Mexican Agency for International Development Cooperation

Partner Country-led Evaluations Report on

Third Country Training Programmes in the Environment Sector 2012-2018 in the framework of

Japan-Mexico Partnership Programme

March 2019

Preface

This Partner Country-led Evaluations report, titled Japan's ODA to the Japan-Mexico Partnership Programme (JMPP) in Mexico, was undertaken by Eriko Yamashita, entrusted by the Ministry of Foreign Affairs of Japan (MOFA) in the fiscal year 2018.

The Partner Country-led Evaluations was established for the aim of ensuring accountability of Japan's ODA to the citizens of Japan, providing feedback to the Government of Japan and the government of the partner countries' to support their effective and efficient management of ODA, and promoting the capacity development of partner country evaluations.

This evaluation study was conducted with the objectives of reviewing Japan's overall policies to the JMPP in Mexico, drawing on lessons from this review to make recommendations for reference in policy planning on future assistance to Mexico by the Government of Japan and its effective and efficient implementation, and ensuring accountability by making the evaluation results widely available to the general public.

Mr. Efrain Del Angel Ramirez (Deputy Director for Asia-Pacific), and Ms. Claudia Lorena Garcia Nava, Head of Department for Asia-Pacific in the General Direction of Technical and Scientific Cooperation (*Direccion General de Cooperacion Tecnica y Cientifica*: DGCTC) from the Mexican Agency for International Development Cooperation (AMEXCID) have shared their expertise on Bilateral Cooperation with Japan as well as Triangular Cooperation toward Latin America and both made enormous contributions in this study. In addition, in the course of this study, I have benefited from the cooperation of the Embassy of Japan in Mexico, MOFA, and the Japan International Cooperation Agency (JICA) Mexico office, as well as government agencies in Mexico and beneficiary institutions of JMPP in Latin America. I would like to take this opportunity to express our sincere gratitude to all who were involved in this study.

Finally, the Evaluator wishes to note that the opinions expressed in this report do not necessarily reflect the views or positions of the Government of Japan.

March 2019 Eriko YAMASHITA Evaluation Consultant

Table of Contents

Table of Contents	_3
List of Tables and Figures	_3
List of Acronyms	_4
Executive Summary	_5
Description of Evaluation	
1.1 Purposes	10
1.2 Targets_	10 10
1.3 Evaluation Framework	
1.4 Methodology	
1.5 Limitation of Evaluation	0
Outline of Evaluation Target	
2.1 Japan-Mexico Partnership Programme (JMPP)	15
2.2. Third Country Training Programme (TCTP)	 15
2.2.1. TCTP for Coastal Water Monitoring in the Mesoamerican	
region as parameters of the Climate Change	16
2.2.2. TCTP on Alternative Technology of Sustainable Water and	
Sludge Treatment with focus on Revalorization of Waste	_20
2.2.3 TCTP on Development of Instruments for the Integral Waste	
Management with focus on 3Rs (Reduction, Reuse, and Red	cycle)
	_23
2.2.4. TCTP on Establishment of Resource Recycling Society Syst	tem
	_24
3. Evaluation Results	
3.1. Final Objective 1: Supporting regional development in Latin Amer	rica
in the environment sector	_26
3.1.1. Relevance of Policies	_26
3.1.2. Effectiveness of Results	_30
3.2. Final Objective 2: Supporting Mexico to be a 'Country with	
Global Responsibility' as one of the five key national targets in the	
National Plan for Development 2013-2018'	
3.2.1. Relevance of Policies	_32
3.2.2. Effectiveness of Results	_34
3.3. Appropriateness of Processes	
3.4. Overall Goal: Strengthening strategic relations between Japan	
through JMPP	_43
4. Recommendations	_44
List of Annexes	_48
List of Tables and Figures	
Table 1: Number of trained government officials from the target TCTP implement	tation
agencies between 2006 and 2015	
Figure 1: System of Objectives	
Figure 2: Number of TCTP participants by country	 16

List of Acronyms

AMEXCID Mexican Agency for International Development Cooperation (Agencia

Mexicana de Cooperacion Internacional para el Desarrollo)

CENICA National Centre for Environmental Investigation and Training (Centro

Nacional de Investigacion y Capacitacion Ambiental)

CONAGUA National Water Commission (Comission Nacional de Agua)

DGCTC General Direction of Technical and Scientific Cooperation (Direction

General de Cooperacion Tecnica y Scientifica)

GIZ Deutsche Gesellschaft für Internationale Zusammenarbeit (German

International Cooperation Agency)

INECC National Institute of Ecology and Climate Change (Institute Nacional de

Ecologia y Cambio Climatico)

IMTA Mexican Institute of Water Technology (Instituto Mexicano de Technologia

del Agua)

JFY Japanese Fiscal Year

JICA Japan International Cooperation Agency

JMPP Japan-Mexico Partnership Programme

MDGs Millennium Development Goals
MOFA Ministry of Foreign Affairs of Japan
ODA Official Development Assistance

PDM Project Design Matrix

REMECA Mesoamerican Network for Water Quality (Red Mesoamerica de Calidad

del Agua)

SDGs Sustainable Development Goals

SEMARNAT Ministry of Environment and Natural Resources (Secretaria de Medio

Ambiente y Recursos Naturales)

TCTP Third Country Training Programme

3Rs Reduction, Reuse and Recycle

Executive Summary

(1) Background

Japan-Mexico Partnership Programme (JMPP) celebrated the fifteen years anniversary in 2018 and Mexican Agency for International Development Cooperation (AMEXCID) and Ministry of Foreign Affairs of Japan (MOFA) agreed to conduct this Partner Country-led Evaluations to analyze outcome generated by JMPP in its beneficiary countries as well as in Mexico along with analysis on its process.

(2) Evaluation Purpose

This evaluation study was conducted with the objectives of reviewing Japan's overall policies to JMPP, drawing on lessons from this review to make recommendations for reference in policy planning on future assistance to Mexico by the Government of Japan and its effective and efficient implementation, and ensuring accountability by making the evaluation results widely available to the general public.

(3) Evaluation Targets

The coverage of this evaluation is four Third Country Training Programmes (TCTP) implemented under JMPP in the environment sector between 2012 and 2018, specifically between the Japanese fiscal years (JFY) 2012 and 2017, which are:

- TCTP for Coastal Water Monitoring in the Mesoamerican region as Parameters of the Climate Change (JFY 2012 2014)
- TCTP on Alternative Technology of Sustainable Water and Sludge Treatment with Focus on Revalorization of Waste (JFY 2012 – 2014)
- TCTP on Development of Instruments for the Integral Waste Management with Focus on 3Rs (Reduction, Reuse, and Recycle) (JFY 2012 2014)
- TCTP on Establishment of Resource Recycling Society System (JFY 2015)

(4) Evaluation Methodology

The evaluation was conducted with the following methodologies

- Comprehensive literature review of key policy documents, project documents, TCTP reports, statistics and data provided by AMEXCID
- Conducting questionnaires to collect information and data with the beneficiary countries and institutions as well as the TCTP implementing agencies in Mexico
- A series of interviews (including telephone interviews), meetings and video-conferences to obtain necessary information for the evaluation.

During the whole process, the evaluator held a series of discussions with AMEXCID to discuss on specific topics on the evaluation including the recommendations until the final version of the evaluation report was approved.

All the information and data collected through the above evaluation activities were profoundly analysed to elaborate this evaluation report and recommendations. The draft report was thoroughly reviewed by AMEXCID and MOFA.

(5) Evaluation Result

Analysis on "relevance of policies" and "effectiveness of results" for this evaluation was

conducted with the following two evaluation perspectives under the two distinctive Final Goals of JMPP that mutually support achieving the Overall Goal "Strengthening strategic relations between Japan and Mexico through JMPP";

- i) From the perspective of JMPP assistance toward the Latin American region:
- <Final Goal 1> Supporting the regional development of Latin America, enhancing innovative and strategic triangular cooperation, particularly in the environment sector, building on past Japan's ODA to Mexico;
- ii) From the perspective of Japan's ODA toward Mexico:
- <Final Goal 2> Supporting Mexico to strengthen the institutional capacity of AMEXCID and the implementing agencies through JMPP implementation.
- It should be noted that appropriateness of processes was analysed for both Objectives in a single section because activities to achieve the two Final Objectives are common.

(a-1) Relevance of Policies (Final Objective 1):

The Final Objective 1 to support regional development in Latin America in the environment sector is highly consistent with the high-level policies of both Japan and Mexico at the time of planning and ex-post evaluation: In Mexico, it is consistent with the International Development Cooperation Law (2012), National Development Plan 2013-2018, and other related legal frameworks in the environment sector; Japan's ODA policies toward the Latin American region include support in the environment sector to address climate change, and uphold utilization of Partnership Programmes to support development in the region. All the target TCTPs were also relevant to development policies and needs of the beneficiary countries, as ensured through diagnostic activities and strategic participant selection process of the respective TCTPs.

(b-1) Effectiveness of Results (Final Objective 1):

Most of the specific goals established for each TCTP were achieved and effectiveness of the target TCTPs was high at the time of project completion of the target four TCTPs.

It was confirmed that a number of the participating institutions have implemented in their country political instruments and pilot projects that were generated as a result of their Action Plans developed in the TCTPs. Through the process, the knowledge and techniques obtained from the TCTPs were also disseminated and they contributed also to the improvement of institutional capacities of the beneficiary institutions. Thus, the TCTPs have generated substantial results and impact in the beneficiary countries.

(a-2) Relevance of Policies (Final Objective 2):

Japanese ODA's Rolling Plans for Mexico and the Country Assistance Policy for Mexico (2014) show the priority areas including enhancement of Triangular Cooperation and supporting efforts to solve global environmental problems. Therefore, strengthening the capacity of Mexican institutions for international cooperation through the target TCTPs in the environment sector was highly consistent with the ODA policies of Japan. Mexican regulations for AMEXCID and the target TCTP implementing agencies in the environment sector also confirmed the importance to conduct international cooperation through increasing regional cooperation and promotion of triangular cooperation.

(b-2) Effectiveness of Results (Final Objective 2):

The capacities of AMEXCID and the Mexican implementing agencies of the target TCTPs to conduct international cooperation were strengthened through the target TCTP implementation. Particularly the strategic planning process of TCTPs was strengthened between 2012 and 2015 to be 'results-oriented', applying more strategic planning process in terms of course structure and participant selection. AMEXCID, as JMPP coordinating organization, has demonstrated its increasing capacity to support the related Mexican agencies and actors both from technical and financial perspectives in the target TCTPs. Furthermore, outside of JMPP, dispatched Japanese experts to AMEXCID during the target period provided guidance and advisory for institutional strengthening, especially in the areas of strategic planning and systematization of the operational mechanism of AMEXCID. As impact, AMEXCID and the Mexican implementing agencies confirmed their increased institutional recognition in the region as prestigiously efficient and effective partners in the mechanism of South-South cooperation or Triangular cooperation.

(c) Appropriateness of Processes:

The high-level decision-making process by the JMPP Planning Committee has been recognized as a strength of JMPP. Additionally, it was affirmed that TCTP in the JMPP framework is one of the most advanced schemes of international cooperation in Mexico in terms of its established mechanisms and operational tools for its implementation, which were developed during this evaluation target period: they contributed in ensuring efficiency and effectiveness of the target TCTPs. A noteworthy tool newly introduced for the target TCTPs is the Project Design Matrix (PDM), a tool conventionally used for Japanese ODA technical cooperation under the concept of the Project Cycle Management.

The diagnostic activities in the target TCTP planning process to identify needs and demands of the beneficiary countries were an integral and critical component that enhanced comparative advantages of JMPP approach, where JICA's important role was highly recognized by AMEXCID and the Mexican implementing agencies, specifically for JICA's regional network and technical support. Another comparative advantage recognized by many beneficiary countries is that all the target TCTPs were offered with advanced and fully equipped facilities as an outcome of Japanese ODA. Furthermore, Japanese techniques were 'tropicalized' by Mexican implementing agencies to the regional context through the TCTP planning and implementation process, which was considered very effective by the TCTP participating countries.

In terms of monitoring and follow-up mechanisms, the target TCTPs put emphasis on providing institutional follow-up during the three years of the implementation period. Its effectiveness was highly recognized by the beneficiary countries as well as the Mexican implementing agencies to generate concrete results. However, at the time of this evaluation, the practice of monitoring activities is not systematically structured in the established TCTP process.

With high recognitions by the two governments on the strengthened capacity of Mexican international cooperation and on high effectiveness achieved in the regional development through JMPP implementation including the target TCTPs, the strategic relations between the two countries have been strengthened in qualitative manners evidenced by the evolution

of the TCTP modality in JMPP.

(6) Recommendations

(a) Enhance strategic selection process of TCTP beneficiary participants

The evaluation results show that the degree of effectiveness and impacts can be better achieved in countries with ongoing initiatives in the related thematic sectors and with institutions possessing certain capabilities to take advantage of the transferred techniques or knowledge by TCTPs. The strategic target country selection should be therefore enhanced for each TCTP while selection criteria should be discussed case by case by the TCTP Committee.

(b)Strengthen and integrate monitoring and evaluation mechanisms in the TCTP implementation framework to increase the effectiveness of TCTPs

Monitoring and evaluation activities are considered indispensable for TCTP participants to effectively implement Action Plans in the beneficiary countries and for TCTP implementing agencies to enhance strategic planning and implementation of the subsequent training courses. Considering the actual needs and the recognized high effectiveness of monitoring and evaluation activities including on-site missions, their practice should be standardized for all TCTPs to increase its effectiveness and generate further impacts in the beneficiary countries.

(c) Support sustainability of the TCTP achievements to generate further impact

Application of new knowledge and techniques in political instruments takes long as it involves variety of actors and long-term political and social campaigns to change culture. Therefore additional supporting mechanisms for the TCTP beneficiary countries in the ex-post TCTP period should be considered as an integral part of TCTP strategy for a longer-term.

Strategic utilization of Dispatch of Mexican Experts, an effective modality of JMPP, should be positively enhanced to support the TCTP participants' efforts to implement their Action Plans, thus achieving better TCTP results in the beneficiary countries. Moreover, it is worth analysing a feasibility to establish a flexible funding mechanism to promptly support the related posterior activities to TCTPs requested by beneficiary countries to increase TCTP sustainability.

(d) Develop further triangular cooperation projects including TCTPs in the environment sector where JMPP comparative advantages are substantially recognized by the beneficiary countries as well as the Mexican side

At the time of this evaluation, there is no TCTP neither other JMPP activities in the environment sector in spite of the confirmed comparative advantages and needs of the related JMPP knowledge and techniques. Recognizing that the Mexican implementing agencies have acquired and developed capacity to perform international cooperation activities by conducting TCTPs, they are expected to play active roles in future international cooperation programmes, whereas JMPP should have a sufficient number of projects effectively drawing on their capacity in the environment sector.

(e) Further strengthen and enlarge the coordination role of AMEXCID

As the capacity of AMEXCID has been substantially strengthened through JMPP

implementation and by support provided by dispatched Japanese experts to AMEXCID as confirmed in this evaluation, knowledge-sharing of TCTP experiences should be enhanced inside AMEXCID to drive capacity strengthening of other divisions of AMEXCID as well as Mexican embassies. AMEXCID should also lead in seeking further coordination with other donors' activities which equally support strengthening the capacity of AMEXCID to benefit from potential synergy effects. Moreover, acknowledging that AMEXCID has increased its financial participation in TCTPs over the past six years, strategic reallocation of financial responsibility should be considered in the planning process of future TCTPs.

(f) Strengthen the visibility of JMPP and increase its publicity activities

This evaluation reveals that TCTP and JMPP have not yet achieved sufficient visibility in the beneficiary countries. JMPP visibility should be promoted in all the beneficiary countries in collaboration with Mexican embassies and JICA local offices.

1 <u>Description of Evaluation (Purposes, Targets, Methodology, etc.)</u>

1.1 Purposes

This Partner Country-led Evaluation was conducted for the aim of ensuring accountability of Japan's ODA to the citizens of Japan, providing feedback to the Government of Japan and the government of the partner country to support their effective and efficient management of ODA, and promoting the capacity development of partner country evaluations.

This evaluation study was conducted with the objectives of reviewing Japan's overall policies to the Japan-Mexico Partnership Programme (JMPP), drawing on lessons from this review to make recommendations for reference in policy planning on future assistance to Mexico by the Government of Japan and its effective and efficient implementation, and ensuring accountability by making the evaluation results widely available to the general public.

The specific purposes of this evaluation are:

- I. To ensure accountability of Japan's ODA and JMPP to the public
- II. To improve management of JMPP
- III. To promote understanding towards Japan's ODA and JMPP

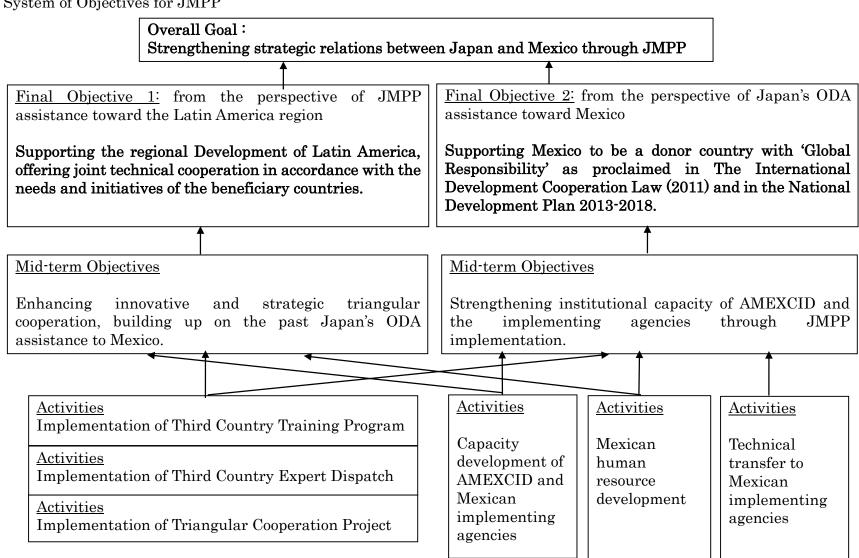
Under these purposes, this evaluation analyzed outcome generated by JMPP in its beneficiary countries as well as in Mexico along with analysis on its process; to what extent Japan's ODA support and the participation of Mexican governmental organizations in JMPP have strengthened their capacities to provide international cooperation; how the effectiveness and efficiency of the JMPP can be improved; which national policies and international initiatives are being addressed; and if there are opportunities to expand the triangular cooperation through JMPP in the environment sector.

1.2 Targets

The coverage of this evaluation is the four Third Country Training Programmes (TCTP) implemented under JMPP in the environment sector between 2012 and 2018, specifically TCTPs implemented during the Japanese fiscal years 2012-2017: Final Objective 1 is evaluated from viewpoint of innovative and strategic triangular cooperation, building up on the past Japan's ODA to Mexico. Other JMPP projects and activities, implemented under the modalities of Third Country Expert Dispatch and Triangular Cooperation Project during the defined period will not be subject of this evaluation.

Under the overall goal of JMPP, the evaluation also covers Japan's ODA policies and support to Mexico in TCTP/JMPP implementation: Final Objective 2 is evaluated from viewpoint of strengthening the institutional capacity of AMEXCID and the implementing agencies through JMPP implementation. The System of Objectives for JMPP evaluation is shown in Figure 1.

