FINAL EVALUATION:

UNDP PROJECT # 00092723:

"ENVIRONMENTALLY SOUND MANAGEMENT OF WASTE CONTAINING PERSISTENT ORGANIC POLLUTANTS"

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Content

Abbreviations and acronyms

Acronyms	Stands for:
AMOCALI	Campo Limpio, Organización de Productores y Comercializadores de Agroquímicos. Campo Limpio, Organization of Producers and Traders of Agrochemicals.
AMIFAC	Asociación Mexicana de la Industria Fitosanitaria AC Mexican Association of the Phytosanitary Industry AC
ANATEL	Asociación Nacional de Telecomunicaciones National Telecommunications Association
CANIETI	Cámara Nacional de la Industria Electrónica, de Telecomunicaciones y Tecnologías de la Información National Chamber of the Electronic, Telecommunications and Information Technology Industry
POPs	POPs Persistent Organic Pollutants
POPNIs	Unintentional Persistent Organic Pollutants
CPAP	UNDP Country Program Action Plan.
SC	Stockholm Convention
TAC	Technical Advisory Committee
DGGIMAR	Dirección General de Gestión Integral de Materiales y Actividades Riesgosas General Management of Comprehensive Management of Materials and Risky Activities
EE	Electrical Equipment
EVAs	Empty containers of pesticides (EVAs)
FE	Final Evaluation
GEF	Global Environment Facility
UNEG	United Nations Evaluation Group
GRES	Gender Outcomes Effectiveness Scale (GRES)
INECC	Instituto Nacional de Ecología y Cambio Climático National Institute of Ecology and Climate Change
PBD	Project Board of Directors
LGPGIR	General Law For The Prevention And Integral Management Of Wastes
UNDAF	United Nations Development Assistance Framework
M&E	Monitoring and Evaluation
MTR	Mid Term Report
BAT/BEP	Best Available Techniques/Best Applied Practices
OEMs	Original Equipment Producers
UN	United Nations Organization
GAP	Gender Action Plan
PCB	PCB Polychlorinated Biphenyls
PBDE	PBDEs Polybrominated Biphenyl Ethers
PIF	Project Identification Form
PIR	Project Implementation Review
PME	Programas de Manejo Especial de residuos de aparatos electrónicos Special Management Programs for Waste Electronic Equipment
PNA	Plan Nacional de Aplicación del Convenio de Estocolmo Stockholm Convention National Implementation Plans (NIPs)
UNDP	United Nations Development Program
AOP	Annual Operating Plan
Prodoc	Project Document
PROFEPA	Procuraduría Federal de Protección al Ambiente Federal Attorney for Environmental Protection
RTA	Regional Technical Advisor
WEEE	Waste from Electrical and Electronic Equipment
EPR	Extended Producer Responsibility
SAGARPA/SADER	Secretaría de Agricultura, Ganadería, Desarrollo Rural, Pesca y Alimentación (Actualmente SADER) Secretariat of Agriculture, Livestock, Rural Development, Fisheries and Food (Currently SADER)

SAICM	Strategic Approach to International Chemicals Management
SE	Secretariat of Economy
SEMARNAT	Secretaría de Medio Ambiente y Recursos Naturales Secretariat of Environment and Natural Resources
SENASICA	Servicio Nacional de Sanidad, Inocuidad y Calidad Agroalimentaria National Service for Agrifood Health, Safety and Quality
SHCP	Secretaría de Hacienda y Crédito Público Ministry of Finance and Public Credit
SIPCO	Sistema de Sitios Potencialmente Contaminados Potentially Contaminated Sites System
SMAGEM	Secretaría del Medio Ambiente Environment Secretariat
TEQ	Toxic Equivalent
PCU	Project Coordination Unit

1. Executive Summary

Project Information

Chart 1. Project Information

Project Specification		**Project milestones**	
Project's name	92723 Sound Management of POPs Containing Waste in Mexico	PIF Approval Date:	PIF Clearance April 24, 2013
UNDP Project ID (PIMS#):	4686	CEO Authorization Date:	July 28, 2015
GEF ID:	5179	Prodoc signature date	October 13, 2015
UNDP Atlas Business Unit, Award ID, Project ID:	Award ID: # 00084929 Project ID: 00092723	Project Coordinator Hiring Date:	March 1 ,2016
Country/ Countries:	Mexico	Workshop starting date:	April 25, 2016
Region:	Latin America	Mid-Term Report Completion Date:	*July 19, 2019*
Focal area:	Persistent Organic Pollutants	Final evaluation completion date:	May 1, 2022
GEF Operational Program or Priorities/ Strategic Objectives:	Strategic Objective No. 3 GEF-5 "promote the proper management of chemicals throughout their life cycle to minimize significant adverse effects on human health and the environment. Objective 1, Result.3: "POPs released into the environment were reduced" Result 1.4: "POPs wastes prevented, managed and disposed of, and management of POPs-contaminated sites in an environmentally sound manner."	Expected operational closing date:	April 1, 2022
Trust fund:	GEF		
Implementing Partner (GEF Executing Entity):	Secretariat of Environment and Natural Resources (SEMARNAT)		
NGO Participation:	• Mexican Association of Electronic Waste Recyclers • Pesticide Toxicology Thematic Network		
Private Sector Participation:	➢ Electronic Waste: ANATEL National Telecommunications Association National Chamber of the Electronic, Telecommunications and Information Technology Industry (CANIETI). ➢ Pesticides: AMOCALI, Organization of Agrochemical Producers and Traders		
Geospatial coordinates of the project sites:	National		

Financial Information		
PDF / PPG	**at the time of the approval (US$M)**	**Upon completion PDF/PPG (US$M)**
GEF PDF/PPG Project Preparation Grants	$ 100,000	$ 100,000

Co-financing for the preparation of projects		
Project Financing	**In the CEO's endorsement (US$M)**	**In Final Evaluation (US $ M)**
[1] UNDP contribution:	$55,000	$55,000
[2] Government:	$12,283,750	$2,568,433
[3] Other multilateral / bilateral:	$3,461,250	
[4] Private sector:	$7,300,000	$3,939,486
[5] NGOs:		
[6] Total co-financing [1 + 2 + 3 + 4 + 5]:	**$23,100,000**	**$ 6,562,919**
[7] Total GEF Funding:	$5,720,000	$3,716,625
[8] Total project financing [6 + 7]	**$28,820,000**	**$10,179,544**

Project Description

The project "Environmentally Sound Management of Waste Containing Persistent Organic Pollutants (POPs)" was approved by the GEF on July 28, 2015, with a grant of $5,720,000.00 (five million seven hundred and twenty thousand U.S. dollars), a matching contribution of $23,100,000.00 (twenty-three million one hundred thousand US dollars), for a total budget of $28,820,000.00 (twenty-eight million eight hundred and twenty thousand US dollars).

The objective of the project in Mexico is to minimize the impacts on health and the global environment through the sound management of chemical products and the reduction of POP releases and exposure to them in electronic waste and pesticide management operations.

This project was prepared to be executed by the Ministry of the Environment and Natural Resources (SEMARNAT) and the United Nations Development Program (UNDP) as the implementing agency, with the participation of multiple stakeholders from public and private sectors. As strategic partners of the public sector, the following stand out: the Ministry of Finance and Public Credit (SHCP), the Ministry of Economy (SE), the Ministry of Agriculture, Livestock, Rural Development, Fisheries and Food (SAGARPA/SADER), the Federal Attorney for Environmental Protection (PROFEPA) and State Governments; and on the part of the private sector, entities such as the Organization of Producers and Traders of Agrochemicals (AMOCALI), electronic equipment manufacturing companies, the National Telecommunications Association (ANATEL), and the National Chamber of the Electronic Industry of Telecommunications and Information Technologies (CANIETI), as well as community-based groups, particularly informal collectors and recyclers among others; who will be allies in the implementation of the activities established in the different components of the project.

Assessment Rating

Chart 2. Assessment Rating

1.Monitoring and Evaluation (M&E)	Score
M&E design at the entrance	5
Implementation of the M&E Plan	5

Overall quality of M&E	4
2. Implementing Agency (IA) Implementation and Execution (IE)	**Score**
Quality of UNDP implementation and monitoring	4
Quality of implementation of implementing partners	4
Overall quality of implementation/execution	4
3. Assessment of Results	**Score**
Relevance	3
Effectiveness	3
Efficiency	3
Overall rating of project results	3
4. Sustainability	**Score**
Financial sustainability	2
Socio-political sustainability	3
Institutional framework and governance sustainability	2
Environmental sustainability	3
Overall probability of sustainability	2

NOTE: See Annex 6. Summary of grading scales, Table of Final Evaluation grading scales.

Summary of Findings and Conclusions

Findings

1. The Mid-Term Report (MTR) marked an important milestone in the development of the project, as a result of the adaptive management in response to the recommendations of the MTR, the development of the activities presented an important advance.
2. The awareness campaign developed by the project had a significant reach at the national level through mass media, impacting a significant number of people at zero cost to the project. Getting the population to identify the risks to health and the environment by not properly disposing of electronic equipment.
3. There are important products such as the Proposal for Electronic Waste Management Plans for four states, however, the change in Federal and State authorities has limited its appropriation and implementation. The follow-up, by the implementing partner, to implement these plans and scale them, achieving their replicability, would allow enhancing the impacts of this project, incorporating the Gender Action Plan (GAP) prepared for this project.
4. Management plans for the recycling of empty agrochemical containers (EVAs) were received and implemented in some places. This is an indication that greater impact can be achieved if these management models are promoted within the country.
5. The combination of the two teams - Project Coordination Unit (PCU) with the Environmentally Sound Management and Destruction of PCBs in Mexico - was not successful. Both projects required dedicated coordination efforts.
6. The phase-out goals set out in the project document were not achieved.

Conclusions

1. The project is aligned with national priorities and with the UNDP mandate to reduce the exposure of persistent organic pollutants to the population and the environment. Capacities have been strengthened in compliance with international commitments, through the creation of a specialized unit within the institutional framework of the implementing partner, creating sustainability.
2. The project was well designed, but implementation was poor, causing significant delays in its development. The inadequate selection of the initial PCU did not meet the logic of this project, as it did not fully conceptualize the project. This deficiency was evidenced by the MTR and, in accordance with the recommendations issued, it was possible to remedy it with the incorporation of a new PCU, changing the structure to be more consistent with the tasks to be performed. The progress achieved in the second half of the project is not only the result of the appointment of a new director at SEMARNAT who is committed to the project, but also as a result of the ownership of the project by the PCU and the contracted consultant. The Regional Technical Advisor (RTA) of UNDP assumed an important role in driving the project forward by conducting missions to Mexico. Despite these efforts, there was not enough time to implement the actions, so to date results of consultancies are still expected.
3. The Special Management Programs for electronic equipment waste (PME) are undoubtedly a benchmark to continue promoting this initiative in other states, however, it is essential that they can be operationalized.
4. As described by MTR, the main activities were postponed in the first half of the project. Although the implementation of the project took a different direction after the MTR, the overall assessment of the project showed that, despite the time constraints and the administrative and external difficulties caused by the Pandemic, the achievements of the project were significant, some goals were partially met, but others could not be achieved. The impacts of the project could be increased if the implementing partner follows up on the replication and scaling of the results obtained in the developed pilots.
5. The initial configuration of the Project Steering Board (PBD) and Technical Committees (TCs) was not equitable among representatives of the pesticide generator and electronic waste management sectors. This was resolved by the formation of two technical committees, but should have been defined more equitably at the beginning of the project.

Synthesis of Lessons Learned

As part of the identification of lessons learned, this evaluation team first reviewed the quarterly reports prepared by the PCU. From this review it is important to highlight the following:

1. Establishing synergies between different activities promotes harmonization, enables savings in resources and promotes rapprochement and feedback from participants.
2. Inter-secretarial (inter-institutional) coordination and collaboration spaces make it possible to raise awareness among the various authorities dealing with different aspects of the same subject. The creation of these spaces promotes the establishment of coordinated actions. It is essential to detonate the spaces for generating knowledge and achieving such collaboration; sensitizing the authorities involved and with the aim of achieving the sustainability of the results.

3. Adaptive management, incorporating the recommendations made by the MTR, allows changing the direction of the project. This supports the importance of carrying out these evaluations and, above all, the need to take the recommendations and incorporate them in the development of project activities.
4. A proper definition of the Terms of Reference (TOR) is crucial in the process of hiring consultants or companies. A precise definition of the expected results and the profile required to perform the expected work is required in order to achieve high-quality and cost-effective hiring.

From the analysis carried out by the evaluation team, the following lessons can be listed:

5. Consolidating a consulting team is important for the proper development of the project. UNDP, together with the implementing partner, should monitor the progress of activities from the start of implementation to ensure a good understanding of the project approach by the implementing unit. The changes in the National Coordinator and the Director-General of SEMARNAT experienced in this project resulted in delays in the implementation of activities.
6. Proposals for the creation or amendment of laws and regulations are an activity that must be initiated in the first year of the project with the aim of achieving approval and implementation within the time frame of the project. A late start to these activities means that the proposals are in the process of being approved by the legislative authorities, making it impossible to carry out other activities dependent on these changes.

Summary of Recommendations

The evaluation of this project provides recommendations for its implementation in the future implementation of projects by UNDP and the implementing partner, establishing the responsibilities of each of the actors involved:

Chart 3. Recommendations

No.	Recommendations	Responsible Entity	Period of time
1.	It is recommended that the profile of the coordinating team and the support structure provided by the implementing partner be clearly defined, achieving the establishment of an integrated coordination unit to ensure the proper implementation of the project.	Implementing partner and UNDP	At the begining of the project
2.	The PBD and TC must ensure equitable representation of the different sectors participating in the project. Ensuring an adequate distribution of resources as established in the Prodoc.	PCU/UNDP	During the induction workshop
3.	When the area of action of the projects is geographically dispersed, it is important to consider hiring local specialists or coordinators, with experience and knowledge of the situation at the regional level, as well as physical proximity, which allows better management.	PCU/UNDP	After the first PIR
4	The project team must receive training from UNDP´s office in order to incorporate times and processes in their work plans and achieve	PCU/UNDP	At the beginning of the project

	contracting in a timely manner according to the needs of the activities to be carried out.		after defining the PCU
5	It is recommended that the implementing partner monitor the activities under development, generating a replicability strategy for the pilots and plans generated at the State level to enhance the results of the project, with the aim of giving sustainability to the results of the project.	Implementing Partner /PCU	Throughout the project
6	As part of the follow-up to the unfinished activities to be carried out by the national authorities, it is recommended that the CPA be implemented, which would allow the incorporation and strengthening of the role of women and vulnerable groups in the management of SARs and pesticides POPs.	Implementing Partner and State Authorities	Continuously after project closure
7	During the design process, project indicators must be defined so they are gender sensitive and gender transformative, in order to comply with the implementation of a Gender Action Plan.	UNDP	At the project design and conceptualizatio n stage

2. Introduction

A. Evaluation purpose

The main purpose of this Final Evaluation (FE) is to determine whether the project has achieved the results originally planned and how it addressed the deficiencies identified by MTR. It also identifies best practices and lessons learned that not only strengthen project results and contribute to national ownership and sustainability of these results, but also support the overall programming framework of UNDP Mexico. Also, identify design and implementation issues that could be strengthened, changed or replicated in future projects funded by the Global Environment Facility (GEF).

B. Evaluation scope

This evaluation will focus on determining the relevance, effectiveness, efficiency, sustainability and impact of the results obtained by the project, analyzing the components and the expected results (design phase) and achieved (implementation) between October 13, 2015 until December 31, 2021, taking as an important milestone the MTR carried out in the first half of 2019, considering the approach in addressing cross-cutting issues such as gender and human rights, people with disabilities, vulnerable groups, poverty, environment, disaster risk reduction, mitigation and adaptation to climate change.

The project has a national scope for the United Mexican States, however, it focuses its efforts on carrying out pilot projects in different states according to the components, for which special attention will be paid to the beneficiaries of these states, without neglecting the national impact that may result from the replicability of the pilots carried out.

C. Methodology

The methodological approach adopted for the development of this evaluation is consistent with the Guide for Conducting Terminal Evaluations of GEF-Financed and UNDP-Supported Projects, which aims at a comprehensive analysis of the project based on evidence that supports the reported findings.

The tools used to collect the relevant data are:

- **Documentary review:** Includes all the documents listed in the ToR as well as any additional project documents requested to supplement the missing information in the mentioned documents. The full list of documents reviewed is contained in Annex 3.
- **Interviews with stakeholders:** Semi-structured interviews provided this evaluation team with the opportunity to speak frankly with key stakeholders, from the PCU, private consultants who facilitated the processes, private companies that participated in the pilot projects developed, and State authorities. and Federal of the institutions involved. This method also ensured a participatory approach, giving equal voice to all stakeholders and ensuring that different perspectives were evaluated to reach conclusions about the different processes undertaken by the project. The interviews were structured according to the matrix of evaluation questions (Annex 4), so that the five criteria were addressed in the interviews, without necessarily asking a question per criteria or mentioning these criteria in the interviews.

These tools provided important, evidence-based information that was carefully analyzed to draw conclusions, lessons learned, and findings at all stages of the project. Furthermore, they allowed for cross-

references from different perspectives: each issue raised was addressed from the point of view of the project/document, from the perspective of the government and stakeholders in the private sector and civil society. As a result of both exercises, this evaluation team had information and evidence, which incorporates the vision of the different actors, in order to reach adequate conclusions on the management of the project.

In the current context of the Covid-19 Pandemic, it was not mandatory to conduct face-to-face interviews, the scheduling such interviews was complex and could be suspended due to pandemic issues. The methodology adopted allowed the scheduling of semi-structured virtual interviews with greater flexibility and minimization of costs, achieving a greater reach of interviewees. The technological tools used allowed, to a large extent, interaction with the interviewees.

D. Data collection and analysis

Data collection and analysis was carried out in accordance with the following activities:

i. Document review: this activity consisted of desk work for the review and reading of:
   - Relevant project documentation: Project Identification Form (PIF), Project Document (Prodoc), Inception Plan and Report, Project Implementation Review (PIR), Substantive Reviews, Annual Operating Plan (AOP), PQA, MTR and management response to MTR recommendations, Audit Reports, Project Operating Guidelines, among others of the M&E system.
   - Review of national contextual documents such as: Government policies and plans, municipal plans, economic and social studies of the sectors.
   - Integration with other activities and policies developed within the framework of the Stockholm Convention and the management of chemical substances and waste such as: similar complementary projects in execution, UNDP and Government policies, State and Federal Plans.
   - Baseline information and project results (quarterly and annual monitoring reports, reports to the PBD, interviews with stakeholders from the public and private sectors, monitoring and evaluation tools.
   - Contextual documents of the implementing agency such as: UNDP financial and administrative guidelines, UNDP Mexico country program, development plans, government programs and policies.

ii. Interviews with stakeholders, including:
   - Project team, including: National Coordinator, national or international experts hired by the project.
   - Implementation agency, among which the following stand out: Country Office of the UNDP-Mexico, the Focal Point of the GEF, Regional Technical Advisor (RTA) of the GEF/UNDP.
   - Government authorities at the Federal level such as: SEMARNAT, the General Directorate of Comprehensive Management of Materials and Risky Activities (DGGIMAR-SEMARNAT), National Service for Agro-Food Health, Safety and Quality (SENASICA); National Institute of Ecology and Climate Change (INECC) and State (States of Baja California, Chihuahua, Jalisco, Querétaro, Colima and Mexico City).
   - Private Sector (AMOCALI, CANIETI).
   - Academy.

- Non-governmental organizations.
- Others that were identified during the documentary review that was carried out.

The data collected from the desk review allowed an assessment of compliance based on the results framework, while interviews allow analysis not only of results but also of impacts and lessons learned from different perspectives.

With the information obtained from the documentary review and the interviews, the proper triangulation of the information was carried out. The quality evaluation criteria of the evaluation report were taken into account when formulating the evaluation conclusions. The data collected was done by reviewing the project documents.

This evaluation included a financial analysis based on the expenditure and co-financing figures provided by the UNDP ATLAS system project. The purpose of this analysis is to highlight important aspects of the budget.

E. Ethics

This evaluation will be carried out with the highest ethical standards. The evaluation team has signed the corresponding code of conduct (Annex 8). This evaluation was conducted in accordance with the principles outlined in the "Ethical Guidelines for Evaluations" of the United Nations Evaluation Group (UNEG). It was made clear to all interviewed stakeholders that the information they provided would be kept in the strictest confidence.

F. Limitations

In the case of this FE carried out during the global crisis due to the COVID-19 pandemic, the mission to Mexico was not carried out by the international consultant, but it was supported by a national consultant who carry out some activities within Mexico. However, the trips or visits to the different sites were not carried out as they would normally be.

Personal interviews were conducted by virtual means, looking for the quantity and quality that this exercise deserves. Interviews were conducted, with the support of the project team and national experts, to exchange questions and information with as many identified stakeholders as possible.

At the time of this evaluation, some of the products are under development and, according to the information obtained, they are expected to be completed during the first months 2022. However, the evaluation team is not certain that they will be delivered in the required quality, therefore, the evaluation team does not consider these products as finished, which affects this evaluation.

Some problems arose during the interview process, the interviewees did not connect on time for various reasons, which limited the time due to the programming carried out by the project team.

3. Project description and development context

Project start and duration, including milestones in the project cycle.

SEMARNAT, with the support of the UNDP, presented this project to the GEF, which aims to minimize the impacts on health and the environment through the proper management of chemicals and the reduction of POPs emissions, as well as exposure to POPs from operation management of electronic waste and pesticides in Mexico.

This project was approved by the GEF on July 28, 2015, with a grant of $5,720,000.00 (five million seven hundred and twenty thousand U.S. dollars), a matching contribution of $23,100,000.00 (twenty-three million one hundred thousand U.S. dollars), for a total budget of $28,820,000.00 (twenty-eight million eight hundred and twenty thousand U.S. dollars). Once the Prodoc was signed by the national authorities and the UNDP on October 13, 2015, the initial workshop was held on April 25, 2016, with an execution period of 5 years.

The project aimed to help Mexico meet the requirements of the Stockholm Convention. In line with this objective, it addresses the flow of e-waste sensitive to the release of POPs through recycling, decommissioning and e-waste treatment (EEW) processes and the disposal and environmentally sound management of obsolete POPs pesticide stockpiles. It was scheduled to end on September 30, 2019, however, as a result of the MTR a substantive revision was submitted to extend the deadline to April 1, 2022, the date on which it will be operationally closed.

The project sought to strengthen national capacities to establish an integrated environmentally sound management system to operate along the waste chain; promoting market mechanisms that state governments could promote.

This project was prepared to be executed by SEMARNAT with UNDP as the implementing agency, with the participation of multiple stakeholders from public and private sectors. Strategic partners of the public sector include: SHCP, SE, SAGARPA/SADER, PROFEPA and State Governments; and by the private sector organizations such as AMOCALI, ANATEL, CANIETI, and electronic equipment manufacturing companies, as well as community-based groups, particularly informal collectors and recyclers, among others; who will be allies in the implementation of the activities established in the different components of the project.

