



Midterm Evaluation of the Project: "Sound Management of POPs Containing Waste in Mexico"

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Project's summary sheet

Project Name	Sound Management	of POPs Containing Waste i	n Mexico		
GEF Project ID number	4686	Financial Summary	As per approval (USD) [1]	Status at Mid-Term Review (USD)[2]	Status at Mid- Term Review (%)
		Total In Cash	5.720.000	949.029	17%
UNDP Project ID Number:	92723	GEF	5.720.000	949.029	17%
		Total In kind	23.100.000	-	0%
		SEMARNAT	1.700.000	-	0%
Country	Mavia	Estado de Baja California	500.000	-	0%
Country	Mexico	SEMADET Jalisco	316.750	-	0%
		SENASICA	8.500.000	-	0%
		AMOCALI	2.500.000	-	0%
		BIOSEA	500.000	-	0%
		CANIETI	2.000.000	-	0%
Region	Latin America	VIZ RESOURCES MANAGEMENT, SA DE CV	2.300.000	-	0%
			55.000	-	0%
Interest area:	Persistent Organic Pollutants	Otros	4.728.250	-	0%
	Strategic Objective №3 GEF-5 "promote the adequate management of chemical products	kind) 23.100.0		-	0,0%
Focal Area's	throughout their life cycle to minimize the significant adverse effects on human health and the environment.	Project Total	28.820.000	949.029	3,3%
objectives (OP/SP)	Objective 1, Result 3: "The POPs emitted to the environment were reduced".				
	Result. 1.4: "The POPs waste prevented, managed and disposed, and the management of sites contaminated with POPs in an environmentally sound manner ".				
Executing partners	SEMARNAT				
Other partners involved	N/A	PRODOC signature date	13-10-2015	Project starting date as per PRODOC	01-09- 2015
		Project closure date (op	erational)	Project	
MTR date as per PRODOC	13-04-2018	Proposed	13-10-2020	actual starting date	01-04- 2016
MTR's Actual Date	23-07-2018	Actual	N/A	Tentative project closure date	N/A

[1] According to PRODOC (Project document).[2] Expenditures from March 31, 2016 to August 9, 2018. There are not reports of co-financing.

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Acknowledgments

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We cannot fail to mention the excellent willingness of the various federal, state and local authorities interviewed for their support to the consultations and visits made by the evaluators.

We would also like to acknowledge the collaboration provided by the business partnerships of the manufacture of electronic devices and pesticide formulation, the WEEE recycling companies and the Plant Health Committees involved.

Without any doubt, the present work and its conclusions and recommendations would not have been possible without the collaboration provided by stakeholders involved in the project.

Mexico City, Mexico, July 2019.

Acronyms

Abbreviation/Acronym	Meaning
POPs	Persistent Organic Pollutants
UPOPs	Unintentional Persistent Organic Pollutants
TAC	Technical Advisory Committee
DGIMMRA	Direction General of Integral Management of Materials and Risky
	Activities
GEF	Global Environment Facility
INECC	National Institute of Ecology and Climate Change
PSC	Project Steering Committee
M&E	Monitoring and Evaluation
NAFTA	North America Free Trade Agreement
GDP	Gross Domestic Product
NIP	National Implementation Plan for the Stockholm Convention
UNDP	United Nations Development Program
AOP	Annual Operation Program
PROCYT	Protección de Cultivos, Ciencia y Tecnología A.C.
Prodoc	Project Document
PROFEPA	Federal Attorney for Environmental Protection
WEEE	Waste Electrical and Electronic Equipment
SAGARPA	Ministry of Agriculture, Livestock, Rural Development, Fisheries and Food
SENASICA	National Service for Agrifood Health, Safety and Quality
SEMARNAT	Ministry of Environment and Natural Resources
TORs	Terms of Reference
TEQ	Toxic Equivalents
PCU	Project Coordination Unit
UMFFAAC	Unión Mexicana de Fabricantes y Formuladores de Agroquímicos A.C
	(Mexican Union of Manufacturers and Formulators of Agrochemicals)

Executive Summary

Evaluation Objective and Purpose

The evaluation corresponds to a Midterm Evaluation of the project "Sound Management of POPs Containing Waste in Mexico", requested by the Country Office of the United Nations Development Program (UNDP), which acts as the implementing agency of the Global Environment Facility. The purpose of the evaluation is to identify potential problems in the design of the project, assess the progress in achieving the objectives established in the Project Document (Prodoc), the sustainability of the achievements, the use of the economic resources and the financing, and to identify and keep record of the lessons learned and provide recommendations on specific actions that must be carried out to improve project execution.