Figure 1: System of Objectives for JMPP



Specific target projects in this evaluation will be the following four Third Country Training Programmes (TCTPs) implemented under JMPP between 2012 and 2018 in the environment sector:

	Title of the Third Country Training Programme (TCTP)	Implementation Period
		(Japanese Fiscal Year)
1	TCTP for Coastal Water Monitoring in the Mesoamerican	2012 – 2014
	region as Parameters of the Climate Change	(Three courses)
2	TCTP on Alternative Technology of Sustainable Water and	2012 – 2014
	Sludge Treatment with Focus on Revalorization of Waste	(Three courses)
3	TCTP on Development of Instruments for the Integral	2012 – 2014
	Waste Management with Focus on 3Rs (Reduction, Reuse,	(Three courses)
	and Recycle)	
4	TCTP on Establishment of Resource Recycling Society	2015
	System	(One course)

Although information on other projects and activities implemented by JMPP during the same time period will be collected and analyzed, the target projects of this evaluation will be ONLY the four TCTPs in the above list and their related impact.

1.3 Evaluation Framework

The evaluation was aligned and conducted with the "Guidelines for the Partner Country-led Evaluation (June 2018)" established by MOFA and analysed from the perspectives, "relevance of policies," "effectiveness of results," and "appropriateness of process." However, considering the fact that the Guidelines were established in view of the bilateral ODA evaluation, the evaluation framework for this study on JMPP, a scheme to promote triangular cooperation, was adjusted in accordance with the System of Objectives (see Figure 1).

Analysis on "relevance of policies" and "effectiveness of results" for this evaluation was conducted with the following two evaluation perspectives under the two distinctive Final Goals of JMPP that mutually support achieving the Overall Goal "Strengthening strategic relations between Japan and Mexico through JMPP";

- i) From the perspective of JMPP assistance toward the Latin American region: Supporting the regional development of Latin America, enhancing innovative and strategic triangular cooperation, particularly in the environment sector, building on past Japan's ODA to Mexico;
- ii) From the perspective of Japan's ODA toward Mexico: Supporting Mexico to strengthen the institutional capacity of AMEXCID and the implementing agencies through JMPP implementation.

In alignment with the illustrated principal evaluation framework, which was discussed and agreed by the evaluation committee, the main points analysed were defined as follows:

(1) Relevance of Policies

Final Objective 1: Supporting regional development in Latin America, offering joint technical cooperation in accordance with the needs and initiatives of the beneficiary countries

- Consistency with high-level (ODA) policies of Japan and Mexico

- Consistency with the policies and development needs of beneficiary countries
- Consistency with international priorities and relativity with other donors

<u>Final Objective 2: Supporting Mexico to be a donor country with 'Global Responsibility' as proclaimed in The International Development Cooperation Law (2011) and in the National Development Plan 2013-2018</u>

- Consistency with Japan's high-level (ODA) policies
- Consistency with the policies and development needs of Mexico
- Consistency with international priorities and relativity with other donors
- (2) Effectiveness of Results

Final Objective 1: Supporting regional development in Latin America, offering joint technical cooperation in accordance with the needs and initiatives of the beneficiary countries

 Degree of the contribution of TCTP: Achievements and impacts of TCTP in beneficiary countries

Final Objective 2: Supporting Mexico to be a donor country with 'Global Responsibility' as proclaimed in The International Development Cooperation Law (2011) and in the National Development Plan 2013-2018

- Degree of the contribution of Japan's ODA: Achievements and impacts of Japan's ODA in Mexico
- Relativity with other scheme: Achievements of Japan's ODA in assisting the strengthening of AMEXCID; Impact of Japan's ODA to JMPP in Triangular and South-South Cooperation
- (3) Appropriateness of Processes.
- Appropriateness of the policy-making processes
- Appropriateness of the policy-implementing processes
- Periodical monitoring and follow-up of the policy-implementing stage
- Cooperation with other actors and donors
- Publicity

It should be reiterated that the main points regarding relevance of policies and effectiveness of results were analysed against the two distinctive perspectives respectively with the two Final Objectives of JMPP, while appropriateness of processes was analysed for both Objectives in a single section because activities to achieve the two Final Objectives are common as shown in the System of Objectives (see Figure 1)

Finally, the achievement of the Overall Goal was analysed based on the achievements obtained for the two Final Objectives of JMPP.

1.4 Methodology

The evaluation was initiated with a comprehensive literature review of key policy documents, project documents, TCTP reports, statistics and data provided by AMEXCID. During the course of the study, the evaluator collected additional information and documents as appropriate.

Based on the findings from the desk review, questionnaires were elaborated and sent to the beneficiary countries and institutions as well as JMPP implementing agencies in Mexico to confirm the outcomes and impacts of the target TCTPs (The list of the TCTP beneficiary

agencies/organizations which responded questionnaire is in Annex 2).

After the responses of the questionnaire were analysed, a series of interviews (including telephone interviews), meetings and field survey (on-site visits) were conducted to obtain supplemental information for the evaluation. Due to the limited conditions in terms of time and budget, it was possible to conduct the interviews and field survey only inside Mexico. Alternatively, video-conferences were organized with the focal points of the environment sector of the JICA offices in the Dominican Republic and Panama under the coordination of JICA Mexico office. Inside Mexico, a series of interviews and meetings were conducted with officials and officers of the responsible agencies for JMPP, namely AMEXCID, JICA Mexico and the embassy of Japan in Mexico, and with officials of the Mexican implementing agencies of the target TCTPs, but with constraint described in Section 1.5. Limitation of Evaluation (List of interviewed officials and officers is in Annex 1).

All the information and data collected through the above evaluation activities were profoundly analysed to elaborate this evaluation report and recommendations. The draft report was thoroughly reviewed by AMEXCID and MOFA, and feedback comments were also provided by JICA. During the whole process, the evaluation committee meetings were held among AMEXICD, the Japanese embassy in Mexico and the evaluator at times as considered appropriate to discuss on specific topics on the evaluation including the recommendations until the final version of the evaluation report was approved.

1.5 Limitation of Evaluation

It should be noted that there were a number of limitations for this evaluation. Due to the limited time and resources allocated for conducting survey with the JMPP beneficiary countries and institutions, achievement of the Final Goal 1 was analyzed by literature/desk review and with the questionnaire responses undertaken by this evaluation, except for a few limited and selected cases with which video-conferences were conducted, as described in Section 1.4 Methodology. Additionally, there was a limitation to collect information from officials of the relevant Mexican implementing agencies and institutions that were involved in the target TCTPs and JMPP, because the administrative transfer of the government of Mexico took place on December 1, 2018. The initiation of this evaluation was officially authorized by MOFA on November 13, 2018, a few weeks before the mentioned political administration transfer whereas the submission due of the evaluation report draft was on December 28, 2018: Many officials in Mexican governmental institutions were not able to respond to the questionnaires or to the request of individual interviews as they were going through the related institutional and personnel changes along with the transition of the government administration. In addition, all the information collected through the questionnaires and the interviews with officials in Mexico were based on the previous government administration before November 2018 as there was uncertainty on the new policies and activities to be presented by the new government during the period of this evaluation survey. As a result, this evaluation was conducted based on the limited information collected during the short period allowed under the contract for the necessary activities, and on the previous government policies of Mexico before December 2018.

2 Outline of Evaluation Target

2.1 JAPAN-MEXICO PARTNERSHIP PROGRAMME (JMPP)

The government of Japan and the government of Mexico signed the Japan-Mexico Partnership Programme (JMPP) in 2003. The purpose of the programme is to reinforce bilateral technical cooperation and to extend joint technical cooperation to other developing countries. In JMPP, Japan supports Mexico's South-South Cooperation to transfer its technical knowledge gained through the bilateral programmes offered by Japan in the past, in order to jointly promote effective development in other beneficiary countries. The scheme of JMPP is composed of various modalities such as Third Country Training Programmes (TCTPs), Dispatch of Mexican Experts, and Trilateral Cooperation Projects.

In July 2014, during the visit of Japanese Prime Minister Mr. Shinzo Abe to Mexico, the Prime Minister and H.E. Mr. Enrique Peña Nieto, the President of Mexico, both welcomed the tenth anniversary of the JMPP in 2013, and recognized the strategic importance of triangular cooperation which contributes to the socio-economic development and growth in the Latin American and the Caribbean region. The two leaders shared the view that the respective cooperation agencies, JICA and AMEXCID, would continue to cooperate in addressing regional challenges.

Every year the joint Planning Committee of JMPP is hosted with representatives of the two countries where the programme's achievements are confirmed and the strategic planning for the future actions are discussed. As the latest Committee, the XIII JMPP Planning Committee was held in July 2018, reiterating the emphasis on the importance of JMPP for both countries in the context of strengthening the strategic relationships between Japan and Mexico and confirming the interest of both countries to maintain and increase the JMPP's achievements that have been obtained during the past 15 years.

The statistical data of the JMPP activities by modality from October 2003 to September 2018 are as follows:

- TCTP: 19 TCTPs have been implemented, having offered thematic trainings to 937 governmental specialists from the Latin American region.
- Third Country Expert Dispatch: The total of 193 Mexican experts from the governmental institutions have been dispatched, mainly to countries in Central America in the last ten years.
- Triangular Project: Seven triangular projects have been implemented under JMPP.

The detailed historical list of the JMPP projects as of September 2018 is in Annex 3.

2.2 <u>Third Country Training Programmes (TCTP)</u>

TCTP is a "scheme in which JICA provides participants from developing countries with a technical training programme in collaboration with a Southern partner (= third country) for the purpose of transfer or sharing of development experiences, knowledge and technology.¹" Regarding the environment sector, 373 specialists from the region participated in the nine TCTPs in the environment sector, presenting 40% of the total TCTP participants since the launch of JMPP in 2003. Despite that they are not the subject of this evaluation, it is worth to

¹ https://www.jica.go.jp/english/our_work/thematic_issues/south/activity_03.html (cited on November 14, 2018)

note that the total number of Mexican expert dispatch for the environment sector is 72 that represents 37% of the total 193 dispatches among all sectors, and many of the Mexican expert dispatches for the environment sector were originated in the TCTP implementation. Examples of such cases include Mexican expert dispatch for; *Elaborating implementation plan for solid waste management with 3R focus* (Panama, 2015-2016); *Natural resource management for the Mesoamerican biological corridor* (Honduras, 2011-2012); *Strengthening capacity of the air quality monitoring* (Honduras, 2011-2012); and *Strengthening capacity of the solid waste management* (Guatemala, 2009-2012).

The four TCTPs were implemented during the target period for this evaluation in the environment sector, as described in Section <u>1.2 Targets</u>.

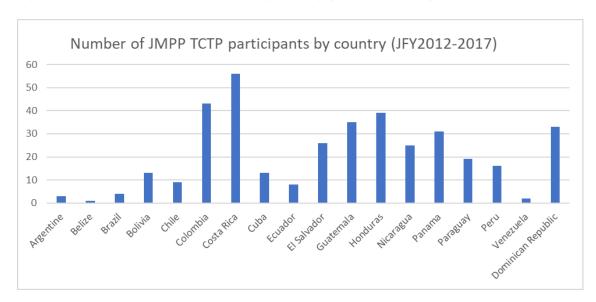


Figure 2: Number of TCTP participants by country (JFY 2012-2017)

2.2.1 <u>TCTP for the Coastal Water Monitoring in the Mesoamerican region as</u> parameters of the Climate Change

Original Title of the TCTP	Curso Internacional de Monitoreo de la Calidad de las Aguas
(in Spanish)	Costeras de Mesoamerica para la medición de parametros
	indicadores del Cambio Climático
Implementation Period	JFY 2012-2014 for three courses
Implementation	National Water Commission (Comisión Nacional del Agua;
Institution	CONAGUA)
Participated Countries	47 invitations of specialists from Belize, Colombia, El Salvador,
and Number of Trainees	Guatemala, Honduras, Nicaragua, Panama, Dominican Republic
Project cost	Japan: 2,485,532 MXN(Mexican Pesos)
	Mexico: 2,797,479 MXN (Mexican Pesos)

TCTP for the Coastal Water Monitoring in the Mesoamerican Region as Parameters of the Climate Change was the first TCTP implemented by the National Water Commission (CONAGUA) of Mexico. In the previous years, JICA implemented two Japanese technical

cooperation projects with CONAGUA in the related themes; i) Coastal Water Quality Monitoring Network Project (JFY 2006-2009); ii) Project on Capacity Enhancement for Establishing Mexican Norms of Water Quality Criteria (JFY 2008-2011). The purpose of the first project was to strengthen the reference function of CONAGUA on the coastal water monitoring: the related procedures and manuals were established and capacity of its laboratories and regional offices was strengthened by technical transfer through the project activities implemented with the team of Japanese experts. The purpose of the second project was to enhance the capacity of CONAGUA for establishing water quality criteria and technical transfer from Japanese experts to Mexican experts was enhanced to define parameters for criteria and the permissible concentrations, based on the reliable analysis of the chemicals to protect aquatic life and human health in the concerned areas. Building on the capacities strengthened through these two bilateral technical cooperation projects, Japan and Mexico agreed to implement the TCTP to strengthen capacities of the neighbouring countries in the related areas to benefit in the protection of coastal water in the Mesoamerican region against the climate change threats. In 2009, an international seminar to disseminate the results and achievements of the two bilateral projects was held in Cancun, Mexico, inviting countries from the region, which served CONAGUA and JICA for the TCTP planning, particularly for identifying the appropriate objective group for the training course.

The TCTP was designed for three courses which had sequential contents over three years under the established purpose with which the participating institutions obtain knowledge and the capacity to conduct an analysis of the five parameters of climate change under the standardized criteria and methodologies. Traditionally, participants for the TCTP are selected every year for each course, but the TCTP by CONGUA, for the first time in TCTP history of JMPP, requested the selected participants to participate in all three courses over three years: after each course, the participants were required to apply and practice the knowledge and techniques offered in the TCTP returning their own countries and to bring back sample analysis data of coastal water in their own countries for further analysis with more advanced

techniques offered in the followed TCTP courses in Mexico. The coastal water quality monitoring was a new area of investigation for most of the countries in the region, although its importance is highly recognized. As a result of obtaining knowledge and techniques and being provided the Mexican Operational Standards as reference manual, many countries became able to establish new initiatives on the coastal water analysis.



(Photo: TCTP participants analysing the sample in CONAGUA laboratory)

Indeed this TCTP aimed beyond the capacity building of the participating countries, and ambitiously aimed to establish a regional analytical network of investigators and specialists and to establish regional database of coastal water quality monitoring results, for which the data and analysis be conducted with the commonly standardized procedure and methodologies assimilated from Mexican norms. The participating institutions expressed their commitment to jointly follow the proposed strategy of the TCTP. As a result, during the implementation years, 44 sites for coastal water quality monitoring were established and calibrated by the participating countries in the Mexican Gulf, the Caribbean Sea, and the Pacific Ocean. The monitoring samples were collected and analysed applying the Standardized Operational Procedure of Mexico by the participating countries during the three years, that allowed generating for the first time a sample database at regional level regarding the five climate change parameters, namely TOC2, Enterococci, Chlorophyll 'a', general chemicals, and nutrient. Furthermore, a network called the Mesoamerican Network for the Water Quality (in Spanish, Red Mesoamericana de Calidad del Agua: REMECA) was established where the participating institutions exchanged information and discussed on the related issues for climate change adaptation based on the obtained results of the water quality monitoring. During the three years, CONAGUA offered active support not only for the course implementation that offered theories and pragmatic practices in the Mexican Gulf, but also for providing constant follow-up guidance and advisory to the participating institutions by emails and regular video-conferences.



(Photo: TCTP participants, learning procedures to take test samples from the Mexican Gulf)

18

² TOC: Total organic carbon

BOX 1: REMECA (Red Mesoamericana de Calidad del Agua)

As a longer-term overall goal, the TCTP aimed that all the participating countries in the Mesoamerican region monitor the five parameters of climate change for coastal water quality with standardized procedure. Under this goal, establishing a regional network for coastal water quality monitoring was one of the aspirations that officials from CONAGUA had from the TCTP planning stage.

The national network inside Mexico was established as an output of successful bilateral cooperation projects with Japan, and adding data from the neighboring countries would be valuable for Mexico to analyze and take appropriate measures for climate change adaptation for the coastal water quality protection. Needless to say, it should benefit all the neighboring countries in the same way. Sharing the common interest and the regional vision, officials from CONAGUA and all the participating institutions in the TCTP agreed to establish an information-sharing platform, called REMECA (meaning Mesoamerican Network for Water Quality in English), through which they shared information on the progress of coastal water quality analysis in the respective participating country as a result of applying the TCTP-offered knowledge and discussed on the identified challenges and solutions.

REMECA functioned as an active information-sharing network during the three years of the TCTP implementation, and kept inspiring the participating countries to put efforts for achieving the common regional goal. In Panama, the participating Ministry officially promoted an initiative of REMECA, involving other three institutions including a University, and their experiences of applying the TCTP offered knowledge and achievement was widely published in Panama with recognition of Mexico's legal framework and the standardized procedure. In the Dominican Republic, a regulation on monitoring the five parameters for climate change for REMECA was officially approved as a Resolution No. 02/2013 in 2013. In El Salvador, the laboratory of the participating institutions obtained official authentification of ISO/IEC 17025, in 2015, applying the standardized procedure and the prinriples on quality control for laboratory and analysis learned from the TCTP and with CONAGUA's advice.. Although not all the countries were able to operate the expected procedures due to lack of necessary laboratory equipment or insufficient resource allocation, REMECA indeed enhanced enthusiasm and motivations for all the participants to generate concrete results in the participating countries in the region.

Although the impact that TCTP generated for the region is substantial and a number of countries continuously makes progress in their coastal water quality monitoring, REMECA is regretably no longer active at the time of this evaluation. The maintenance of REMECA required extensive resource allocation, and it was not possible to maintain institutional commitments for its sustainability after the TCTP completion.

2.2.2 <u>TCTP on Alternative Technology of Sustainable Water and Sludge Treatment</u> with focus on Revalorization of Waste

Original Title of the TCTP	Curso Internacional sobre Sistemas Naturales de Tratamiento de
(in Spanish)	Agua y Lodos Residuales, su Reúso y Aprovechamiento
Implementation Period	JFY 2012-2014 for three courses
Implementation	Mexican Institute of Water Technology (Instituto Mexicano de
Institution	Tecnología del Agua; IMTA)
Participated Countries	20 specialists from Colombia, Dominican Republic, El Salvador,
and Number of Trainees	Guatemala, Honduras
Project cost	Japan: 1,092,406 MXN (Mexican Pesos)
	Mexico: 687,510 MXN (Mexican Pesos)

TCTP on Alternative Technology of Sustainable Water and Sludge Treatment with focus on Revalorization of Waste was implemented by IMTA as their third TCTP under JMPP. IMTA had previously implemented the two TCTPs; TCTP for Natural Treatment Systems for Wastewater and Sludges: Use and Reuse (2010-2011); Integrated Systems of Residual Water Treatment and its Reuse for the Sustainable Environment (2002-2006). Since its establishment, IMTA has been functioning as a reference centre not only nationwide but also in the Latin American region for its advanced research and technologies particularly on water quality criteria establishment and the related human resource development under the aim of promoting environmental protection and security. The collaboration history between IMTA and Japan started back in the 1990s. Between 1995 and 1998, IMTA and JICA conducted a joint research project 'Efficient use of wastewater for agriculture (In Spanish, Uso eficiente de aguas residuales con propósitos agrícolas)'. Through the project, IMTA constructed an activated sludge treatment plant and a laboratory for the control of the treatment process. JICA dispatched a number of Japanese experts for technical assistance and procured necessary equipment for the treatment plant and for the process control laboratory. Experts from IMTA also received the relevant technical trainings in Japan. As a result, the project achieved developing small-scale wastewater treatment technologies with low cost and low emission of the greenhouse gas using biofilter, anaerobic fermentation, septic tanks, marsh, and lakes: the final evaluation of the project stated that the project achievement positioned IMTA as one of the most advanced research institutions in the area of nutrients treatment of wastewater with a biological processing method. IMTA, with its mission to seek solutions to support the MDGs, consequently became a strategic partner of JICA to jointly promote Japan's environmental management advocacy toward the Latin American region.