Development context: environmental, socio-economic, institutional and policy factors relevant to the goal and scope of the project

There is an important socio-economic factor that is still in place, the Covid-19 Pandemic, generated a number of restrictions, in relation to the project, it was mainly affected during the second half of the implementation. In this context, the project had to adapt and, with an adaptive management approach, redesign its implementation strategy, a situation that is reflected in the realization of many activities virtually or remotely. The economic effects of the pandemic limited access to companies to carry out pilot projects, and the resources available to both public and private actors limited the resources allocated to co-financing the project.

The project was affected by multiple changes in the National Coordinator and the Director General of SEMARNAT. These changes resulted in delays in the recruitment and implementation of consultancies, as well as in the review of delivered outputs. These changes in project team also influenced the misapplication of the project concept. This is well illustrated by the results of MTR.

Problems the project sought to address

The project was formulated based on the results obtained from Mexico's First National Implementation Plan of the Stockholm Convention (NIP), transmitted in 2008, which establishes the need to implement action plans for the management of pesticides POPs, PCBs and unintentional release of POPs (POPNIs). The NAPA established that inventories should be supplemented and refined, identifying locations, as well as the need to generate an inventory of contaminated sites. Although unintentional releases of POPs were not considered in the 2008 NAP, they would be included in the next NAP as well as in the Government's National Development Plan 2013-2018.

By 2010, a generation of electrical and electronic equipment waste of 360,000 tons was estimated (National Institute of Ecology, 2010). 90% of electronic waste were televisions and computers that contained PBDEs of the order of 18,000 mg / kg, the mass flow of PBDEs contained in electronic waste in Mexico between 125-570 tons. There is no clarity on the amount of waste processed in an environmentally sound manner.

At the time of project design, the Mexican government was very interested in the sound management of e-waste and the implementation of "Waste Management Plans" as an instruments to promote compliance with legal requirements for environmentally sound management. However, there were no specific regulations in Mexico that oblige manufacturers to ensure the sound management of chemicals in electronic products.

In regards to pesticide management, by 2010 an inventory of 290 metric tons of obsolete pesticides was determined, however, a joint estimate by the government and the association of pesticide producers is of at least 1,200 tons, of which approximately one third, 400 tons are DDT and HCH, which represents a significant risk of release and exposure to POPs pesticides in Mexico, as well as release to the environment.

The project is consistent with the primary objective of the GEF-5 Chemicals Results Framework to "promote the sound management of chemicals throughout their life cycle in ways that lead to the minimization of significant adverse effects on human health and the global environment. In particular, the project contributes to objectives 1 and 3:

- **CHEM-1 Objective:** "Phase POPs phase-out and reduce POPs releases"
  - **Outcome 1. 3** Reduced releases of POPs into the environment.
    Indicator 1.3.1: Number of unintentionally produced POPs releases prevented or reduced in the industrial and non-industrial sectors; measured in grams TEQ against the baseline recorded through the POPs tracking tool.
  - **Outcome 1.4** POPs wastes are prevented, managed and disposed of, and POPs contaminated sites are managed in an environmentally sound manner.
    Indicator 1.4.2 Quantity of obsolete pesticides, including POPs, disposed of in an environmentally sound manner; measured in tons.

- **CHEM-3 Objective** "Experimental Management of Rational Chemicals and Mercury Reduction"
  - **Outcome 3.2** Contribute to SAICM's general objective of achieving sound management of chemical products throughout their life cycle in a way that leads to the minimization of significant adverse effects on human health and the environment.

    Indicator 3.2.1 Countries undertake relevant SAICM activities that generate global environmental benefits and report to the International Conference on Chemicals Management.

Project´s immediate and development goals.

The project´s goal is to minimize impacts on global health and the environment through the sound management of chemicals and the reduction of POPs releases and exposure to POPs from e-waste and pesticide management operations in Mexico.

In order to achieve this objective, the project has been divided into components, each of which has a specific objective, namely:

- **Component 1,** focused on strengthening the legal framework, public policies and institutional capacities to facilitate the reduction of the risk of POPs in general and particularly associated with obsolete pesticides and e-waste.
- **Component 2**, sought to demonstrate best practices for e-waste management at the state level to minimize releases of POPs from this waste stream, taking into account Best Available Techniques/Best Applied Practices (BAT/BEP) in accordance with international standards.
- **Component 3**, focused on reducing risk from exposure to POPs pesticides, stockpiles, waste and contaminated sites, other obsolete pesticide stockpiles through disposal of obsolete pesticides and waste, as well as management of contaminated sites.
- **Component 4,** aimed at strengthening the capacities of State authorities for inspection and enforcement, and for end-users in the operational management of obsolete pesticides, disposal of empty packaging and ensuring that sustainable programs covering obsolete pesticides are in place.
- **Component 5,** support project monitoring and evaluation and dissemination of lessons learned.
- **Component 6,** aimed at strengthening project management capacity for effective and efficient implementation.

To address the challenges that prevent reaching these goals, the project promoted the establishment of policies and legislation related to the management of electronic waste, POPs and obsolete pesticides.

Training for companies, authorities responsible for monitoring and control, and raising awareness among the general population on the health and environmental effects of inadequate WEEE management promoted a change in the WEEE management culture and improved national storage and final disposal capacity.

Description of the project's Theory of Change

The Prodoc does not contain a Theory of Change, but this evaluation team understands that the project was prepared thinking of a Theory of Change composed of two thematic axes; i.) Reduction of emissions resulting from the environmentally sound management of plastics containing POPs and, ii.) Reduction of risks through the elimination of inventories of POPs and obsolete pesticides.

The activities set out in the project document sought to generate, through the developed pilots, impacts beyond the implementation period of the project, the successful demonstration leads the other actors to consider and incorporate into their operations the changes observed in the pilots with confidence in obtaining better results.

The results will be scaled up to a higher impact level with post-implementation activities, such as: i.) the implementation of the National Replication Program, ii.) the introduction of state and national e-waste management plans based on the pilots carried out, iii.) the scaling up of provincial POP pesticide waste management plans to a state and national level. This is enhanced by national capacities and a strengthened policy and institutional framework, as well as sustainable and continuous management of e-waste and pesticide POPs.

Expected Results.

The main expected result of the project is the minimization of negative impacts on global health and environment through the sound management of chemicals and reduced releases of POPs; and the reduction of exposure to POPs in e-waste management operations and POPs pesticides in Mexico.

It was expected that with the execution of the project activities, a reduction of 42g of Toxic Equivalent (TEQ) of PCDD/F POPs releases per year would be achieved. This reduction would be the product of a rational management of electronic waste through the introduction of applicable international best practices and best available technologies. Through the application of the National Replication Program, once the project is completed, it is expected to achieve a reduction of 89g of TEQ/year.

Updating the inventories of obsolete pesticide stocks would allow the environmentally sound destruction of at least 400 tons of this inventory of POPs and obsolete pesticides.

The implementation of pilot State plans for e-waste management, the Provincial Plan for POPs Pesticide Waste Management, the development of a National Replication Program, and the strengthening of national regulatory, legal and institutional capacities will ensure sustainable management for the continuous disposal of pesticides and proper management of e-waste and POPs.

The objective, components and expected results for each component are summarized below:

Project objective: Minimize negative impacts on health and the environment through the appropriate handling and management of chemicals and the reduction of POPs emissions, as well as exposure to POPs from electronic waste and pesticides in Mexico.

Component 1*: Strengthening institutional and public policies and capacities on POPs and the sound management of chemicals.*

Outcome A: Strengthened national legal and regulatory framework to enhance capacity to implement and enforce Stockholm Convention (SC) obligations within the country's overall framework for the sound management of chemicals, including potential POPs

Component 2: *Reduction of emissions of POPs from state e-waste processing and waste processor.*

Outcome B: Development and implementation of pilot management plans at the state level in three states: Baja California, Jalisco and Mexico City and projection to the rest of the country.

Outcome C: Demonstration of the minimization of POPs emissions in the formal and informal recycling of electronic waste.

Component 3: *Risk reduction through the disposal of stocks and wastes of POPs pesticides.*

Outcome D: Establishment of a provincial-level plan for the management of POPs pesticide residues tested in selected provinces

Outcome E: Substantial elimination of remaining POP pesticide stocks and POP residues in Mexico

Outcome F: Containment or remediation of priority sites contaminated with POPs pesticides and national program to address remaining sites

Component 4: *Strengthening capacity to manage obsolete pesticides*

Outcome G: Institutional strengthening at the state level for the management of obsolete pesticides

Component 5: *Monitoring and evaluation*

Outcome H: Monitoring, learning, adaptive feedback, disclosure and evaluation

Component 6: *Project Management*

Output I: Strengthened capacity and efficiency in project management

A detailed analysis is shown in Annex 7, Project Strategy Table, indicators, baseline and expected result at the end of the project.

Total resources

At the time of the approval of this project, the total financing reached $28,820,000 (US$28,800,000). The contribution provided by the GEF is $5,720,000 (US$5,720,000), while the contribution pledged by the main actors, as co-financing of the project, reaches the sum of $23,100,000 (US$23,100,000). Table 5 shows the breakdown of the counterpart committed by each of the sources.

Table 5. Co-financing

Co-financing sources	Type of Co-financing	Amount (US$)
National Government Contribution Project (SEMARNAT, SAGARPA/SADER)	In kind	$10,200,000
Local Government Contribution Project (States of Baja California, Mexico City and Jalisco)	In kind	$2,083,750
Private Sector (AMOCALI, UNFAAC, OEMs, original equipment manufacturers, large importers, distributors, companies, service companies, recyclers, metallurgical companies)	Mobilized Investment	$7,300,000
To confirm during implementation	Investment	$3,461,250
Other Multilateral Agencies (UNDP)	In kind	$55,000
Total co-financing		**$23,100,000**

Summary of key stakeholders and their roles in the project.

For the implementation of the project, the following institutions are identified as stakeholders and key actors (Table 6):

Table 6. Key stakeholders and their roles in the project.

Institution/Organization	Role of project implementation
SEMARNAT, DGGIMAR	Coordination of all activities, as waste management falls within its competence, it is a focal point of the Stockholm Convention
SAGARPA/SADER	The support in the implementation of components 3 and 4, it is the Ministry that executes the collection programs for empty pesticide containers, it has information on sites contaminated with pesticides. It is a key actor in the co-financing of these components
Amocali (Clean Field)	It is an association of the main companies that produce and distribute pesticides in Mexico. It brings together AMIFAC and UMFAAC, which are two business organizations that produce and distribute pesticides; they will provide support in identifying and researching obsolete pesticide stockpiles and provide co-financing to components 3 and 4.
Local Governments	Key allies to implement management plans for both wastes. They have within their jurisdiction “Special Management Waste” (for e-waste) and have information on pesticide contaminated sites. Provide co-financing for Components 2, 3 and 4.
OEM, Recyclers and metallurgical extractive industries	Allies in the implementation of demonstration pilot projects. Key actors in the co-financing of Components 2, 3 and 4 and the National Replication Program
Community groups, particularly informal waste pickers and recyclers	Key groups to ensure that improved management practices are adopted throughout the value chain. Recipients of training and dissemination of good practices. Consulted and integrated into the overall recycling value chain to ensure inclusion and sustainability.

ANATEL, CANIETI y AMOCALI	They are the 3 key organizations of manufacturers and sellers of cell phones, electronic products in general and pesticides, respectively. They will be responsible for the development of the Management Plan.
United Nations Development Program (UNDP-Mexico)	UNDP provides guidance, technical support, management tools and expertise and will support the development of substantive projects and make its installed capacity available to the Project, ensuring project accountability.

Fuente: Prodoc

This evaluation is in accordance with the MTR carried out in 2019. At the time of developing this EF, the recommendations and conclusions indicated in the MTR were taken into account and based on these, the results obtained were analyzed.

Key partners involved in the project

The most important partners of this project are SEMARNAT/DGGIMAR, UNDP (Environment, Energy and Resilience Programs Officer).

In addition to these, we can name:

1. Secretariat of the Environment of Mexico City
2. Secretariat of Sustainable Economy and Tourism of the State of Baja California
3. Secretariat of Development and Territorial Development of the State of Jalisco
4. SENASICA/SEDER
5. Amocali A.C.
6. INEC
7. CANIETI
8. Mexican Association of Electronic Waste Recyclers

How this assessment fits into the context of other assessments

This evaluation considers the conclusions and recommendations of the MTR carried out in 2019. It analyzes the actions taken by the PCU to address the deficiencies found by the MTR. The recommendations made in this evaluation are considered to determine the progress and the application of an adaptive management in the general implementation of the project during the second half, for which the recommendations of this evaluation team consider the results of the MTR as a base instrument, based on this information and the other analyzed documents provided by UNDP Mexico and the PCU, as well as the information obtained through interviews, the project is evaluated incorporating the guidelines of an EF.

4. Findings

A. Project design and formulation

To meet the project's objective, it was designed in two main themes: i). Reduction of emissions from waste management of electronic equipment (Component 2) and (ii). Risk reduction through the disposal of stockpiles and waste of obsolete POPs pesticides (Components 3 and 4). In a cross-cutting manner, activities related to strengthening national policies and institutional capacities for the sound management of POPs and chemicals were addressed by Component 1.

The project was designed taking into account Mexico's NAP results, transmitted in 2008, with a strategy ranging from the State to the National. The generation of State Plans, pilot projects, regulatory proposals to be tested at the State level, would allow a subsequent escalation to the National level with the increase in the overall environmental benefits of the project.

Specifically, on the issue of waste, the diagnosis made to formal WEEE managers would allow the identification of options for improvement that would be addressed through Good Practice Guides, incorporating BAT/BEP for this sector. The application of these guidelines, drawn up under the project, to these companies through pilot projects would enable them to be validated and scaled up at the national level. Similar to projects with informal managers, pilots with this sector to take them to formalization would allow them to demonstrate the benefits they would represent as a company to be formalized, as well as to determine the costs associated with this formalization process. Both activities to improve the management of plastics containing POPs in e-waste.

Related to the issue of management of POPs pesticides, the project was designed to improve the inventory, analyze the options for destroying these inventories and generate management plans at the state level (Chiapas, Sinaloa, Jalisco). These activities would allow the generation of knowledge to be scaled up at the national level. Selected States addressed the findings of the NAPA as indicated above. In addition, the analysis of the existing collection system for EVAs, with the incorporation of successful experiences at the international level, would allow for a system for the collection and recycling of these wastes through a public-private partnership. Finally, in this same area, the design of the project would make it possible to generate national capacity for the identification and remediation of contaminated sites, always with a view to scaling up from the state to the national level.

Results analysis framework: project logic and strategy, indicators

From the point of view of this evaluation team, the project was well designed and presented SMART indicators (specific, measurable, achievable, relevant and time-bound) for the monitoring of results.

One of the established indicators (gTEQ of reduced POPs emissions) represents significant measurement challenges, as it must be projected based on studies carried out, such as the characterization and inventory of WEEE.

The logical framework does not contain gender-sensitive and gender-transformative indicators, since possibly at the time of project design a global benefit was conceptualized, without the issues of gender

perspective and the empowerment of women being identified as important elements to incorporate. However, the GAP that is elaborated in the second part of the project comes to solve these deficiencies, since it is not implemented, there are no relevant records regarding the participation of women in training, in studies carried out in the pilot projects or in the elaboration consulting on the project.

The project responds to the national priorities regarding POPs identified in the PNA, and incorporates the lessons learned from previously implemented PCB-related projects.

Prodoc does not present a Theory of Change, but together with the PIF it clearly defines the problem to be addressed and the root causes. The expected components and outcomes address these problems and their causes, and would create the conditions for improving the baseline situation. Based on a vertical logic, this evaluation team considers that the activities established are consistent for the achievement of the results, these activities were well defined and formulated with a clear relationship to the expected outputs and results.

At the time of project design and formulation, it was not necessary to define medium-term goals, which makes it difficult to monitor compliance with them.

Through the generation of pilots at the state level to show the success stories and the subsequent scaling up at the federal level, the project would generate socio-economic and environmental improvements, improve employment and improve the health impact of workers linked to the sectors of intervention of this project. Changes to the regulatory framework will allow the generation of jobs associated with the management of SARs.

This project sought a significant global impact generated by a change in the management of wastes containing POPs, such as pesticides and WEEE. This intervention sought to transform the recycling and recovery sector of WEEE by incorporating best practices in the management of these wastes and raising public awareness about the impacts on health and the environment, as well as eliminating the inventory of POPs pesticides.

On the other hand, in the area of pesticides, the creation of a structure for the management of contaminated sites would allow the reduction of risks for the populations adjacent to these sites, and the establishment of a management model for EVAs would allow the management of plastics contaminated with chemicals and minimize the impacts associated with poor management. Eliminating existing inventories (400 tons) of pesticides would create national conditions for proper management of POPs and obsolete pesticides.

The improvement in electronic waste management systems would have direct effects on the health of the people directly involved in these tasks (collectors, recyclers) and significant economic impacts due to health care.

The generation of business models would represent opportunities for job creation, in sectors such as informal recycling, where there is a high participation of women. In the context of the economic and social crisis caused by the Pandemic caused by COVID-19, the scale-up of the pilots could boost the economy and generate jobs, under a circular economy scheme, using waste to obtain recycled raw materials and lowering the levels of extraction of raw materials from ecosystems.

Assumptions and Risks

After analyzing the challenges that the project faced during its implementation phase, this consulting team determined that the risks identified during the design phase were well analyzed in the context in which the project proposal was developed. During implementation, the project updated the risks as well as the mitigation measures in the prepared RIPs.

The Covid-19 pandemic was an important factor during the second half of the project's implementation period. This factor, which was not identifiable at the time of project design, greatly increased the level of probability and significance of previously identified risks. The state and federal governments had to focus their resources on responding to the pandemic, while private companies had their activities restricted by the sanitary measures established by the health authorities. Finally, the project team had limited the possibilities of travel and the carrying out of face-to-face activities.

The change of government represented a change in the high-level authorities of the partner institutions of the project, this was addressed by the PCU working with middle management, to maintain the commitment of the institutions to the activities established within the framework of the project, minimizing the impact of the change of authorities on the project.

A major risk identified that had a significant impact was the lack of support from local authorities in the process of identifying POPS pesticide inventories, which meant that the 400-ton pesticide phase-out target was not met. This lack of support was reflected in the failure to respond to communications generated by the project team for the identification of inventories, resulting in the identification and environmentally sound destruction of only 131.6 tons of obsolete POPs pesticides. It was also evident in the private sector, where participation in the pilot projects was not as expected, affecting the expected results of the project.

Another risk identified in the design phase was the time required for the approval of legal modifications. Although this risk was identified, the project did not achieve the approval of the legal reforms and depends on the work of the national authorities in promoting the approval process in the chamber of legislators once the project is finished.

The slowness of the approval process for the regulatory amendments had a negative impact on the development of the project, as part of the assumptions identified that the changes in the legal framework would facilitate the process of coordination with the authorities for the implementation of activities, including the management of pesticides and e-waste.

In conclusion, although the assumptions and risks identified in the Results and Resources Framework of the Project were consistent with the reality of application at the time of design, they were increased by unidentifiable factors at the design stage such as Covid-19, which increased their probability and significance.

Lessons from other relevant projects

The design phase of this project involved triangular cooperation with two major countries, China and the United States. At the time of project design formulation, China was implementing a GEF project for e-waste management, while the United States was cooperating with Mexico on its approach to e-waste. Experiences, lessons learned and recommendations were therefore an important contribution to the training of the consultants (CPU and technicians), the implementing partner and UNDP Mexico.

During the implementation of the project, this cooperation with China materialized through the following activities:

i. A video of the #Stop the POPs Campaign of the Project "Reduction and Elimination of POPs in China" (UNDP China) was translated into a Spanish version and adapted with information from the project in Mexico. This allows a better use of resources and an important contribution to the training and awareness of the population on the problem of WAS.
ii. The coordinator and the technical specialist accompanied by a representative of SEMARNAT attended an experience-sharing event, "Reduction and Elimination of POPs in China (UNDP China)" in 2016. The lessons learned from the event were several, including the circular economy scheme applicable to the management of SARs, the strengthening of the regulatory framework, the implementation of a public-private scheme and the importance of regional partnerships.
iii. In 2017, a representative of the UNDP China project team facilitated an exchange of experiences between the governments of Mexico and China on the issue of e-waste management. The exchange of information between the two countries took place in the State of Jalisco, among the topics to be discussed were: the current situation of the WEEE recycling industry and the international regulation of WEEE trade.

Planned engagement of stakeholders

Stakeholders were consulted in the PPG phase and their views were incorporated into the project document. The main stakeholders were SEMARNAT and SAGARPA/SADER in terms of government institutions, AMOCALI as an association of private companies, the governments of the States where the pilot projects would be developed, and WEEE waste recyclers.

In the case of the e-waste components, the main stakeholders reported that they would contribute to the project's development. During the preparation of the Prodoc, it was possible to identify that the formal recycling companies were the ones that mainly invested in electronic waste management.

In the early years of the project at the PDB and TC it was unevenly composed of representatives from the pesticide generator and electronic waste sectors. Once this was corrected by the formation of two technical committees per thematic area, each sector was more effectively involved.

Links between the project and other interventions within the sector.

The project complements the initial inventory of POPs pesticides carried out in 2006, as well as a study on e-waste streams developed for Mexico. At the time of the formulation of this project, Mexico was implementing the GEF-funded POPs project "Environmentally Sound Management and Destruction of PCBs in Mexico", which made it possible to update the legal and regulatory framework and strengthen

institutional capacity for its implementation. It was therefore hoped that the experience gained from the project in relation to PCB management would be used and that there would be synergies between the two projects.

During the implementation, the project coordination unit, Environmentally Sound Management and Destruction of PCBs in Mexico" Second phase (2019-2023), was shared with that of this project. This divided the attention of the Coordinator and his team between both projects, so that the activities were not attended directly and in the required time. In some cases, tasks such as the elaboration of TOR were transferred to the hired Technical Advisor. This was reflected in delays in the project schedule and as a result of the established goals.

Project design and its gender perspective

The project document formulates gender considerations in relation to the need for the sound management of chemicals to take into account the population involved in the management of these substances, as well as those close to the managers of electronic waste and pesticide POPs. Many of the workers in the agricultural and e-waste recycling sectors are men, however, women and children are also involved and exposed to the toxic impact on their communities, due to their proximity to decommissioning sites and areas contaminated with POPs pesticides.

In the design of the project, the dimensions related to the inclusion of women, and gender equality, had a very limited approach, especially in the management of POPs. The paper presented an analysis of the risks of being in contact with persistent toxic chemical pollutants that can affect both women and children as vulnerable groups, as well as men working in e-waste recyclers.

At the implementation stage, the project proposes to address the priority concerns of vulnerable groups, including workers and people with low economic resources, to assess and strengthen the capacity to reduce flows sensitive to the release of COP/PTS.

The project design aims to ensure women's participation in related training and capacity-building activities. For this, there will be two general interventions, awareness-raising and multi-stakeholder participation, which will contribute to ensuring integration from a gender-inclusive perspective. However, from the design of the project, indicators must be defined that are gender sensitive and gender transformative, which are not found in this project. No UNDP gender marker rating was assigned to this Prodoc to assess whether it was realistic or supported by gender analysis as the analysis conducted was very limited.