The evaluation period covers from October 13, 2015 to September 30, 2018, although it is important to mention that project activities began in 25 April 2016, since there were delays in the hiring of the Project Coordinator and the setup of the Project Coordination Unit.

In order to accomplish the purpose of the evaluation, a documentary review of the provided project information was conducted (e.g. progress reports, consulting reports, Terms of Reference, etc.) and an evaluation mission was carried out from October 1 to 15, 2018, in which the cities of Colima, Tecomán, Guadalajara, Querétaro and Mexico City were visited. 53 people were interviewed which included the project team, officials from UNPD Mexico and Panama, local and federal government officials, civil society organizations, electronic waste recycling companies, pesticide associations and the Customs Laboratory, among others.

Project Description

The public health and environmental risks due to exposure to Persistent Organic Pollutants (POPs) are a topic included in the national public agenda, whose attention is also part of the commitments acquired by Mexico, through the signing of the Stockholm Convention. The presence of these pollutants in electronic waste and obsolete pesticides has generated actions to avoid their emissions, or their elimination, even before the signing of the Convention However, the country's efforts are still insufficient to solve this problem, which is complex due to the difficulty in identifying these pollutants, and their dispersion throughout the national territory, among others.

Thus, the objective of the project under evaluation is to minimize the impacts on health and the environment through the sound management of chemicals, and the reduction of POP emissions and the exposure to them, during the handling of electronic waste and pesticides in Mexico. This will help the country to accomplish with the requirements indicated in the Stockholm Convention.

To achieve this objective, the project includes a review of the legal framework of these wastes in order to propose modifications to strengthen their regulation and harmonize the provisions with international legislation. Moreover, the project includes to carry out economic studies to favor the recycling of electronic waste. A set of trainings addressed to government officials, federal and state inspectors and chemical laboratories are planned to strengthen their knowledge on POPs and their risks and their analytical and monitoring capacities according to their duties.

The project has two particular lines of work. The first line aims to reduce emissions of POPs from electronic waste, during its processes of recycling, dismantling and treatment, mainly through the

development of management plans and pilot projects with formal and informal recyclers. The second line of work focuses on the environmentally sound treatment and disposal of stockpiles of obsolete POPs pesticides that are identified in the country, which include to conduct the inventory of the stocks and select the destruction or treatment technology more viable in environmental, technical and legal terms. It also includes actions aimed at strengthening the management of sites contaminated with POPs pesticides and empty pesticide containers.

Findings

The project has managed to position the relevance of risk minimization derived from POPs, through its rational management, and has allowed a very close work with SEMARNAT, which has derived thus far in the updating of the Information System of Contaminated Sites, including a specific section for POPs, and with SENASICA that has provided and received expert knowledge to move forward on the management of obsolete pesticides and empty pesticide containers. In general terms, the project is still relevant for Mexico, due to the constant increase of electronic waste and the significant risks due to exposure to POPs present in electronic waste and pesticides, and in particular to accomplish the Stockholm Convention.

Among the most relevant aspects of the project design, the vertical logic that stands between the problems identified and the proposed actions to solve them is highlighted, as well as the relevance of the project to solve a priority problem in the country, which was acknowledged by stakeholders. However, it is observed that medium-term goals were not considered for the middle of the period and very long terms were included for the completion of the activities, a situation that makes difficult to establish the aspects in which the project is late, since theoretically, all the outputs and outcomes of the project could be obtained during the last year of the project, giving the perspective that activities are still on time.

However, the project is very delayed in the implementation of its main components. Component 2, which includes the reduction of emissions of unintentional persistent organic pollutants (UPOPs), and that contains 57% of the project budget, has not moved towards implementation of demonstration projects in pilot states that will directly lead to the reduction of UPOPs. Component 3 focused on reducing risks through the identification and elimination of POPs pesticides, which holds 26% of the budget, presents an inventory of POPs pesticides and associated waste that is not conclusive and lacks technical rigor. Moreover, the elimination of obsolete pesticides and waste are still pending.