Finishing the long-continued technical cooperation with Japan, IMTA commenced its active role to disseminate the unique knowledge and technologies developed jointly through the bilateral cooperation. After concluding the first TCTP, IMTA took initiative to confirm the achievements generated in the beneficiary countries as an impact of the TCTP but found out the degree of achievement did not meet the original expectation. Therefore IMTA, in JMPP framework, organized an international seminar in Mexico in 2009, through which diagnostic and identification of specific needs were conducted and IMTA confirmed it served substantially for the strategic planning in the second TCTP.

In consideration of the facts that the target TCTP was the third JMPP training programme

offered to the same region and that IMTA itself had gained knowledge from the prior TCTPs on the actual conditions and challenges of the neighbouring countries, it adopted an evolved and systematic approach in planning for the third TCTP project structure. For all the past TCTPs, all participants were required to elaborate an Action Plan, but the past evaluation results had shown that such Actions Plans elaborated by individual specialists did not necessarily obtain institutional support after their return and had been left aside without generating any follow-up or achievement. Learning from such findings, the target TCTP committee conducted an analysis of country situations in the region and pre-selected a limited number of participating countries that were considered to be feasible to work on the course-offered themes, based on the evaluation results of the previous TCTPs. Additionally, from the selected countries, the TCTP required the candidate institutions to submit their institutional Action Plans that they would intend to refine during the course participation over three years and commit its follow-up after the TCTP completion. In that screening process, the candidate institutions were also required to describe specific problems that they would be working on through the course implementation. Along with this new approach, the TCTP aimed to contribute to achieving concrete progress in the participating countries/institutions.

The TCTP had an overall goal that it would contribute to an increase in coverage as well as the efficiency of wastewater and sludge treatment in the participating countries. To confirm the progress of the overall goal, a monitoring survey was conducted under the JMPP framework in September 2014 by visiting three participating countries in the TCTP.

BOX2: Ex-post Monitoring Visit to the participating countries and institutions for the TCTP on Alternative Technology of Sustainable Water and Sludge Treatment with focus on Revalorization of Waste

In September 2014, as a mission assigned by JMPP, two officials from IMTA conducted a monitoring mission to visit Honduras, El Salvador, and the Dominican Republic. Prior to their visit, a series of follow-up communication by emails and video-conferences were conducted to monitor the progress of the developed Action Plans in the TCTP and the above three countries were selected for the ex-post monitoring visit as they were seemingly generating substantial and concrete progress. The mission report summary describes their general findings as follows:

Relevance	Authorities of the visited participating institutions confirmed that the TCTP was consistent with their development policies and their needs of sustainable environmental management. Particularly offering alternative natural technologies with low cost enhances sustainable environmental management for their communities.
Effectiveness	All the visited participating institutions have implemented their action plans, utilizing the knowledge and techniques obtained from the TCTP. A number of pilot cases for wastewater treatment have been implemented with financial support from the institutions, although evaluation with efficiency parameters was not yet conducted, which gives limitation to the extent of the pilot development. However, it should be noted that, through the pilot implementation, the knowledge and techniques obtained from the TCTP were also disseminated to other officials inside the institution, which accounts for more than 100 officials in the Republic Dominican, for example, generating further impact in the institutional capacity. The provided materials in the TCTP were utilized in such technical dissemination process.
Efficiency	Authorities of the visited participating institutions confirmed that the TCTP was conducted by a group of the specialized professionals with appropriate facilities in IMTA. Even after the TCTP participation, the ex-participants keep receiving some guidance through emails or video-conferences, which increases the efficiency for their action plan implementation.



(Left photo: Advisory activities by IMTA officials in Honduras

Right photo: Technical visit of the pilot project of wetland wastewater treatment systems in El Salvador)

2.2.3 <u>TCTP on Development for the Integral Waste Management with focus on 3Rs</u> (Reduction, Reuse, and Recycle)

Original Title of the	Curso Internacional para el Desarrollo de Elementos que
TCTPe (in Spanish)	Fortalezcan la Instrumentación de la Gestión Integral de Residuos
	con Enfoque de 3Rs (Reducir, Reutilizar y Reciclar)
Implementation Period JFY 2012-2014 for three courses	
Implementation National Institute of Ecology and Climate Change	
Institution Nacional de Ecología y Cambio Climático: INECC) **	
Participated Countries	43 specialists from Costa Rica, Colombia, Cuba, Dominican
and Number of Trainees	Republic, El Salvador, Guatemala, Honduras, and Panama
Project cost	Japan: 2,457,396 MXN (Mexican Pesos)
	Mexico: 1,238,975 MXN (Mexican Pesos)

The proposal for TCTP on Development of Instruments for the Integral Waste Management with focus on 3Rs (Reduction, Reuse, and Recycle) was originally submitted by the National Centre for Environmental Investigation and Training (Centro Nacional de Investigación y Capacitación Ambiental; CENICA) as their third TCTP implementation under JMPP. After CENICA was created in 1993 for addressing the emerging environmental issues especially in the metropolitan areas, such as air contamination, solid waste management and industrial waste management. Upon request from the Mexican government, the technical cooperation project by Japanese ODA called 'The National Center for Environmental Research and Training (Phase 1: 1995 – 1997, Phase 2: 1997 – 2002) 'was implemented to strengthen Mexico's ability for environmental protection: Japanese ODA provided technical assistance to establish the institutional framework of CENICA as well as their necessary technical facilities while providing technical transfer to Mexican human resources to increase the number of specialists and experts for the related areas. After the project completion, CENICA started to play an active role in contributing to JMPP, not only in TCTP, but also in dispatching their experts to provide technical support to the neighboring countries in the region. While contributing to various environmental management issues, the TCTPs implemented by CENICA were focused on the area of waste management. The first TCTP by CENICA trained 92 Latin American experts between 2002 to 2005 on the theme of 'hazardous waste management'. From 2009 to 2011, the second TCTP by CENICA introduced the concept of '3Rs (Reduce, Reuse, and Recycle)' to the neighboring countries, which was a concept technically transferred to CENICA by Japan's ODA through the bilateral technical cooperation project 'Development of waste management policy based on 3Rs in Mexico' (2007-2008). The second TCTP trained 66 experts in the region of Central America and the Caribbean, adopting the concept of Japanese '3Rs' to the regional context based on the Mexican experience of its implementation.

Learning from the previous two TCTPs implementation results and experiences, the joint committee for the TCTP, comprised of CENICA, AMEXCID, and JICA, agreed to plan more strategic framework for the subject TCTP and decided to conduct a sequential three-year course as the third TCTP on solid waste management: the joint TCTP committee preselected candidate six countries and institutions which were considered to be ready to actually implement concrete '3R' schemes or instruments, based on the evaluation results of

the past TCTPs. The participants for the first course were trained to elaborate institutional proposals to introduce political instruments to promote the '3R' concept in their countries. Those proposals were analyzed in terms of its appropriateness and feasibility and prescreened for their continuous and further development in the consequential two TCTPs in order to draft ultimately an official proposal of new public policy regarding the 3Rs. Despite that the first course was opened to six countries in the Central American region, the number of the participating counties were reduced based on diagnostics conducted based on the first course's achievement: the strategy was that the course provide intensive and focused support in the second and third courses to actually feasible proposals, with the aim to jointly obtain concrete achievements as a result of the three years' support through the TCTP implementation. Under this strategy, the efforts by the participating institutions required continuous support over the three years, and INECC, that absorbed CENICA in 2012 as part of the government restructure and took over the institutional responsibility for the course implementation, monitored its progress during the three years of the project period through emails, video-conference, and a monitoring on-site visit to the selected countries.

At the end of the third course, the project objective was achieved and seven institutional public policy drafts were elaborated to be officially submitted for its authorization for the participating countries. As an impact, inter-institutional coordination mechanisms were established in some of the participating countries, which is an important factor to promote the 3R concepts in integral solid waste management: Countries such as Costa Rica and Panama sent participants from different institutions from different levels of the government. In the process of elaborating and Action Plans, those participants from different institutions recognized the importance to collaborate together to enhance common instruments by the Action Plans.



(Photo: The inauguration ceremony of the third TCTP on <u>Development for the Integral Waste Management with focus on 3Rs</u> (Reduction, Reuse, and Recycle))

2.2.4 TCTP on Establishment of Resource Recycling Society System

Original Title of the TCTP	Curso Internacional hacia un Ciclo Sustentable de los Materiales y	
(in Spanish)	Residuos	
Implementation Period	Plan: JFY 2015 – 2017, Actual: JFY 2015 (cancelled after 2016)	
Implementation	National Institute of Ecology and Climate Change (Instituto	
Institution	Nacional de Ecología y Cambio Climático: INECC)	
Participated Countries	17 specialists from Brazil, Chile, Colombia, Costa Rica, El Salvador,	
and Number of Trainees	Honduras, Panama, Peru, and the Dominican Republic	
Project cost	Japan: 354,930 MXN (Mexican Pesos)	
	Mexico: 319,874 MXN (Mexican Pesos)	

While capacity development of public institutions in the region was supported by the past TCTPs under JMPP in the area of waste management, strengthening their partnerships with the private sector was indispensable for promoting 3Rs (Reduce, Reuse, and Recycle), and to form a system toward a material-recycle society. Through the bilateral technical cooperation projects and implementation of the past three TCTPs, INECC had institutionally developed and accumulated not only its specialized knowledge on integral waste management, but also knowledge on the situations of the sector in the region. Building additionally on the knowledge and experiences that INECC obtained from the JICA's Knowledge Co-Creation Programme in Japan and through its implementation in Mexico, INECC, AMEXCID, and JICA agreed to implement the 'TCTP on Establishment of Resource Recycling Society System', with the aim to introduce the concept and to support the development of the relevant instruments in the neighboring countries, adjusting the contents to its regional context. Considering the potentials and level of preparedness to replicate the TCTP-offering knowledge, specifically to formulate strategic partnerships with the private sector, the TCTP was opened to countries beyond Central America, such as Brazil, Chile, and Peru. For the first time JMPP initiative, representatives of six private Japanese companies³ that had interest in establishing projects or seeking investment opportunities in the participating countries were invited as training instructors.

The first course of the TCTP generated impacts in the beneficiary countries. A participant from Chile, for instance, elaborated an Action Plan during the TCTP to implement an initiative called *'Santiago RECICLA FACIL (Santiago Easy Recycle)'*, which was launched on May 2016: The participant expressed in the questionnaire response that the course was very useful, learning of two countries' experiences and receiving tutorials to elaborate the Action Plan where obtained knowledge had to be applied adequately and that the course was effective in promoting the concept of waste valuation in the Latin American region.

In spite of positive impacts produced by the first course of the TCTP, the following two courses were cancelled, suffering further institutional restructure at the time by the government in the environment sector: In 2015, the new Climate Change General Law (*Ley General de Cambio Climático*) went into effect and forced the relocation of the waste management sub-sector changing its budget allocation structure. As a result, INECC was not able to assure the necessary budget allocation for the TCTP. Although a series of discussion and negotiation took place seeking alternatives and possibilities to continue the TCTP, including possible support from other donors, the committee was unable to reach an agreement to solve the issue. Consequently the second and third courses of the TCTP were cancelled.

_

³ The six invited Japanese companies were; Okinawa Industrial Waste Association, Hamada Company, Ishizaka Sangyo Kabushiki Co. Ltd, Kinsei Sangyo Co., Ltd, Street Design Corp, and S'tem Co., Ltd

3 Evaluation Results

3.1 Final Objective1: Supporting regional development in Latin America in the environment sector, offering joint technical cooperation in accordance with the needs and initiatives of the beneficiary countries

3.1.1 Relevance:

(a) Consistency with high-level policies

The International Development Cooperation Law (in Spanish, Ley de Cooperación Internacional para el Desarrollo) of Mexico, established in 2010 at the time of planning was embraced by the objectives of the target TCTPs: The Law provided the legal framework to establish AMEXCID in 2011 and asserts that triangular cooperation modality in partnerships with bilateral and multilateral donors will be one of the important cooperation modalities to be promoted for responding the needs and support requests of the third countries (Article 4, IV). The Law defines that its geographical priority will be Central America and the rest of the countries in Latin America and the Caribbean (Article 24). It also states that human resources formation is considered especially important from the strategic viewpoint of the beneficiary countries, and Mexican international cooperation will have special emphasis in supporting the formation of the human resources and specialists in the region (Article 25).

The National Development Plan (in Spanish, Plan Nacional de Desarrollo: PND) 2013-2018 of Mexico set five key national targets for its national development policies: 1) Nation in Peace; 2) Inclusive Mexico; 3) Mexico with Qualitative Education; 4) Prospering Mexico; and 5) Mexico with Global Responsibility. The JMPP enhances a role of Mexico in the Latin American region to fulfill its national commitment under the fifth key target 'Mexico with Global responsibility' to undertake the corresponding global responsibilities and its Strategy 5.1.7. supports enhancing vigorous international cooperation to contribute to the development of Mexico as well as the development and stability of other countries. In terms of the environment sector, under the third key target 'Prospering Mexico,' the Strategy 4.4.3 upholds strengthening the national policy for climate change and environmental protection for transformation toward the competitive, sustainable, and resilient country with low carbon production, and it clearly affirms promotion and strengthening international cooperation in the related sectorial areas.

At the operational level, Mexico's 'International Cooperation Program for the Development 2014-2018 (*Programa de Cooperación Internacional para el Desarrollo 2014-2018*)' emphasizes Mexico's unique positioning in International Cooperation with dual characters as recipient and as donor. Facing the decrease of ODA allocation by traditional donors toward the Latin American region, it emphasizes the importance of a mechanism of South-South cooperation and of taking advantage of triangular cooperation. With substantial experiences as recipient and also as donor of international cooperation, it upholds that Mexico should take the privilege to serve as a facilitator to connect traditional donors and emerging actors in International Cooperation and confirms that AMEXCID will promote triangular cooperation schemes with its strategic partners. TCTPs in the framework of JMPP reinforce this unique position of Mexico: based on its own experiences to apply the knowledge and techniques transferred from Japan through bilateral assistance, TCTPs in JMPP framework offers international cooperation and knowledge-sharing whose contents are adapted to the regional context. Embedded within the framework of the mentioned *National Development Plan*

2013-2018, but also of the *International Development Cooperation Law*, this Program defines that the environment sector is one of the most prioritized sectors for AMEXCID and argues that one of the areas in which Mexico has institutional strengths include technology regarding water. Officials from the target TCTP Mexican implementing agencies in the environment sector confirmed in the interviews that their respective *Internal Regulations* also uphold enhancing technical international cooperation, synchronized with the national policies.

In terms of environmental legal frameworks, Mexico is privileged by possessing a number of established laws and regulations which have been put into operation in the environment sector. The most relevant laws to the target TCTPs are Law and Regulations on Ecologic Balance and Environmental Protection (in Spanish, Ley General del Equilibrio Ecológico y la Protección al Ambiente y su Reglamento), Law and Regulations for Prevention and Integral Management of Waste (in Spanish, Ley General para la Prevención y Gestión Integral de los Residuos y su Reglamento), and Law of Climate Change (in Spanish, Ley General de Cambio Climático). The Deputy Director General for Cooperation with Europe, Asia-Pacific and North America in AMEXCID and interviewed officials of the Ministry of Environment and Natural Resources (in Spanish, Secretaria de Medio Ambiente y Recursos Naturales: hereinafter referred as SEMARNAT) indeed stated that they consider that Mexico is positioned as an advanced country in the region in terms of legal and institutional framework implementation in the environment sector, particularly in the thematic areas addressed by the target TCTPs.

Japan's ODA policies toward the Latin American region at the time of planning were described in ODA databook 2011 and the main areas to support included the environment sector addressing climate change, and it upholds utilization of Partnership Programmes to support development in the region. The latest ODA databook 2017, as policies at the time of this evaluation shows the focused areas toward the Latin American region, in which environment and climate change are listed together with triangular cooperation through Partnership Programmes.. In that sense, the objectives of the TCTPs are also consistent with Japanese ODA policies toward the region. Additionally, during the planning process of each TCTP, their alignment with the Japanese ODA policies in the respective beneficiary countries was confirmed through consultation with JICA offices in the beneficiary countries. It is noteworthy to say that the annual J

MPP Planning Committee has served to ensure alignment of JMPP including TCTPs to international cooperation policies and framework of both countries toward the beneficiary countries, which will be discussed later in Section 3.3.(a).

The Final Objective 1 to support regional development in Latin America in the environment sector aimed by the target TCTPs in the JMPP framework is thus highly consistent with the high-level policies of both Japan and Mexico.

(b) Consistency with development needs of Beneficiary countries

In the planning process of the target TCTPs, diagnostic work was conducted jointly by the TCTP committee team, consisting of AMEXCID, JICA and Mexican implementing agency for each TCTP in order to identify needs and feasibility to apply the relevant Mexican experiences and techniques offered by the TCTPs. Through the respective communication

canals of each institution, the needs for the respective TCTP were confirmed. The countries and institutions that expressed such needs and their interest to participate in the proposed TCTP were also required to submit its preliminary plans at the initial planning stage. In the submitted preliminary plans, their environmental policies and needs, as well as institutional capacities were explained by the candidate institutions to confirm the consistency of their development strategies to the objectives of offered TCTPs. The TCTP committee analyzed and utilized such information not only to select participants, but also to adjust the offering TCTP contents refining it to be more adequate for the expressed specific needs in the region, ensuring the specific goals of each country will be addressed in the TCTP. The consistency of the target TCTPs was thus ensured through its strategic planning process of TCTPs. The comments collected from the beneficiary countries through questionnaire and videoconference evidenced the consistency: All the responded beneficiary institutions in the evaluation survey confirmed that the objectives of target TCTPs were congruent to their national policies and development needs at the time of planning as well as at the time of this evaluation.

(c) Consistency with international priorities

Japan and Mexico ratified a number of international conventions and protocols in the environment sector, including the Rio Declaration on Environment and Development, the United Nations Framework Convention on Climate Change and its Kyoto Protocol, and the Stockholm Convention on Persistent Organic Pollutants among others. Japan has been playing significant roles to enhance international commitments agreed in such global environmental conventions. Particularly, in terms of climate change, it is one of the leading countries to fulfill the agreed targets in the Kyoto Protocol being the hosting country. Likewise, Mexico, as part of its fulfillment of Agenda 214, has been playing active roles to lead numerous international dialogues and tables with its delegation teams habitually comprising with experienced environment specialists, and in 2010 successfully hosted the 16th session of Conference of Parties (COP 16)⁵. Supporting human resources formation in the region through TCTP knowledge sharing of Japan's techniques and its applied Mexican experiences is considered a significant contribution to respond to the commitments subscribed in such international conventions and protocols.