The indicator of the gender marker GEN-3 "seek to ensure that projects have as their main objective to promote gender equality or the empowerment of women", was not clearly defined and supported with actions this objective.

It is not possible to assign a GEN-3 gender marker to this project because the gender approach that is described in the design is not realistic and despite the fact that the PAG was developed that, if it has actions to implement the gender perspective guidelines aligned with the CE, this PAG was not fully implemented. The purpose of the PAG was to contribute to the fulfilment of Mexico's commitments to the EC, taking into account the gender perspective. The activities established in the PAG are aligned with

the EC that makes visible and recognizes the preponderant role of women as a vulnerable group and promotes the participation and inclusion of women in activities related to the proper management of POPs. In addition, the PAG incorporates elements recognized by the 2007 NAP and its 2016 update, addressing issues of awareness and education of vulnerable groups, as well as the adoption of measures for protection, recognizing the differentiated impacts for vulnerable groups.

No information on gender and its relationship to health, environment and waste aspects was found in the National Development Plan.

Given that the project developed a solid PAG that includes activities to address the different sectors, this evaluation recommends that as part of the follow-up to the unfinished activities that the national authorities must give, the implementation of the PAG be ensured, which would allow the incorporation and strengthening of the role of women and vulnerable groups in the management of WEE and POPs Pesticides

The positive results in terms of gender equality and women's empowerment will be reflected as soon as environmental changes and improvements are made from the perspective of the project. The reduction of emissions of unintentional POPs and the elimination of inventories of POPs and obsolete pesticides are directly related to the reduction in the risk factors to which women, children and men are exposed, both in their working hours, as well as in their housing and recreational conditions.

Social and environmental safeguards

The project document in its Annex 1. Social and Environmental Risk Screening Checklist does not define any environmental or social risk within the three principles and seven standards listed. For its part, with the development of the Environmental and Social Risk Detection (ESPR) tool, an analysis is made of how the project will address the integral principles of human rights, gender equity and women's empowerment, as well as how environmental sustainability would be incorporated. This analysis proposes that during the PPG phase several actors were integrated to share experiences and knowledge during the formulation of the Prodoc.

As part of this analysis, it is proposed to address the priority concerns of gender equity and empowerment of women, including people with low economic resources, in order to assess the ability to reduce e-waste streams sensitive to the release of POPs/ PTS.

The environmental sustainability approach is efficiently developed with a description of the most important activities for an effective management of chemical substances, financially and environmentally sustainable.

This analysis correctly identifies as moderate the risk to occupational health and safety from the perspective of the impact on populations involved in the informal management of electronic waste and living in the communities surrounding these activities.

Another important societal risk, which there was no way to identify in the design phase, was the outbreak of the COVID-19 pandemic. Adaptive management was required to adjust the project's work plans, taking into account the limitations imposed by the health authorities for dealing with the pandemic.

B. Project Implementation

Adaptive Management

The MTR gave a series of recommendations to resolve the main deficiencies found in the project implementation at that time. These recommendations received Management Responses in each case with a proposal from the PCU to implement them. The proposed actions and changes were approved in PBD.

Among the most important actions, it was recommended to change the composition of the PCU and the coordinator of the project. Table 7 shows an evaluation of the recommendations from the MTR and the management response that the PCU proposed to implement in response to these recommendations and what was actually achieved.

Chart 7. Evaluation of MTR Recommendations and Management Response

	MTR Recommendation 2019	Management Response 2019	Final Evaluation team comments
1	Extending the project for an additional year and stopping ongoing and planned activities.	Work Plan 2019-2020 aims to accelerate the implementation of the project and achieve important results of the Prodoc outputs and results in order to justify the extension of the project.	After the MTR of the project and due to considerations of COVID-19, it was extended until March 31, 2022. Limited results were achieved because in several cases the activities took place, but did not have the expected impact, as for example in the State Electronic Waste Management Plans are, but have not been operationalized. In other cases, the consultancies had not yet been completed at the time of this evaluation. The extension helped in a moderate way to boost activities and products that were lagging behind at the time of the MTR.
2	Recruitment of the project developer as a consultant (1-2 weeks) to explain the objectives, scope and activities to the Project Coordination Team. This consultant could have a role as an external advisor to the project.	The PCU works with the Prodoc developer to better understand the logic of its design, the detail and scope of the objectives and activities for its implementation.	The project developer was hired as an external consultant for the revision of the ToR and quality follow-up to the results of the consultancies. The role of this external advisor became practically a coordinator, since he not only formulated the ToR, but also took over the leadership of the project in practice.
3	Reorganize the PCU with a Project Coordinator and two thematic specialists with experience in their field, one for pesticides and the other for e-waste. The Project Coordinator should have extensive experience in waste management, project coordination, and the ability to communicate with high-level authorities.	The PCU has hired a new project coordinator with experience in waste management and the ability to communicate and interact with senior authorities. It is necessary to reorganize the CPU with a specialist who will liaise with the public-private sectors for and reconnect with the target states (BC, CDMX and Jalisco) and a technical specialist who will guarantee the approach of the Prodoc and the quality of the products and results. That this specialist will organize with the coordinator the activities of the specialists in pesticides and electronic waste and be the contact with the States.	A new coordinator was appointed as well as two technical specialists, one for pesticides and the other for e-waste. The task of these thematic specialists was to liaise with the state governments where pilot projects were being carried out.
4	Include local coordinators in the states with pilots to have an effective dialogue with state and municipal authorities, as well as local and private sector actors.	The PCU, through the Public-Private Relations Specialist, will establish an effective dialogue with state and municipal authorities, as well as with the main local actors, to support the implementation of the components of the project, with particular	Focal points were appointed who lived in the States where the pilot projects were being carried out. These coordinators were well aware of the realities and constraints of their States.

		attention to support the development of the State Management Plans and the Pilot Projects.	
5	Reorganize the National Technical Committees by defining work plans (objectives, activities and deadlines). Define the roles of the actors and the scope and powers of these committees.	The PCU developed a proposal to reorganize the CTA based on the suggestions of the external evaluators. The proposal consists of two advisers, one for electronic waste and the other for pesticides.	This recommendation was complemented by the reorganization of the CTA to include more representation from the e-industry.
6	Establish technical committees at the state/local level, following the same logic as previous national technical committees.	The PCU is considering the reorganization of the CTA specifically for e-waste and for the presence of linkages to facilitate the participation of key actors and thus determine the intervention model that promotes networking at the local level.	Two TOCs, one for e-waste and one for pesticides, were established at the project level, but not in the pilot States.
7	A mission from the Panama RTA office to explain, along with the UNDP Mexico, the objectives, main outputs and results to the new federal and state authorities at the highest level.	This recommendation was already resolved with the change of government in Mexico and the SEMARNAT authorities. Another mission will have to be scheduled.	In response to the recommendation, the Panama RTA office carried out several missions with the aim of improving the performance of the project. These included meetings with the national authorities, support for the UNDP Mexico office and project coordination to better guide the implementation of the project.
8	Prioritize activities/products leading to the elimination/reduction of POPs, such as pilot projects in the sector of formal waste recyclers, management plans, and final disposal of 96 tons of pesticides that have been identified.	Suppliers of pesticide destruction services have been identified. A tender for the disposal of identified pesticides will be developed in June 2019. The search for new inventories continues. For e-waste, 4 demonstration pilots within the formal sector of waste Recycler have been tendered.	Regarding pesticides, Tredi Mexico was identified as a supplier of the Pesticide Destruction Service. Some new pesticide inventories were identified, totaling 131.6 tons. For the development of the demonstration pilots, four companies within the formal sector of waste recycler were identified and selected.
9	Analyze the desirability of resuming the TV recovery plan resulting from the elimination of analogues.	In coordination with the project's national counterparts, a special management plan will be developed.	There is no evidence of the development of this plan as a measure of attention to the recommendation provided by the MTR.
10	Develop a technical evaluation of the main products considering the Prodoc, and the proposed reorganization of the PCU. Plan adjustments to the work already done to focus on the main approach of the project: POPs in WEEE and pesticides, their proper	The PCU is establishing an adaptive management to develop the activities, this includes new calls for proposals to ensure their alignment with the Prodoc.	The PCU and UNDP Mexico implemented an adaptive management in order to speed up the contracting processes to incorporate the new activities that would allow addressing the main problems identified in the Prodoc; the management of WEEE containing POPs and POPs and obsolete pesticides, during the second half of this project. Even with these changes implemented, the development of the contracting of

	management and disposal/disposal, best practices adopted and lessons learned.		consultancies and their execution experienced significant delays.
11	Consider an exit strategy for the project one year in advance of the project's closure.		No exit strategy could be ascertained.
12	Development and design of a gender strategy immediately.	The PCU will promote the development of a gender strategy for the project and it will be implemented in the electronic waste pilots.	A very well elaborated and complete Gender Action Plan was developed in its guidelines. It was not possible to verify that this plan was implemented at the time of this evaluation.
13	Initiate the development of a replicability strategy during the final year of the project.	The PCU will start the product strategy process from January 2020, which will include the Project's replicability strategy, additionally, it will be implemented in the electronic waste pilots.	Pilots with formal and informal managers of electronic waste were developed, but it was not possible to confirm that a replicability strategy will be formulated. In the participating States, it was possible to lay the foundations for SEMARNAT to be able to follow up and replicate the experience with other managers in other States of the Republic of Mexico.
14	Establish a simpler M&E system focused on achieving results rather than activities, with field visit plans, ad-hoc indicators, internal reporting, and monitoring of consultancies.	The PCU will establish a simple system for the monitoring and organization of information based on the results programmed in the Prodoc, under the provisions and procedures established by UNDP.	The PIRs, quarterly and annual reports were made according to the guidelines established by UNDP/GEF.
15	Improve the AOP documents that support the definitions of the strategies to be followed for the different outputs and results, that establish priorities and the relevant importance of each product and activity, as well as establish a logical sequence for each.	In the 2019 Work Plan, which explains the strategies of each component, it was integrated considering the recommendations of the mid-term report (MRT).	The 2019 AOP integrated the MRT recommendations. And, henceforth, the AOPs were built taking these recommendations into account.
16	Implement a reporting system for co-financing contributions from different institutions.	Design and implementation of a co-financing reporting system.	At the time of this FE, it is confirmed that the recommended reporting system does not exist.

Real participation of the interested parties and association agreements.

SEMARNAT and DGGIMAR are the executors of the project and played a very important role in coordinating activities with state entities and other institutions such as SENASICA and SAGARPA/SADER. With the incorporation of these actors in the PBD and others, such as AMOCALI, in the Technical Committees, the integration of actors in decision-making and approval of strategies for electronic waste and pesticide issues was achieved.

The State Governments and institutions linked to SEMARNAT, where the pilot plans for formal and informal WEEE were executed, participated through coordination with the PCU in the planning of consultancies and in the development of state management plans. These entities will be the ones who will make the plans operational in each State, in addition to monitoring their compliance.

In the area of pesticides, state governments and local SENASICA, SAGARPA/SADER and PROFEPA played an important role in training on best practices for the management of obsolete pesticides and the management of empty agrochemical containers.

The communication plan and the leadership of SEMARNAT through the DGGIMAR in the communication processes managed to raise awareness about the importance of environmentally sound management of WEEE and the possible impacts on the health of the population. This awareness has been positive in the campaigns for the collection and proper disposal of electronic equipment in the activities carried out during the project.

The actual participation of the stakeholders was in accordance with what the Prodoc defined as their main roles. The project document did not have a Participation Plan for the interested parties, but the identification of these and their roles was correct.

With regard to gender, the project developed the GAP, which includes a methodology and an intervention plan for the inclusion of gender in the various components. The paper makes a total of 6 proposals on how to include gender, which are summarized as follows:

- Management Plans for EVAs issues and in sites contaminated with pesticides.
- Analysis of the exposure and risks of women in relation to POP pesticides and in the management of WEEE.
- Sensitization on the issue of gender and chemical substances.

This plan is appropriate to achieve the gender mainstreaming objectives for this project. This evaluation failed to confirm that, beyond training in the management of POPs pesticides and raising awareness of the risks and impacts on health and the environment of inadequate management of WEEE, the CPA has been implemented transversally in the project's activities and products.

Project financing and co-financing

Financial management was a responsibility performed by the PCU, with the approval of the Project Management and under the budgetary protocols established by UNDP as the implementing agency.

According to the information provided by the PCU at the end of 2021, 64. 98% of the total funding established by the GEF has been implemented (see table 8) for a total of $3,716,625 of the $5,720,000 funded.

Table 8. Project budget vs actual implementation

Year	Prodoc Budget		Approved budget		Total executed	Executed Cumulative	
	USD $	%	USD $	%	USD	USD $	%
2015	$350,250.00	6%					
2016	$1,677,000.00	29%	$195,280.00	3.41%	$197,756.00	$197,756.00	3.46%
2017	$1,783,500.00	31%	$560,000.00	9.79%	$522,275.00	$720,031.00	12.59%
2018	$1,248,050.00	22%	$750,000.00	13.11%	$711,518.00	$1,431,549.00	25.03%
2019	$596,450.00	10%	$545,226.00	9.53%	$302,513.00	$1,734,062.00	30.32%
2020	$64,750.00	1%	$1,455,537.00	25.27%	$551,124.48	$2,285,186.48	39.95%
2021			$2,171,476.00	37.96%	$1,431,438.52	$3,716,625.00	64.98%

Source: Project Coordination Unit, Annual Reports 2016-2021

As can be seen from the table above, performance during the first few years was low. At the time of the MTR, the project had implemented only 16. 59 per cent of the total budget. Once the PCU addressed the recommendations set out by MTR and implemented the different adaptive management components, project management became more efficient and effective.

As part of the measures taken, for 2020 the PCU budgeted an execution of just over 25% of the total budget, however, the arrival of the Pandemic caused by Covid-19 limited the expected execution, managing to execute only 37.86 % of what was budgeted for that year.

The co-financing commitments were not fulfilled. The total amount of co-financing amounts to $6,562,918.88, which represents 28.41% of the co-financing established in the Prodoc.

Tables 9 are presented below. Co-financing table, 10. Sources of co-financing confirmed at the Final Assessment stage and 11. Total co-financing per year, provided by the PCU, are presented below.

Table 9. Co-financing table (in thousands of dollars – US$m)

Co-financing Type/Source	UNDP funding (US$m)		Government (US$m)		Collaborating Agency (US$m)		Total (US$m)	
	Planned	Real	Planned	Real	Planned	Real	Planned	Real
GEF Budget	**$5,720.00**	**$3,716,63**					**$5,720.00**	**$3,716.63**
Loans/								
concessions	$55.00	$55.00	$12,283.75	$2,568,44	$10,761.25	$3,939.49	$23,100.00	$6,562.91
in-kind support								
Total	**$5,775.00**	**$3,771.63**	**$12,283.75**	**$2,568.44**	**$10,761.25**	**$3,939.49**	**$28,820.0**	**10,279.54**

Source: Project Coordination Unit

The following table shows the resources by source of financing during the total period of the project.

Table 10. Sources of co-financing confirmed at the Final Assessment stage (in US$)

Source of Co-financing	Name of Co-financing	Type of co-financing	Mobilized Investment	Amount (US$)
Donor Agency	**GEF**	**Subsidy**	**Mobilized Investments**	**$3,716,626.00**
GEF Agency	UNDP	In kind	Recurrent expenses	$55,000
Host country government	Secretariat of Environment and Natural Resources (SEMARNAT)	In kind	Recurrent expenses	$1,085,589
Host country government	Secretariat of Agriculture and Rural Development (SADER_SENASICA)	In kind	Recurrent expenses	$1,482,845
Host country government	Governments of Jalisco and Baja California	In kind		0.00
Private sector	AMOCALI (Pesticides)	In kind	Recurrent expenses	$3,939,486
Private sector	OEMs, importers, and major distributors of electronics (CANIETI)	In kind		0.00
Private sector	e-waste processors (BIOSEA, VIZ RESOURCES	In kind		0.00
Others	to be confirmed	In kind		0.00
Total Co-financing				**$10,279,544**

Source: Project Coordination Unit

The breakdown of resource use by year is shown in Table 11 below.

Table 11. Total co-financing per year (in US$ dollars)

Name of the Cofinancier	2016	2017	2018	2019	2020	2021	Accrued
GEF	$197,756	$522,275	$711,518	$302,513	$551,124	$1,431,439	**$3,716,625**
UNDP	$55,000						**$55,000**
SEMARNAT	$41,494	$121,364	$166,005	$96,934	$172,454	$487,336	$1,085,589
SADER-SENASICA	$228,179	$272,107	$143,824	$202,683	$354,342	$281,709	$1,482,845
Government of Jalisco	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Government of Baja California	0.00	0.00	0.00	0.00	0.00	0.00	0.00
AMOCALI (Pesticides)	$510,383	$684,307	$798,538	$813,806	$592,816	$539,635	$3,939,486
CANIETI	0.00	0.00	0.00	0.00	0.00	0.00	0.00
BIOSEA	0.00	0.00	0.00	0.00	0.00	0.00	0.00
VIZ RESOURCES	0.00	0.00	0.00	0.00	0.00	0.00	0.00
to be confirmed	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total co-financing	**$1,032,812**	**$1,600,054**	**$1,819,886**	**$1,415,937**	**$1,670,737**	**$2,740,119**	**$10,279,544**

Source: Project Coordination Unit

Monitoring and Evaluation: Initial Design, Implementation, Overall Evaluation of M&E

- **M&E design at the beginning**

The design of the M&E plan presented in Prodoc for initial implementation included standard tools as required by UNDP/GEF. These tools are:

- The Inception Workshop Report
- AOP
- APR/PIR
- Quarterly progress reports
- Design and Implementation Project Quality Assurance (PQA) Process
- GEF Tracking Tools
- Mid-Term Report (MTR)
- RTA and UNDP monitoring visits
- Audits
- Final evaluation
- Final Project Report
- Lessons learned and knowledge sharing
- UNDP Country Programs for Mexico

The budget established for the fulfillment of these tasks was prepared according to what is usually estimated to be the costs. The M&E Plan contained SMART indicators. What it does include are visits to the country by the UNDP RTA (Panama Headquarters) in order to support and strengthen the process of monitoring the results in process.

The PCU used the M&E instruments developed as part of project execution to implement the necessary adaptive management. The instruments used were the MTR and the corresponding management response, as well as the PIRs and the annual reports. These instruments allowed reorienting the project from an important milestone such as the MTR.

The M&E Plan articulated well the responsibilities of each actor for each type of activity to be developed. It also sets out a time frame within which activities are to be carried out. The plan does not indicate how the GEF PDO would be kept informed.

- **Implementation of M&E**

As indicated above, the Monitoring Plan did not have any budgetary problems for the implementation of its main activities. In April 2016, the Inception Workshop of the project was held with a broad participation of potential actors. Only one financial audit was carried out in 2017. At the time of this evaluation, no reports were submitted for other financial audits conducted subsequent to this one.

Information on the GEF Tracking Tool was presented in the presentation of the 2020 DPB Report. This evaluation team did not find any other documents corresponding to this monitoring tool.

Based on the results of the MTR, the RIPs improved significantly with respect to what was indicated in the Implementation Progress and the concordance between the results of the overall rating and assessment of the program officer, the project coordinator, the implementing partner and the RTA.

The recommendations generated in the MTR were extremely important for improving the information used to assess the implementation process. The new structure of the PCU and the recruitment of the project adviser were very relevant to the achievements of this second phase of implementation. In the second part of the project, UNDP facilitated training on the implementation and preparation of the various M&E reports and administrative management processes.

The PIRs and the Annual Reports inform and evaluate the perspectives of women and men involved in and affected by the project. This was done for both pesticides and electronic waste.

The design of the project is based on the SESP Plan for Environmental and Social Risks. In the 2020 and 2021 RIPs, these risks were updated in line with the achievements at the time of the report.

Ratings originally submitted in the 2016, 2017, and 2018 PIRs were not well grounded in the status of project´s progress. Since the MTR was carried out, in which it recommended an improvement in the information of the PIRs, these turn out to be much more in line as an instrument for monitoring progress. At the time of carrying out this EF, the PIRs have provided enough information to enrich the analysis of the results.

The PBD met at least once or twice per year and the progress and activity proposals were presented by the PCU and approved for implementation.

In the new organization of the PCU, as a result of the recommendation of the MTR, the person in charge of M&E, took a leading role by carrying out important tasks in the formalization of the M&E processes and guaranteed their compliance in a timely manner.

Table 12 presents the results that this evaluation assigns to the design, implementation and general quality of M&E.

Table 12. Monitoring and Evaluation Results

Monitoring and evaluation (M&E)	Rating
M&E design at the entrance	**S**
Implementation of the M&E plan	**S**
Overall quality of M&E	**MS**

NOTE: See Annex 6. Summary Rating Scales, Table Monitoring and Evaluation Rating Scale

UNDP implementation/ monitoring, Delivery Partner execution and overall assessment of implementation/ monitoring and execution

- **UNDP implementation/ monitoring**

UNDP Mexico has provided support to the implementing partner with training, analysis of consultancy reports and the support required for administrative processes. At times when the Implementing Partner faced changes resulting from the change of government, UNDP managed to keep the project on track.

When it became clear after the MTR that the project had serious implementation problems, UNDP responded to the need for changes in project management. Conducted training with PCU staff on their administrative processes to expedite the recruitment and approval of consultancies.

Regarding the management of environmental and social risks through the SESP Environmental and Social Risk Detection tool, UNDP guided the PCU so that, together with the Implementing Partner, they could resolve their mitigation.

The Implementing Partner has been somewhat critical of UNDP regarding delays in administrative processes such as resolving consultancy contracts and purchasing equipment. It is understandable that UNDP must be very careful in these processes, and what can be understood as a delay is rather the efficient management of administrative processes.

The RTA of Panama provided a great deal of support in evaluation and follow-up missions to the implementation of the project resulting from the results of the RIPs, which enabled the project to be speeded up.

After this analysis, this evaluation team rates UNDP's implementation/supervision as ***Moderately Satisfactory.***

- **Implementing Partner Execution**

During the implementation of the project, the Implementing Partner faced several changes that influenced its efficiency in the management of activities. The changes in the Director General of the DGGIMAR of SEMARNAT and the change in the head of the Secretariat influenced the delays for which the Implementing Partner is responsible. There were also changes in the PCU that affected the fluidity of the consultancy hiring processes and the monitoring of the products and results that needed to be developed together with the Implementing Partner.

It is important to note that the result of the MTR coincides with the appointment of a new Director General of SEMARNAT, who managed to put the project on a safer and more positive path.

After this analysis, the Execution of the Implementing Partner is rated as **Moderately Satisfactory**.

Table 13. UNDP implementation/monitoring and implementing partner execution

UNDP implementation/monitoring and implementing partner execution	Classification
Quality of UNDP execution/supervision	**Ms**

Quality of the implementing partner's execution	**Ms**
Overall quality of implementation/monitoring and execution	**Ms**

NOTE: See Annex 6. Summary rating scales, Table Scale of implementation/supervision and execution ratings.

Risk management

In the design phase of the project, 7 risks were identified and the corresponding mitigation strategies for each of them. Table 14 details each of these, according to the information extracted from the Prodoc.

Table 14. Risks and Mitigation Strategies.