These delays can be explained through the concepts that the PCU has incorporated into the project implementation. The first and very important concept was the extension of the scope of the WEEE inventory and the self-imposed need for the project to cover all the problem of WEEE. The second concept makes reference to the roles of the PSC, the TAC and the technical working groups. The composition of the SPC caused a serious imbalance in favor of the pesticides, due to the lack of participation of representatives of the WEEE sector in the Committee. There is also an incorrect use of the SPC as this Committee is being used to solve problems and situations that PCU should propose how to solve them. The TAC and the working groups are not participatory, they are being mainly used for informative issues. A third concept is the understanding of the PCU and SEMARNAT authorities on what the project intends to achieve and its priority tasks. The key activities are postponed without seeking solutions and without considering that the proposed results have to be

accomplished in a finite time. The last concept is related to the project management that has been imposed in the PCU, which appears excessively centralized. The PCU is trying to cover all the complications of the project by itself without taking advantage of the capacities and knowledge of stakeholders.

Regarding the outcomes achieved so far, 33 persons directly involved in the project were interviewed (excluding UNDP, UCP and those not participating in the project from this statistics), of which 48.5% (16 people) negatively rated the quality of the outputs and the expertise of the consultants hired to elaborate the outcomes. 39% (13 people) abstained from their opinions, and the remaining 12% (4 people) positively rated the outcomes. The negative opinions are mainly focused on key products such as the inventories and good practice guides for WEEE, and to a lesser extent in relation to the inventory of obsolete pesticides and the diagnosis of the empty pesticide containers program. With respect to the general progress of the project, most of the 54 interviewees rated it as deficient or regular.

As for financing, the project has a cash donation from the GEF for US \$ 5.72 millions. The project also includes cofinancing commitments for a total of US \$ 23.1 million, totaling a budget of US \$ 28.82 millions. Disbursements of GEF resources only reach 32% of the initially budget planned for the first half of the project. The cofinancing has not been estimated yet by the PCU.

Main Conclusions

In general terms, the project strategy is clear and logical, although its lack of goals for the midterm evaluation of the project has been identified as a weakness. With respect to its relevance, the project is completely necessary and is aligned with Mexico's NIP and international commitments in this matter and is also supported by the legislation.

In terms of project implementation, the decisions made by the PCU and SEMARNAT have caused that implementation of the most important components of the project has been systematically postponed. Likewise, the incorrect understanding of the PCU and SEMARNAT on the strategy and the execution time of the activities proposed in the Prodoc are also causing delays. If the current approach of the project continues, it is very likely that the goals of elimination and reduction of POPs in WEEE and POPs pesticides cannot be accomplished at the end of the project, also due to the complexity of these activities.

UNDP needs to make a greater effort in M&E of the progress of the project by conducting more visits in the field and having a more independent relationship with project's stakeholders.

The TAC and the technical working groups are not contributing to obtain the project's results, mainly due to the lack of effective participation of stakeholders and the absence of a clear work agenda that defines roles, deadlines, procedures and goals. If this way of organization continues, these groups will be merely recipients of information.

There is a greater problem in the integration of the PSC, since the WEEE sector does not have representatives in the Committee, which has caused a notorious imbalance in favor of the topic of pesticides, considering that SENASICA / SAGARPA is participating in the PSC.

The adaptive management carried out by the PCU has been limited mainly due to a very rigid management, which has not allowed the working groups and the TAC to participate effectively and provide their contributions.

Regarding the inclusion of the gender perspective, the reports include statistics that show the participation of women in the activities promoted by the project, but a gender mainstreaming strategy has not been developed. The strategy should address the specific problems related to women participating in the activities on WEEE and obsolete pesticides. The PCU reported that a consultancy will be carried out to address this issue.

At the time of the evaluation, the disbursements made correspond only to 32% of the disbursements planned in the Prodoc (US \$ 947 thousand versus US \$ 2.92 millions) and the degree of compliance of cofinancing cannot be assessed since the PCU has not made this estimation yet.

Lessons Learnt

When initiating the implementation of a project, implementers must be very careful to avoid to extend the scope of activities and outputs for which the project has not been designed and, therefore, is unable to provide solutions.

During the project design, attention must be paid to include midterm goals in order to facilitate the midterm evaluation and, at the same time, provide a clear reference on the estimate of the progress to be accomplished during the first half of the project.

if two topics that have little relation to each other are included in a single project (in this case the only common aspect between the two topics addressed in the project is the POPs), care must be taken in the design of the implementation structure, in which the roles and responsibilities of each topic are clearly separated.