Supporting the environment sector development in the region through the target TCTPs and JMPP was consistent with the Millennium Development Goals (MDGs)⁶ at the time of planning; the MDG Goal 7 to ensure environmental sustainability, and the Goal 8 to develop a global partnerships for development. Japan and Mexico jointly promoted achievement of those goals of the third countries in the region through capacity development of the participating countries in the target TCTPs. At the time of this evaluation, it is also consistent with the Sustainable Development Goals (SDGs), particularly with the SDG Goals 6, 11, 12, 13, and 15⁷, global commitments pledged by the United Nations in Agenda 2030.

⁴ Agenda 21: a non-binding action plan of the United Nations with regard to sustainable development to implement the Rio Declaration on Environment and Development.

⁵ COP: yearly held conference in the framework of the United Nations Framework Convention on Climate Change

⁶ MDGs: http://www.un.org/millenniumgoals/

⁷ SDGs: Goal 6: Clean Water and Sanitation; Goal 11: Sustainable Cities and Communities; Goal 12: Responsible Consumption and Production; Goal 13: Climate Action; and Goal 15: Life on Land (Sources: https://www.un.org/sustainabledevelopment/)

(d) Consistency with other donors' assistance in the environment sector in the region and JMPP's comparative advantages

In the Latin American region, other donors are also active in supporting the environment sector development and work of each donor who implement triangular cooperation with Mexico including Japan is aligned with policies and activity plans of AMEXCID.

The German international cooperation agency (*Deutsche Gesellschaft für Internationale Zusammenarbeit:* hereinafter referred as GIZ) is also a strong partner for Mexico, especially by offering a regional fund for Latin America that has financed a number of initiatives in environment sector development in the region and information of the TCTPs are shared occasionally. Indeed Japan and Germany are considered as principal strategic partners by AMEXCID and SEMARNAT to jointly promote triangular cooperation in support of the environment sector development in the region. Other active donors mentioned by AMEXCID and SEMARNAT include Spain that operates a triangular cooperation joint fund with Mexico in Central America, France, and the United States of America. Mexico has also triangular cooperation experiences with emerging horizontal partners such as Korea, Singapore, and Turkey.

Having worked with various donors, AMEXCID and the TCTP implementing agencies recognize advantages of JMPP. One of the distinguishing advantages is its commitment made in high-level policy dialogue between the two countries and in its systematically established scheme and structure. For example, JMPP was one of the big pillars for the presidential summit meeting held between Japan and Mexico in April 2013 where strengthening strategic partnerships between the two countries was confirmed and the declared Shared Vision and Actions for Strengthening the Bilateral Relationship included a pillar of Triangular Cooperation, embedded with JMPP, emphasizing its recognition that 'the consolidation of the partnership between Japan and Mexico in Asia and Latin America, is conducive to the stability and prosperity of these said regions'8 in its Joint Statement. In 2014 'The Letter of Intent for the Future Cooperation' was signed between AMEXCID and JICA, in which the importance of strengthening triangular cooperation efforts to support the neighboring countries was once again reiterated as operational level commitment. Expressed as high-level commitment, JMPP strategies are discussed by high-level officials in the annual JMPP Planning Committee where operational issues are also reviewed and confirmed. Endorsed by the Planning Committee, modalities and schemes of JMPP have been systematically structured and officially established: The procedures for the TCTP operations and evaluations were standardized as documented in the relevant guidelines, and the criteria for finance mechanism and administration are also officially institutionalized. The details will be also discussed in the posterior section 3.3.(b).

From the thematic viewpoint, knowledge and techniques offered by the TCTPs were uniquely advanced in the Latin American region. For example, the low-cost innovative technologies for wastewater treatment, originated in Japan and developed by Mexico was unique and attractive for countries in the region. A number of beneficiary countries in the questionnaire expressed that the techniques offered in the target TCTPs were not only unique, but also

_

⁸ https://www.mofa.go.jp/files/000003580.pdf

well-adjusted to the needs of the beneficiary countries and consequently had high feasibility to replicate in their countries, which gives a comparative advantage of JMPP in comparison with similar training courses offered in the developed countries.

3.1.2 Effectiveness of Results

Specific achievements were confirmed during the respective TCTP implementation period as described in Chapter 2: Most of the specific goals established for each TCTP were achieved and effectiveness of the target TCTPs was high at the time of project completion of the TCTPs.

Official ex-post monitoring was conducted only for the TCTP on *Alternative Technology of Sustainable Water and Sludge Treatment with focus on Revalorization of Waste* (see Box 2): In El Salvador, as an example, the National Administration for Aqueduct and Sewer System (*Administracion Nacional de Acueductos y Alcantarillados: ANDA*) implemented four pilot projects in accordance with the developed Action Plans in the TCTP which include construction of sludge composting systems and aerated lagoon and wetland wastewater treatment systems. These pilot projects required establishing partnerships with various actors, including academic institutions such as the University of El Salvador (UES) and Ministry of Health and municipal governments, and also triggered dissemination of the knowledge and techniques obtained from the TCTP to those forming the pilot project teams. These newly established partnerships and dissemination effects are considered as a substantial impact of the TCTP in El Salvador.

Another example of impact was confirmed for the TCTP on Coastal Water Monitoring in the Mesoamerican region as parameters of the Climate Change. In Panama, where high effectiveness was confirmed for the TCTP benefitting from a direct link that a participant had with a JICA project on sanitation of Panama Bay, a new Department of Coast and Sea was created in the Ministry of Environment as its analytic capacity as well as laboratory equipment on coastal water quality monitoring were strengthened as an impact of its participation in the TCTP.

In the case of the Dominican Republic, the JICA Dominican Republic office took strong leadership to link the two TCTPs and the existing JICA bilateral cooperation project in the solid waste management sector. Interviewed officers from JICA Dominican Republic office and the Ministry of Economy, Planning and Development of the Dominican Republic confirmed in video-conference that all the participants for the TCTPs in the relevant sector were selected from among the direct counterparts of the JICA project. Their Action Plans elaborated in the TCTPs were reviewed officially by the project team and considered as important inputs to reinforce 'Dominica Limpia (Clean Dominican Republic),' a newly established political initiative ordered from the President in those days. It is considered that the TCTPs substantially contributed to strengthening the relevant institutional capacities of the project counterparts to increase effectiveness and sustainability of the project.

As indirect impact, participation in the target TCTPs has generated opportunities for many participating institutions to obtain necessary and appropriate support and equipment inside their own institutions to apply the knowledge and techniques learned from the TCTPs, thereby contributing to the improvement of their institutional capacities and to implement the

political instruments and pilot projects generated as a result of their Action Plans developed in the TCTPs. It is also noteworthy to mention that collected information from the beneficiary countries for this evaluation suggested that some Action Plans elaborated by the target TCTPs obtained financial support from other bilateral and multilateral donors for its implementation: In Honduras, the learned knowledge from the TCTP on *Development of Instruments for the Integral Waste Management with Focus on 3Rs (Reduction, Reuse, and Recycle)* served as basis for a number of newly established legal frameworks and guidelines including the Municipal Guidelines for solid waste management financed by the Pan-American Organization for Health; Guatemala obtained financial support from Spain and loan from Inter-American Bank for Development for a program that promotes wastewater treatment system construction in rural areas as well as peri-urban areas in which the TCTP knowledge was applied.

On the other hand, for some countries, lack of necessary equipment or absence of the supporting institutional framework was an obstacle to applying the knowledge and capacities learned from the TCTP, thereby limiting effectiveness and impact of the TCTPs beyond individual capacity development.

The participated specialists in the beneficiary countries are indeed conscious of the learning opportunities to improve their operation and have been undertaking active efforts to promote its application, for which most of the participating institutions are in search of ways to respond. However, many of the participants as well as officials from the Mexican implementing agencies expressed in their questionnaire responses and interviews that implementation of a new political instrument or the standardization of the methodologies under new criteria is not straightforward: it involves a variety of actors at multiple levels nationwide and may require occasionally institutional changes and physical infrastructure improvement, which entail long-term efforts. Therefore they all claim the necessity for a long-term technical or institutional support or follow-up activities to the TCTPs in order to generate concrete achievements and impacts in their countries while they continue efforts to maintain or disseminate the obtained technical knowledge and capacity within the institutions.

Officials from the Mexican implementing agencies in their interviews confirmed that they have been providing occasional follow-up consultation and advisory through emails with the exparticipants of the TCTPs at the time of this evaluation, but all such efforts are made as individual efforts with limitation because there is no institutional justification or support to allocate resources once the official TCTP implementation period subscribed under the Minutes of Discussion concluded. This limitation was also recognized and reflected in some of the questionnaire responses from the participating institutions, as a vulnerability for sustaining the TCTP achievements and impact. Especially, many participating institutions expressed in questionnaire response that sustainability of the TCTP achievement decreases substantially when responsible instructors or officials of the Mexican implementing agencies leave their positions in the Mexican government.

3.2 Final Objective 2: Supporting Mexico to be a donor country with 'Global Responsibility' as proclaimed in The International Development Cooperation Law (2011) and in the National Plan for Development 2013-2018.'

3.2.1 Relevancy

(a) Consistency with high-level policies

Japanese ODA's *Rolling Plan for Mexico 2011* at the time of planning of the target TCTPs listed three principal diplomatic considerations for the Plan: one of them was enhancing Triangular Cooperation implemented through cooperation between Mexico and Japan in the Japan-Mexico Partnership Programme (JMPP) and one was the importance to support efforts to solve global environmental problems such as climate change measures which are shared problems of Mexico and Japan. The two priority pillars established by the Plan were congruent with the two diplomatic considerations, in which all the target TCTPs were included accordingly. Regarding the climate change pillar, the Plan upheld Japan's Assistance Policy to strengthen 'the ability to create and implement climate change measures which contribute to sustainable development in Mexico, Japan aims to provide assistance on science and technologies in the areas of cooperation where Japan can utilize the experience it gained within Japan and past technical cooperation results in Mexico and Japan aims to disseminate the results obtained from the assistance for Mexico to other countries in Latin America in particular, through supporting Mexico's South-South cooperation.' Under the pillar of enhancing triangular cooperation, the Japan's Assistance Policy describes that 'Japan identifies Mexico as a partner for jointly supporting Central America and the Caribbean, rather than as an aid recipient, and vigorously implements cooperation projects under the JMPP framework mainly focusing on the Third-country Training. Organizations and personnel developed through past Japanese assistance for Mexico will be utilized and Mexico's initiatives will be encouraged at all stages of the cooperation including project formulation. implementation, monitoring and evaluation. Mexico's aid resources will be identified and the JMPP cooperation will be more efficient and effective in order to meet demand from developing countries.'

At the time of this evaluation, the Country Assistance Policy for Mexico (2014) upholds that Mexico is a strategic partner country to seek solutions for global challenges and Japanese ODA will support strengthening Mexico's capacity to work on environmental challenges at a global scale such as biodiversity conservation, climate change, and reforestation, and that the results of such Japanese ODA support toward to Mexico are expected to spread or be replicated to the third countries in the region through JMPP. The Rolling Plan for Mexico 2017 also lists a Program for strengthening Mexico's capacity as one of the main programs to address climate change challenges through the promotion of scientific and technical collaboration between the two countries. Especially for the thematic areas of waste management and biodiversity, the plan specifically affirms providing follow-up activities to the past bilateral cooperation projects to create positive impact through wide dissemination of such past projects' achievements.

Therefore, strengthening the capacity of Mexican institutions for international cooperation through the target TCTPs in the environment sector was highly consistent with the ODA policies of Japan both at the time of planning and at the time of this evaluation.

(b) Consistency with development needs of Mexico

In the section of 'Mexico as Cooperation Recipient' in Mexico's 'International Cooperation Program for the Development 2014-2018 (in Spanish, Programa de Cooperación

Internacional para el Desarrollo 2014-2018),' it states that 'Mexico requires applying schemes and strategies to increase the learning capacity for resource mobilization through experience exchange'. For that purpose, establishing the international cooperation focus giving precedence to quality, not only quantity, is indispensable and the proposed priority sectors include the environment sector. It also states that 'strengthening relations with the traditional donors and international organizations, involving different levels of government would be prioritized actions'. It describes that enlargement of resource allocation toward the cooperation to contribute to prosperity and stability for the prioritized region will be enhanced through AMEXCID: increase of regional cooperation and promotion of triangular cooperation with the strategic partner extension are upheld as earlier described in this report in Section 3.1.1(a).

The Mexican international cooperation policies are well rooted in the environment sector. All the Mexican implementing agencies of the target TCTPs, including SEMARNAT, have an International Cooperation division inside their institutions that have been working closely with AMEXCID. In the interviews, officials from all the target TCTP implementing agencies expressed that protection of Mexican environment sector, particularly under the threat of climate change, is not possible without assimilated efforts in the region because of Mexico's geographical conditions, which justifies their mission for participating in international cooperation schemes. As discussed in Section 3.1.1 (a), their missions and internal regulations confirm the consistency of Japan's ODA support to strengthen their international cooperation capacity.

(c) Consistency with international priorities

The aims of TCTPs and JMPP are consistent with the Goal 17 of the SDGs that calls for global partnerships for sustainable development, bringing together national governments, the international community, civil society, the private sector and other actors. Specifically in the target TCTPs, Japan and Mexico collaborated together toward the achievement of the relevant SDG in the environment sector (the Goals 6, 11, 12, 13, and 15, as described in Section 3.1.1 (c)), with participation of multiple actors including national institutions, international donors and the private sector. Among the principal target categories established for the Goal 17, the evaluated TCTPs especially contributed in some indicators under the target categories of Finance, Technology and Capacity-Building: For example, Finance Target 17.3 to mobilize additional financial resources for developing countries from multiple sources; Technology Target 17.6 to enhance North-South, South-South and triangular regional and international cooperation on and access to science, technology and innovation and enhance knowledge sharing on mutually agreed terms; and Capacity-Building Target 17.9 to enhance international support for implementing effective and targeted capacitybuilding in developing countries to support national plans to implement all the sustainable development goals, including through North-South, South-South and triangular cooperation.

The aims of TCTPs and JMPP are also consistent with the aims of Global Partnership for Effective Development Co-operation⁹ created at the Fourth High-Level Forum on Aid Effectiveness in Busan (2011) to promote the effectiveness of development efforts by bringing together all actors, and providing practical guidance and sharing knowledge.

_

⁹ <u>http://effectivecooperation.org/about/about-the-partnership/</u>

Assistance from Japan and Mexico through the established scheme of JMPP is offered in support of beneficiary countries needs and capacity: All the target TCTPs were geared to elaborate political and technical instruments of the beneficiary countries through the offered TCTPes, building on the transferred Japanese techniques and experiences that Mexico attuned to its national context, to be assimilated in the regional context.

(d) Consistency with other donors' assistance in strengthening Mexico's capacity for international cooperation and Japan's comparative advantages

The past AMEXCID annual and semester activity reports suggest that Germany and Japan have been the principal bilateral donors to assist in strengthening AMEXCID capacity, Japan through the dispatch of experts and Germany through a bilateral project and a co-financed fund respectively. AMEXCID also operates a number of co-financing funds with Spain, Chile, Uruguay, and other multilateral donors in support for the regional development. Japan is considered to have contributed substantially by its technical inputs and its coherent and continued assistance over the past decades, for which JMPP operation including TCTPs is considered as an established and systematically-structured tool and a drive for its further capacity strengthening.

3.2.2 Effectiveness of Results

AMEXCID considers that JMPP has contributed substantially to strengthen Mexico's visibility in International Cooperation, especially in the Latin American region.

In 2016, the volume of international cooperation offered by AMEXCID was approximately 288 million US dollars with 212 international cooperation projects, according to *the AMEXCID the* 1st semester Report in 2018. Since the efforts and exercise for quantification of Mexican international cooperation just started in 2012, criteria for quantification may not be identical over the past years' records, but the estimated volume of the corresponding Mexican international cooperation in 2011 was registered as 235 million US dollars¹⁰. Considering that the exchange rate of Mexican pesos (MXN) to US dollars (USD) was 11.74 MXN/USD as of June 30 in 2011 and 18.65 MXN/USD as of June 30 in 2018¹¹, the volume of Mexican international cooperation can be considered to have doubled between 2011 and 2016 in terms of Mexican peso.¹²

AMEXCID and the Mexican implementing agencies of the target TCTPs confirmed that their capacities to conduct international cooperation were strengthened through the target TCTP implementation. As described earlier, the target TCTPs were conducted under the systemized and established procedures of JMPP with clear and adequate guidelines and tools. Implementing the TCTPs together with Japan and benefitting from such established guidelines and tools developed during the target period, interviewed officials of AMEXCID considered that Mexico has increased and fine-tuned its capacity to assimilate effective

¹⁰ Data source: AMEXCID 1st tri-semester report in 2013: https://transparencia.sre.gob.mx/amexcid/images/pdf/informe-cc-2013/1er-Informe-Semestral-CC-Amexcid2013.pdf

cc-2013/1er-Informe-Semestral-CC-Amexicuzu 13.pui

11 Data source: Banco de Mexico website /Daily U.S. dollar-MXN exchange rate historical series - (CF373):
http://www.anterior.banxico.org.mx/SieInternet/consultarDirectorioInternetAction.do?accion=consultarCuadro&idCuadro
=CF373§or=6&locale=en

¹² In terms of Triangular Cooperation, 27 triangular projects were in implementation with 2 JMPP projects as of June 2018, while 23 triangular cooperation projects were conducted as of December 2012, out of which 6 were conducted in JMPP.

international cooperation in an appropriate manner in harmonization with the Japanese ODA management methodology called 'Project Cycle Management (PCM).' The established procedures and tools also facilitated that all the TCTPs were conducted under the harmonized administrative procedure that increased effectiveness, not only for the TCTP implementing actors, but also for the beneficiary participants. A majority of the participants who answered the questionnaires confirmed that all the procedures and administrative arrangement of the target TCTPs were very efficient and appropriate.

Particularly for the TCTP implemented period of 2012-2015, AMEXCID and the experienced Mexican implementing agencies considered that the strategic planning process of TCTPs was strengthened as the target TCTPs were developed based on the results and learning from the previously implemented TCTPs; more strategic TCTP structure and participant selecting process, as described in Chapter 2, increased effectiveness of the target TCTPs. These successful and strategic practices of the four target TCTPs were shared as good practices in 2015 with other Mexican governmental institutions for their consideration of potential future TCTPs. The initiatives to adopt such strategies emerged not only from Japanese side but also from Mexican side, because IMTA and INECC, as experienced agencies to have implemented several TCTPs in the past, themselves were not any longer satisfied with just offering the training courses to any country of the region, but had strong interest in seeing concrete achievement and impact of the TCTPs in the beneficiary countries. This proved their strengthened capacity as a donor: as a process to become a strengthened international cooperation donor, now their strategy and operation evolved to be 'resultsoriented' as advocated in the international cooperation standard. All the implementing agencies and AMEXCID stressed in the questionnaire responses and the interviews the need of strengthening the follow-up mechanism of TCTPs, including the ex-post period, emphasizing that a longer-term cooperation would be necessary for the TCTP beneficiary countries to generate concrete results, as the application of newly obtained knowledge takes time, expressing their interest to continue offering international cooperation through JMPP. Such a statement from the Mexican agencies confirms their increasing ownership and affirmation of their institutional responsibility in the international society, particularly to support regional development in the environment sector.