Risk	Probability	Mitigation Strategy
No or low cooperation of the defined state governments	L	The commitment of the proposed states is strong at this time. Final selection and reaffirmation will be guaranteed by co-financing commitments.
Non-Interested Electronics Original Equipment Manufacturers (OEMs)	M	Possibly lagging commitment from domestic distributors can be strengthened through support at international OEM locations
Lack of cooperation from informal or formal e-waste managers	M	Information and training campaigns will be part of the outreach strategy to overcome this potential resistance
Technological and economic difficulties associated with the segregation of PBDE plastics	L	In the pilot projects, these difficulties will be assessed and solutions will be developed to overcome them, if possible.
PROFEPA will not be able to enforce the control of POPs	L	With the analysis of the legal gaps, a proposal and work will be prepared to support the coordination and compliance of the authorities.
Legal changes can take a long time to be adopted	L	Emphasis on the development of regulatory work at the beginning of the project with a proposal and follow-up activities launched.
Spread of POPs through climate change induced by extreme weather (storms, hurricanes, etc.).	L	The risk of exposure to POPs (pesticides) will be reduced by eliminating all known existing inventories in the country and ensuring adequate storage conditions until final disposal.

Source: Prodoc

After analyzing the numbered risks in the design phase, it was concluded that they were well identified and that the mitigation measures were clear and their implementation mitigated each of the identified risks.

From the analysis of the documents provided (Quarterly Reports, Annual Reports, PIR) it was concluded that there was a constant monitoring of the risks during the implementation of the project, determining the types of risks that were presented (political, operational, organizational and regulatory) and the measures taken by the PCU to address them in each reporting period. The Annual Reports were submitted to the COP.

A socio-environmental aspect that was impossible to identify as a risk in the project design stage was the pandemic caused by Covid-19. This factor outside the control of the PCU meant the slowdown of the work plan established as a response to the mid-term report. In addition, the Covid-19 pandemic increased the probability and impact of the identified risks.

The 2020 and 2021 RIP identified measures to address the new risks associated with the pandemic. The sanitary measures imposed prevented the holding of workshops and face-to-face meetings, so the PCU, with an adaptive management approach, maintained the activities that could be carried out under the modality of working from home, while other activities were carried out virtually. However, activities related to updating the POPs pesticide inventory and e-waste management pilot projects were postponed due to the risk associated with travel and field visits.

Project management did not identify the financial risk associated with non-compliance by the partners identified as co-financers of the project, so the expected impacts of the project were not achieved as expected.

Social and environmental standards

The PCU, together with the UNDP country office, carried out appropriate follow-up and management of the environmental and social risks identified through SESP during the Prodoc generation phase. For 2021, they carried out an update of the Social and Environmental Diagnosis Matrix. Table 15 below shows the risks identified for each of the instruments performed.

As indicated in the previous section, the template for the Detection of Environmental and Social Risks (SESP) was completed during the design stage, preparing the respective analysis. The only risk identified was: “Risk and vulnerability related to occupational health and safety”

Table 15. Comparison of Risks identified in the Prodoc and update during the implementation.

Original risk (in ProDoc)	**Risk Revised 2021**	**Original Rating (I/P & Importance)**	**Revised Rating (I/P & Importance)**	**TE conclusions on the review**
Risk 1: Risk and vulnerability related to safety and health at work		**I=3; P=1** **I: Moderate**		This risk was well identified and managed, the pilot projects established management systems to minimize this risk for workers and nearby communities. The final objective of the project is to minimize the risk due to exposure to POPs.
	Risk 1: Lack of cooperation from formal and informal e-waste processors in the country		**I 3, P=3** **I: Moderate**	This evaluation considers that this risk was increased by Covid-19, which had an impact on the activity of the companies and therefore the interest in cooperating with the project.
	Risk 2: Economic and technological difficulties for the		**I=4; P=3** **I: Moderate**	This risk was well identified, although it was overcome with the efforts developed to

	segregation of plastics contaminated with persistent organic pollutants			recycle empty agrochemical containers (EVAs).
	Risk 3: Poor cooperation from farmers to locate expired and/or contaminated pesticides.		**I=4; P=3** **I: Moderate**	The restrictions imposed by the pandemic made fieldwork impossible, making it difficult to manage this risk.

Source: Own elaboration based on documents shared by the PCU (UNDP PIMS4686 Mexico E-Waste SESP; Social and Environmental Screening 2021 COP Project)

During implementation, the project addressed the risks initially identified, however, with the appearance of the Covid-19 pandemic, three new risks were identified that put at risk the attainment of the objectives initially set. In the opinion of this evaluation team, the CPU underestimated the impact and importance of these risks, which meant that the objectives were not 100% achieved.

To minimize the associated social and environmental impacts, the project established a very well-grounded gender strategy, however, there is no evidence that this was fully implemented during the project's implementation. In addition, a local outreach campaign was conducted in 14 municipalities in 3 states, with the aim of promoting social change regarding the proper final disposition of EVAs, complemented by national media interviews on the proper management of SARs.

The general socioeconomic benefit of the project is based on the elimination of POPs emissions from electronic waste and the destruction of stockpiles of expired pesticides and POPs that have a significant and negative impact on biodiversity and human beings. In particular, vulnerable populations and especially women during the maternity stage. The project components will become integral parts of an effective chemical management scheme along with long-term institutional sustainability.

A) Project results and impacts

Progress towards goal and expected results

All logical framework indicators have been revised against the results and outputs achieved to date of this evaluation. Overall, when assessing expected results, achievements and related indicators, the rating is **Moderately Satisfactory**. However, a number of accomplishments were not fully achieved, not necessarily because the corresponding activities were not carried out, but rather because the final reports of the respective consultancies had not yet been finalized at the time of this evaluation. In these cases, the rating of Moderately Unsatisfactory was assigned. It is possible that, at the time of submission of the final reports of unfinished consultancies, after the closing date of this assessment, the rating would become Moderately Satisfactory or Satisfactory.

Interviews with the various consultants made it possible to verify the progress of the work they had contracted and, in many cases, what is missing is the submission and validation of the final report. As the final reports were not available for this evaluation, it was not possible to ascertain the achievements mentioned by the interviewees.

In the interviews carried out with the different consultants, it was possible to verify the progress in the work they had contracted and, in many cases, what is missing is the presentation and validation of the final report. As the final reports were not available for this evaluation, it was not possible to verify the achievements that the interviewees had commented on.

The project has had several backlog elements such as changes in governance and administration, changes in the PCU organization, fairly general adaptive management after the MTR, and ending the effects of COVID 19. Efforts made after the MTR are positive and are reflected in the progress of activities and thus the expected outputs and results. This evaluation team acknowledges the effort made, which with a little more time of the project could have further completed the expected results.

The Project Results and Resources Framework is presented below (table 16) with the results obtained at the time of this evaluation.

Table 16. Project Results and Resources Framework

Project strategy Indicators	*Initial reference level*	*Goal at the end of the project*	*Level and Evaluation at the End of the Period*	*Assessment of achievements*	*Justification for valuation*
Project objective: Minimize negative impacts on health and the global environment through appropriate handling and management of chemicals and the reduction of POPs emissions, as well as exposure to POPs from electronic waste and pesticides in Mexico.					
Revised, analyzed and amended national legal and regulatory framework to enhance implementation of and compliance with the sound management of chemicals, including e-waste and pesticide management	Policy and legal framework not in line with the country ' s obligations under international conventions. Limited awareness of chemicals management in the environment	Regulatory and legal, economic instruments reviewed, analyzed and amendment process initiated to reflect an overall framework for the sound management of chemicals and to align with the Stockholm and Basel Conventions. Relevant government officials, private sectors, trained end-users and awareness-raising	Prepared draft regulations and evaluated the feasibility of: i. Regulation to incorporate the principle of Extended Producer Responsibility (EPR) elaborated and feasible to implement, with the approval of SEMARNAT, bases the polluter pays principle, contains the design of a model of the Anticipated Recycling Tariff (TAR), types of management schemes and WAS. ii. File with summary information that includes a description of the extended producer responsibility, collection of WAR, regulatory instruments for the inclusion of the PER scheme in Mexico, distributed among the subnational authorities of Baja California, Mexico City, State of Mexico and Jalisco, among others. iii. Support to DGGIMAR to develop the proposal to change the regulatory status of WEEE to hazardous waste The change of the category from special waste to hazardous waste is proposed but is subject to approval by the House of Legislators, which is why no further progress could be made. Progress was made in the revision of various articles and explanatory memorandum of the General Law for the Prevention and Integral Management of Waste (LGPGIR) to promote change through lobbying with legislators. The implementing partner will promote the changes to the regulations during the year 2022 before the House of Legislators for approval.	**S**	The project developed proposals for regulatory instruments, which must go through the national process of approval by the House of Legislators. It should be ensured that the SEMARNAT follows up the approval process to achieve the goal set for the end of the project and ensure the sustainability of the proper management of the WEEE.

TEQ grams of reduced POPNIs Development of State e-waste management plans	Maximum potential to generate dioxins and furans between 246. 68 and 287. 51gr TEQ/year.	Demonstration pilot projects undertaken with the application of BAT/BEP to improve mechanisms for collection and segregation of e-waste and dismantling and disposal technologies	Four Demonstration Pilot Projects with application of BAT/BEP to improve mechanisms for the collection and segregation of e-waste and decommissioning and disposal technologies initiated in 2020, in formal WEEE recycling companies in Mexico City, Jalisco and Nuevo León. 1) Corporación de Valores Reciclados, S. A. de C. V. (CVR) and 2) Multi Professional Computer Services (RESELECOM), in the state of Nuevo León; 3) BT Recycling Solutions S. de R. L. de C. V. (BTRS) and 4) Business Ecology (ECOLE), in the state of Jalisco. In the "diagnostic" phase, 230 opportunities for improvement were identified, 43 of which are directly linked to the indirectly related to the release of COP-PBDE and the generation and release of COPNI. At the time of this assessment, the following have been analysed: i. 200 samples of SAR, the percentage of COP-PBDE was determined to be 38. 5% (77 out of 200 samples); 89% (69 out of 77 samples) contain brominated flame retardants; ii. 155 samples of SAR (out of 400 projected), 100 positive for bromine, of which 34% contain three (3) the five (5) Polybrominated Diphenyl ethers. 155 WEEE samples (out of 400 projected), 100 positive for bromine, of which 34% contain three (3) of the five (5) Polybrominated Diphenyl ethers. There is no evidence in the RIP 2021 or the annual report 2021 of the measurement of emission reductions or projections of these, of the selected companies. Three of the four participating companies – BTRS, ECOLE and RESELECOM – do not recycle or dispose of WEE, so they are not sources of PBDEs or POPNIs, while CVR recycles WEE. (PIR2021, p. 11)	**Ms**	The project developed a national and state inventory for WEEE, extending the product type of Prodoc from 5 to 34. In order to characterize residues containing POPs, 355 samples were analyzed for POPs in the second half of the project period. A projection based on the results obtained should be made to determine the baseline estimate for COPNI emissions of the products specified in the inventory.
Inventory (quantity and locations) of obsolete pesticides completed. Tons of obsolete pesticides destroyed (by compound) and mode of destruction (tons and cost/ton)	307. 56 tons of obsolete pesticides identified in the last official update in March 2012, and could reach 1200 tons	Accurate and detailed inventory of obsolete pesticide stocks. Environmentally sound destruction of at least 400 tons of the confirmed inventory of obsolete pesticides, and may lead to final disposal of 1200 tons pending the results of an updated inventory to be carried out during project implementation	131. 6 tons (ton) of obsolete pesticides and POPs were collected and disposed of in Chihuahua 66. 44 tons (40 kg POP); Colima 59. 03 tons (400 kg COP); Tabasco 0. 429 tons; Puebla 1. 4 ton (COP); Tlaxcala 3. 27 tons (3. 27 tons COP); 1 ton in Quintana Roo. 36% were disposed of by controlled incineration (non-chlorinated); 59% were contained (non-chlorinated) and 5% are pending, as export (7 tons of chlorinated pesticides) is under way for final disposal in France during the first quarter of 2022. According to Q4-2021 an amendment was signed due to expire on 31. 03. 2022, so at the time of this assessment no data on the destruction carried out are available. Given the results obtained the projection of reach of 1200 tons is not feasible	**Mi**	The update of the POP inventory for pesticide residues did not find the 400 tons specified in the Prodoc, found only 131. 6 tons of POPs and obsolete pesticides. The documents show a limited effort on the part of the project to increase the scope of this activity. The response was not as expected, on the part of both public and private holders. The situation of the COVID-19 pandemic was a major obstacle to the development of the project. The PCU should have implemented a strategy aimed at farmers and formulators and not so much at the institutional level. The PCU in coordination with the implementing partner expanded the scope of the inventory to include obsolete non-POP pesticides. Local destruction of non-chlorinated pesticides is carried out and chlorinated pesticides will be exported for treatment. It is not planned to achieve the elimination of 1200 tons programmed by the project Inventory projection was inadequate at the design stages of the project.

Provincial Pesticide Management Plans in place	They don't exist	Pesticide contaminated sites were identified and environmentally sound containment and remediation measures were taken at priority contaminated sites. Provincial Management Plans established, implemented and evaluated in three states: Chiapas, Sinaloa and Jalisco	2018: Hazardous Waste Management Plan (POPs and obsolete pesticides) for the State of Colima, prepared and submitted to SEMARNAT, prioritized because little more than 59 metric tons of pesticides were found in the warehouses for pest control and However, similar volumes of obsolete pesticides and POPs were not found in the pilot states of the project (Chiapas, Jalisco and Sinaloa). Three potential contaminated sites were identified and confirmed for remediation plans: 1) San Juan del Río in Querétaro, contaminated with Endosulfan, 2) a site in Tula, Hidalgo, where DDT was stored, and 3) Tekchem (a closed agrochemical plant) in Salamanca, Guanajuato By the end of 2021 the ToR for the implementation of these plans were published ("development of remediation plans (3 detailed and 10 preliminary), with the characteristics and guidelines established by the implementing partner), the receipt of tenders closed at the beginning of 2022, it is expected to have plans by 31. 03. 2022 An online system (Potentially Contaminated Sites System (PCPS)) was developed and will be operational by the third quarter of 2021 (no progress report Q3-2021)	**Ms**	Contaminated sites were identified and a Management Plan was established for the State of Colima, Three detailed plans and 10 preliminary plans are under development. If this consultancy is successfully completed, the project will achieve closure. The Potentially Contaminated Sites System (SIPCO) is a good tool for identifying potentially contaminated sites and their subsequent monitoring.

Component 1: Strengthening institutional and public policies and capacities on POPs and the sound management of chemicals **Outcome A:** Strengthened national legal and regulatory framework to enhance capacity to implement and enforce Stockholm Convention (SC) obligations within the country's overall framework for the sound management of chemicals, including potential POPs					
Translate Strengthening the regulatory and legislative framework	Not integrated with the framework for the sound management of chemicals	Regulatory and legal reforms underway in the Mexican Law on Hazardous Waste and Regulations to align with international conventions, in particular, the Stockholm and Basel Conventions Sites	Prepared draft regulations and evaluated the feasibility of: i. Regulation to incorporate the principle of Extended Producer Responsibility (EPR) elaborated and feasible to implement, with the approval of SEMARNAT, bases the polluter pays principle, contains the design of a model of the Anticipated Recycling Tariff (TAR), types of management schemes and WAS. ii. File with summary information that includes a description of the extended producer responsibility, collection of WAR, regulatory instruments for the inclusion of the PER scheme in Mexico, distributed among the subnational authorities of Baja California, Mexico City, State of Mexico and Jalisco, among others. iii. Support to DGGIMAR to develop the proposal to change the regulatory status of WEEE to hazardous waste No progress could be made on changing the category from special waste to hazardous waste. Progress was made in the revision of various articles and explanatory memorandum of the General Law for the Prevention and Integral Management of Waste (LGPGIR) to promote change through lobbying with legislators. The implementing partner will promote the changes to the regulations during the year 2022 before the House of Legislators for approval.	**S**	There are proposals for regulatory reforms that must be promoted by the implementing partner in order to have them adopted by the Chamber of Legislators.
State-level training on inspection of POP substances and products containing new POPs	Nothing implemented	200 trained federal and state inspectors.	Training was provided to: i. 120 customs officials, PROFEPA and COPEFRIS trained on illegal trade in POPs and ODS. ii. Six officials of the Counterpart in the use and modifications made to SEMARNAT's Contaminated Sites Information System (SIPCO), by integrating an algorithm for the software that includes the methodology for risk assessment of sites potentially contaminated by POPs The Q3-2021 report reports on the future development of the ToR for the contracting of consultancy services "Online System for the Identification and Tracking of WAR in Mexican Customs and Distance Training Course for Personnel of PROFEPA, Customs and Local Governments. " Its completion is rescheduled for 28 February 2022. At the time of this evaluation, there is no documentation to confirm that this consultancy has been carried out.	**Ms**	The training of the 200 inspectors was not achieved, although the activity was adapted to the construction of an online training system, which could allow for greater outreach and impact once the project is completed, by training new staff, there is no evidence that such a system is operational at the time of this evaluation. The development of this activity had to be programmed for the first years of the project, in order to have this tool that would have made it possible to achieve or even exceed the established goal.
Increased analytical and monitoring capabilities of federal inspectors, customs and chemical laboratories.	Nothing implemented	100 federal inspectors, customs officers and chemical laboratory staff trained and capacity strengthened.	i. 120 officials from PROFEPA and the Customs Service ii. In coordination with the implementing partner, the Project decided to develop an online training course for the last quarter of 2021 to enable the identification and follow-up of WARs in Mexican customs, aimed at staff from PROFEPA, Customs and local governments, which includes a risk assessment methodology. The course aims to update participants' knowledge on the proper management of SARs and compliance with the Stockholm, Basel and Rotterdam Conventions. The coordination of the implementing partner and PROFEPA during the course development will allow us to test the usefulness of the information, the functioning of the platform and its implementation at the end of the project.	**Ms**	There is no clear separation of the scope of the training set out in the previous activity, and the latter appears to combine both with the above outcome. Some inspectors were trained in the use of portable detection equipment. But the goal of 100 is not achieved. The online training course for the last quarter of 2021 to enable the identification and tracking of WARs in

			The Q3-2021 report reports on the future development of the ToR for contracting the consultancy service "Online System for the Identification and Tracking of WAR in Mexican Customs and Distance Training Course for Personnel of PROFEPA, Customs and Local Governments. " Its completion is rescheduled for 28 February 2022, as a training tool.		Mexican customs, aimed at staff of PROFEPA, Customs and local governments" hopes to fulfill this activity, but there is no evidence of its completion and availability online.
Sustainable capacity to support reporting to the Stockholm Convention and exchange of information.	Limited activities	(i) Increased reporting to the Stockholm Convention and information sharing; (ii) participation in the global POPs monitoring network; (iii) Mexico takes a leading role in its regional network.	The counterpart established a specific area in its structure to deal with international conventions related to chemicals and waste, as well as coordination with the National Institute of Ecology and Climate Change (INECC), which leads the global POPs monitoring network.	**S**	The establishment of a dedicated unit to deal with the topics of international conventions relating to chemicals will make it possible to improve reporting. The goals set were achieved and are sustainable with the creation of this unit. The implementing partner must ensure that this unit remains operational.
Component 2: Reduction of POPs emissions from state-level e-waste processing and waste processor **Outcome B:** Development and implementation of pilot management plans at the state level in three states: Baja California, Jalisco and Distrito Federal, and projection to the rest of the country.					
Establishment of a legal and regulatory framework at the state level.	None	Model state e-waste management plans in place.	There are proposals from waste electronic equipment (WEEE) SME's for: i. **Baja California:** Developed with the participation of the Undersecretariat for Sustainable Development of the State of Baja California, under the Ministry of Sustainable Economy and Tourism and SEMARNAT. ii. **Mexico City:** Includes the CDMX and its 16 municipalities, developed with the participation of the Secretariat of the Environment (SEDEMA) and SEMARNAT. The final details are expected to be finalized in the first two months of 2022. iii. **State of Mexico:** Includes the 125 municipalities, developed with the participation of the Secretariat of the Environment (SMAGEM) of the Government of the State of Mexico and SEMARNAT. The final details are expected to be finalized in the first two months of 2022. SMAGEM is preparing the State Program for the Preservation and Integral Management of Urban Solid Waste and Special Management. It was therefore recommended that SMAGEM incorporate the objectives, targets and indicators provided for in the PEM. iv. **Jalisco**: Developed with the participation of the Secretariat of Environment and Territorial Development of the State of Jalisco and SEMARNAT, the final details are expected to be completed in the first two months of 2022. Most SME's are still to be finished. In all cases, the authorities should promote the implementation of SMEs.	**S**	There are 4 SME proposals that can be used as a basis for the generation of national programs. These plans were generated with the participation of the Federal and State authorities in each case. Some of these programs are in their final stages at the time of this evaluation. All plans must be promoted for their establishment. Had it been established; this activity would have been highly successful.

Development of REP and REP administration fees to promote sustainable financing of appropriate e-waste management	None	(i) Administrative charges established; (ii) developed PRN mechanisms to promote sustainable financing	As indicated in the RIP 2021, the study was carried out, two scenarios were defined; the first considers a single rate for all types of EEE. The second scenario assumes a differentiated value for each type of U. S. Potential synergies were determined if the state partners of the Project consider implementing the EPR scheme through their WEEE management plan and disseminating the scope, financing, role of the actors, among others. The document includes the proposal for an initiative to be adopted as part of the legal and regulatory reforms. Extended Producer Responsibility System (EPR) with the approval of SEMARNAT. The EPR was designed as a public policy tool that seeks to reduce the economic and environmental costs of waste electronic equipment (WEE) management by broadening the commitment of producers to include social and environmental costs during their management. The CPR was shared with local authorities in the states of Baja California, Mexico City and Jalisco.	**S**	There is a proposal to establish charges with two models for implementation. The project was approved by the implementing partner (SEMARNAT)
State and national inventories of e-waste generation and mass flow balance	Obsolete or inadequate data.	Inventories with better identification of e-waste generated and improvement of the POPs emission estimate.	National and State inventory carried out without including waste generators, identification of POP products or COPNI estimates. To complement this, an annex was prepared to the national inventory in which calculations were made for five specific categories of SARs, with emphasis on information from the States of Baja California, Mexico City and Jalisco. At the time of this assessment, the following have been analyzed: i. 200 samples of SAR, the percentage of COP-PBDE was determined to be 38. 5% (77 out of 200 samples); 89% (69 out of 77 samples) contain brominated flame retardants; ii. 155 samples of SAR (out of 400 projected), 100 positive for bromine, of which 34% contain three (3) the five (5) Polybrominated Diphenyl ethers. 155 WEEE samples (out of 400 projected), 100 positive for bromine, of which 34% contain three (3) of the five (5) Polybrominated Diphenyl ethers. It is expected that the study under development will include the 10-year projection including the effects by VIDOC-19. Inventory supplement to be completed by March 2022	**Ms**	The results obtained from the inventory conducted, plus the results obtained from the samples analyzed, could be used to generate an estimate of COPNI emissions. The PCU should ensure that this is achieved in the consultancy that closes in March 2022.
Development and implementation of management plans at the state level	Limited	Management plans based on the life cycle of WEEE developed, implemented and evaluated in 3 states (Baja California, Jalisco and Mexico City)	The name of the plans was changed to a special program because of the country ' s planning rules (under an adaptive management approach), but they maintain the objective of strengthening the capacity of the State in coordination with the municipal authorities in the context of integrated management of SARs. The documents are in the latest revisions with local authorities in each state and key players. The four documents are expected to be finalized in January and the states will implement the programs according to their institutional capacities. The Project, the Counterpart and the General Directorate of Integrated Waste Management of the Secretariat of the Environment of the State of Mexico agreed on an additional special program for this entity. This approach complements the information and attention to the flows of WEEE in the Metropolitan Area of the Valley of Mexico.	**Mi**	SMEs are available for three states. However, these have not been implemented or evaluated as set by the goal for project closure.