When participation bodies are created to support project implementation, it must be ensured that the participation of stakeholders is real and not only "on the paper". In addition, these bodies must have scopes, attributions, work agendas, objectives, goals and deadlines clearly defined in order to have a systematic operation during project implementation.

In the same way, when the collaboration of key stakeholders is requested, it is expected that they wish to have a more active role in the decision making related to their expertise, for example, to provide comments on TdR, guidance on technical consultancies, review of progress reports, etc. It cannot be assumed that they will act as mere beneficiaries of the project.

The mere preparation of the AOP from sheets in Excel is not enough to explain the approach strategy used by the executing units of the projects. AOP should be supported by clear and concise strategy documents.

Recommendations

- Extend the project an additional year and stop/pause ongoing and scheduled activities.
- Take 1-2 months to understand the logic and plan the focus and organization of the project. Use as a consultant the project designer (1-2 weeks) to explain exactly the objectives, scope, activities, etc., to the Project Coordination Unit. The project designer may have a role as a external project advisor.
- <u>Reorganize the PCU in order to have a Project Coordinator and two Thematic Specialists,</u> one for pesticides and the other for WEEE. These specialists should be under the supervision of the Project Coordinator, and may organize and coordinate the aspects related to their

expertise and according to specific Terms of Reference. The Project Coordinator should have extensive and recognized experience in the subject of waste and to coordinate large-scale projects, along with a great capacity to dialogue and interact with high levels of authority. The Thematic Specialists should be recognized as experts in each of the subjects (pesticides and WEEE).

- Include local coordinators in the pilot states, which should have an effective dialogue with state and municipal authorities, as well as an effective interaction with local and private stakeholders (electronic and Recycling and Reuse companies, farmers' organizations, etc.).
- Reorganize the national technical committees of the project: define formal work agendas, which should have clarity in the desired objectives, activities and deadlines. Moreover, define the roles of stakeholders and the scope and attributions of these committees (e.g. carry out specific TORs consultations, review partial reports and collaborate to ensure outputs quality, etc.).
- ✓ Consider the establishment of technical committees at state/local level, which should have the same logic as the national committees aforementioned.
- ✓ A mission of the Panama UNDP's Regional office to the country would be very positive. UNDP Mexico and the Regional office should explain the objectives, main outputs and outcomes of the project to the new federal and state authorities at the highest possible level.
- ✓ Give urgency to activities/outputs that lead to the elimination/reduction of POPs, such as pilot demonstration projects in the formal recycling sector, state management plans and elimination of 96 tons of pesticides identified (as a sign of progress).
- ✓ Assess the convenience of retaking the TV recovery plan derived from the analog switch-off, once the legal resolution against the federal government is resolved during the project implementation time, and electronic waste can be mobilized.
- Carry out a technical evaluation of the main outputs of the project, (for example, inventories and management plans for WEEE and pesticides) considering the Prodoc and the proposed reorganization for the PCU. Plan adjustments to the work already done in order to focus on the main approach of the project: POPs in WEEE and pesticides, their sound management and disposal/elimination, adoption of good practices and lessons learned.
- ✓ Start thinking about the elaboration of the exit strategy of the project at least 1 year before its completion.
- ✓ Prepare a project gender strategy immediately.
- ✓ Begin the development of a replication strategy during the last year of the project.
- Establish a simpler M&E system focused on accomplishing results rather than activities, with field visits plan, ad-hoc indicators, internal reports and follow-up of consultancies.
- ✓ Improve the AOP through the preparation of supporting documents that clearly explain the strategies to address the different outcomes and outputs of the project, the priorities established and the relative importance of each output and activity, as well as establishing their logical sequence for each one.
- Implement a reporting system for cofinancing contributions from the different institutions. It is suggested to generate a system similar to the system implemented by the UNDP-Uruguay project "Environmental Sound Life-Cycle Management of Mercury Containing Products and their Wastes".