Additionally, interviewed officials from AMEXCID also believe that a principal and extensive database of Mexican experts as international cooperation resource was established in the environment sector during the target period of this evaluation: Numerous Mexican experts acquired capacity to conduct effective international cooperation with a good understanding of the regional context of Latin America through the target TCTPs implementation. Indeed, being originated from the TCTPs, a number of requests for Mexican experts dispatch were expressed from the beneficiary countries during the period. An example is a dispatch of two Mexican experts for a project of Establishing solid waste management plan with 3R focus (in Spanish, 'Establecimiento del Plan de Gestión de Residuos con Enfoque de 3Rs (Reducir, Reutilizar y Reciclar)' in Panama between 2015 and 2016.

Another proof of the increased capacity of AMEXCID, particularly in implementing TCTPs, was demonstrated in their financial contribution to the target TCTPs. Since the launch of JMPP in 2003, the programme had a principal agreement on cost-sharing in its *Article 2 (1.a)* where the government of Mexico will *'initially assume financial responsibility to cover 30 % of the necessary cost for TCTP, and will make efforts to gradually increase its share to 50% in the future.'* Indeed the effectiveness demonstrated by JMPP over the decade has facilitated AMEXCID to justify its budget allocation increase for JMPP during the target TCTP period: by the time of the final year of the target TCTPs in 2015, the financial contribution by AMEXCID reached 659 thousand Mexican pesos while the annual financial contribution in 2011 was approximately 165 thousand Mexican pesos. Particularly in 2015, the Mexican implementing agency for the TCTP on *Establishment of Resource Recycling Society System* faced difficulty to allocate the agreed budget suffering from the government restructure in the environment sector as earlier described in Section 2.2.4. After a number of dialogues in vain, AMEXCID for the first time made available the necessary budget covering approximately 50% of the total TCTP cost from their finances.

BOX 3: Bilateral cooperation and national development within the TCTPs.

AMEXCID and the Mexican implementing agencies also financed other beneficiaries outside of the JMPP framework in the target TCTPs. Especially AMEXCID's financial participation to cover the participation of trainees outside JICA's priority countries is considered valuable from the viewpoint of Mexico's international cooperation for Latin America. For example, AMEXCID covered the participation of six Ecuadorian participants in the TCTP on *Development of Instruments for the Integral Waste Management with Focus on 3Rs (Reduction, Reuse, and Recycle)* (2012-2014). Since supporting Ecuador in this area was not part of JICA's priorities, JICA considered it to be supported exclusively by Mexico, not by JMPP..

For the target TCTPs to be more effective, AMEXCID or Mexican implementing agencies also covered the invitation cost of some instructors: For example, for the TCTP on *Alternative Technology of Sustainable Water and Sludge Treatment with focus on Revalorization of Waste,* Mexican side burdened the cost for bringing instructors from other states, and even from outside of the country as Mexican side considered that their experiences were important for addressing some specific topics of the TCTP.

Additionally, considering value-added not only for regional development, but also for national development, the implementing agencies invited Mexican participants mainly from local governments to the training courses. In total, more than 30 Mexican participants were included in the four target TCTPs for which the necessary cost was fully covered by the Mexican side: in the TCTP evaluation conducted during the implementation of each TCTP, many international participants expressed that the participation of Mexican nationals had a positive result enriching their information-sharing and discussion in face of similar development challenges and likewise commented so by the Mexican participants.

From the technical viewpoint, AMEXCID has demonstrated its increasing capacity to support the related Mexican agencies and actors. AMEXCID in collaboration with JICA, have carried out a number of workshops on Project Cycle Management for the Mexican agencies and on mechanisms of JMPP for Mexican embassies in the beneficiary countries to ensure all the activities be implemented in alignment with the established framework of JMPP and with the respective TCTP. As an impact, supporting and promoting JMPP has become part of the work plans of the Mexican embassies in the region.

Outside of JMPP, Japan also supports the capacity strengthening of AMEXCID and Mexican implementing agencies through various schemes: Capacity development of AMEXCID and Mexican implementing agencies Mexican human resource development; and Technical transfer to Mexican implementing agencies.

Regarding capacity development of AMEXCID, the Deputy Director General for Cooperation with Europe, Asia-Pacific and North America of AMEXCID confirmed that Japan's assistance has been coherent over the decades: Starting from the prior period of AMEXCID establishment, dispatched Japanese experts provided guidance and advisory for institutional strengthening especially in the areas of strategic planning and systematization of the operational mechanism of AMEXCID. The three Japanese experts dispatched between the target period of this evaluation reviewed operation of AMEXCID including JMPP experiences: They advocated the importance of establishing sub-regional and bilateral cooperation strategies for the prioritized region, as well as sectorial approach strategies for AMEXCID's prioritized sectors including the environment sector, and tried to reinforce systematic data management which was reflected to the first Mexican Resource Catalogue for International Development Cooperation published in 2012 with JICA's support for its editing and publishing. The Chief Representative of JICA Mexico commented that the strengthened capacity of the DGCTC, which has been a window division for Japanese ODA, has been confirmed through the dispatched Japanese experts over the decades and that future support should be provided to other divisions inside AMEXCID. The next Japanese expert dispatched from December 2018 will be working in the Planning Division of AMEXCID, which holds an important function to formulate institutional strategies of international cooperation and better coordination between the Planning Division and other divisions inside AMEXCID including the DGCTC.

As for Mexican human resource development, JICA offered training opportunities including technically specialized courses and region-focused courses in Japan, and other JICA's regional courses and seminars. The summary of the training opportunities in Japan offered for the officials of the target TCTP implementation agencies between 2006 and 2015 are as shown in the Table 1:

Table 1: Number of trained government officials from the target TCTP implementation

agencies between 2006 and 2015.

Name of Institution	Thematical areas	Number of the training opportunities
AMEXCID	ODA Evaluation, South-South Cooperation, Project Management Cycle for International Cooperation	13
CONAGUA	Coastal Water Monitoring Plan, Formulation of Environmental Standards and Regulations, Water Sediment Quality Analysis Capacity Building, Water Environmental Monitoring	22

IMTA	Climate Change Prediction, Adaptation Policy to Climate Change, South-South Cooperation	4
INECC	Waste Management and 3R (Reduce, Reuse, and Recycle) policies, Environmental Conservation, South-South Cooperation,	20
Other officials under the Ministry of Environment	Waste Management and 3R (Reduce, Reuse, and Recycle) policies, Mega-City Environmental Policy, The Environmental Management of Enclosed Coastal Seas, Adaptation to Climate Change, South-South Cooperation	23

All the Mexican implementing agencies for the target TCTPs confirmed that past bilateral cooperation served as a basis to build a basic institutional capacity to implement TCTPs. (The details of the past bilateral cooperation of the respective agency is described in Chapter 2.). However, it has been more than 10 years since the last bilateral cooperation project completion for some Mexican implementing agencies. Although opportunities for capacity training in Japan have been continuously offered, some government officials expressed their wish and need for further and constant update on Japanese technologies at larger scale and for capacity development of new generations, in order to ensure the strengthening of JMPP comparative advantages.

A number of impacts were confirmed. The DGCTC hosts similar training courses with Korea and Singapore, for which the experiences of implementing TCTPs in JMPP over decades served as a sound basis, regardless that each donor has its distinctive schemes and conditions. Interviewed officials from AMEXCID expressed that JMPP has contributed in reinforcing the concerned divisions of AMEXCID to be considered as a prestigiously efficient and effective partner in the mechanism of South-South cooperation or Triangular cooperation to implement similar training courses for the region of Latin America and the Caribbean. During the years of 2016 to 2018, AMEXCID served as a chair for South-South cooperation committee of CEPAL (Comisión Económica para América Latina y el Caribe), the regional commission of the United Nations.

The Mexican implementing agencies also have witnessed the impact of hosting the TCTPs. Officials from the Mexican implementing agencies expressed in the questionnaire responses and in the interviews that the participation in JMPP including the target TCTPs has contributed to their increased institutional recognition in the region and increased opportunities for other international cooperation schemes with various international actors in the posterior period of the TCTPs. For example, IMTA is now conducting several new international cooperation initiatives originated from the target TCTP: During the TCTP implementation, IMTA was approached by GIZ which was looking for a technical resource institution for a project in Bolivia, and upon their request, the inclusion of the Bolivian counterparts in the TCTP was undertaken with funds of GIZ, and subsequently IMTA was officially integrated as a technical partner for the project.

It is absolutely fair to say that AMEXCID and the Mexican implementing agencies increased their capacity to conduct effective international cooperation through the experiences of the target TCTPs.

3.3 Appropriateness of Processes

(a) Appropriateness and clarity of policy-making processes

Its strategic planning structure of JMPP involving high-level officials is considered to be one of the most advanced triangular cooperation mechanisms by the Deputy Director General of Cooperation with Europe, Asia-Pacific and North America of AMEXCID, as described earlier. The JMPP Planning Committee is held every year with the presence of the Minister of the Japanese embassy, the Chief Representative of JICA Mexico, and the General Director of DGCTC-AMEXCID to confirm the previous year's achievements and agree on planned activities for the present and coming years, where political and operational aspects are fully discussed and accordingly the strategic decisions are made at the level of such high-level commissioners ensuring alignment of JMPP policies and activities to international cooperation policies of the respective country. In 2018, the XIII JMPP Planning Committee affirmed the significance of the decision-making process by the Planning Committee as a strength of JMPP, and the evolving mechanisms of JMPP were acknowledged as proof of JMPP's increasing effectiveness and efficiency.

(b) Appropriateness and clarity of policy implementing processes

At the operational level, interviewed officials from AMEXCID and the Mexican TCTP implementing agencies also considered that JMPP is one of the most advanced schemes in terms of having established mechanisms and operational tools for its implementation. A number of guidelines and tools for TCTP implementation were developed and newly adopted during the target TCTP implementation period between 2012 and 2015: The Guidelines of TCTP Implementation (2011), the Guidelines for TCTP Evaluation (2012), the TCTP Administration Manuals (2015), the Budget Guidelines and Accounting Regulations for TCTP (2014), and the Administrative Guidelines to request Japanese instructors for TCTP (2015). Elaboration and introduction of all these guidelines facilitated and ensured the effectiveness and efficiency of the target TCTPs. It has also facilitated other Mexican agencies which operate TCTP for the first time in future to understand the standard procedure and administrative requirement in international cooperation: those TCTP guidelines are grounded on Japanese ODA procedure and administrative guidelines that follow international standards of ODA. Furthermore, these established procedures and guidelines enabled to plan the TCTPs toward the commonly recognized goals among all the actors and to implement the TCTPs with transparency and appropriate actions on time. The developed guidelines were also referred from other countries: For example, Panama as emerging south south-cooperation donor referred to these guidelines for planning their similar international courses for the region.

A significant and noteworthy tool newly introduced for the target four TCTPs is the Project Design Matrix (PDM), a tool conventionally used for Japanese ODA technical cooperation under the concept of the Project Cycle Management. It is a tool to outline and establish the logical framework of a project, which defines the overall goal, project-specific goals and its indicators, necessary inputs and activities, and the expected outputs. Recognizing the project management benefits by the tool, PDM has been elaborated jointly by the TCTP committee institutions and used as a basis for planning, monitoring and evaluation of each TCTP since 2012, and accordingly the target four TCTPs adopted the tool for the project management (see Annex 4). Officials from AMEXCID and the three Mexican implementing agencies of the

target TCTPs confirmed that the PDM served to enhance effectiveness of the TCTPs: elaborating it jointly by the committee members, the objectives and the logical framework of the TCTP became clear and a common basis was shared among all the involved actors; during the TCTP implementation, it also served as a core tool for monitoring and evaluation.

The diagnostic activities in the target TCTP planning process to identify needs and demands of the beneficiary countries, as described in Section 3.1.1 (b) were an integral and critical component that enhanced comparative advantages of JMPP approach. Indeed, officials from AMEXCID and the Mexican implementing agencies consider that the role of JICA in this diagnostic activities is one of the most significant contributions of JICA: The network of JICA offices in the region is a mechanism that Mexican side does not possess. The contribution of Mexican side in the process was to provide technical input to analyze the information that JICA possesses to identify specific needs and confirm the feasibility. The diagnostic activities made two countries working as a team for the target TCTPs.

Another comparative advantage recognized by many beneficiary countries is that all the target TCTPs were offered with advanced and fully equipped facilities as an outcome of Japanese ODA, which enabled the participants to learn hands-on techniques that were considered very pragmatic, being differentiated from other conventional training opportunities offered that are theory-oriented without practical exercises of their application. In that sense, many also expressed also that the duration of the TCTP was sufficient and appropriate to include those 'practical' modules. In the case of the solid waste management TCTPs, the field visits were considered very useful and served for the participants as evidence of applied initiatives and technologies.

Furthermore, Japanese techniques were 'tropicalized' to the regional context through the TCTP planning and implementation process. For example, IMTA had discovered the techniques transferred from Japan through the bilateral cooperation were not applied in the participating countries of the past TCTPs due to its expensive operation and maintenance cost, which was not affordable to many potential users in the region. Consequently IMTA adjusted the Japanese transferred-techniques and generated innovative solutions to match the actual regional conditions in terms of human resources, finances, and physical background for the target TCTPs. Additionally, all the target TCTPs introduced tutoring support to each participant and personalized its guidance for elaboration and implementation of their Action Plans and the value of these supports was highly recognized and appreciated by the beneficiary institutions.

One of the challenges is the selection process of the participants in the beneficiary countries. Some ex-participants in the region expressed that selection process of the participants in the beneficiary countries was not always transparent as official communication can reach only at the directorial level or at the national ministry level, while sometimes actual needs and appropriate candidates can be found at the operational level for a specific existing initiative or at the regional level. Officers from JICA Panama expressed that the selection process often takes place only within the government without JICA Panama's involvement, which has a negative impact to take full advantage of TCTP opportunities.

(c) Periodical monitoring and follow-up of the policy implementation stage

The target TCTPs put emphasis on providing continuous institutional follow-up during the three years of the implementation period, including the period between the actual training courses in Mexico through video-conference, and periodical email communication as described in the earlier sections. Strategic selecting process and decreasing the number of participating institutions were vital that resulted in better management and allocation of the limited resources to strengthen the monitoring and follow-up activities to all the participants in the target TCTPs.

Two of the target TCTPs conducted monitoring missions to selected beneficiary institutions and countries to provide necessary technical advice for their Action Plan implementation, and to conduct hands-on reviews for operation and results in the applied field in the beneficiary countries. Officials and officers from JICA, AMEXCID and Mexican implementing agencies consider that follow-up activities are indispensable and monitoring missions to selected countries with particular needs for the further advisory is an effective mechanism to promote Action Plan implementation in the beneficiary countries, and also to plan strategically the contents of the subsequent courses of the TCTPs. The visited beneficiary countries also expressed in the questionnaire responses and the interviews that these follow-up support activities were very effective and that TCTPs could be further beneficial if there was a more systematic mechanism of follow-up activities.

However, at the time of this evaluation, the practice of monitoring activities is not systematically structured in the established TCTP process: Indeed most of the interviewed officials involved in the target TCTPs recognize the vulnerability to provide such continuous support between the courses due to the increasing demand for national needs or ordinary domestic work, for which human and financial resources were clearly allocated in their annual work plans. Meanwhile, some Mexican experts, recognizing the importance and needs of such monitoring and follow-up support, recurrently provide ad-hoc technical support, utilizing unofficial mechanism by email and social network called WhatsApp application, somewhat as their personal dedication beyond institutional commitments subscribed under JMPP.

(d) Roles and ownership of actors

JICA's contribution, as a principal JMPP coordinating organization of Japan, is highly recognized by AMEXCID as well as the Mexican implementing agencies including SEMARNAT. JICA's technical support is indispensable in planning their international cooperation activities and constant presence in supporting their institutional capacity development is highly recognized as one of the most important strategic partners particularly in the environment sector development.

AMEXCID, as a principal JMPP coordinating organization of Mexico, proved its active and increasing roles in its implementation in the target four TCTPs. Based on the accumulated knowledge and experiences from the previous TCTPs in JMPP framework since 2003, the officials of the DGCTC of AMEXCID conducted capacity training at the planning stage of each TCTP for officials of the Mexican implementing agencies on project management methodologies and on the related tools including the Project Design Matrix (PDM) for its strategic utilization in the target TCTPs. Officials in charge of JMPP in AMEXCID were

constantly present and provided guidance as necessary to the Mexican implementing agencies throughout the whole project management cycle of the target TCTPs. In addition, the official communication for TCTP invitation and the necessary preparative works inside the beneficiary countries were conducted by Mexican embassies in the region under the coordination of AMEXCID. AMEXCID's increasing ownership and institutional roles as a facilitator to connect Japan, Mexican implementing agencies and beneficiary countries were recognized by the Mexican implementing agencies as well as beneficiary institutions of the target TCTPs. It is also proved by the fact that AMEXCID for the first time contributed in covering the whole necessary budget from Mexican side for the TCTP on Establishment of Resource Recycling Society System as described in Section 3.2.2.

IMTA and INECC as experienced Mexican TCTP implementing agencies, took lead and played active roles in offering strategic TCTPs to generate concrete achievement in beneficiary countries and in exploring an innovative and effective approach based on the past TCTP experiences. CONAGUA, as the first time implementing TCTP agency, also demonstrated its strong ownership to transfer techniques and knowledge that they had obtained from Japan's recent bilateral technical cooperation. Interviewed officials of CONAGUA confirmed that effective and regular communication with JICA allowed to take necessary actions in a timely and appropriate manner for the TCTP implementation and to generate concrete results and achievements. Officials of the Mexican implementing agencies commented that appropriate guidance and advisory were also always available from AMEXCID.

(e) Cooperation with other actors and donors

SEMARNAT recently started to coordinate and promote cooperation with other actors and donors in the thematic areas addressed in the TCTPs. Starting in 2014, the International Affairs Unit of the SEMARNAT has organized a discussion table inviting international donors for annual planning: an annual activity plan is presented and collaboration opportunities are discussed with and among donors. It promoted information sharing of donors and generating synergy effects for the SEMARNAT to coordinate and take advantage of different modalities offered by different donors toward the same goals. The initiative to collaborate with the private sector was also enhanced in the TCTPs on the solid waste management area as described in Section 2.2.4. However, at the time of this evaluation, officials and officers from AMEXCID, JICA, and the Mexican implementing agencies admitted that each donor's activities are operated with their distinctive corresponding window division of AMEXCID, and unfortunately few information sharing and coordination are yet in practice among those divisions inside AMEXCID or among donors.

The role of JICA office in the beneficiary countries is considered also critical: In the case of the Dominican Republic, JICA Dominican Republic took strong leadership to join the strategic selection process of the TCTP participants: the government officials expressed that the support that JICA Dominican Republic provides not only for participants selection, but also for applying the TCTP results to their existing initiatives in the country was indispensable for high effectiveness and impacts generated in the sector development.