Development and implementation of dissemination strategies	None	Dissemination program for the general public and state governments developed, implemented and results evaluated. 15 events organized and 300 participants	There is no formal Communication Strategy document, however, the RIP-2021 details a number of high-impact, non-targeted activities that are relevant: i. Press conference International Electronic Waste Day (14/Oct/2020) which resulted in: 15 news hits in print media, 35 in digital media (market value USD 49,296. 00, reaching 40 million people) ii. Activity aimed at Chambers and business groups (OEMs, marketers, large generators and waste pickers) with the participation of 11 Civil Society Organizations with local and national presence iii. National radio and television interview (Commercial value USD 121 264. 00, reaching 3. 22 million people) with the aim of raising awareness about the import of proper management of SAR. iv. Contact with 3 national opinion leaders v. Redesign of the website www. residuoscop. org vi. Press conferences with state media (Baja California, 12 media; Jalisco, 12 media) with a commercial value of USD 49,100. 00 and 50 million people impacted The hosting of the website was contracted for 5 years. It was agreed to continue the strategy until project closure	**S**	Based on an informal strategy, the project achieved a massive impact through news dissemination, impacting a significant number of people, mainly the general public. In addition, it developed specific activities with key actors such as business chambers and civil society organizations (local and national). The 15 activities were not organized, which is understandable given the measures taken to contain the pandemic. However, the project managed to impact a significant number of people by raising awareness among the population about the need to properly manage their e-waste. The population of users of electronic equipment is committed to finding a correct solution to their waste.
Training strategy on e-waste management guides developed Number of trainings conducted	None	(i) Training strategy for the public, recycling companies and state governments developed, implemented and with evaluated results; (ii) 500 participants in the training; (iii) 2 guides produced.	We identified 21 improvement actions (high, medium and low impact) produced by the pilots developed that will be the basis for the development of the guides: i) generation of WAR, ii) collection and transportation, iii) treatment, iv) value maximization and v) disposition. As indicated in the RIP, a forum will be organized during the fourth quarter of 2021 to promote its use, adoption and voluntary implementation, which will lay the groundwork for a system of certification of good practices. The PCU together with the implementing partner agreed on the creation of an Online System for the Identification and Tracking of WAR in Mexican Customs and a distance training course for staff of PROFEPA, Customs and local governments, which is expected to be delivered on March 31, 2022. At the end of 2021, there were no bidders to carry out the consultancy. This evaluation team does not have documentary information to verify the existence of the strategy, guides have not been produced and 500 participants have not been trained.	**Mi**	The guidelines developed are based on the analysis of 4 formal companies, three of which do not recycle WEEE, which is worrying since the characterization carried out (21 improvement options) may not represent the WEEE recycling sector. Training was given to the pilot's participants, but no training for the public.
Characterization study of the recycling industry at the national level to establish a registry and certification system	None	i. Inventory of formal recycling facilities and estimation of informal recycling facilities ii. Registration and certification system established for the e-waste recycling industry, with 20 of the certified facilities. iii. Increase in the number of registered facilities	By the time of the mid-term report, the inventory of formal and informal companies was completed for three Pilot States, however, there was no progress in the certification process. As a measure in the RIP 2021 it is indicated that the PCU will develop the certification proposal based on the process of updating the guidelines of good practices and other results of the formal recycling pilots of WEEE, in coordination with SEMARNAT. This activity will begin in the third quarter of 2021, but the 2021 Annual Report shows no evidence of progress.	**Mi**	A national inventory of recycling facilities has been carried out, there is no progress in the process of registering and certifying companies, and there are no certified facilities for the management of WEEE. The project page (http://www. residuoscop.org/empresas/) promotes the registration process, but does not provide a link to do so.

Establishment of a national platform for information exchange on e-waste	None	National information exchange system established, connecting WEE waste streams with secure processors.	A voluntary business registration system (http://www. residuoscop.org/empresas/) was generated, however, according to the PIR 2021, the PCU did not test the information exchange module between the recycling plants of WEEE due to the incompatibility of the developed system and the current website of the Project. Even transferring to SEMARNAT is impossible because they migrated all their web systems to free versions and additionally limited operations of many recycling companies due to the restrictions of Covid-19. There is no progress report on this activity in the year 2021. (http://www. residuoscop.org/empresas/) at the time of the evaluation this page is not working,	**Ms**	Access to the link http://www. residuoscop.org was obtained, but it is not possible to find the company registry on this portal, nor can it be determined if this tool allows an exchange of information between the managers of WAR that evidences an improvement in the flow of WARs.
Outcome C: Demonstration of the minimization of POPs emissions in the formal and informal recycling of electronic waste					
Number of demonstrative pilot projects with introduction of BAT/BEP in formal recycling plants	None	At least 2 pilot interventions implemented, introducing BAT/BEP in collection, segregation, dismantling and final disposal	Four Demonstration Pilot Projects with application of BAT/BEP to improve mechanisms for the collection and segregation of e-waste and decommissioning and disposal technologies initiated in 2020, in formal WEEE recycling companies in Mexico City, Jalisco and Nuevo León. 1) Corporación de Valores Reciclados, S. A. de C. V. (CVR) and 2) Multi Professional Computer Services (RESELECOM), in the state of Nuevo León; 3) BT Recycling Solutions S. de R. L. de C. V. (BTRS) and 4) Business Ecology (ECOLE), in the state of Jalisco. In the "diagnostic" phase, 230 opportunities for improvement were identified, 43 of which are directly linked to the indirectly related to the release of COP-PBDE and the generation and release of COPNI. Three of the four participating companies – BTRS, ECOLE and RESELECOM – do not recycle or dispose of WEE, so they are not sources of PBDEs or POPNIs, while CVR recycles WEE. (PIR2021, p. 11)	**Ms**	The project implements four of the five pilot projects initiated; however, three of the four companies do not recycle or dispose of WEEE, which is evidence of inadequate pre-selection of Pilot participants.
Number of demonstrative pilot projects in informal recycling plants to bring the operation to an environmentally sound operational and compliance level	None	At least 2 pilot interventions implemented with improved collection and segregation mechanism, and environmentally sound management practices for e-waste	Consulting service for the development, implementation and evaluation of 3 pilot projects of WEEE management in the informal sector for the reduction of emissions of POPs. " (Dec-2020). Identified 43 potential participating microenterprises (13 in Baja California, 10 in Mexico City and 20 in Jalisco), and 4 NGOs (1) Fundación Hélice A. C. , 2) Casa Cem, 3) Vías Verdes A. C. and 4) Fundación que Transforma A. C. Once the criteria were applied, 3 companies agreed to participate as pilots are (BIOSEA (Baja California), Colibrí Solu). Ambientales (Mexico City), and Electronic Component Disassembly (Jalisco)). Corporate adherence to the principles of human rights, gender, transparency, anti-corruption and other guidelines identified by UNDP was solicited. One company pulled out due to changes in the Pandemic. In progress the acquisition of equipment required by the four pilots such as three XRF analyzer guns, four laptops, cable shredders, racks, tables, scales, forklifts, etc. The pilots finish in March 2022. At the time of this assessment, the pilots have not been completed.	**Ms**	The improvement options identified may not be representative of the WEEE recycling industry.
Feasibility study and design of an integrated recycling plant	None	Feasibility study completed with project design, identification of financing and options with a private sector proponent.	The project has the "Design of a recycling and treatment plant for WEEE and analysis of financial feasibility". Capacity 35. 7 tons per day of WAS: screens (15. 2%), large (11. 27%) and small (31. 38%) and telecommunications equipment (42. 15%) (annual capacity of 10 000 t/y, 1% of the total estimated 1,103. 47 kt of SAR per year. This consultancy does not carry out the analysis of economic and financial viability, only proposes three scenarios to be considered in this analysis, nor does it have a private proponent for the realization of such a plant.	**Mi**	It was possible to develop pilots in two companies by strengthening their management capacity by equipping them; the projects have not been completed at the time of the evaluation.
Component 3: Risk reduction through disposal of POPs pesticide stockpiles and waste **Outcome D:** Establishment of a provincial-level plan for the management of POPs pesticide residues tested in selected provinces					

Availability of inventory of remaining stocks of POP pesticides and associated wastes	Outdated and incomplete inventory	Implemented: (i) Updated detailed inventory; (ii) Review and prioritization of contaminated sites; (iii) risk analysis of contaminated sites.	131. 6 tons (ton) of obsolete pesticides and POPs were collected and disposed of in Chihuahua 66. 44 tons (40 kg POP); Colima 59. 03 tons (400 kg COP); Tabasco 0. 429 tons; Puebla 1. 4 ton (COP); Tlaxcala 3. 27 tons (3. 27 tons COP); 1 ton in Quintana Roo. 36% were disposed of by controlled incineration (non-chlorinated); 59% were contained (non-chlorinated) and 5% are pending, as export (7 tons of chlorinated pesticides) is under way for final disposal in France during the first quarter of 2022. 2018: Hazardous Waste Management Plan (POPs and obsolete pesticides) for the State of Colima, prepared and submitted to SEMARNAT, prioritized because little more than 59 metric tons of pesticides were found in the warehouses for pest control and However, similar volumes of obsolete pesticides and POPs were not found in the pilot states of the project (Chiapas, Jalisco and Sinaloa). Three potential contaminated sites were identified and confirmed for remediation plans: 1) San Juan del Río in Querétaro, contaminated with Endosulfan, 2) a site in Tula, Hidalgo, where DDT was stored, and 3) Tekchem (a closed agrochemical plant) in Salamanca, Guanajuato The project worked in coordination with SEMARNAT, SENASICA and local authorities. However, the response was null due to the COVID-19 pandemic.	**Mi**	As part of the inventory update process, the project identified only 131. 6 tons of pesticides (obsolete POPs and No POPs) Only three contaminated sites were identified and remediation plans are being developed with due risk analysis of these sites.
Availability of the waste management plan in three states (Chiapas, Sinaloa, Jalisco)	Not available in all states	Designed and tested on a pilot scale of 3 management plans from identification to destruction of POPs pesticides	No substantial progress has been made in terms of local pesticide management plans. The PCU decided with the implementing partner to contract through an LTA for the elaboration of three detailed plans and 10 preliminary plans, according to Q3-2021 it is expected to have at least three plans elaborated by the first quarter of 2022. An online system (Potentially Contaminated Sites System (PCPS)) was developed and will be operational by the third quarter of 2021 (no progress report Q3-2021) No progress is reported in the latest Q4-2021 report or the Annual Report.	**Mi**	There is a management plan drawn up for the state of Colima, and three detailed plans and 10 preliminary plans are under development, however, these will not be tested on a pilot scale, so the stated objective will not be achieved.
Outcome E: Substantial elimination of remaining POP pesticide stocks and POP residues in Mexico					
Effective business options for the environmentally sound destruction of remaining POPs pesticides and other residues	None	Assessment of commercial destruction options available on the domestic and export market	As indicated in the mid-term report, the study was carried out, since there are no local options, the PCU decided to quote the process with international companies.	**Ms**	The final disposition of the inventories of obsolete pesticides was made taking into account the results of the survey, so at local level only non-chlorinated pesticides were disposed of and the final disposition of POP pesticides was contracted in France.
Quantity of POP pesticide stockpiles and waste destroyed	400 tons of confirmed inventory of remaining pesticides	Removal of 400 tons from the confirmed inventory of POP pesticide stocks and wastes, and may lead to eventual disposal of 1200 tons pending the results of an updated inventory to be carried out during the implementation of the project	131. 6 tons (ton) of obsolete pesticides and POPs were collected and disposed of in Chihuahua 66. 44 tons (40 kg POP); Colima 59. 03 tons (400 kg COP); Tabasco 0. 429 tons; Puebla 1. 4 ton (COP); Tlaxcala 3. 27 tons (3. 27 tons COP); 1 ton in Quintana Roo. 36% were disposed of by controlled incineration (non-chlorinated); 59% were contained (non-chlorinated) and 5% are pending, as export (7 tons of chlorinated pesticides) is under way for final disposal in France during the first quarter of 2022. It has not been possible to confirm the existence of the 400 tons reported in the Prodoc as a reference level. According to Q4-2021 an amendment was signed due to expire on 31. 03. 2022, so as of the date of this assessment no data on the destruction carried out are available. Given the results obtained, the projection of 1200 tons is not feasible.	**Mi**	The inventories located, far below those planned, were adequately disposed of, and it is not clear how the environmentally sound management of the 1200 tons of pesticides resulting from this intervention can be achieved.

Feasibility study for the recycling of used pesticide containers	None	(i) Study of technological and economic aspects of pesticide container recycling; (ii) Action plan designed and estimated costs	By contract No. SDC-58-2017, "Technical-economic analysis of alternatives for the decontamination of plastics from agrochemical and pesticide packaging, which will be incorporated into recycling processes and feasibility of their implementation in Mexico", although the study analyzes the technical-economic aspects of three plastics recycling companies does not present an action plan. At the time of PIR2021 a technical and regulatory proposal was being developed for a new Integrated Management System (IMS) model, which includes the following products: (a) A new management plan for the integrated management of empty agrochemical containers (EVAs) in the municipalities of Comitán de Domínguez, La Independencia, La Trinitaria and Las Margaritas in the state of Chiapas; (b) Analysis of the process lines and civil works required for the construction of a refurbishment and recycling centre; (c) Preliminary technical and financial feasibility analysis of the model, (d) A communication campaign to publicize the scope and characteristics of the SGI, addressed both to government officials concerned and to the population of the regions of Chiapas and Jalisco-Colima; The GIS proposal envisages the establishment of a Traceability System to track performance indicators to measure the efficiency of the system, as well as the participation of women in the recycling industry (collectors, separators, vending machines). According to Q4-2021 Given the delays in the implementation process of the pilots, the fourth amendment was signed on December 8 with a completion date of January 31, 2021, canceling the last activities that will not be fulfilled. This consulting team does not have documents indicating the progress of the programmed activities or activities not covered.	**Ms**	An analysis of the current Agrochemical Empty Containers (EVAs) management system was carried out. This evaluation team has not had access to the Integrated Management System Model for Empty Agrochemical Containers. As indicated in various reports, activities not completed by January 31, 2022 by the consulting team will not be cancelled. At the time of this evaluation there is no Action Plan designed.

Outcome F: Containment or rehabilitation of priority sites contaminated with POPs pesticides and a national program to treat the remaining sites					
Number of remediation plans for high-priority sites contaminated with POPs pesticides	None	Designed 3 detailed remediation plans, including cost estimates.	An online system (Potentially Contaminated Sites System (SIPCO)) has been developed and will be operational by the third quarter of 2021 (no progress report on expected outputs is available from the 2021 Quarterly and Annual Reports). Three potentially contaminated sites confirmed by SEMARNAT were identified in San Juan del Río, Querétaro; Tula, Hidalgo and Salamanca, Guanajuato for immediate action. By the end of 2021 the ToR for the implementation of these plans were published (development of remediation plans (3 detailed and 10 preliminary), with the characteristics and guidelines established by the implementing partner), the receipt of tenders closed at the beginning of 2022, it is expected to have the plans for 31. 03. 2022. No information is available regarding the process of recruitment and development of such plans	**Ms**	Three contaminated sites were identified and three detailed plans and 10 preliminary plans are under development, to be completed by March 2022.
Number of first phase remediation plans for sites contaminated with POPs pesticides	None	(i) 10 preliminary containment and remediation plans generated; ii) Implementation arrangements including identification of funding for clean-up.	By the end of 2021 the ToR for the realization of these plans were published, the receipt of bids closed at the beginning of 2022, it is expected to have the plans by 31. 03. 2022. A significant impact on the capacity of the Counterparty is reported by providing the Potentially Contaminated Sites System (SIPCO). This evaluation team does not have any information related to the recruitment and development of these plans.	**Ms**	Preliminary plans for 10 sites will be developed as part of the development consultancy, but the source of funding for the clean-up process has not been identified
Availability of a national program for the permanent management of POPs contaminated sites	None	National program that addresses contaminated sites in general, with specific emphasis on sites contaminated with POPs	Program prepared, **"NATIONAL PROGRAMME FOR REMEDIATION OF CONTAMINATED SITES"** available at https://www.gob.mx/semarnat/documentos/programa-nacional-de-remediacion-de-sitios-contaminados?idiom=es https://www. gob. mx/semarnat/documentos/programa-nacional-de-remediacion-de-sitios-contaminados?idiom=es	**S**	The National Program for the Remediation of Contaminated Sites meets the obligations of the authorities (It obeys Article 7, paragraph 1, of the General Law for the Prevention and Integral Management of Waste (LGPGIR, 2003 and complies with Action Line 5. 3. 1 of the Sectoral Environment and Natural Resources Program (PROMARNAT 2013-2018).
Component 4: Strengthening capacity to manage obsolete pesticides **Outcome G:** Institutional strengthening at the state level for the management of obsolete pesticides					
Availability of an assessment covering national institutional capacities for state-level implementation of obsolete pesticide management plans.	National and State programs are not in line with obligations under international conventions	(i) National capacity assessed; (ii) legal gap analysis developed; (iii) priorities and action plans identified; (iv) public-private partnership initiated	The PIR 2021 reports actions carried out in response to this activity, which, according to this evaluation team, are more relevant to activity E. 3 on the management of empty packaging of agrochemicals. There is no evidence that these activities have achieved the expected results, there are no plans of action or priorities, and there is no evidence that there is a public-private partnership to address this issue. The 2019-2020 Annual Reports and the 2021 Quarterly Reports provide details of the progress of this activity.	**I**	Analysis of the legal framework has been carried out, but not of national capacities, action plans have been drawn up and a PPP has not been launched.

Training and dissemination programs developed	None	100 pesticide end-users, waste management and monitoring authorities trained	Although at the time of the mid-term report the target had been exceeded, the evaluation suggested that the CPU should prepare a report on training activities in order to obtain a clearer view of the contribution of these trainings to the objectives of the project and to see the applicability of gender equity. The 2019 Annual Report indicates that the project continued its participation in the BUMA courses: Good Use and Management of Agrochemicals, developed by SENASICA in collaboration with the State Plant Health Committees, in four states (Campeche, Chiapas, Tabasco and Sinaloa); 200 farmers participated. The workshops explained the problems related to POP pesticides, which consist of environmentally sound management and the importance of managing empty packaging of agrochemicals (Activity G2). There is no evidence of training for the authorities responsible for waste management and control and monitoring, nor does it allow an assessment to be made of women's participation in these activities.	**Ms**	A Guide to Good Practice on Pesticide Use was developed and active participation in the training process developed by the national authority (SENASICA) in cooperation with national authorities. The issue of pesticides POPs and EVPs was included. However, it is not clear how many supervisory authorities were trained It is not clear that an ongoing Training Program has been created and will continue to be developed after the project has been implemented.
Availability of national guidelines for the management of pesticide residues	Current guidelines are not in line with international convention obligations	1 updated guide reflecting international practices and lessons learned.	Although there is a MANUAL FOR THE GOOD USE AND MANAGEMENT OF PLAGUICIDAS IN THE FIELD (file:///C:/Users/jrled/Downloads/MANUAL_PARA_EL_BUEN_USO_Y_MANEJO_DE_PLAGUICIDAS_EN_CAMPO. pdf) this evaluation team agrees according to the criteria issued in the mid-term report, the document does not address the activity, since it does not include issues related to obsolete pesticides, does not align the national guidelines with the obligations assumed in international conventions.	**Mi**	The MANUAL GUIDE TO THE GOOD USE AND MANAGEMENT OF PLAGUICIDES IN THE FIELD, although it is a tool for better management by end-users, does not fully meet expectations, since it does not constitute a national guideline, nor does it emphasize the proper management of pesticide residues.
Delivery of a strengthened program for the collection of obsolete pesticides and used containers at the state and municipal levels	State Programs for Outdated Used Pesticide Containers	Implemented changes reflecting current experiences from other NAFTA and Latin American countries.	By contract No. SDC-58-2017, "Technical-economic analysis of alternatives for the decontamination of plastics from agrochemical and pesticide packaging, which will be incorporated into recycling processes and feasibility of their implementation in Mexico", the study that analyzes the technical-economic aspects of three plastics recycling companies does not present an action plan. At the time of PIR2021 a technical and regulatory proposal was being developed for a new Integrated Management System (IMS) model, which includes the following products: (a) A new management plan for the integrated management of empty agrochemical containers (EVAs) in the municipalities of Comitán de Domínguez, La Independencia, La Trinitaria and Las Margaritas in the state of Chiapas; (b) Analysis of the process lines and civil works required for the construction of a refurbishment and recycling centre; (c) Preliminary technical and financial feasibility analysis of the model, (d) A communication campaign to publicize the scope and characteristics of the SGI, addressed both to government officials concerned and to the population of the regions of Chiapas and Jalisco-Colima; The GIS proposal envisages the establishment of a Traceability System to track performance indicators to measure the efficiency of the system, as well as the participation of women in the recycling industry (collectors, separators, vending machines). According to Q4-2021 Given the delays in the implementation process of the pilots, the fourth amendment was signed on December 8 with a completion date of January 31, 2021, canceling the last activities that will not be fulfilled. This consulting team does not have documents indicating the progress of the programmed. There is no evidence that changes have been made by incorporating the experiences of other countries.	**Mi**	Although the evaluation of the EVPs collection program was carried out, no changes have been made in the system that incorporates the best international practices in this area. As of the date of this evaluation, a consultancy is still under development, which, according to the documents analyzed, the PCU anticipates that some activities will not be delivered. Evidence remains that this product might not be completed.

National Replication Program for Sustainable Pesticides Management	None	Developed a national replication program for the sustainable management of obsolete pesticides.	The consultants will prepare a Manual for the implementation of the SIG, which will describe and systematize the good practices and lessons learned to facilitate and improve the scaling and replication of the model (considering the gender approach). The manual will contain a refined communication strategy based on implementation experience. The manual will be ready by September 2021 In the 2021 quarterly reports there is no evidence of progress in this activity, nor is there evidence in the 2021 annual report.	**Mi**	As foreseen by the MTR, the lack of a real study of state capacities, of priority lines of action on this issue and of a functional public-private alliance with a national replication program.