(f) Publicity

Publicity is an area that most of the relevant actors and the beneficiary countries feel strong needs for improvement. Despite of the increased efforts of JMPP, the recognition of the programme and its achievement is still limited among the directly benefitted institutions in the past. The Chief Representative of JICA Mexico stated in his interview that public relations activities for the regional cooperation including triangular cooperation as well as South-South cooperation are often initiatives driven by donors or support-offering countries, but that public relations activities from the side of beneficiary countries should be enhanced in future, with the aim of establishing strategic partnerships through such cooperation modalities. Strengthening publicity in the beneficiary countries also helps more strategic utilization of TCTPs or JMPP, therefore increasing the effectiveness of the offered cooperation. JMPP should consider seeking support of JICA local offices and Mexican embassies should be considered. In parallel, JICA and AMEXCID, as well as the Mexican implementing agencies should actively promote sharing its TCTP experiences through regional and international seminars, which can open more opportunities of wider recognition or for formulating new international cooperation in the future.

3.4 <u>Overall Goal: Strengthening strategic relations between Japan and Mexico</u> through JMPP

JMPP is expected to serve as a strong tool for the Japanese diplomatic policies toward Mexico, so as expected by Mexico toward Japan. With high recognitions by the two governments on the strengthened capacity of Mexican international cooperation and high effectiveness achieved in the region through JMPP implementation over a decade including the target TCTPs, the strategic relations between the two countries have been strengthened in qualitative manners evidenced by the evolution of the TCTP modality in JMPP as discussed in this evaluation.

Not only serving as a tool for bilateral relations between Japan and Mexico, but JMPP can serve as part of the mechanism to strengthen the two countries' respective diplomatic relations with other countries in the region. In that sense, all the actions taken for JMPP implementation have multiple effects and generate further benefits for the two countries to better position themselves in the global community. Continuous enrichment of the Programme not only in its quantity but also in quality and visibility promotion in the beneficiary countries are the keys to enhance further achievement of the Overall Goal.

4 Recommendations

• Enhance strategic selection process of TCTP beneficiary participants:

This evaluation has confirmed that the selection process of TCTP participating countries and institutions is one of the critical factors for TCTP effectiveness and the newly introduced selecting processes for the target TCTPs contributed in generating high effectiveness in the beneficiary countries. The evaluation results show that the degree of effectiveness and impacts can be better achieved in countries with ongoing initiatives in the related thematic sectors and with institutions possessing certain capabilities to take advantage of the transferred techniques or knowledge by TCTPs. Furthermore, limiting the number of participating countries in the TCTPs by IMTA and INECC, made it possible for them to provide intensive and tailored support to the selected beneficiary countries for implementing their Action Plans. Inviting the carefully selected institutions which made official commitments for their active participation over three years in the TCTP by CONAGUA resulted in generating regional outputs such as REMECA. In this sense, the importance of diagnostic work should be further stressed, which could be optionally initiated under the bilateral cooperation framework between Japan and Mexico. Identifying the right participating institutions in TCTPs are big interest not only for Japan and Mexico, but also for beneficiary countries including the respective JICA local offices and potential participating institutions in need. The strategic target country selection should be therefore enhanced for each TCTP while selection criteria should be discussed case by case by the TCTP Committee.

• Strengthen and integrate monitoring and evaluation mechanisms in the TCTP implementation framework to increase the effectiveness of TCTPs:

The necessary activities for monitoring and evaluation should be clearly established from the planning stage and ideally should be included in the Record of Discussions or Minutes of Meetings so that its resource allocation should be secured accordingly. As commented not only by all the TCTP committee institutions, including JICA and AMEXCID, but also by many beneficiary institutions in the region, monitoring and evaluation activities are considered indispensable for TCTP participants to effectively implement Action Plans in the beneficiary countries and for TCTP implementing agencies to enhance strategic planning and implementation of the subsequent training courses: Despite that value of monitoring and evaluation missions is highly recognized by beneficiary countries and TCTP committee institutions, for example, such missions have been conducted as ad-hoc activity depending on financial availability of the moment and are not regularly institutionalized. Although some monitoring activities such as video-conferences and email follow-ups have been incorporated in the planning documents as official TCTP activities during its implementation period, actual request or demand for the TCTP implementing agencies to provide posterior technical support are bigger than the officially assigned resources in the current TCTP framework. Considering the actual needs and the recognized high effectiveness of monitoring and evaluation activities including on-site missions, their practice should be standardized for all TCTPs to increase its effectiveness and generate further impacts in the beneficiary countries.

• Support sustainability of the TCTP achievements to generate further impact:

This evaluation discovered that most of the TCTP participating institutions are putting their efforts to take advantage of their TCTP experiences through implementing their Actions Plans and pilot projects and seeking solutions for the faced challenges in their countries in terms of technical, financial, and political perspectives. Because application of new knowledge and techniques in political instruments takes long as it involves variety of actors and long-term political and social campaigns to change culture, additional supporting mechanisms for the TCTP beneficiary countries in the ex-post TCTP period should be considered as an integral part of TCTP strategy for a longer-term. Especially, TCTP implementing agencies need justification or resources to respond to posterior technical support requests coming from the ex-participants after the TCTP implementation period: Currently the posterior technical support provision are not provided institutionally, but depend on personal motivation and efforts by individual Mexican experts. Strategic utilization of Dispatch of Mexican Experts, an effective modality of JMPP, should be positively enhanced to support the participants' efforts to implement their Action Plans, thus achieving better results in the beneficiary countries. Moreover, a mechanism for a flexible and quick funding should be considered for such posterior support to TCTPs. The current process for a new triangular initiative requires approximately one year from planning to approval and the process has to be conducted within the bilateral framework between Japan and Mexico, without directly involving beneficiary countries in needs: Beneficiary countries cannot ensure receiving technical support or financial availability for a long time and consequently needed actions cannot be necessarily taken at an appropriate timing, which results in affecting TCTP effectiveness and sustainability in beneficiary countries. On the other hand, other major donors that enhance triangular cooperation with Mexico have utilize particular 'funds' established for triangular cooperation from which they can allocate necessary financial resources quicker to respond to needs expressed by beneficiary countries all around the year. In case of JMPP, it is also worth analysing a feasibility to establish a flexible funding mechanism to promptly support the related posterior activities to TCTPs requested by beneficiary countries to increase TCTP sustainability. In addition, seeking strategic partnerships with other donors and actors in the beneficiary countries can be also considered as an option for enhancing sustainability, for which AMEXCID could lead coordination mechanisms. However, establishing a mechanism to strengthen sustainability of TCTP achievement should be considered inside JMPP framework.

• <u>Develop further triangular cooperation projects including TCTPs in the environment sector where JMPP comparative advantages are substantially recognized by the beneficiary countries as well as the Mexican side.</u>

This evaluation proves that TCTPs implemented under JMPP in the environment sector have substantially benefited both Mexico and countries in the region for its unique knowledge and for its high feasibility in dissemination and replication. Recognizing also that the Mexican implementing agencies have acquired and developed capacity to perform international cooperation activities by conducting TCTPs, they are expected to play active roles in future international cooperation programmes, whereas JMPP should have a sufficient number of projects effectively drawing on their capacity. At the time of this evaluation, there is no TCTP neither other JMPP activities in the environment sector in spite of the confirmed comparative advantages and needs of the related JMPP

knowledge and techniques. The potential areas to develop triangular projects can continue to be water and waste management, and additionally areas in which JMPP has previously operated such as air quality management and biodiversity could be reactivated. Alternatively, the past TCTP implementing agencies in the environment sector could also support other Mexican institutions newly participating in JMPP in their formulation or implementation process of new projects by sharing their TCTP implementation experiences. Besides, to increase effectiveness under the limited financial allocation, new mechanisms including combination of several modalities should be additionally explored. For example, offering intensive and focused TCTPs designed for a selected country and for its specific needs could be considered as 'Triangular Cooperation' project. It is noteworthy to mention that the environment sector is included but not necessary the prioritized sector for other donors that implement triangular cooperation projects with Mexico: JMPP should take the most of the strengthened capacity of Mexican implementing agencies in the environment sector.

• Further strengthen and enlarge the coordination role of AMEXCID.

Although the capacity of AMEXCID has been substantially strengthened through JMPP implementation and by support provided by dispatched Japanese experts to AMEXCID as confirmed in this evaluation, it is also recognized by Japan and other Mexican institutions that such strengthened capacity in AMEXCID is basically limited inside the DGCTC so far. Knowledge-sharing of TCTP experiences should be enhanced inside AMEXCID to drive capacity strengthening of other divisions of AMEXCID. In addition, it is expected that AMEXCID should promote strengthening technical capacity of Mexican embassies and their participation in promoting effectiveness of TCTPs, especially because diagnostic work and identification process of the participating institutions in beneficiary countries are confirmed critical in this evaluation. AMEXCID should also lead in seeking further coordination with activities of other donors which equally support strengthening the capacity of AMEXCID to benefit from potential synergy effects. Moreover, acknowledging that AMEXCID has increased its financial participation in TCTPs over the past six years, strategic reallocation of financial responsibility should be considered in the planning process of future TCTPs. Especially, unless it is a Mexican 'decentralized institution 13'that is mandated to 'sell' their technical services, TCTP implementing agencies in general struggle to ensure financial resource availability to particular international cooperation activities over years. It is expected that AMEXCID could extend their financial allocation to absorb the gap needed for Mexican side to contribute 50% of the total cost as subscribed in the JMPP framework. To facilitate the process, redistribution of the resource allocation should be discussed: Although the items that Japan and Mexico should finance are regularly fixed in any TCTPs, reallocation of financial resource among parties should be considered for each TCTP in reflection of the actual availability and financial strengths of the respective party. It could possibly allow the inclusion of some monitoring and evaluation activities and combining other modalities such as Dispatch of Experts within the TCTPs, for example, taking

¹³ Among Mexican governmental institutions, there are two categories distinguished by their financial sustainability mechanism: while 'decentralized' agencies are expected to generate part of their income by 'selling' their services and products, 'deconcentrated' agencies fully depend their operation on the allocated budget from the central government. Among the target TCTP implementing agencies, IMTA is 'decentralized' while CONAGUA and INECC belong to the latter

advantage of AMEXCID's increasing financial capacity in the recent years and seeking the most efficient distribution of financial responsibility for each TCTP.

• Strengthen the visibility of JMPP and increase its publicity activities:

In spite of recognition of high relevance to the development needs and policies as well as high effectiveness by the beneficiary institutions, this evaluation reveals that TCTP and JMPP have not yet achieved sufficient visibility in the beneficiary countries. Likewise, the importance of improving the visibility of JMPP have been acknowledged by AMEXCID and JICA in the past years, and a new JMPP logo was launched in 2017 with a purpose to reinforce the identity of the programme. Utilizing this logo, JMPP visibility should be promoted in all the beneficiary countries in collaboration with Mexican embassies and JICA local offices: Understanding of the available modalities should be also enhanced for all potential beneficiary institutions at different levels inside the beneficiary countries, not only to high level authorities. Technical and financial availability for the publicity activities should be also accompanied or ensured in planning or implementing new TCTP or JMPP projects in future.

9

List of Annexes

Annex 1: List of interviewees

Annex 2: List of TCTP beneficiary institutions and officials that responded questionnaires

Annex 3: The historical list of the JMPP projects as of September 2018

Annex 4: Project Design Matrix (PDM) of the target four TCTPs

Annex 1: List of interviewees

	Date	Title, Unit, Institution (As of the time of Interview)
1	2018/11/23	Deputy Director for Asia-Pacific, the General Direction of Technical and Scientific Cooperation, AMEXCID
2	2018/11/28	Program Officer for Technical Cooperation, Responsible for JMPP, JICA Mexico
3	2018/12/3	Deputy Director-General for Europe, Asia and North America, the General Direction of Technical and Scientific Cooperation, AMEXCID
4	2018/12/3	Head of Department for Asia-Pacific, the General Direction of Technical and Scientific Cooperation, AMEXCID
5	2018/12/12	(Video-conference) 1. Analyst of International Cooperation for Mexico, Direction for Bilateral Cooperation, Ministry of Economy, Planning and Development, the Dominican Republic 2. Program Officer, JICA Dominican Republic 3. Program Officer for Co-Creation Program of Knowledge, JICA Dominican Republic 4. Adviser for Project Formulation, JICA Dominican Republic
6	2018/12/12	(Video-conference) 1. Program Officer for Technical and Financial Cooperation, JICA Panama 2. Program Officer for Technical and Financial Cooperation, JICA Panama
7	2018/12/13	(Sectorial Group Interview Meeting) 1.Director of Bilateral Cooperation, International Cooperation Unit, Ministry of Environment and Natural Resources, Mexico 2. Sub-director, International Cooperation Unit, CONAGUA 3. Head of Laboratory Operation Project, CONAGUA 4. Head of Quality Control Assurance Unit, CONAGUA 5. Specialist in International Issues in Water, IMTA 6. Specialist in Wastewater Treatment Sub-coordination Unit, IMTA 7. Director of Investigation for Contaminant, Substances, Waste and Biosecurity, INECC 8. Officer of International Area, INECC
8	2018/12/18	Deputy Director General for Sustainable Development, AMEXCID
9	2018/12/19	Chief Representative, JICA Mexico
10	2019/1/15	Head of Department for Cooperation with Spain and Germany, the General Direction of Technical and Scientific Cooperation, AMEXCID
11	2019/1/15	Consultant of European and Occidental Cooperation, the General Direction of Technical and Scientific Cooperation, AMEXCID

Annex 2: List of TCTP beneficiary institutions and officials that responded to Questionnaire

Country	Name of Title and Institution
	(Original in Spanish)
Belize	- Autoridad e Instituto de Gestión de la Zona Costera de Belize
Bollzo	Autoridad o inicitato de Gostion de la Zena Gostiona de Benzo
Chile	- Coordinador Comité Técnico, EMERES
Colombia	- Profesional Especializado, Secretaría Distrital de Ambiente
Costa Rica	- Promotora Municipal, IFAM
	 Encargada de Procesos y Proyectos Estratégicos de la Dirección de Agua, Dirección de Agua del Ministerio de Ambiente y Energía
Cuba	- Delegación Provincial del Ministerio de Ciencia y Tecnologia y Medio Ambiente de La Habana
The Dominican Republic	 Analista de Gestión Ambiental, Ministerio de Medio Ambiente y Recursos Naturales Técnico, Dirección de Proyectos de Residuos Solidos, Ministerio de Medio Ambiente y Recursos Naturales
	 Analista de Gestión Ambiental, Ministerio de Medio Ambiente y Recursos Naturales Coordinadora técnica de proyectos de Residuos Solidos, Ministerio de Medio Ambiente y Recursos Naturales
	- Encargada del Departamento de Calidad de Agua, Ministerio de Medio Ambiente y Recursos Naturales
	- Analista de Gestión Ambiental, Ministerio de Medio Ambiente y Recursos Naturales
	- Encargado Departamento Tratamiento Aguas Residuales, Corporación del Acueducto y Alcantarillado de Santiago
	- Coordinadora de Residuos Solidos, Ministerio de Medio Ambiente y Recursos Naturales
El Salvador	- Jefa de Cooperacion Internacional, Administracion Nacional de Acueductos y Alcantarillados
	 Tecnico Analista de Laboratorio, Ministerio de Medio Ambiente y Recursos Naturales Gerencia de Articulación Territorial, Dirección de Atención Ciudadana e Institucional, Ministerio de Medio Ambiente y Recursos Naturales
Honduras	- Técnico del Departamento de Residuos Sólidos, Secretaría de Recursos Naturales y Ambiente
Guatemala	 Cooperación Internacional, Instituto de Fomento Municipal -INFOM Jacobo Alberto Ortiz Barrientos, Ingeniero Civil, Plantas de Tratamiento, Instituto de Fomento Municipal
Nicaragua	- Especialistas en Análisis de Laboratorio, Centro para la Investigación en Recursos Acuáticos de Nicaragua de la Universidad Nacional Autónoma de Nicaragua, Managua
Panama	 Jefa de Laboratorio en calidad ambiental/Ministerio de Ambiente Municipio de Panama

Annex 3: The historical list of the JMPP projects as of September 2018

The Third Country Training	Programme	e (TCTP)		
Name of TCTP	Impleme ntation Period JFY	Participating Countries	Name of Mexican Implementing Agency	
In Implementation				
Training Program on Genebank Management	2017- 2019	Bolivia, Brazil, Costa Rica, Colombia, Cuba, Ecuador, El Salvador, Guatemala, Honduras, Nicaragua, Panama, Paraguay, Perú, Dominican Republic	Centro Nacional de Recursos Genéticos (CNRG/INFAP)	
	1	Completed	T	
International Course on Sexual and Reproductive Health of Adolescents with Emphasis on Pregnancy Prevention	2015- 2017	Bolivia, Colombia, Costa Rica, El Salvador, Panama, Paraguay y Perú	Centro Nacional de Equidad de Género y Salud Reproductiva (CNEGySR)	
Establishment of Resource Recycling Society System	2015	Brazil, Chile, Colombia, Costa Rica, Panama, Peru y Dominican Republic	Secretaría de Medio Ambiente y Recursos Naturales (SEMARNAT)	
Industrial Automation focused on Numeric Control	2014- 2016	Guatemala, Honduras, Costa Rica, Nicaragua, El Salvador, Panama, Dominican Republic y Colombia	Dirección General de Educación Tecnológica e Industrial (DGETI/SEP)	
Diploma Course on Technology of Non Traditional Tropical Fruits	2014- 2016	Guatemala, Honduras, Costa Rica, Nicaragua, El Salvador, Ecuador y Colombia	Campo Experimental de Cotaxtla, Veracruz del INIFAP	
Capacity Development for Strengthening of Rural Extensionism	2013- 2015	Bolivia, Costa Rica, Guatemala, Ecuador, El Salvador, Honduras, Nicaragua, Panama, Paraguay y Dominican Republic	Secretaría de Agricultura, Ganadería, Desarrollo Rural, Pesca y Alimentación (SAGARPA)	
Development of Instruments for the Integral Waste Management with Focus on 3Rs (Reduction, Reuse, and Recycle)	2012- 2014	El Salvador, Honduras, Costa Rica, Guatemala, Cuba, Dominican Republic	Instituto Nacional de Ecología y Cambio Climático (INECC)	
International Course on Alternative Technology of Sustainable Water and Sludge Treatment with focus on Revalorization of Waste	2012- 2014	Colombia, El Salvador, Dominican Republic, Honduras, Guatemala	Instituto Mexicano de Tecnología del Agua (IMTA)	
TCTP for Coastal Water Monitoring in the Mesoamerican region as Parameters of the Climate	2012- 2014	Belize, Colombia, Costa Rica, Guatemala, El Salvador, Honduras, Nicaragua, Panama y Dominican Republic	Comisión Nacional del Agua (CONAGUA)	

Change			
Non-Destructing Test for the preparation to the certification	2011- 2013	Argentina, Colombia, Costa Rica, Chile, Panama, Peru, Uruguay y Venezuela	Centro de Ingeniería y Desarrollo Industrial (CIDESI)
Natural Treatment Systems for Wastewater and Sludges : Use and Reuse	2010- 2011	Guatemala, Colombia, Nicaragua, Panama, El Salvador, Honduras, Dominican Republic	Instituto Mexicano de Tecnología del Agua (IMTA)
Regional development on Sustainable Waste Management	2009- 2011	Belize, Costa Rica, Guatemala, Nicaragua, Panama, Cuba, Honduras, Dominican Republic	Centro Nacional de Capacitación Ambiental (CENICA)
Third Country Training: Cervical Uterine Cancer's Control	2007- 2011	Belize, Bolivia, El Salvador, Guatemala, Honduras, Nicaragua, Panama, Peru, Dominican Republic	Centro Nacional de Equidad de Género y Salud Reproductiva (CNEGySR)
International Multidisciplinary Course on Civil Protection and Disaster Prevention Programs	2006- 2011	Argentina, Belize, Bolivia, Chile, Colombia, Costa Rica, Ecuador, El Salvador, Guatemala, Honduras, Nicaragua, Panama, Peru, Venezuela	Centro Nacional de Prevención de Desastres (CENAPRED)
Connectivity and management of protected areas in the Mesoamerica biological corridor	2007- 2011	Belize, Costa Rica, El Salvador, Guatemala, Honduras, Nicaragua, Panama,	Comisión Nacional para el Conocimiento y Uso de la Biodiversidad (CONABIO)
International Course on Applied Robotics	2005- 2009	Argentina, Bolivia, Chile, Colombia, Costa Rica, Ecuador, Guatemala, Panama, Paraguay, Peru, Uruguay, Venezuela	Centro Nacional de Actualización Docente (CNAD)
International Course on Non Destructive Testing	2004- 2008	Argentina, Bolivia, Brazil, Chile, Colombia, Costa Rica, Cuba, Ecuador, Panama, Paraguay, Peru, Uruguay, Venezuela	Centro de Ingeniería y Desarrollo Industrial (CIDESI)
Integrated Systems of Residual Water Treatment and its Reuse for the Sustainable Environment	2002- 2006	Argentina, Brazil, Chile, Colombia, Costa Rica, Ecuador, Guatemala, Nicaragua, Panama, Paraguay, Peru, Uruguay, Venezuela	Instituto Mexicano de Tecnología del Agua (IMTA)
Hazardous Waste Management	2002- 2006	Argentina, Belize, Bolivia, Brazil, Chile, Colombia, Costa Rica, Ecuador, El Salvador, Guatemala, Honduras, Jamaica, Nicaragua, Panama, Peru, Venezuela	Centro Nacional de Capacitación Ambiental (CENICA)

Triangular Project				
Name of the Project	Impleme ntation Years (JFY)	Beneficiary Country	Name of Beneficiary Implementing Agency	Name of Mexican Implementing Agency
	1	In Implement	ation	I
-	_	Complete	d	_
Project of Strengthening and consolidation of production and use of improved sesame seeds for small-scale farmers in Paraguay (Phase2)	2012- 2016	Paraguay	Facultad de Ciencias Agrarias/Universidad Nacional de Asunción (FCA/UNA)	Instituto Nacional de Investigaciones Forestales, Agrícolas y Pecuarias (INIFAP)
Enhancement of the Construction Technology and Dissemination System of the Earthquake-Resistant "Vivienda Social"	2009- 2012	El Salvador	Viceministerio de Vivienda y Desarrollo Urbano (VMVDU)	Centro Nacional de Prevención de Desastres (CENAPRED) e Instituto de Ingeniería de la UNAM
Project of Strengthening and consolidation of production and use of improved sesame seeds for small-scale farmers in Paraguay	2009- 2012	Paraguay	Facultad de Ciencias Agrarias/Universidad Nacional de Asunción (FCA/UNA)	Instituto Nacional de Investigaciones Forestales, Agrícolas y Pecuarias (INIFAP)
Promotion and Strengthening of 'Maquilador' System in Paraguay	2004- 2007	Paraguay	Consejo Nacional de Industrias Maquiladoras de Exportación	Secretaria de Economía
Production of Tilapia in Floating Cage in the Fonseca Golf in Honduras	2003- 2004	Honduras	-	-
Project of Integrated Pest Management	2002- 2005	Nicaragua	Universidad Nacional Autónoma de Nicaragua-León (UNAN León)	Instituto Nacional de Investigaciones Forestales, Agrícolas y Pecuarias (INIFAP) y Universidad Autónoma Agraria Antonio Narro (UAAAN)
Enhancement of Technology for the construction of Popular Earthquake Resistant Housing	2003- 2007	El Salvador	Universidad Centroamericana "José Simeón Cañas" (UCA); la Universidad de El Salvador (UES), la Fundación Salvadoreña de Desarrollo y Vivienda Mínima (FUNDASAL)	Centro Nacional de Prevención de Desastres (CENAPRED)

Dispatch of Mexican Experts				
Name of the Project ** (translated unofficially to English)	Impleme ntation Period JFY	Beneficiary Country	Beneficiary Implementing Agency	Mexican Implementing Agency
		(In Implement	ation)	
Conservation of Archeological Sites	2018	Honduras	Instituto Hondureño de Antropología e Historia (IHAH)	Instituto Nacional de Antropologia e Historia (INAH)
Evaluation of Sesame's Germplasm and Agronomical Management for Sesame Cultivation	2018	El Salvador	Universidad de El Salvador (UES)	Instituto Nacional de Investigaciones Forestales, Agrícolas y Pecuarias (INIFAP)
		(Complete		
Establishment of Waste Management Plan with Focus on 3Rs in Panama	2015- 2016	Panama	Autoridad de Aseo Urbano y Domiciliario de Panama (AAUD)	Instituto Nacional de Ecología y Cambio Climático (INECC)
Anti-seismic Measures in Haiti by Japan-Mexico Partnership Program	2010- 2013	Haiti	Ministerio de Trabajos Públicos, Transporte y Comunicaciones	Centro Nacional de Prevención de Desastres (CENAPRED)
Natural Resource and Basin Management in the Mesoamerican biological corridor	2010- 2012	Honduras	Secretaria de Recursos Naturales (SERNA) e Instituto Nacional de Conservación y Desarrollo Forestal Áreas Protegidas y Vida Silvestre (ICF)	Comisión Nacional para el Uso de la Biodiversidad (CONABIO)
Strengthening of Air Quality Monitoring Capacity	2010- 2012	Honduras	Secretaria de Recursos Naturales (SERNA)/Centro de Estudios y Control de Contaminantes (CESCCO)	Centro Nacional de Investigación y Capacitación Ambiental (CENICA)
Strengthening of Capacity for Solid Waste Management	2009- 2012	Guatemala	Ministerio de Ambiente y Recursos Naturales/Comisión Nacional para el Manejo de los Desechos Sólidos	Centro Nacional de Investigación y Capacitación Ambiental (CENICA)
Strengthening of Integral Management of Plague in the Northwestern region of Nicaragua	2009	Nicaragua	Universidad Nacional Autónoma de Nicaragua-León (UNAN León)	Instituto Nacional de Investigaciones Forestales, Agrícolas y Pecuarias (INIFAP)
Diagnostics and Development of Local Operational Plans for Risk Disaster Management for Forestry Areas.	2010	El Salvador	Ministerio de Agricultura y Ganadería	Instituto Nacional de Investigaciones Forestales, Agrícolas y Pecuarias (INIFAP)
Establishment of low prevalence areas of plague	2008	El Salvador	Cento Nacional de Tecnología	Instituto Nacional de Investigaciones

in vagatables and fruits			Agropoquorio	Forestales Agrícules
in vegetables and fruits			Agropecuaria Forestal (CENTA)	Forestales, Agrícolas y Pecuarias (INIFAP)
Processing fishery products (fish and shellfish)	2008	El Salvador	Centro de Desarrollo de la Pesca y la Agricultura (CENDEPESCA)	Instituto Nacional de la Pesca (INAPESCA) y Comisión Nacional de Acucultura y Pesca (CONAPESC A)
Unicelular protein obtention with yeast of Torula, substrata of juice from coffee pulp and sugar cane molasses	2008, 2009	El Salvador	Escuela Nacional de Agricultura "Roberto Quiñonez" (ENA)	-
Road management through concession system	2008	Paraguay	-	-
Control of hydraulic basin and protection of water and soil quality	2003- 2008	Costa Rica	Compañía Nacional de Fuerza y Luz S.A	Instituto Mexicano de Tecnología del Agua (IMTA)
Solid waste management and treatment	2008, 2006	Guatemala	Comisión Nacional para el Manejo de los Desechos Sólidos (CONADES)	Centro Nacional de Capacitación Ambiental (CENICA)
Risk Management	2006	Guatemala	Coordinadora Nacional parala Reducción de Desastres (CONRED)	-
Strengthening of institutional capacity to monitor air contamination/Study for its regulation instruments	2005, 2004	Perú	-	-
Valorization of custom regime and taxation	2005	Guatemala	-	-
Waste treatment of medical materials	2004	Guatemala	-	-
Strengthening of capacity for technology evaluation for hazardous waste treatment	2004	Perú	-	-
Planning for integral and sustainable management of hydric resources in Rio Chilli basin	2004	Perú	-	-
Strengthening of technical capacity and administration in water and sanitation sector	2004	Perú	-	-
Strengthening of regional health services	2004	Perú	-	-

Annex 4: Project Design Matrix of the target TCTPs (Originals in Spanish)

a) PDM for TCTP for Coastal Water Monitoring in the Mesoamerican region as Parameters of the Climate Change

Nombre del proyecto: CURSO INTERNACIONAL SOBRE MONITOREO DE LA CALIDAD DE LAS AGUAS COSTERAS EN LA REGIÓN MESOAMERICANA PARA LA MEDICIÓN DE PARÁMETROS INDICADORES DEL CAMBIO CLIMÁTICO

Periodo de ejecución: años 2012-2014. Lugar: México, D. F., Altamira, Tamaulipas

Agencia Responsable: Comision Nacional de Agua (CONAGUA)

Grupo Meta: Las instituciones responsables del monitoreo de la calidad del agua de los Países Mesoamericanos.

Version: PDM 2

Resumen Narrativo	Indicador verificable	Medios de verificación	Factores externos
Resumen Narrativo Objetivo superior: Las instituciones participantes monitorean los 5 indicadores del cambio climático de aguas costeras con un procedimiento estandarizado	1) En el año 2017, el 80% de las		Las instituciones beneficiarias mantienen el interés en la aplicación de los conocimientos adquiridos sobre los parámetros
	el 70% del personal técnico, entre		

	3) Hacia el 2017 el 80% de las instituciones beneficiarias desarrollan y aplican un sistema de registro específico de los cinco indicadores de impacto en el cambio climático en al menos el 80% de los sitios de monitoreo de aguas costeras elegidos por cada país, para dar cobertura regional a las siguientes zonas: el Golfo de México, Mar Caribe y Océano Pacífico, cuyos datos cubren un período quinquenal a partir de 2012.		
Objetivo del Proyecto: Las instituciones participantes adquieren la capacidad analítica y conocimiento para la realización del muestreo y análisis de los 5 indicadores de cambio climático, con base en metodologías y criterios estandarizados.	1) Al cierre de la tercera edición del curso, al menos el 80% de las instituciones mesoamericanas beneficiarias integran en sus laboratorios los métodos analíticos y procedimientos relativos a los cinco indicadores de cambio climático en sus respectivos sistemas de control de calidad del agua costera. 2) Los sistemas de monitoreo de la calidad del agua costera de las instituciones beneficiarias del curso son desarrollados con base en metodologías y criterios estandarizados sobre indicadores de cambio climático asimilados en México durante el período 2012-2014.	1) Reporte anual de monitoreo y análisis de los cinco indicadores de cada institución participante. 2) Base de datos de calidad del agua generados por los participantes. 3) Mapa de sitios de monitoreo en operación. 4) Video-conferencias de seguimiento.	Al cierre de la tercera edición del curso las instituciones participantes conservan en sus laboratorios de calidad del agua costera, al menos, un 80% de los recursos humanos capacitados en México durante 2012-2014, así como de los técnicos capacitados en talleres y seminarios dictados por los propios ex-becarios como parte de la actividad de extensionismo que sugiere este curso.

3) Para 2014, al menos el 80% de los sitios de monitoreo elegidos por cada país, suministran sistemáticamente la información/muestras para su diagnóstico en laboratorio y confirmar la calidad de sus aguas de conformidad con los estándares de sus respectivas normas y reglamentaciones.	
4) Al termino de la última edición del curso, en el 80% de las instituciones beneficiarias cuentan con la participación activa de exbecarios, quienes coordinan acciones de monitoreo de aguas costeras en los sitios elegidos.	

Resumen Narrativo	Indicador verificable	Medios de verificación	Factores externos
Resultado 1	1) Reporte anual de resultados de	1) Reporte anual de monitoreo y	Las instituciones beneficiarias
	los cinco indicadores de cambio	análisis de cada los sitios de	mantienen el interés en la
Procedimientos Operativos	climático tratados en el curso.	monitoreo seleccionados de cada	aplicación de los conocimientos
Estandarizados para la Medición		institución participante.	adquiridos sobre los parámetros
de los cinco indicadores de cambio	2) Resultados del monitoreo de		de cambio climático
climático	sitios seleccionados en cada país		
	participante.		
Resultado 2	1) Todos los técnicos	1) Exámenes aplicados.	
	participantes muestran 80% de		
Técnicos capacitados en	comprensión en el examen final		
mediciones directas de campo y	del curso.		

	2) Reporte de resultados del	
2) Resultados del análisis de	' '	
•	· · · · · · · · · · · · · · · · · · ·	
	3) Video conferencias de	
3) Al término de la tercera ediciór el 70% del personal dedicado al muestro y análisis de aguas	1 '	
costeras, incluyendo los ex	4) Plan de trabajo en el cual los	
becarios, de cada	técnicos asistentes al curso	
	· ·	
•		
·		
•	σα μαισ.	
impartidae en er earee.	5) Reporte de los talleres,	
	actividades, seminarios, o	
	material en el que se demuestre	
	la transmisión del conocimiento	
	· · ·	
1) Los dotos do E parámetro	'	
,		
•		
•		
de los 6 meses posteriores	' '	
	en	
	3) Informe Técnico de Conagua.	
	Aporte:	
	Lado Japonés:	
•		participantes
	límite de control. 3) Al término de la tercera edición el 70% del personal dedicado al muestro y análisis de aguas costeras, incluyendo los ex becarios, de cada institución/laboratorio participante cuentan con el conocimiento y capacidad para aplicar de manera integral las técnicas impartidas en el curso. 1) Los datos de 5 parámetro indicadores son generados entregados por el 80% de la instituciones beneficiarias dentre de los 6 meses posteriores regreso a su país basándose el las metodologías transferidas.	ejercicio de intercalibración. 3) Al término de la tercera edición el 70% del personal dedicado al muestro y análisis de aguas costeras, incluyendo los ex becarios, de cada institución/laboratorio participante, cuentan con el conocimiento y capacidad para aplicar de manera integral las técnicas impartidas en el curso. 4) Plan de trabajo en el cual los técnicos asistentes al curso imparten los conocimientos adquiridos de muestreo y análisis a técnicos nacionales al regreso a su país. 5) Reporte de los talleres, actividades, seminarios, o material en el que se demuestre la transmisión del conocimiento impartido en el curso, por parte de los becarios a otro técnico de su país. 1) Los datos de 5 parámetros indicadores son generados y entregados por el 80% de las instituciones beneficiarias dentro de los 6 meses posteriores al regreso a su país basándose en las metodologías transferidas. Aporte: Lado Japonés: arizados para la medición de Apoyo financiero para envío de

- 1.1 Conagua y los participantes del curso discuten los resultados de los POEs transferidos en el país de procedencia, comparando con criterios ecológicos.
- 1.2 Conagua y los participantes discuten y analizan propuestas de mejora para las actividades relacionadas con el monitoreo de parámetros indicadores.
- 1.3 Los participantes comprueban dentro de cada institución participante los procedimientos operativos al regreso a su país.
- 1.4 Conagua brinda asesoría técnica sobre la aplicación de los procedimientos a través de video-conferencias y correo electrónico.
- 1.5 Las instituciones participantes entregan anual a Conagua el reporte de monitoreo y análisis.
- 1.6 Los participantes presentan las sugerencias y/o necesidades de modificación de los procedimientos conforme a la actual condición y operación del respectivo país.
- 1.7 Conagua analiza sugerencias y/o solicitudes de modificación de las instituciones participantes para formular una versión integrada de los POEs.

Resultado 2.

Técnicos capacitados en mediciones directas de campo y análisis de laboratorio.

- 2.1 Conagua analiza el Informe de País de cada institución participante para identificar el nivel actual de la capacidad analítica.
 2.2 Los instructores de Conagua identifican oportunidades de mejora y capacitan a los participantes del curso sobre las mediciones directas de campo y análisis de laboratorio durante el curso.
- 2.3 Los participantes elaboran un plan de acción para aplicar el conocimiento y tecnología adquiridos del curso posterior al regreso al país.
- 2.4 Conagua brinda asesoría técnica a través de videoconferencias y correo electrónico.

- Boletos de avión reembolsables para 18 participantes.
- Hospedaje de los participantes.
- Viáticos.
- Seguro médico de los participantes.

Lado Mexicano:

Personal contraparte para realizar el curso. Instalaciones del Centro de Referencia Especializado en Aguas Salinas (CREAS).

Equipo, materiales y reactivos.

Viáticos de los instructores de la Subgerencia de la Red Nacional de Medición de la Calidad del Agua.

Resultado 3.	
Un registro de datos que integre la información generada durante los tres años (Conagua).	
3.1 Los participantes seleccionan los sitios de monitoreo en sus países al finalizar la primera edición del curso, de acuerdo a los criterios establecidos.3.2 Monitoreo de la calidad del agua de los parámetros indicadores	
en los sitios seleccionados en cada país. 3.3 Envío a Conagua de datos de calidad del agua obtenidos durante el monitoreo por cada contraparte de las instituciones	
participantes de acuerdo a la periodicidad establecida. 3.4 Conagua verificará los datos enviados por las contrapartes de los países participantes.	
3.5 Conagua integrará el registro general de datos enviados por las contrapartes de los países participantes.3.6 Conagua difundirá los resultados obtenidos entre los países participantes.	

b) PDM for TCTP on Alternative Technology of Sustainable Water and Sludge Treatment with Focus on Revalorization of Waste

Nombre del Proyecto: "Curso Internacional sobre Sistemas Naturales de Tratamiento de Aguas y Lodos Residuales, su Reúso y Aprovechamiento"

Período de Ejecución: 3 años AFJ (2012-2014)

Agencia Responsable: Instituto Mexicano de Tecnología del Agua (IMTA).