Relevance

According to this evaluation, the project´s objective is clearly aligned with the regulatory framework and national policies of the United Mexican States. On the Political Constitution of Mexico (modified in 2012) it is established that “All people have the right to a healthy environment for their development and well-being. The State shall guarantee respect for this right. The damage or deterioration of the environment will generate responsibilities for those who cause it in terms of what is established by this Law”

The project is aligned with the National Development Plan (2013-2018), the Environmental Sector Program (2013-2018). In the National Development Plan 2019-2024, one of the guiding principles established is *"Leave no one behind, leave no one out",* within which it is indicated *"We advocate a development model that respects the inhabitants and the habitat, equitable, aimed at correcting and not exacerbating inequalities, defender of cultural diversity and the natural environment, sensitive to regional and local economic modalities and singularities and aware of the needs of the future inhabitants of the country, whom we cannot inherit a ruined territory”.*

Within a chemicals management framework, the project is aligned with the national framework for sound chemicals management being developed through the SAICM initiative. Specifically, it addresses the needs identified in PNA (2008) on inventories of POPs pesticides and recent studies on the generation of WEEE with possible POPs content.

The activities proposed in this project are aligned with those objectives established in the NAFTA North American Regional Action Plans.

The project is aligned with the strategic objectives established in the fifth replenishment of the GEF, namely:

- **CHEM-1 Objective:** "Phase POPs phase-out and reduce POPs releases"
  - **Outcome 1.3** Reduced releases of POPs to the environment.
    Indicator 1.3.1: Number of releases of unintentionally produced POPs prevented or reduced in the industrial and non-industrial sectors; measured in TEQ grams against the baseline recorded through the POPs tracking tool.
  - **Outcome 1.4** POPs waste prevented, managed and disposed of, and POPs contaminated sites managed in an environmentally sound manner.
    Indicator 1.4.2 Amount of obsolete pesticides, including POPs, disposed of in an environmentally sound manner; measured in tons.
- **CHEM-3 Objective:** "Pilot environmentally sound chemicals management and mercury reduction"
  - **Outcome 3.2** To contribute to SAICM's overall objective of achieving the sound management of chemicals throughout their life cycle in a manner that leads to the minimization of significant adverse effects on human health and the environment.
    Indicator 3.2.1 Countries implement relevant SAICM activities that generate global environmental benefits and report to the International Conference on Chemicals Management.

In the first two years of its implementation, the project did not have a clear understanding of the strategy established in the design, which meant a low level of stakeholder involvement. During the second half, after the MTR, the project focused its efforts on complying with the established activities, achieving greater progress in the results, however, the restrictive measures in the framework of the Covid-19 pandemic, did not achieve the Timely involvement of the key actors for the fulfillment of the expected objectives.

About an approach that contributes to gender equality, the empowerment of women and human rights, a GAP for POPs was developed. This GAP is well developed, but according to the information gathered in the interviews, due to lack of time to operationalize the state management plans for electronic waste, it could not be fully implemented. Regarding the recycling of EVAs, it was possible to implement some of the project's efforts with the participation of women in the recovery and recycling management plans.

The project is in line with the United Nations Sustainable Development Cooperation Framework in its four areas of work: 1) equality and inclusion, 2) prosperity and innovation, 3) green economy and climate change and finally 4) peace, justice and rule of law with two transversal areas: gender equality and empowerment of women, girls and migrants and refugees.

The results of the project are clearly aligned with the Collaboration Framework Agreement between UNDP and the Government of the Mexican States, which aims to strengthen cooperation at the national level and foster alliances for regional and global development between the parties. These processes are intended to enhance progress in achieving the MDGs and SDGs.

The 2014-2018 Country Program is very clear in its UNDAF 6 effect in enacting the mainstreaming of environmental sustainability, low-emission development, and the green economy. In this particular case, the results of the project are fully aligned with this program.

This evaluation team rates the relevance of the results of this project as **Moderately Satisfactory (Ms).**

Effectiveness

Despite the efforts made by the project to align the achievement of results, at the end of this evaluation the project has not fully met the expected objectives.

The project has made significant progress in the development of proposals for regulatory instruments; however, these must go through the national approval process by the Chamber of Legislators. In order to achieve the expected result, SEMARNAT must ensure follow-up. With regard to the updating of the ARW inventory, the project prepared a national and state inventory for ARWs and conducted sample analyses for the determination of POPs. However, a projection should be made based on the results obtained to determine the baseline estimate for POPs emissions from the products specified in the inventory.

The update of the POPs inventory for pesticide residues did not find the 400 tons specified in the Prodoc, only 131.6 tons of POPs and obsolete pesticides were found; An analysis of the national options for the management of POPs pesticides was carried out. Finally, non-chlorinated pesticides were destroyed locally and chlorinated pesticides will be exported for treatment. The escalation is not projected to achieve the elimination of 1200 tons programmed by the project

Contaminated sites were identified and a Management Plan was established for the State of Colima. Three detailed plans and 10 preliminary plans are under development. If this consultancy is successfully completed, the project will be able to have the proposed plans at the end. The Potentially Contaminated Sites System (SIPCO) is a good tool for identifying potentially contaminated sites and their subsequent monitoring.

It was possible to work on the design of a plan for the implementation of an Integrated Management System for EVAs. Three pilot projects were carried out in the state of Jalisco, but a proposal for design and implementation has yet to be submitted to AMOCALI, SEMARNAT and SENASICA and the state authorities.

Despite making progress on all of these major goals, none of the above were fully achieved, so the rating for this section is **Moderately Unsatisfactory (Mi).**

Efficiency

The project, with the aim of making the appropriate and efficient use of resources, shared the Coordination Unit with the Project "Environmentally Sound Management and Destruction of PCBs in Mexico" Second Phase (2019-2023), which represented a saving of resources in administrative aspects. Although it should be noted that sharing the PCU between the two projects could result in savings, it had a high cost in the effectiveness of the administration of the projects.

Of the GEF grant budget, only 64. 98% ($3,716,625. 00) was implemented, indicating inadequate programming of resources to achieve the expected results. On the other hand, in the area of co-financing, the project achieved only 28. 41% of the counterpart committed under Prodoc ($6,562,919).

The low implementation of the project was reflected in a low level of achievement of results, with most of the cases not meeting the expected objectives of this GEF intervention. Contracts for the completion of some outputs were made without the end result having the expected impact. There are a number of recruitments at the time of this evaluation which, although in the final stage of completion, did not have access to the final reports. The deadline for submission was March 2022.

Although an extension was approved by March 31, 2022, as a result of the MTR's recommendations, and in the second half of the implementation period, the project redirected activities to meet the established goals, the constraints resulting from the Covid-19 pandemic limited the achievement of the objectives.

The adaptation of some activities to the measures imposed by the response to the pandemic represented a lower budget implementation, but should not have limited the achievement of the objectives set.

At the discretion of this evaluation team, the Efficiency rating is **Moderately Unsatisfactory (Mi).**

Overall outcome of the project.

The overall result of the project considers the ratings given to the aspects of relevance, effectiveness and efficiency. Therefore, once the analyses of each of these aspects have been carried out, it is considered a rating of **Moderately Unsatisfactory (Mi)** for the results of the project.

The following table summarizes the ratings for each of the previously analyzed aspects.

Table 17. Assessment of Relevance, Effectiveness and Efficacy

Assessment of results	Rating
Relevance	Ms
Effectiveness	Mi
Efficiency	Mi
Overall rating of project results	Mi

NOTE: See Annex 6. Summary of rating scales, Results Rating Scale Table: Relevance, Effectiveness, Efficiency

Sustainability: financial, socio-political, institutional and governance, environmental and overall probability.

- **Financial Sustainability**

The eventual integration of e-waste management into Mexico's LIGRS will result in an obligation on the part of the owners of this equipment at the end of its useful life to an authorized manager, as well as an environmentally appropriate management responsibility for waste recyclers and collectors. These responsibilities linked to the principle of REP will be the foundation for the generation of business models under a circular economy scheme that is self-sustaining.

As part of the studies carried out within the framework of the project, there is an analysis of business models in which two possible tariff structures are established, the implementation of which would ensure the sustainability of the management of the WEEE.

For the issue of POPs and obsolete pesticides there is a definition of a possible management plan at the State level, but state funds will be needed to ensure the operability, follow-up and monitoring of these plans.

As many of the results are derived from the experience of pilot schemes, large-scale experiments need to be implemented to see if they will be feasible. Once the results obtained by the pilots have been analyzed, they should be scaled up to a national level.

Based on the analysis performed, financial sustainability is **Moderately Unlikely (Mi)**

- **Sociopolitical Sustainability**

There is really little socio-political risk that could be detrimental to the results achieved and their longevity. At the federal level (SEMARNAT, DGGIMAR), SAGARPA/SADER and SENASICA, there is awareness of the importance of the achievements made and of the need to continue them.

At the State level, governments have become involved with the pilot projects and have expressed their interest during the interviews to continue with the management plans for WEEE and pesticides, recognizing the importance of protecting health and the environment.

Socio-political sustainability could be considered **Moderately Likely (MP)** based on the degree of commitment that the institutions have shown with the project.

- **Institutional Framework and Governance Sustainability**

The project laid the groundwork for changes in the regulatory framework related to the management of WEEE, carried out an analysis of the collection system of EVAs, in addition to State Plans and a System for

the Management of Contaminated Sites, all of which are delivered to the national authorities. Some of them must go through the approval process by the House of Legislators, others, such as State Contaminated Sites Management Plans, must be incorporated by State Governments for implementation and enforcement.

The involvement of the responsible institutions at the state and federal levels in the process of generating proposals for amending legal instruments is an important factor in ensuring the sustainability of the results of the project from an institutional point of view.

It is important to highlight that the counterpart established a specific area in its structure to deal with international agreements related to chemicals and waste, as well as coordination with INECC, which leads the global POPs monitoring network.

A commitment on the part of the national counterpart to promote the approval of the legal reforms proposed by the project, as well as the implementation of the State Plans, would ensure sustainability in the institutional framework and governance, however, at the time of conducting this evaluation there is the risk of not being achieved.

According to the analysis carried out, Institutional and Governance sustainability is **Moderately unlikely (Mi)**

Environmental sustainability

If the integration of e-waste management into the General Law for the Prevention and Integral Management of Waste (LGPGIR) is not approved, there is a risk that management plans will not be implemented and awareness of the proper management of this waste will not be promoted. Failure to reduce POP emissions resulting from inadequate management of WEEE and failure to remediate contaminated sites will produce environmental and health effects that may not be resolved in the way the project has been designed with its products.

According to the analysis carried out, environmental sustainability is **Moderately Likely (MP)**

Table 18. Summary of Sustainability Assessment

Sustainability	Rating
Financial resources	**Mi**
Sociopolitical	**MP**
Institutional framework and governance	**Mi**
Environmental	**MP**
Overall probability of sustainability	**Mi**

NOTE: See Annex 6. Summary rating scales, Sustainability Rating Scale Table

Country ownership

The design and implementation of this project is aligned with both the National Development Plans 2013-2018 and 2019-2024. It also responds to the priorities established in the Environmental Sector Program (2013-2018).

The States where pilot projects were developed have adopted management plans for both WAS and POPs pesticides and contaminated sites. State governments will integrate them into their environmental policy. SEMARNAT is working together with the States to make the plans operational and thus extend the concepts to other States of the Nation.

The members of the PBD played an important role in approving the strategy to be followed and the guidelines for the development of project activities. It is not possible to determine whether the country's financial commitment in the form of co-financing has been achieved due to the lack of efficient accounting of the investments made.

SEMARNAT is promoting the approval of the incorporation of electronic waste management into the LGPGIR, which will make the results obtained in this area sustainable.

Gender equality and women's empowerment

The GAP was finished in 2020 and contained three main parts:

1. A participatory gender analysis
2. An intervention plan that includes compliance indicators
3. Specific tools for the implementation of the plan.

The Participatory Gender Analysis is composed of 6 main sections:

1. Concepts related to the gender perspective and data on gender gaps in Mexico.
2. Presentation of the links between gender and the management of toxic chemicals, with emphasis on pesticides and ARVs,
3. Institutional alignment of projects,
4. Applicable legal and institutional context,
5. Description of the process for identifying and contacting key stakeholders, and
6. The project's adaptive management strategy.

The Intervention Plan was developed based on an analysis of the project's components and proposes a methodology to include gender aspects in the activities. A general framework was developed that included: baseline, objectives and compliance indicators.

Proposals for POPs pesticides and for WEEE were made.

For the issue of POPs pesticides, the proposals were as follows:

1. The incorporation of gender issues in EVA management programs. This was done and women participated in the proposed management plans.
2. The design of the Integrated Management System (SIG) of EVAs was an opportunity to include, generate and disseminate information. These actions contributed to an inclusive gender perspective in the management of the EVAs, such as population and beneficiary data disaggregated by sex, different impacts of the POPs according to the gender of the population, and current legislation on the subject.

3. Incorporation of the gender perspective in contaminated site remediation issues. In this case, the project did not manage to define the remediation of any contaminated site, but it did manage to strengthen the SIPCO system, which will allow the authorities to better define these sites in order to propose mitigation plans. The GAP has recommendations for introducing a gender perspective in EVA management plans and in the remediation of sites contaminated by pesticides. This was achieved in the management plans prepared for the States.
4. Analyze exposure, knowledge and risks of POPs substances (with emphasis on VAS). This analysis was achieved and management plans were developed that mitigate exposure and health risk.
5. Raising awareness on the issue of gender and chemicals.

Related to the topic of Electronic Device Waste (WEEE), it includes the following proposals:

1. Carry out an analysis of the exposure, knowledge and risks of women and adolescents in relation to the management of WEEE waste.
2. Raise public awareness on gender and WEEE issues. Sensitization was achieved through communication campaigns and awareness of the health and environmental impacts that inadequate management of WEEE presents not only to the population of women and children, but to men as well.

Some of the activities carried out were:

a. Dissemination campaigns of good practices for the management of EVAs;
b. Distribution of outreach materials to local media outlets, and
c. Training, design and realization of theoretical and practical events aimed at the different actors involved in the management of EVAs.

As previously indicated, the GAP was well developed considering the issues described, but the implementation was limited, if an adequate implementation of the GAP had been achieved, the results in this aspect would have enhanced equalities and the participation and incorporation of women in this sector.

If we apply the Gender Outcomes Effectiveness Scale (GRES), it can be concluded that the implementation of women's equality and women's empowerment can be classified as **gender-oriented and gender-sensitive.**

Cross-cutting topics

The project has generated positive effects on the population, has reduced the risk of exposure to persistent organic pollutants (POPs), particularly by eliminating inventories of obsolete and POPs pesticides, as well as generating capacity through pilot projects for better management of e-waste that may contain POPs, and has generated State Plans for the Management of Pollution Sites. All this represents an improvement in the living conditions of vulnerable populations, such as the underprivileged, women and marginalized groups, major workers in the formal industry and the informal recycling sector, surrounding communities and globally.

In addition, the project generated proposals to establish a platform for the management of WAS under a financially sustainable scheme, which would allow the generation of jobs with better working conditions (Occupational Health) as a result of the Guidelines generated for the recycling sector, both formal and informal. It trained farmers on good practices in agrochemical management. Improved monitoring and control of the import of dangerous substances through training of the responsible authorities.

The objective of the project is to minimize negative impacts on health and the global environment through appropriate chemical management and management operations and the reduction of POPs emissions, as well as exposure to POPs from electronic waste and pesticides in Mexico, which was achieved through the intervention of the project.

Although the targets were not fully achieved, the project strengthened national capacities to meet the obligations set out in the international chemicals conventions. In addition, the results of the project contribute to SDG 3, Health and Welfare, Target 3. 9. By 2030, significantly reduce the number of deaths and diseases caused by hazardous chemicals and the pollution and pollution of air, water and soil; SDG 12. Sustainable production and consumption Target 12. 4 By 2020, achieve the environmentally sound management of chemicals and all their wastes in accordance with internationally agreed frameworks for how and significantly reduce their release to air such as water and soil in order to minimize their adverse effects on human health and the environment.

The project took advantage of the South-South cooperation with the exchange of experiences with China and the United States, improving capacities for the proper management of SAR.

The results of the project contribute to the attention of the priorities established in the UNDP Country Program for Mexico (2014 2018), developed jointly and in a participatory manner to maintain coherence with the priorities identified at the federal, state and municipal levels. The project results are aligned with three of the six identified priorities: (a) equality, inclusion, equity; (b) productive economic development, competitiveness and decent work; and (c) environmental sustainability and green economy.

Given that the project overlaps with the UNDP Country Program for Mexico (2021-2025) at the end of 2022, this evaluation team considers it important to indicate that the project is also aligned with three of the four priority areas established for this period, which are: a.) inclusion and equality; b.) generation of shared prosperity to reduce inequality and poverty; c.) green economy, climate change mitigation, energy and sustainable production.

GEF Additionality

The intervention of the GEF through the project allowed the Mexican Government to generate proposals for legal amendments that will allow better management of chemicals, as anticipated at the design stage. These proposals would not have been generated in the same period of time without the intervention of the project. The country will have Plans for the Management of Pesticide-Contaminated Sites and EVAs, Good Practice Guidelines for the Management of Agrochemicals, and detailed studies of inventories of WEEE containing POPs thanks to the intervention of the project.

Since the legal reforms must be promoted in the House of Legislators, the sustainability of the project results cannot be described as highly satisfactory or satisfactory, however, the project achieved a

coordinated work with the implementing partner, SEMARNAT, who will be responsible for promoting the approval of the legal reforms. Once this is achieved, the sustainability of the project will be enhanced by an improved regulatory framework. In addition, the implementation by the States of the management plans drawn up, as well as the replication of these developed models, will allow greater results in the medium and long term.

The project programmed significant scalability, which has not been achieved to date of this evaluation. However, if the implementing partner of the project internalizes the activities under way as part of its institutional work, a greater impact will be achieved, generating a transformation of the legal and regulatory framework as a result of GEF intervention.

The incorporation of the Guides elaborated for the formal and informal recycling sector will allow a transformation of the industry towards a more efficient and sustainable one. This same process of improvement in production processes has significant socioeconomic impacts by improving the health conditions of workers and surrounding communities.

Catalytic/replication effect

To evaluate the catalytic role of this project, we must take into account that it did not succeed in replicating the activities and experiences in the pilot projects within the country. The qualification should be “demonstration project” because its achievements catalyzed a public good, the necessary efforts to reduce POPs emissions to the environment and minimizing their impact on the health of the Mexican population.

The work carried out in raising awareness and raising awareness about the importance of proper management of WEEE expands throughout the country. The general population is increasingly committed to delivering equipment to informal and formal recyclers. Work was done with informal recyclers to achieve the integration of best practices in their work and eventually become formal recyclers.

Unfortunately, the achievements in this field were obtained at a very advanced stage of the project and the possibility of replication in other recyclers that were not part of the pilot companies was not achieved. This implies that SEMARNAT and the other institutions involved at the State level must work to present the lessons learned from their management to the other recyclers and replicate the positive results.

The project might not be considered a failure to achieve its objective, but there was a missed opportunity due to delays in the implementation of activities resulting in partial outputs. If more time had been allowed for implementation, the outputs would be operationalized and the catalytic effect would be greater. This applies to management plans for both pesticides, contaminated sites, EVAS recycling and WEEE management.

There is no official exit strategy for this project, but some provisions were made to ensure the sustainability of the results obtained. The eventual adoption of the proposal to incorporate e-waste management as part of the LGIRS is one such measure that would contribute to the institutional, political and economic sustainability of these important aspects.

In order to achieve better replication and to expand the catalytic role of the results, it would be important to find new sources of financing to promote projects that take the next step in putting current achievements into practice.

Progress to impact

The project sought to minimize impacts on health and the global environment by reducing emissions of POPs and exposures from e-waste and pesticide management in the country.

There are a number of achievements in the results that aim to meet the stated objective. The reduction of 131. 6 T of POPs and obsolete pesticides, the formulation of management plans for contaminated sites and for the management of EVAs are some of the results that if scaled beyond the pilots carried out (replicability) would increase the impact at the national level. In the field of WAS, progress was made in State Management Plans and the use of good management practices in informal and formal waste recyclers. Also, if SEMARNAT succeeds in replicating the formulation of management plans in the other states of the Nation, it could actually achieve a reduction in emissions and guarantee improvements in health and the environment.

The results achieved are at an initial stage that requires implementation at the national level (scaling up) to achieve the expected replicability effect. An impact was achieved, but scaling up the results would allow a greater impact, there are bases to enhance the results of the project.

Core indicators and monitoring tools of the GEF/LDCF/SCCF were not presented in the requested project documents, but progress towards impact analysis was made on the basis of the results achieved by the project.

5. Main findings, conclusions, recommendations and lessons learned

Main Findings

As part of the documentary review process and the interviews carried out with the different actors involved in the implementation of this project, the main findings are summarized below:

1. In the second half and based on the recommendations of the MTR, the project advanced significantly. The incorporation of the figure of the Project Advisor strengthened and promoted important advances. This adaptive management allowed to straighten the project, if this incorporation had not been carried out, the results of the project would be lower. Although the figure of Project Advisor should have a strategic role of consultation and recommendation on specific technical aspects, in the process of implementing this project, this consultant took on the role of Project Coordinator, maintaining participation in all processes, from the generation of the ToR, participation in the selection processes and the review of the final products obtained. This situation generates delays in the process because the hiring of him is part-time and the response times are extended by said situation.
2. The project carried out a national inventory of WEEE, with the inclusion of not only 5 products, characterizing a total of 34 products, to determine the content of POPs in the plastics of this waste. This characterization of the WEEE containing POPs is a good input to carry out a projection

of the national inventory of WEEE, to approximate the inventory of WEEE contaminated with POPs, however, at the end of the project no such exercise has been carried out.

3. The Covid-19 Pandemic, an unexpected risk, led to a restructuring of many of the activities, due to the impossibility of carrying out fieldwork and face-to-face workshops. This situation limited the development of the pilot projects due to the restriction measures established by the Government, affecting the achievement of the established objectives and goals.
4. The project achieved a positive impact through a communication campaign that included mass media (television, radio, print and digital), the holding of press conferences allowed important spaces in National and State media, at zero cost for the project. This campaign encouraged the population to identify the risks to health and the environment that not attending to the proper disposal of their electronic equipment means.
5. The decision to share the PCU of this project with the project Environmentally sound management and destruction of PCBs in Mexico was not correct. Both projects, of equal size, require full attention from the Coordination, at important moments for one of the two projects the activities of the other project were neglected, which limited adequate management in this project.
6. The administrative processes both within the PCU and in the UNDP and with the implementing partner were not efficient, which generated significant delays in resolving routine operational aspects such as the preparation of ToR, selection of consultants in a timely manner.
7. An important achievement is that the project carried out a Proposal for Electronic Waste Management Plans in 4 States, however, the change in Federal and State authorities has limited its appropriation and implementation. The follow-up, by the implementing partner, to implement these plans and scale them, achieving their replicability, would allow enhancing the impacts of this project.
8. The project carried out a specific, complete and comprehensive GAP, but at the end of the project it was not able to implement it adequately.
9. The inventory of POPs and obsolete pesticide waste was carried out, but the goal of 400 tons was not achieved. Despite many efforts, 131.6 tons were identified, which were disposed of according to the technologies identified in the study of national capacities for the elimination of this waste.
10. EVA recycling management plans were received and implemented in some places. This shows that more impact can be achieved if these management models are promoted in the country.
11. Since the completion of the MTR, the UNDP M&E department has taken a more active role in quality assurance of the M&E tools (PIR).

Conclusions

The conclusions reached by this consulting team are shown below:

1. The project is aligned with national priorities and the UNDP mandate to reduce the exposure of persistent organic pollutants to the population and the environment, capacities have been strengthened in compliance with international commitments, through the creation of a specialized unit within the institutionality of the implementing partner, generating sustainability.
2. The project was well designed, but the implementation was poor, generating significant delays in its development. The inadequate selection of the initial PCU did not meet the logic of this project,

since it did not understand the conceptualization of the project. This deficiency was evidenced by the MTR and by the recommendation issued by the MTR, it was corrected with the incorporation of a new PCU, changing the structure to be more consistent with the tasks to be performed. The progress achieved in the second half of the project is not only the result of the appointment of a new director in SEMARNAT who is committed to the project, but also as a consequence of the appropriation of the project by the PCU and the hired Advisor. The UNDP RTA assumed an important role in promoting the project by carrying out missions to Mexico. Despite these efforts, time was not enough to carry out the actions, so to date, the results of consultancies are still awaited.

3. The selection of the coordinator and the team must be made looking not only for experience in project management, but also must be considered that they have knowledge around the subject to be developed. This will allow a greater understanding of the project logic and strengthen management.
4. The SMEs are undoubtedly a benchmark for continuing to promote this initiative in other States, however, it is essential that they can be made operational
5. The National WEEE Inventory has been an achievement that the project leaves as a tool at the national level, it is necessary to continue with the destruction of pollutants, mainly POPs residues for the benefit of health and the environment.
6. As described by the MTR, the main activities were postponed in the first half of the project. Even though after the MTR the execution of the project took a different course, when making a general balance of the project it is considered that despite the time limitations and the administrative and external difficulties resulting from the pandemic, the achievements of the project were significant, some goals were partially met, however, others were not achieved. The impacts of the project could be increased if the implementing partner follows up on the replication and scaling of the results obtained in the developed pilots
7. The initial formation of the PBD and CT was not equitable between the representatives of the sectors of pesticide generators and waste managers of electronic devices. This was resolved with the formation of two technical committees, but it should have been defined more equitably at the beginning of the project.

Recommendations

After completing this evaluation, it is recommended:

1. It is recommended that the profile of the coordinating team and the support structure provided by the implementing partner be clearly defined, achieving the establishment of an integrated PCU to ensure the proper implementation of the project.
2. The PDB and TK should ensure equitable representation of the different sectors involved in the project. Ensuring an appropriate distribution of resources as set out in the Prodoc.
3. When the area of activity of projects is geographically dispersed, it is important to consider hiring specialists or local coordinators with experience and knowledge of the situation at the regional level, as well as with physical proximity, which allows for better management.

4. The project team should be trained by the UNDP office to incorporate time and processes into their workplans and to secure timely recruitment according to the needs of the activities to be carried out.
5. It is recommended that the implementing partner follow up on the activities under development, generating a replicability strategy for the pilots and plans generated at the State level to enhance the results of the project, with the aim of making the project results sustainable.
6. As part of the follow-up to the unfinished activities to be undertaken by the national authorities, it is recommended that the CPA be implemented, which would allow the incorporation and strengthening of the role of women and vulnerable groups in the management of SARs and POPs pesticides.
7. From the design of the project, gender-sensitive and gender-transforming indicators should be defined as a measure of the implementation of a gender action plan for the project.

Lessons Learned

As part of the identification of the lessons learned, this evaluation team first reviewed the quarterly reports prepared by the PCU, from this review it is important to highlight:

1. Establishing synergies between different activities promotes harmonization, saves resources and promotes rapprochement and feedback from participants.
2. Inter-sectoral participation forums, in which various actors and sectors, such as the federal and state governments, the private sector, academia and civil society, participate, enrich discussion and feedback, and the presentation by participants of their positions, points of view and needs, contribute to a comprehensive understanding of the problem, and make it possible to strengthen a participatory approach and promote awareness and coordination among actors.
3. Inter-ministerial (inter-institutional) coordination and collaboration spaces make it possible to raise awareness among the various authorities dealing with different aspects of the same subject. The creation of these spaces promotes the establishment of coordinated actions. It is essential to detonate the spaces for generating knowledge and achieving such collaboration; sensitizing the authorities involved and with the aim of achieving the sustainability of the results.
4. Communication with the implementing partner is fundamental in the development of the project, this ensures that from the elaboration of the ToR to the products received are aligned with national needs and priorities, therefore, the products must be reviewed by the implementing partner.
5. Adaptive management, incorporating the recommendations made by the MTR, makes it possible to change the course of the project. This underlines the importance of carrying out these evaluations and, above all, the need to take the recommendations and incorporate them into the development of project activities.
6. The PCU and UNDP should pay particular attention to staff changes, especially at the managerial level, as this significantly delayed the development of the project. It is important that, faced with these changes, the project team establish a strategy of outreach (communication, integration) with the people who are assuming the positions in order to contextualize them about the project and avoid delays in the processes.

7. Carrying out a barrier analysis is essential for proper attention to the problem. For example, the lack of analytical capacity is a constraint on the capacity for monitoring and control, which is why carrying out root cause analysis is important as a planning process for activities.
8. A proper definition of the ToR is crucial in the process of hiring consultants or companies. A precise definition of the expected results and the profile required to carry out the expected work is required in order to achieve quality contracts that are cost-effective, discarding those that might be more favorable in terms of cost but do not have the capacity to deliver the expected products.
9. The planning process should take into account the timing of the approval processes of both implementing partners and UNDP itself.

The following lessons can be listed from the analysis carried out by the evaluation team:

10. Consolidating a consulting team is important for the proper development of the project. UNDP, together with the implementing partner, should monitor the progress of activities from the start of implementation to ensure a good understanding of the project approach by the implementing unit. The changes in the National Coordinator and the Director of SEMARNAT experienced in this project resulted in delays in the implementation of activities.
11. Proposals to create or amend laws and regulations is an activity that must begin in the first year of the project with the aim of achieving approval and implementation within the project time frame. A late start to these activities means that the proposals are in the process of being approved by the legislative authorities, making it impossible to carry out other activities dependent on these changes.
12. Adaptive management to solve the restrictions imposed in response to the Covid-19 Pandemic allowed some activities to be carried out virtually, however, it is clear that, as far as possible, face-to-face attendance is essential.

Annexes

Annex 1. Terms of Reference (ToR)

Because of the size of the document, it is not attached to the present report. It will be provided as a PDF in the Final Document (The document is appended to the original published language).

Annex 2. List of people interviewed

No.	Name	Position/Institution
		Government Sector
1	Ing. Ricardo Ortiz Conde	Director General of DGGIMAR-SEMARNAT (member of the project Steering Committee and implementing partner)
2	Lic. Erika María del Pilar Casamadrid Gutiérrez	Director General of Strategic Financing -SEMARNAT (Member of Steering Committee)
3	Leandro David Soriano García	Director of biosecurity for Genetically Modified Organisms, SENASICA
4	Alma Liliana Tovar Díaz	Subdirector of Certification and Acknowledgement, DGIAAP-SENASICA
5	Ing. Miguel Irabien Alcocer	Director of Restauration of Contaminated Sites, DGGIMAR
6	Ing. Alejandra Medina Arévalo	Director Hazardous Waste and Materials DGGIMAR
7	Fernando Rosas Padilla	Responsible for the pesticides project, COFESPRIS-Colima
8	Alejandro Naranjo	COFEPRIS-COLIMA
9	Edgar Villalobos	Coordinator of Plant Health Safety Chihuahua
10	Ing. Bárbara Núñez González	Directorate of Comprehensive waste management Secretariat of Environment and Territorial Development (SEMADET) of Jalisco (co-financier)
		Private iniciative
11	Lic. Martín Fueyo Mac Donald	Executive Director of Dragon Agrochemicals and former Director of the Board of Directors of Amocali A.C.
		Project Consultants
12	José Luis Quiroz Méndez	Consultant in charge of the updating of the SIPCO platform
13	Dr. Hernando Guerrero Cazáres	Project Manager of the GEA Consulting (formal pilots of RAE and ratification of RAE inventory)
14	M.C. Maria Esther Nieto Sánchez	Project Manager of the Adhoc Consultancy (informal RAE pilots)
15	Dr. Isael Fierros González	Consultant (RAE inventories)
16	Edgar Lugo Chávez	Secretary of the Mexican Association of Electronic Waste Recyclers
17	M. en C. Sergio Gasca A.	Project Manager of Ecotec Consulting
18	M. en C. Luis Sánchez Cataño	Kuradzo Project Manager (RAE good practice guides)
		PNUD
19	C. Kasper Koefoed	Regional Technical Advisor for Chemical projects and the Montreal Protocol
20	Mtro. Edgar González González	Environment, Energy and Resilience Program Officer (member of the Project Board)
21	Dr. Guillermo Román	Project Advisor
22	Mtro. Ives Enrique Gómez Salas	General Project Coordinator

Annex 3. List of documents reviewed

1. PIF
2. PNUD Initiation Plan PNUD
3. PNUD Project Document
4. Results of the UNDP Social and Environmental Diagnosis
5. Project Initiation Report
6. All Project Execution Reports (PIRs)
7. Design and Implementation Project Quality Assurance (PQA) Process
8. Quarterly progress reports and work plans of the various task execution teams
9. Audit reports
10. Monitoring tools completed in the GEF area of action at the approval of the CEO and mid-term (introduce specific TTs for the area of action of this project)
11. Mission monitoring reports
12. All follow-up reports prepared by the project
13. Financial and management guidelines used by the Project Team
14. Project operational guidelines, manuals and systems
15. UNDP country/country programme document(s)
16. Minutes of the meetings of the Board of Environmentally Sound Management and Destruction of PCBs in Mexico: Second Stage.
17. Maps of the sites where the project operates
18. Project MTR and progress reports
19. CDP 2014-2018, 2021-2025.

Annex 4. Assessment Question Matrix

Evaluation Criteria / Questions	Indicators	Sources	Methodology
RELEVANCE: **¿How does the project relate to the main objectives of the GEF area of focus and to environmental and development priorities at the local, regional and national levels?** **Is it adapted to local and national development priorities and national policies and plans?**			
- How does the project support the strategic priorities of UNDP and GEF?	- There is a clear relationship between the project objectives and strategic priorities of UNDP and GEF.	- Project documents - UNDP/GEF strategies and documents.	- Document analysis. - Interviews with UNDP staff and the project team
- How does the project support environmental and development priorities at the national level? - What has been the level of stakeholder participation in the design of the project? - Does the project take into account national realities, policies and national plans in both its design and implementation? - What has been the level of ownership of the main stakeholders in the implementation of the project?	- Degree to which the project supports national environmental policies and plans. - Assessment of key stakeholders regarding the level of adequacy of the design and implementation of the project to national realities and existing capacities. - Coherence between the needs expressed by national stakeholders and UNDP-GEF approach. - Level of involvement of government officials and other partners in the project design process.	- Project documents - Assessment of key partners and stakeholders of the project.	- Document analysis. - Interviews with staff from DGGIMAR-SEMARNAT, SENASICA, state governments and project partners, UNDP and the project team.
- Are there logical links between the expected results of the project and the design of the project (in terms of components, choice of partners, structure, implementation mechanisms, scope, budget, use of resources, among others)? - Was the deadline set in the Prodoc sufficient to achieve the proposed results? - How does the theory of change expressed in prodoc correspond to the structure and composition of the project, the context and the needs of the country?	- Level of coherence between the results and the design of the internal logic of the project. - Level of coherence between the design of the project and its implementation approach. - Level of correspondence of the theory of change, with the structure and composition of the project, the context and the needs of the country?	- Project documents. - Assessment of DGGIMAR-SEMARNAT staff, project partners and project team.	- Document analysis. - Interviews with staff from DGGIMAR-SEMARNAT, SENASICA, state governments and project partners, UNDP and the project team
Are the objectives, results, outputs and activities still valid, given the current implementation context of the project?	-Level of relevance of the objectives in the current reality - Level of adaptability shown by the project to achieve the expected results in the framework of the crisis situation due to the Covid-19 pandemic	- Project documents. - Quarterly and annual progress reports. - DGGIMAR-SEMARNAT staff, partners, project team and UNDP.	- Document analysis. - Interviews with staff from DGGIMAR-SEMARNAT, SENASICA, state governments and project partners, UNDP and the project team
Evaluation Criteria / Questions	**Indicators**	**Sources**	**Methodology**
Effectiveness: **To what extent have the expected results and objectives of the project been achieved?**			

- Has the project been effective in achieving the expected results?	- Analysis of the indicators within the framework of the strategic results/logical framework of the project, in relation to the resources and time invested.	- Project documents. - Quarterly and annual progress reports. -DGGIMAR staff-SEMARNAT, the partners, the project team and UNDP.	- Document analysis. - Interviews with staff from DGGIMAR-SEMARNAT, SENASICA, state governments and project partners, UNDP and the project team
- How were the risks and assumptions of the project handled? - What has been the quality of the mitigation strategies developed? - How has adaptive management contributed to the achievement of results and the expansion of expected outputs?	- Integrity of the identification of risks and assumptions during the planning and design of the project. - Quality of the information systems established to identify emerging risks.	- Project documents. - Quarterly and annual progress reports. - DGGIMAR-SEMARNAT staff, partners, project team and UNDP.	- Document analysis. - Interviews with staff from DGGIMAR-SEMARNAT, SENASICA, state governments and project partners, UNDP and the project team
- What changes could have been made (if possible) to the project design to improve the achievement of the expected results?	- Changes that improve the achievement of project results.	- Data collected during interviews and evaluation of documentation.	- Analysis of documentation and relevant data.
What has been the involvement of federal and state authorities, and other key actors to receive training on proper chemical management and the effects of POPs?	- Level of participation of state and federal authorities in the training courses and workshops provided within the framework of the project.	-Quarterly and annual progress reports. - DGGIMAR-SEMARNAT staff, partners, project team and UNDP.	- Document analysis. - Interviews with staff from DGGIMAR-SEMARNAT, SENASICA, state governments and project partners, UNDP and the project team
Evaluation Criteria / Questions	**Indicators**	**Sources**	**Methodology**
EFFICIENCY: **Was the project implemented efficiently in accordance with international and national norms and standards?**			
- How has adaptive management contributed to the achievement of results and the expansion of expected outputs? - Have the logical framework, work plans or any changes made to them been used as management tools during the implementation of the project? - Have the financial and accounting systems been adequate for project management and for producing accurate and timely financial information? - Were the progress reports accurate and timely? - Do they respond to reporting requirements? - Do adaptive management changes include?	- Adaptive management was used to ensure an efficient use of resources. - Availability and quality of financial and progress reports. - Punctuality and adequacy of the reports delivered. - Level of discrepancy between the planned expenditure and the actually executed expenditure. - Planned co-financing vs. the current one received. - Cost based on the results achieved compared to the costs of similar projects in other organizations. - How appropriate the options selected by the project have been based on context, infrastructure and cost.	- Project documents. - Quarterly and annual progress reports. - DGGIMAR-SEMARNAT staff, partners, project team and UNDP.	- Document analysis. - Interviews with staff from DGGIMAR-SEMARNAT, SENASICA, state governments and project partners, UNDP and the project team

- ¿Ha sido la ejecución del proyecto tan efectiva como fue propuesta originalmente (planeado vs. actual)? - Has the co-financing been as planned? - Have financial resources been used efficiently? - Have the acquisitions been made in such a way that the resources of the project are used efficiently? - How has the results-based management approach been used during the implementation of the project?	- Quality of the results-based management report (progress reports, monitoring and evaluation). - There were and with what occurrence changes in the design of the project or in the implementation approach when they have been necessary to improve the efficiency of the project. - Cost associated with the delivery mechanism and management structure, compared to other alternatives.		
What other projects with national and/or international funding are being executed in the same territories as the GEF-Residuos COP project? Has the link with these projects been achieved?	- Projects identified with national and/or international funding that are being executed in the same territories as the GEF-Waste COP project - Level of linkage achieved for the execution of aligned activities of the identified projects.	- Project documents. - Quarterly and annual progress reports. - DGGIMAR-SEMARNAT staff, partners, project team and UNDP.	

Evaluation Criteria / Questions	Indicators	Sources	Methodology
RESULTS: **The positive and negative, foreseen and unforeseen changes and the effects produced by a development intervention.** **In GEF terms, the results include the direct performance of the project, from short to medium term, and the longer-term impact that includes benefits to the global environment, repeat effects and other local effects.**			
To what extent are negative impacts on health and the environment being minimized through proper chemical handling and reduction of emissions and exposure to POPs, particularly those contained in e-waste and PESTICIDE POPs? What factors have contributed to achieving or not achieving the planned results?	(i) Number and effectiveness of activities that have promoted proper chemical management; number and effectiveness of activities that have led to a reduction in POPs emissions; and (ii) Number and effectiveness of activities that have decreased exposure to POPs.	Project progress reports, annual work plans, reported budgets and interviews with the project and UNDP team and project beneficiaries (e.g. trained state authorities).	
Based on the results achieved so far, to what extent are the end-of-project goals expected to be met?	(i) Percentage of progress in meeting the indicators of the PRODOC results framework.	Project progress reports, annual work plans, reported budgets and interviews with the project team and UNDP and other actors deemed relevant.	

Annex 5. Evaluation Consultant Agreement Form

Anna Ortiz Salazar

Evaluators/Consultants:

1. Must present information that is complete and fair in its assessment of strengths and weaknesses so that decisions or actions taken are well founded.
2. Must disclose the full set of evaluation findings along with information on their limitations and have this accessible to all affected by the evaluation with expressed legal rights to receive results.
3. Should protect the anonymity and confidentiality of individual informants. They should provide maximum notice, minimize demands on time, and respect people's right not to engage. Evaluators must respect people's right to provide information in confidence, and must ensure that sensitive information cannot be traced to its source. Evaluators are not expected to evaluate individuals, and must balance an evaluation of management functions with this general principle.
4. Sometimes uncover evidence of wrongdoing while conducting evaluations. Such cases must be reported discreetly to the appropriate investigative body. Evaluators should consult with other relevant oversight entities when there is any doubt about if and how issues should be reported.
5. Should be sensitive to beliefs, manners and customs and act with integrity and honesty in their relations with all stakeholders. In line with the UN Universal Declaration of Human Rights, evaluators must be sensitive to and address issues of discrimination and gender equality. They should avoid offending the dignity and self-respect of those persons with whom they come in contact in the course of the evaluation. Knowing that evaluation might negatively affect the interests of some stakeholders, evaluators should conduct the evaluation and communicate its purpose and results in a way that clearly respects the stakeholders' dignity and self-worth.
6. Are responsible for their performance and their product(s). They are responsible for the clear, accurate and fair written and/or oral presentation of study imitations, findings and recommendations.
7. Should reflect sound accounting procedures and be prudent in using the resources of the evaluation.
8. Must ensure that independence of judgement is maintained, and that evaluation findings and recommendations are independently presented.
9. Must confirm that they have not been involved in designing, executing or advising on the project being evaluated and did not carry out the project's Mid-Term Review.

Evaluation Consultant Agreement Form

Agreement to abide by the Code of Conduct for Evaluation in the UN System:

Name of Evaluator: Anna Ortiz Salazar

Name of Consultancy Organization (where relevant): _____

I confirm that I have received and understood and will abide by the United Nations Code of Conduct for Evaluation.

Signed at San Jóse, Costa Rica on April 19,2022

Signature: _____

Marisol Violeta Sánchez Avendaño

Evaluators/Consultants:

1. Must present information that is complete and fair in its assessment of strengths and weaknesses so that decisions or actions taken are well founded.
2. Must disclose the full set of evaluation findings along with information on their limitations and have this accessible to all affected by the evaluation with expressed legal rights to receive results.
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Evaluation Consultant Agreement Form

Agreement to abide by the Code of Conduct for Evaluation in the UN System:

Name of Evaluator: Marisol Violeta Sánchez Avendaño

I confirm that I have received and understood and will abide by the United Nations Code of Conduct for Evaluation.

Signed at Guanajuato, México on 20/04/2022

Signature: _____

Annex 6. Summary of qualification scales

Monitoring and Evaluation Rating Scale

Rating	Description
6 = Highly Satisfactory (HS)	There were no short comings; quality of M&E design/implementation exceeded expectations.
5 = Satisfactory (S)	There were minor shortcomings; quality of M&E design/implementation met expectations.
4 = Moderately Satisfactory (MS)	There were moderate shortcomings; quality of M&E design/implementation more or less met expectations.
3 = Moderately Unsatisfactory (MU)	There were significant shortcomings; quality of M&E design/implementation was somewhat lower than expected.
2 = Unsatisfactory (U)	There were major shortcomings; quality of M&E design/implementation was substantially lower than expected.
1 = Highly Unsatisfactory (HU)	There were severe shortcomings in M&E design/implementation.
Unable to Assess (UA)	The available information does not allow an assessment of the quality of M&E design/implementation.

Implementation/Oversight and Execution Rating Scale

Rating	Description
6 = Highly Satisfactory (HS)	There were no shortcomings; quality of implementation/execution exceeded expectations.
5 = Satisfactory (S)	There were no or minor shortcomings; quality of implementation/execution met expectations.
4 = Moderately Satisfactory (MS)	There were some shortcomings; quality of implementation/execution more or less met expectations.
3 = Moderately Unsatisfactory (MU)	There were significant shortcomings; quality of implementation/execution was somewhat lower than expected.
2 = Unsatisfactory (U)	There were major shortcomings; quality of implementation/execution was substantially lower than expected.
1 = Highly Unsatisfactory (HU)	There were severe shortcomings in quality of implementation/execution.
Unable to Assess (UA)	The available information does not allow an assessment of the quality of implementation and execution.

Outcome Rating Scale - Relevance, Effectiveness, Efficiency

Rating	Description
6 = Highly Satisfactory (HS)	Level of outcomes achieved clearly exceeds expectations and/or there were no shortcomings.
5 = Satisfactory (S)	Level of outcomes achieved was as expected and/or there were no or minor shortcomings.
4 = Moderately Satisfactory (MS)	Level of outcomes achieved more or less as expected and/or there were moderate shortcomings.
3 = Moderately Unsatisfactory (MU)	Level of outcomes achieved somewhat lower than expected and/or there were significant shortcomings.
2 = Unsatisfactory (U)	Level of outcomes achieved substantially lower than expected and/or there were major shortcomings.
1 = Highly Unsatisfactory (HU)	Only a negligible level of outcomes achieved and/or there were several shortcomings.
Unable to Assess (UA)	The available information does not allow an assessment of the level of outcome achievements.