Grupo Meta: Profesionistas tomadores de decisiones de las áreas de manejo de saneamiento responsables de actividades de diseño y operación de plantas de tratamiento de aguas residuales en los países de Colombia, El Salvador, Guatemala, Honduras, Nicaragua y República Dominicana Version : PDM 0

VCISION . I DIVI O			
Resumen del Proyecto	Indicadores	Medios de Verificación	Condiciones Externas
Objetivo Superior:	Se implementa los planes de	Informes de las	- El país continua el apoyo a
Se incrementa la cobertura y eficiencia de los	acciones al 100 % por las	instituciones	las metas del milenio en
sistemas naturales de tratamiento de agua y	participantes institucionales hasta	participantes	agua y saneamiento
lodos, su reuso y aprovechamiento en los países	2017.	Misiones de evaluación	- En todos los países de la
objetivo de la región de América Latina y el			región existen sistemas
Caribe por las instituciones participantes.	Incremento del 5% adicional al 15%		naturales de tratamiento
	de tratamiento de aguas residuales		
	en 10 años, en los sitios		
	seleccionados en los planes de		
	acción.		
Objetivo del curso	-Al término de las 3 versiones del	-Carta oficial de las	Todas las instituciones
Las instituciones participantes instrumentan un	curso, los planes de acción en los	instituciones	participantes convocados
plan de acción con enfoque integral de	cuales los becarios incorporan la	participantes	demandan el curso a los
tratamiento de aguas, lodos, su reuso y	nueva tecnología de tratamiento de	- Planes de acción	largo de los 3 años.
aprovechamiento.	aguas, lodos, su reuso y	- Videoconferencias	
	aprovechamiento, fueron	-Reporte del avance de	
	aprobados oficialmente por las	los planes de acción	
	instituciones participantes hasta		
	2013.		
	-Al menos 50% de los planes		
	diseñados son instrumentados por		
	las instituciones participantes hasta		
	marzo del 2014.		
Resultados	1.1 Al menos el 80% de los	- Exámenes del curso	- El 100% de los

Las instituciones participantes cuentan con capacidades técnicas para diseñar, operar y mantener sistemas de tratamiento de aguas residuales	participantes aprueban los exámenes aplicados al final de cada curso sobre los 5 temas. 1.2. La versión final de los planes de acción del año 2014 contienen: a) inventario y clasificación de los sistemas de tratamiento, b) Cobertura de reuso, c) Cobertura de saneamiento 1.3 Los planes de acción institucionales cuentan con planes de operación así como de mantenimiento avalados por IMTA y las instituciones participantes hasta 2013. 1.4 Cada institucion beneficiara presenta oficialmente un informe de avance de obra e implementacion de los planes de accion correspondientes. Se incluiran documentos comprobatorios de capacitacion y del avance.	- Calificaciones de los Exámenes del curso - Planes de acción - Carta oficial de las instituciones participantes sobre el reporte del avance del plan de acción.	participantes regresa a su país y aplica los conocimientos adquiridos, permaneciendo en la institución. - Las instituciones participantes respaldan las actividades que promueven los becarios utilizando el conocimiento adquirido del curso.
2. Los becarios de las instituciones participantes difundan tecnología no convencional localmente en materia de sistemas de tratamiento de aguas residuales conforme al respectivo plan de acción institucional.	2.1 Los becarios establecen un plan de difusión del conocimiento dentro del plan de acción. 2.2. Los 3 becarios de cada institución capacita al mínimo 10 personas involucrados en la implementación del plan de acción. 2.3 Los becarios brindan asesorías técnicas al equipo de trabajo que implementen el respectivo plan de acción.	- Videoconferencias - Reporte de avance de los planes de acción (plan de difusión, personal capacitado, asesoría al equipo de trabajo por el becario). Con documentos probatorios de las capacitaciones realizadas.	

3. Los becarios de las instituciones participantes elaboran las iniciativas para promover la normatividad necesaria sobre sistemas de aguas, lodos residuales, su uso y aprovechamiento con el fin de buscar asegurar la sustentabilidad del plan de acción.	3.1 Los planes de acción contienen una propuesta de normatividad sobre tratamiento de aguas, lodos, su reuso y aprovechamiento. 3.2 Las instituciones participantes cuentan con el borrador de las iniciativas para promover normatividad necesaria hasta 2014.	- Planes de acción - Reporte del avance de los planes de acción (normatividad)	
Actividades previas de cada Resultado: 1.1 Cada institución presenta a través de sus becarios el borrador del plan de acción institucional y el inventario de las plantas de tratamiento de aguas residuales que hay en su país 1.2 Los instructores del IMTA dan a conocer tecnologías de bajo costo sobre tratamiento de aguas y lodos, su reuso y aprovechamiento durante el curso 1.3 Los instructores del IMTA dan asesorías especializadas sobre la identificación de la tecnología más apropiada del tratamiento de agua, lodos, su reuso y aprovechamiento así como sobre su incorporación en cada plan de acción institucional. 1.4 Las instituciones participantes elaboran los planes de operación y mantenimiento bajo supervisión y asesoría del IMTA. 2.1 Los participantes elaboran un plan de difusión (pláticas, cursos, etc) basado en las experiencias adquiridas en el curso 2.2 Los participantes elaboran los materiales-instrumentos de difusión 2.3 Los participantes difunden localmente al equipo para implementar las actividades del	INSUMOS: IMTA - Laboratorios y aulas - Instructores - Manuales o memorias electrónicas	JICA - Gastos de invitación de becarios - Boletos de avión - Hospedaje - Viáticos -Seguro Médico -Experto Japonés - Autobús para prácticas	Condiciones previas -Todas las instituciones se comprometan a implementar el plan de acción institucional dentro de los 3 años Las instituciones participantes cuentan con los recursos financieros - Las instituciones participantes elaboran el plan de acción institucional — Elaboración de la PDM del curso - IMTA tiene acceso directivo en AIDIS

3.3 Los participantes reciben asesoría especializada sobre normatividad durante el curso 3.4 Los participantes formulan anteproyectos de normas en tratamiento de aguas buscando la sustentabilidad del plan de acción.

c) PDM for TCTP on Development of Instruments for the Integral Waste Management with Focus on 3Rs (Reduction, Reuse, and Recycle)

Nombre del Proyecto: "Curso Internacional para el desarrollo de elementos para el fortalecimiento de la instrumentación de la gestión integral de residuos con enfoque en 3R's (Reducir, Reutilizar y Reciclar)"

Período de Ejecución 3 años AFJ (2012-2014)

Agencia Responsable: Instituto Nacional de Ecología y Cambio Climático (INECC)

Grupo Meta: Las instituciones participantes (seleccionadas de las ediciones previas) en el curso.

Versión: PDM1

Resumen del Proyecto	Indicadores	Medios de Verificación	Condiciones Externas
Objetivo Superior: Los países cuentan con una política pública que promueve la gestión integral de residuos con enfoque de 3R's	La política pública que está basada en la propuesta elaborada durante el curso autorizada y publicada 5 años después a partir de la tercera edición del Curso.	Edición impresa/digital de la política pública autorizada y publicada	Las agendas ambientales de los países participantes orientan acciones de apoyo a la gestión integral
Objetivo del Curso: Los países participantes diseñan una propuesta de política pública para el fortalecimiento de la gestión integral de residuos, con enfoque de 3R's.	Al término de la tercera edición del curso, el 100% de las instituciones participantes ha diseñado una propuesta de instrumentos de política pública con enfoque de 3R's.	Edición impresa/digital de la propuesta Videoconferencias interinstitucionales (JICA-INECC-DGCTC- instituciones participantes)	de residuos. Las instituciones participantes mantienen respectivos desarrollos institucionales favorables a la capacitación de sus
Resultado 1. Las instituciones participantes han definido un instrumento de política para la GIR con enfoque de 3Rs en base a un diagnóstico básico.	A partir de la primera edición, las instituciones seleccionadas presentan un documento donde se define el o los instrumentos política pública aprobado y consensuado por la institución en julio del 2013.	Reporte de monitoreo del plan de acción Videoconferencias interinstitucionales (JICA-INECC-CGCTC- instituciones participantes) Los diagnósticos entregados por las instituciones participantes	-

Resultado 2. Las instituciones participantes han diseñado una estrategia factible (plan básico) económica, administrativa y técnicamente para el manejo de los residuos, con enfoque de 3Rs.	La estrategia elaborada hasta junio del año 2014 que contenga: - diseño básico para el desarrollo de un instrumento de gestión integral o política pública (categorías jurídica, económica, participación social o derecho a la información, otros) que indique las actividades y fechas de su elaboración o implementación -Propuesta de las responsabilidades estructurales en el país para la aplicación de planes de manejo	participantes)	
Resultado 3. Las instituciones participantes han desarrollado los lineamientos estratégicos de validación de la propuesta de política pública sobre la gestión integral de los residuos con enfoque de 3Rs.	Los lineamientos estratégicos de validación diseñada hasta marzo de 2015.	Reporte de monitoreo del plan de acción Videoconferencias interinstitucionales (JICA-INECC-DGCTC- instituciones participantes) Los lineamientos estratégicos entregados por las instituciones participantes	

Actividades Previas a la Primera Edición

- 1.1 El INECC realiza una evaluación diagnostica para confirmar la relevancia del contenido del curso.
- 1.2. JICA envía un experto japonés al INECC para apoyar en evaluar la pertinencia del contenido temático del curso para la realidad de la situación de la GIR de la región comprendida por los países invitados.
- 1.3. El Comité interinstitucional (INECC-JICA-AMEXCID) define los puntos a desarrollar en el diagnóstico situacional en términos de instrumentación de políticas para la GIR con enfoque de 3R's a presentar por los participantes.
- 1.4. Las instituciones participantes desarrollan un diagnóstico situacional preliminar para presentar en el curso.

Actividades

Resultado 1. Las instituciones participantes han definido un instrumento de política para la GIR con enfoque de 3Rs en base a un diagnóstico básico..

- 1.1. El INECC brinda asesoramientos e información necesaria para orientar las instituciones participantes a 3Rs, durante la primera edición del curso.
- 1.2. Las instituciones participantes desarrollarán un plan de acción donde se plantea las líneas potenciales para el

Insumos Japón

- 1. Apoyo técnico para organizar el curso
- 2. Apoyo financiero para cubrir el costo de los participantes internacionales en curso:
 - i. Boletos de avión para 14 participantes
 - ii. Hospedaje de los participantes
- iii. Viáticos
- iv. Seguro médico de los participantes
- 3. Expertos japoneses (3)

Insumos México

- 1. Recursos humanos
 - Personal administrativo
 - Personal técnico
- Expertos técnicos (Honorarios de especialistas mexicanos)
- Instalaciones y Recursos materiales para la realización del curso
 - Vehículos
 - Sala de capacitación
 - Papelería y material didáctico
 - Documentos técnicos

Condiciones Previas

desarrollo e implementación de instrumentos de política de GIR con enfoque de 3R's. 1.3. Las instituciones participantes definen el instrumento de política a desarrollar en la segunda y la tercera edición del curso 1.4. El Comité interinstitucional (INECC-JICA-AMEXCID) dará seguimiento de la definición institucional del instrumento de política a desarrollar, a través de video conferencia posterior de la primera edición del curso.		Los países beneficiar mantienen su voluntad polít de apoyo a la capacitación sus recursos humanos materia de manejo sustenta de residuos.
Resultado 2. Las instituciones participantes han diseñado una estrategia factible (plan básico) económica, administrativa y técnicamente para el manejo de los residuos, con enfoque de 3Rs. 2.1. los becarios presentan avances de la propuesta del apoyo del manejo de residuos con enfoque de las 3Rs. El INECC transfiere los conocimientos técnicos y las metodologías durante el curso para que se cuente con los		
instrumentos de política pública y gestión integral para la implementación del esquema de las 3Rs. 2.2. El INECC dará asesoría técnica para el diseño y elaboración de los instrumentos objetos durante el curso, y a través de video-conferencias de seguimiento posteriores. 2.3. Los becarios participantes elaboran un plan de acción que cuente con una		

estrategia de instrumentos institucional de	
política pública que sea factible en materia	
manejo de residuos con enfoque de las	
3Rs.	
2.4 Los becarios deberán desarrollar una	
propuesta de lineamientos básicos para la	
validación del instrumento de política	
pública en materia manejo de residuos con	
enfoque de las 3Rs.	
·	
Resultado 3. Las instituciones	
participantes han diseñado los	
lineamientos estratégicos de validación de	
la propuesta de política pública sobre la	
gestión integral de los residuos con	
enfoque de 3Rs.	
3.1. El INECC transfiere los conocimientos	
técnicos y las metodologías durante el	
curso para el diseño de los lineamientos	
estratégicos de validación.	
2.2. El INECC da asesoría técnica para el	
diseño de los lineamientos estratégicos de	
validación durante el curso, y a través	
video-conferencias de seguimiento	
posteriores.	
3.3. Los becarios participantes elabora los	
lineamientos de validación a implementar	
en el respectivo país.	
3.4. Las instituciones participantes	
establece y socializa los lineamientos de	
validación con base a los lineamientos	
diseñados por los becarios del curso.	

d) PDM for TCTP on Establishment of Resource Recycling Society System

Nombre del Proyecto: "Curso Internacional hacia un Ciclo Sustentable de los Materiales y Residuos"

Período de Ejecución: 3 años 2015-2017

Agencia Responsable: SEMARNAT: SSFyNA (DGFAUT) e INECC, SRE: AMEXCID (DGCTC)

Grupo Meta: Funcionarios pertenecientes a instituciones de Gobiernos Nacionales y Locales en los países de Latinoamérica, y Representantes de Compañías y Prestadores de Servicios que colaboren con las instituciones gubernamentales en materia de valorización de materiales y residuos

Versión: PDM 0

Resumen del Proyecto	Indicadores	Medios de Verificación	Condiciones Externas
Objetivo Superior:	Una estrategia establecida de	Edición impresa/digital	Las agendas ambientales
En los países participantes, se incrementa	valorización de una corriente de	publicada de la estrategia de	de los países participantes
el aprovechamiento de los materiales y	materiales y/o residuos está basada	participación pública y privada	orientan acciones de
residuos, como resultado de la participación	en la propuesta elaborada en las		apoyo y fomento de la
pública y privada en el ciclo sustentable de	tres ediciones del Curso		participación pública y
materiales y residuos.	Internacional dentro de los 5 años		privada en el ciclo
	posteriores al término de la Tercera		sustentable de materiales
	Edición		y residuos.
Objetivo del Curso:	Al término del curso, el 100% de los	Edición impresa/digital de la	
Los países participantes desarrollan una	participantes ha diseñado una	propuesta	Las instituciones
experiencia del ciclo sustentable de los	propuesta de Plan de Acción que		participantes mantienen
materiales, con participación pública y	involucra la participación pública y		sus respectivos
privada.	privada en el ciclo sustentable de		desarrollos institucionales
	materiales y residuos		favorables a la
			capacitación de sus
			recursos humanos en
Resultado 1. Las instituciones participantes	El Plan de Acción factible de	Reporte de monitoreo del plan	materia de gestión integral
han iniciado la implementación del Plan de	estrategia de ciclo sustentable de	de acción	de residuos con enfoque
Acción conforme a los lineamientos	materiales/residuos aprobado y		de sustentabilidad.
estratégicos necesarios del ciclo	consensuado por la institución [al	Videoconferencias	
sustentable de materiales/residuos con	término de la tercera edición]	interinstitucionales (JICA-	
participación pública y privada.		SEMARNAT-INECC-CGCTC-	
		instituciones participantes)	

Resultado 3. Las instituciones participantes han definido una estrategia de ciclo sustentable de un flujo de materiales /residuos, con participación pública y	actividades requeridas; el grupo Meta; un cronograma de implementación; rol de responsabilidades; los mecanismos de interacción de la estrategia público-privada; sustento legal y administrativo. Los lineamientos estratégicos de implementación diseñada hasta marzo de 2017.	instituciones participantes) La edición impresa/digital del Plan de Acción diseñado por las instituciones participantes. Reporte de monitoreo del plan de acción Videoconferencias interinstitucionales (JICA-	
privada.		SEMARNAT-INECC-DGCTC-instituciones participantes) Los lineamientos estratégicos entregados por las instituciones participantes	
Resultado 4. Las instituciones participantes en la primera edición del curso han identificado/ seleccionado los métodos y técnicas susceptibles de ser incorporados en el Plan de Acción institucional	La presentación de los diagnósticos de país (Línea Base)	Los diagnósticos entregados por las instituciones participantes (Informe de País)	

Actividades Resultado 1. Las instituciones participantes han iniciado la implementación del Plan de Acción conforme a los lineamientos estratégicos necesarios del ciclo sustentable de materiales/residuos con participación pública y privada. 1.1 Brindar información y asesorar a las instituciones participantes para la implementación de su Plan de Acción con enfoque de ciclo sustentable de materiales y residuos. 1.2 Las instituciones participantes inician la implementación de su Plan de Acción de al menos una corriente de materiales y residuos que considere la participación pública y privada. 1.3 Dar seguimiento al proceso de implementación de los Planes de Acción de los países participantes. 1.4 Recibir, revisar y retroalimentar el Reporte de monitoreo del plan de acción. Resultado 2. Las instituciones participantes han diseñado un Plan de Acción que involucra la participación pública y privada del ciclo sustentable del flujo de materiales / residuos 2.1 Las instituciones participantes diseñan un Plan de Acción factible económica,	Insumos Japón 1. Apoyo financiero para cubrir el costo de los participantes internacionales en curso: vi. Hospedaje de los participantes vii. Viáticos viii. Seguro médico de los participantes ix. Traslado interno para visitas técnicas	Insumos México Boletos de avión para participantes internacionales Recursos humanos Personal administrativo Personal técnico Expertos técnicos (Honorarios de especialistas mexicanos) Instalaciones y Recursos materiales para la realización del curso Vehículos Sala de capacitación Papelería y material didáctico Documentos técnicos	Condiciones Previas

materiales/residuos.	
2.2 Brindar asesorías y tutorías para que las	
instituciones participantes cuenten con los	
conocimientos técnicos y las metodologías	
necesarios para establecer su propuesta de	
Plan de Acción de ciclo sustentable de	
materiales y residuos.	
2.3 Las instituciones participantes presentan	
una propuesta de Plan de Acción de ciclo	
sustentable de materiales/residuos que	
considera la participación pública y privada.	
Resultado 3. Las instituciones participantes	
han definido una estrategia de ciclo	
sustentable de un flujo de materiales	
/residuos, con participación pública y privada.	
3.1 Los países participantes presentan una	
propuesta de lineamientos estratégicos de	
ciclo sustentable de materiales/residuos de	
evaluación y seguimiento de proyectos de su	
Plan de Acción que considera la participación	
pública y privada.	
3.2 Brindar asesorías y tutorías para que los	
países participantes diseñen los lineamientos	
estratégicos de evaluación y seguimiento de	
proyectos de su Plan de Acción de ciclo	
sustentable de materiales y residuos.	
Resultado 4. Las instituciones participantes	
en la primera edición del curso han	
identificado/ seleccionado los métodos y	
técnicas susceptibles de ser incorporados en	
el Plan de Acción institucional	

4.1 La Parte mexicana analiza y retroalimenta		
los diagnósticos de país de los participantes.		
4.2 Diseñar el <i>Currículum</i> y la agenda del		
Curso.		
4.3 Enviar la convocatoria a los países		
invitados.		
4.4 Recibir las propuestas de participación de		
los países invitados y evaluarlas.		
4.5 Emitir resultados e informar a los		
postulantes aceptados.		
4.6 Recibir y retroalimentar los diagnósticos		
de cada país participante.		
4.7 Gestionar la participación de cada uno de		
los ponentes de la iniciativa privada y		
gobiernos.		
4.8 Organizar la logística de la sede del curso		
[horarios, salones y servicios].		
4.9 Organizar la traducción simultánea		
durante las ponencias de los expertos		
aponeses.		
4.10 Organizar la logística de recepción,		
hospedaje y retorno de los participantes en el		
curso y de los expertos japoneses.		
4.11 Organizar la logística del traslado de la		
sede de hospedaje a la sede del curso.		
1.12 Gestionar con las empresas las visitas a		
realizar y diseñar la logística de las mismas,		
ncluyendo transporte.		
1.13 Diseño y envío de la agenda final del		
curso a países participantes.		
4.14 Elaboración y firma de reconocimientos		
del curso.		
4.15 Recopilar e imprimir o digitalizar los		
materiales del curso que utilizarán los		

participantes.

 4.16 Llevar a cabo el diseño de la logística de las tutorías. 4.17 Organizar la logística de cierre del curso. 4.18 Elaboración de informes financieros del curso. 4.19 Elaboración del informe técnico del curso. 		