Sustainability Ratings Scale

Rating	Description
4 = Likely (L)	There are little or no risks to sustainability
3 = Moderately Likely (ML)	There are moderate risks to sustainability
2 = Moderately Unlikely (MU)	There are significant risks to sustainability
1 = Unlikely (U)	There are severe risks to sustainability
Unable to Assess (UA)	Unable to assess the expected incidence and magnitude of risks to sustainability

Annex 7. Table 4. Project strategy, indicators, baseline and expected outcome at the end of the project

	Indicator	**Baseline**	**End of Project Target**
Project Objective To minimize impacts on health and the global environment through sound chemicals management and reduction of POPs releases and exposure to POPs from e- waste and pesticides management operations in Mexico	National legal and regulatory framework reviewed, analyzed, amended to enhance enforcement and compliance with overall sound chemicals management, in particular, e- waste and pesticides management	Regulatory and legal framework not matching country's obligations under international conventions Limited awareness on environmentally sound chemicals management	Regulatory and legal, economic instruments reviewed, gay analyzed, andamendment process initiatedto reflect an overall Sound Chemicals Management framework and to align withStockholm and Basel Conventions Relevant government officials, private sectors,end-users trained and awareness raised
	Grams TEQ of UPOPs emission reduced Development of State level e- waste management plans	Maximum potential generation of dioxins and furans with a range of 246.68 and 287.51 g TEQ./year .	Demonstration pilot projects undertaken with application of BAT/BEP to improve e- waste collection and segregation mechanisms and dismantle and final disposal technologies 42 g TEQ/year POPs release minimized in formal and informal recycling of e- waste
	Inventory (quantity and locations) of obsolete pesticides finalized Tons of obsolete pesticides destroyed (per compound) and mode of destruction (tons and costs/ton) Provincial Management Plans for obsolete pesticides established	307.56 tons obsolete pesticides identified at last official update in March 2012, and could be up to 1,200 tons None exists	Accurate and detailed inventory on obsolete pesticides stockpiles Environmentally sound destruction of at least 400 tons of confirmed inventory of obsolete pesticides, and may lead to the eventual elimination of 1,200 tons pending findings of an updated inventory to be conducted during project implementation Pesticide contaminated sites identified, and environmentally sound containment and remediation actions taken at priority contaminated sites Provincial Management Plans established, implemented and evaluated at three states: Chiapas, Sinaloa and Jalisco

Component 1: Strengthening institutional and public policies and capacities regarding POPs and sound chemicals management			
Outcome A): National legal and regulatory framework strengthened to enhance enforcement and compliance capacity for Stockholm Convention (SC) obligations within the country's overall sound chemicals management framework, in particular potential POPs release from e-waste management and pesticides	Strengthened regulatory and legislative framework	Not integrated with sound chemicals management framework	Regulatory and legal amendments in progress in the Mexican Law for Hazardous Waste and its Regulations to align with international conventions, in particular, Stockholm and Basel Conventions
	Training at State level on inspection of POPs substances and products containing new POPs	None implemented	200 Federal (PROFEPA and Customs officers) and state inspectors trained
	Analytical and monitoring capacities of federal inspectors, Customs and chemical labs enhanced	None implemented	100 federal inspectors,Customs officers and chemical laboratory personnel trained and capacity strengthened.
	Sustainable capacity to support Stockholm Convention reporting and information exchange	Limited activities	i) Enhanced Stockholm Convention reporting and information exchange ii) participation in Global POPs Monitoring Network and iii) Mexico taking leadership role in its regional network
Component 2: *Reduction of POPs releases from e-waste processing at State and waste processor levels*			
Outcome B): Development and implementation of State pilot level e-waste management plan in three States:Baja California, Jalisco and Federal District of Mexico City and projection to entire country	Establishment of State level regulatory and legal framework	None	Model state e-wastemanagement plans established
	Development of WEEE stewardship levies and EPR to foster sustainable financing of sound management of e-waste	None	i) WEEE stewardship levies established ii) EPR mechanisms developed to foster sustainable financing
	State and national inventory on e-waste generation and mass flow balance	Outdated or inadequate data	Inventories with better determination of e-waste generated and POPs releasebetter estimated
	Development and implementation of State levelManagement Plans	Limited	Management Plans on lifecycle management (LCM) developed, implemented and evaluated in three States (north bordering United States, Jalisco and Federal District)

	Development and implementation of outreachstrategy	None	Outreach and communication programme for general public and state level government developed, implemented andresults evaluated 15 times events organizedand 300 participants
	Training strategy on e-waste management guides developed Number of training workshop conducted	None	"i) Training strategy for public, recycling enterprises and state governments developed, implemented and results evaluated ii) 500 participated in the training iii) 2 guidelines produced."
	Characterization study of nationwide recycling industry to establish a registration and certification system	None	i. Inventory of formal and estimation of informal recycling facilities ii. Registration and certification system established for e-waste recycling industry, with 20 of the facilities certified. iii. Increase in the number ofregistered facilities
	Establishment of nationwide e-waste information exchange platform	None	Nationwide information exchange platform established linking waste streams and safe processors
Outcome C): Demonstration of POPs release minimization in formal recycling and informal recycling of e-waste	Number of demonstration pilot projects with introduction of BAT/BEP in formal recycling facilities	None	At least 2 pilot interventions implemented, introducing BAT/BEP on collection, segregation, dismantling andfinal disposal
	Number of demonstration pilot projects in informal recycling plants to bring operation up to environmentally sound operational and compliance level	None	At least 2 pilot interventionsimplemented with improvedcollection and segregation mechanism, and practice of environmentally sound management of e-waste
	Feasibility study and design of integrated recycling facility	None	Feasibility study finalized with project design, identifying financing estimates and options with aprivate sector proponent
Component 3: *Reducing risks through elimination of POPs pesticides stockpiles and wastes*			

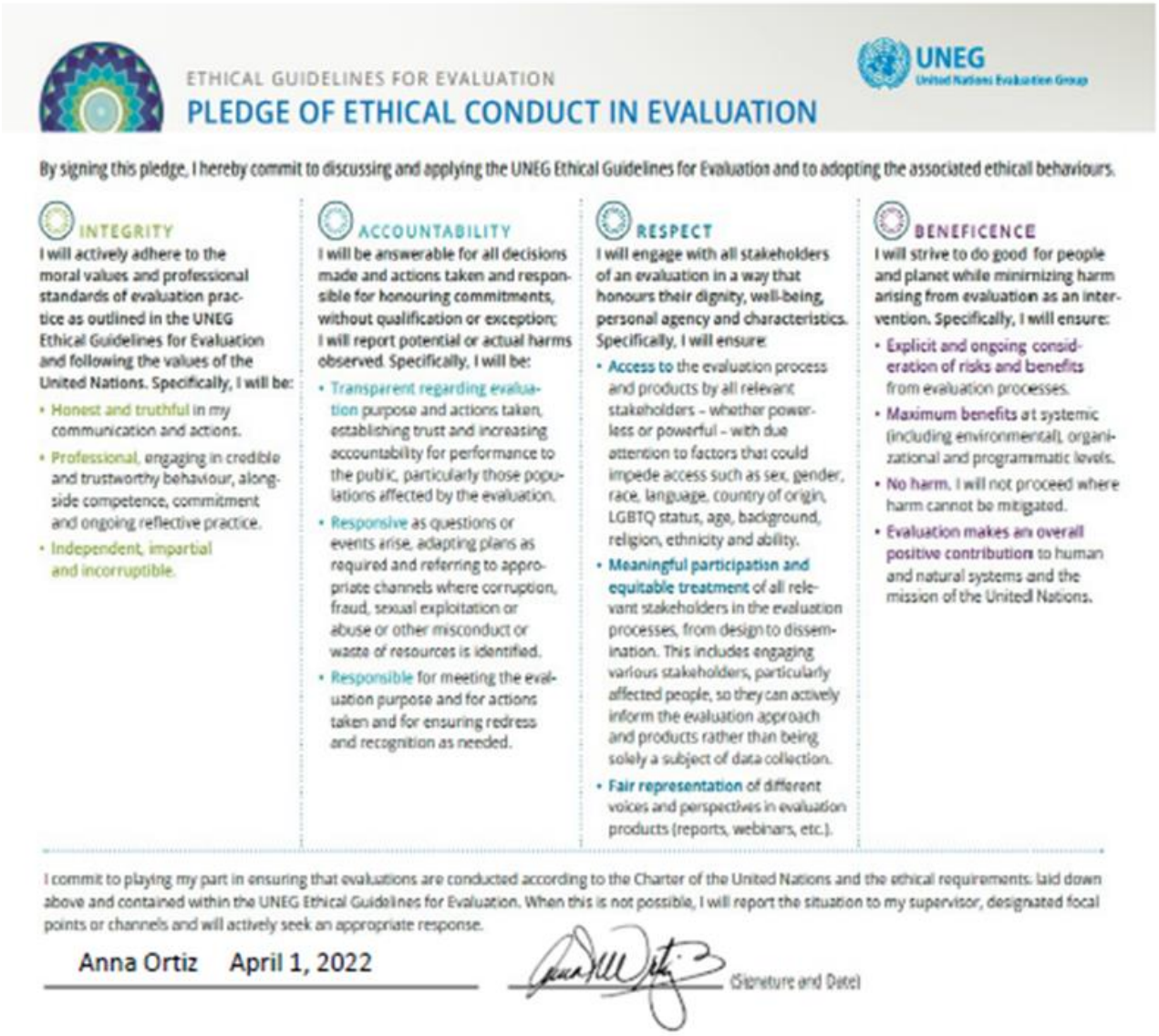
Outcome D): : Provincial POPs pesticides Waste Management Plan establishment and tested in selected provinces de un plan a nivel provincial para el manejo de residuos de plaguicidas COPs probados en provincias seleccionadas	Availability of inventory of remaining POPs pesticide stockpiles and associated waste	Inventory outdated and complete	Implemented: i) Detailed inventory updated ii) prioritization screening conducted iii) risk assessment of POSPs pesticide contaminated sites
	Availability of Waste Management Plans at 3 States (Chiapas, Sinaloa, Jalisco)	Not available at all States	3 Waste Management Plans from identification throughdestruction of POPspesticides designed andtested at state pilot scale
Outcome E): Substantial elimination of remaining POPs pesticide stockpiles and POPs wastes in Mexico	Effective commercial options for environmentally sound destruction of POPs pesticide stockpiles and wastes	None	Available domestic andexport market commercial destruction options assessed
	Amount of POPs pesticide stockpiles and waste destroyed	400 tons of confirmed inventory of pesticide stockpiles	Elimination of 400 tons of confirmed inventory of POPs pesticide stockpiles and wastes, and may lead to the eventual elimination of 1,200 tons pending findings of an updated inventory to beconducted during projectimplementation
	Feasibility study for recycling of used pesticide containers	None	i) Technological and economical aspects of recycling used pesticide containers studied. ii) Action plan designed and costs estimated
Outcome F): Containment/remediation of priority POPs pesticide contaminated sites and national programme to address remaining sites	Number of remediation plansfor high priority POPs contaminated sites	None	3 Detailed remediation plansdesigned inclusive of costs estimates
	Number of first phase remediation plans for POPs pesticides contaminated sites	None	i) 10 Preliminary containment and remediation plans generated ii) implementation arrangements including identification of clean up financing identified
	Availability of national programme for on-going management of POPs pesticidecontaminated sites	None	National programme addressing contaminated sites in general with specificemphasis on POPs contaminated sites

Component 4: *Obsolete pesticide management capacity strengthening*			
Outcome G: Institutional strengthening at provincial level for obsolete pesticides management delivered	Availability of an assessment covering national institutional capacities for implementation of state level obsolete pesticides management plan	State and national level programme not matching obligations of international conventions	i) National capacity assessed ii) gap analysis conducted, iii) priorities and action plans identified; iv) public-private partnership initiated
	Outreach and training programmes developed	None	100 Pesticide end-users, waste management and low enforcement governmental officials trained
	Availability of national pesticides waste managementguidelines	Present guidelines not matching obligations of international conventions	1 Guidelines updated to fully reflect internationalpractices and lessons learned
	Reinforcement of State and municipal level obsolete pesticide and used containers collection programme delivered	Outdated State level used pesticide containers programmes	Changes implemented to reflect current experiencesof other NAFTA and otherLatin American countries
	National replication programme for sustainable pesticide management	None	National replicationprogramme s for sustainable obsoletepesticide management developed
Component 5: *Monitoring and evaluation.*			
Outcome H): Monitoring, learning, adaptive feedback, outreach, and evaluation	Timing and quality of annual (APRs, PIRs etc.) and M&E reports Quality appraisal in Mid-Term Review and Terminal Evaluation	Indicative M&E plan, budget and timeframe	M&E activities implemented as scheduled and project implementation monitored to achieve project objectives
	Lessons learnt and experience documented and disseminated; post-project action plan formulated	None	Lessons and experience documented and disseminated

Component 6: *Project Management*			
Output I): Strengthened project management capacities and efficiency	Institutional established and capacities strengthened to achieve timely project implementation and disbursement	Limited existing staff	National project teamestablished, staffed, equipped. National project teamtrained and capacitiesstrengthened
	Training needs identified; project personnel trained on relevant requirements of GEF and UNDP on project management	None	Staff trained and project management capacity strengthened
	Routine project management activities undertaken to ensure the smooth and timely implementation of the project. The activities include but not limited to drafting TORs, select and contract with consultants, organize M&E activities, organize the review of substantial report	None	Efficient and effective project management leading to achievement of project objectives and sustainability ensured

Annex 8. Code of Conduct for Evaluation

Anna Ortiz Salazar



ETHICAL GUIDELINES FOR EVALUATION

UNEG
United Nations Evaluation Group

PLEDGE OF ETHICAL CONDUCT IN EVALUATION

By signing this pledge, I hereby commit to discussing and applying the UNEG Ethical Guidelines for Evaluation and to adopting the associated ethical behaviours.

INTEGRITY

I will actively adhere to the moral values and professional standards of evaluation practice as outlined in the UNEG Ethical Guidelines for Evaluation and following the values of the United Nations. Specifically, I will be:

- Honest and truthful in my communication and actions.
- Professional, engaging in credible and trustworthy behaviour, alongside competence, commitment and ongoing reflective practice.
- Independent, impartial and incorruptible.

ACCOUNTABILITY

I will be answerable for all decisions made and actions taken and responsible for honouring commitments, without qualification or exception; I will report potential or actual harms observed. Specifically, I will be:

- Transparent regarding evaluation purpose and actions taken, establishing trust and increasing accountability for performance to the public, particularly those populations affected by the evaluation.
- Responsive as questions or events arise, adapting plans as required and referring to appropriate channels where corruption, fraud, sexual exploitation or abuse or other misconduct or waste of resources is identified.
- Responsible for meeting the evaluation purpose and for actions taken and for ensuring redress and recognition as needed.

RESPECT

I will engage with all stakeholders of an evaluation in a way that honours their dignity, well-being, personal agency and characteristics. Specifically, I will ensure:

- Access to the evaluation process and products by all relevant stakeholders – whether powerless or powerful – with due attention to factors that could impede access such as sex, gender, race, language, country of origin, LGBTQ status, age, background, religion, ethnicity and ability.
- Meaningful participation and equitable treatment of all relevant stakeholders in the evaluation processes, from design to dissemination. This includes engaging various stakeholders, particularly affected people, so they can actively inform the evaluation approach and products rather than being solely a subject of data collection.
- Fair representation of different voices and perspectives in evaluation products (reports, webinars, etc.).

BENEFICENCE

I will strive to do good for people and planet while minimizing harm arising from evaluation as an intervention. Specifically, I will ensure:

- Explicit and ongoing consideration of risks and benefits from evaluation processes.
- Maximum benefits at systemic (including environmental), organizational and programmatic levels.
- No harm. I will not proceed where harm cannot be mitigated.
- Evaluation makes an overall positive contribution to human and natural systems and the mission of the United Nations.

I commit to playing my part in ensuring that evaluations are conducted according to the Charter of the United Nations and the ethical requirements laid down above and contained within the UNEG Ethical Guidelines for Evaluation. When this is not possible, I will report the situation to my supervisor, designated focal points or channels and will actively seek an appropriate response.

Anna Ortiz April 1, 2022

(Signature and Date)

MEDIO AMBIENTE
SECRETARÍA DE MEDIO AMBIENTE Y RECURSOS NATURALES
AGRICULTURA
SECRETARÍA DE AGRICULTURA Y DESARROLLO RURAL
SENASICA
gef
PNUD

Marisol Violeta Sánchez Avendaño

ETHICAL GUIDELINES FOR EVALUATION

PLEDGE OF ETHICAL CONDUCT IN EVALUATION

UNEG
United Nations Evaluation Group

By signing this pledge, I hereby commit to discussing and applying the UNEG Ethical Guidelines for Evaluation and to adopting the associated ethical behaviours.

INTEGRITY

I will actively adhere to the moral values and professional standards of evaluation practice as outlined in the UNEG Ethical Guidelines for Evaluation and following the values of the United Nations. Specifically, I will be:

- Honest and truthful in my communication and actions.
- Professional, engaging in credible and trustworthy behaviour, alongside competence, commitment and ongoing reflective practice.
- Independent, impartial and incorruptible.

ACCOUNTABILITY

I will be answerable for all decisions made and actions taken and responsible for honouring commitments, without qualification or exception; I will report potential or actual harms observed. Specifically, I will be:

- Transparent regarding evaluation purpose and actions taken, establishing trust and increasing accountability for performance to the public, particularly those populations affected by the evaluation.
- Responsive as questions or events arise, adapting plans as required and referring to appropriate channels where corruption, fraud, sexual exploitation or abuse or other misconduct or waste of resources is identified.
- Responsible for meeting the evaluation purpose and for actions taken and for ensuring redress and recognition as needed.

RESPECT

I will engage with all stakeholders of an evaluation in a way that honours their dignity, well-being, personal agency and characteristics. Specifically, I will ensure:

- Access to the evaluation process and products by all relevant stakeholders – whether powerless or powerful – with due attention to factors that could impede access such as sex, gender, race, language, country of origin, LGBTQ status, age, background, religion, ethnicity and ability.
- Meaningful participation and equitable treatment of all relevant stakeholders in the evaluation processes, from design to dissemination. This includes engaging various stakeholders, particularly affected people, so they can actively inform the evaluation approach and products rather than being solely a subject of data collection.
- Fair representation of different voices and perspectives in evaluation products (reports, webinars, etc.).

BENEFICENCE

I will strive to do good for people and planet while minimizing harm arising from evaluation as an intervention. Specifically, I will ensure:

- Explicit and ongoing consideration of risks and benefits from evaluation processes.
- Maximum benefits at systemic (including environmental), organizational and programmatic levels.
- No harm. I will not proceed where harm cannot be mitigated.
- Evaluation makes an overall positive contribution to human and natural systems and the mission of the United Nations.

I commit to playing my part in ensuring that evaluations are conducted according to the Charter of the United Nations and the ethical requirements laid down above and contained within the UNEG Ethical Guidelines for Evaluation. When this is not possible, I will report the situation to my supervisor, designated focal points or channels and will actively seek an appropriate response.

Marisol Violeta Sánchez Avendaño _____ *Marisol Sánchez* _____ (Signature and Date)

Annex 9. Interview Questionnaires.

Questions for interviews

UNDP

1. At the end of this project, how would you evaluate the design of the project with respect to its relevance of the results obtained and the cross-cutting themes of the countries?
2. How do you visualize the sustainability of the project's results once it is finished?
3. How would you describe SEMARNAT's involvement as the project implementing agency? How would you evaluate it?
4. Overall, how would you evaluate the project implementation process as a whole?
5. If you could start the project from the beginning, how would you find it different from the current one?
6. To what extent has Covid-19 impacted the implementation of the project? What is your suggestion for the future formulation and implementation of similar projects?

PROJECT UNIT

Project director:

1. Do you consider that the objectives of the project are in line with Mexico's national development priorities?
2. Explain what are the positive results that have been obtained from this project.
3. Were these positive results as expected or were they the synergy of the project?
4. What challenges were faced and how they were resolved.
5. What is your assessment of UNDP involvement and support in this project?
6. Explain whether in your opinion financial and human resources were used efficiently and effectively?
7. What lessons learned can you share in any of the implementation aspects of the project that may be useful for future projects of this type?
8. How is the sustainability of the results obtained after the end of the project guaranteed?

Are there any questions you want to raise about the project (in terms of formulation, implementation, coordination, cooperation, etc.)?

Project Coordinator

1. Explain the work structure of the project and how the work is divided.
2. Explain in your own words the project and what positive results have been obtained.
3. What challenges were faced and how they were resolved.
4. What lessons learned can you share in any of the implementation aspects of the project?
5. Please explain how stakeholder involvement has been in meeting participation and co-financing commitments.

6. Are the results of the project in line with the country's development needs in terms of the elimination of pesticide POPs and the reduction of emissions due to mismanagement of electronic waste management?
7. How has the project ensured gender mainstreaming in the life of the project? To what extent do you think the project meets the objectives set out in the approved gender mainstreaming plan? Please provide key achievements to date?
8. Are there any questions you want to raise about the project that we have not covered so far, especially from your point of view?

Project Administrator

1. Explain the different challenges in completing expected budget expenses compared to actual expenses.
2. How have you accounted for compliance with co-financing? What is the accounting method or how do stakeholders report their investments, annually, quarterly? Can you provide a table with the co-financing committed vs the one actually executed in this project?
3. In its function it keeps a record of the execution of the expenses of this project. You can supply a table with what was budgeted vs executed for each year of the project.

Government Sector

1. How has the project impacted the implementation of POPs pesticide disposal and e-waste management in your state?
2. Do you think the results of the project have had a beneficial impact on your provincial management capacity to reduce pesticide stocks and the environmentally sound management of e-waste?
3. What lessons learned can be given as a result of the implementation of the project and the actions undertaken in its implementation?
4. What is your overall assessment of the projects and the results obtained with respect to their provincial needs for the implementation of the results?

Private Initiative

1. How would you assess the relevance of this project to the implementation of the elimination of pesticide stocks of POPs and the reduction of emissions resulting from poor management of electronic waste?
2. What lessons can you give due to the implementation of the project and the actions undertaken in its execution?
3. How would you evaluate the results obtained and the expectations that the organization had for this project?
4. If you can give 3 tips for a similar project in the future, what would they be?

Academic institutions

1. How has your institute or academy been involved in the project?
2. What have been your contributions and in what areas?
3. Has the project produced results that are relevant to the development goals and plans of your institutions?
4. Do you have any other suggestions/comments about the project and for a similar project in the future?

Project Director

1. Do you consider that the objectives of the project are in line with Mexico's national development priorities?
2. Explain what are the positive results that have been obtained from this project.
3. Were these positive results as expected or were they the synergy of the project?
4. What challenges were faced and how they were resolved.
5. What is your assessment of UNDP involvement and support in this project?
6. Explain whether in your opinion financial and human resources were used efficiently and effectively?
7. What lessons learned can you share in any of the implementation aspects of the project that may be useful for future projects of this type?
8. How is the sustainability of the results obtained after the end of the project guaranteed?
9. Are there any questions you want to raise about the project (in terms of formulation, implementation, coordination, cooperation, etc.)?

Annex 10. FE Report Clearance Form

FE Report for Environmentally Sound Management of Waste Containing Persistent Organic Pollutants **Reviewed and Cleared By:**

PNUD Country Office

Name: Edgar R. González

Signature: DocuSigned by: Edgar R. González 8288197E4906420... Date: 20-jun.-2022

Name: Alicia López

Signature: DocuSigned by: 9705FA6347B0495... Date: 22-Jun-2022

Regional Technical Advisor

Name: Kasper KOEFOED

Signature: DocuSigned by: A1892A852773480... Date: 22-Jun-2022