Project ra	Project rating						
Parameter	MRT Assessment		Description of the achievement				
Project strategy			It does not apply at this stage				
	Level of achievement of the global environmental objective: Minimize negative impacts on health and the global environment through chemicals' appropriate management and handling operations and reduction of POPs' emissions, as well as exposure to POPs from electronic and pesticide wastes in Mexico.	U	Considering the current project management approach and the delays noted in the elimination of POPs in both WEEE and pesticides, the overall environmental objectives could be partially met, with severe deficiencies.				
	Level of achievement for the development objective (not explicitly declared in prodoc): development of national and states' capacities to develop and implement a sound management and disposal system for WEEE and pesticide wastes containing POPs in the country (it includes legislation, control, sound management and final disposal), in order to meet the commitments set out by the Stockholm Convention		SEMARNAT's internal management on hazardous waste and Colima's state authorities are expected to be strengthened. WEEE's recycling companies and SENASICA would also be favored in the management of their respective activities, as well as customs office and INECC, which would strengthen their role. However, the prospect for the short and medium term for the approval of amendments to the legal framework for WEEE and empty pesticide containers' wastes is not positive due to the lack of discussion of the proposed regulations and the resistance of the industry involved.				
Progress in achieving results	<u>Level achievement of Result A:</u> National legal and regulatory framework strengthened	MS	A legal proposal for discussion in Congress could be available, as well as have customs and Profepa officials trained. However, with the current approach for training focused mostly on pesticides, competences of these entities in identifying WEEE containing POPs would not be strengthened, nor on the nature of these residues.				
	Level of achievement for Result B: Development and implementation of pilot management plans at state level in Baja California, Jalisco and Federal District and dissemination to the rest of the country.		Inventories for WEEE were carried out with an expanded scope from 5 to 34 products, blurring completely the POP issue in this inventory; generators of e-wastes and POP containing products not identified or estimated. On the other hand, the assessment of WEE's state plans is stopped, and development of state pilots' plans does not begin, and no formal dissemination and training strategies are observed. The project has already developed the best practices and available technology guides for WEEE, without first implementing WEEE's pilot management experiences in the pilot states, so it is very likely that these guides will not reflect the experience or reality of the country on this issue.				
	<u>Level of Achievement of Result C</u> : Demonstration on minimization of POP emissions in formal and informal recycling facilities of electronic wastes.	U	Implementation approach focused on assessments and limited stakeholder participation, with significant delays in the main project components. At this pace of implementation and with the current project approach, the goal of				

Parameter	MRT Assessment		Description of the achievement
			elimination of POPs in WEEE and pesticide wastes, could be partially achieved with significant implementation issues
	<u>Level of Achievement Result D:</u> Establishment of a provincial-level plan for management of confirmed POPs' pesticide wastes in selected provinces.	MS	Colima's state plan is for review in SEMARNAT, but the other two do not yet begin. The inventory of pesticide wastes lacks technical rigor, is inconclusive and does not have a robust, objective and consensual strategy to identify additional stocks. The study of options for destruction of these wastes questions the technical suitability of the only authorized facility to incinerate this type of waste, remaining only the options of export of wastes and to continue the co-processing tests in cement facilities prior approval by SEMARNAT, or its confinement at an authorized site. Some of the results could be achieved, but with significant deficiencies.
	<u>Level of Achievement Result E:</u> Substantial elimination of the remaining stocks of POPs pesticides and wastes in Mexico.	U	Considering the current project management approach, the delays observed in the elimination of POPs pesticides and associated wastes, the overall environmental objectives could be partially met with severe deficiencies.
	Level of Achievement Result F: Containment or remediation of priority sites contaminated POPs pesticides and national programme for treatment of remaining sites.	MU	Potential contaminated sites have not been identified in order to implement their respective remediation plans, and there is no robust and clear strategy for identification and prioritization of sites. In addition, the PCU has a misunderstanding of the project's strategy, as it develops a national plan on contaminated sites before conducting field experiences, so it starts upside down. Therefore, partial results could be obtained
	<u>Level of Achievement Result G</u> : Institutional strengthening at state level for obsolete pesticides management.	MU	There is a misunderstanding of the project strategy established in the Prodoc. The national capacities' assessment was not carried out, which was an activity prior to the design of national guidelines on obsolete pesticide management, and to the replication plan. With this approach, the result could be partially achieved, but with shortcomings in its concept and usefulness.
Project execution and adaptive management		MU	Lack of strategies for approaching stakeholders and the misunderstanding of the project strategy, as well as the lack of real participation of the actors involved, leads to the PCU having no alternative pathways to address the different situations encountered and, therefore, rigid management is implemented.
Sustainability		MU	The main risk is the current approach of a non-participatory management and misunderstanding of the project strategy, which results in most actors not having ownership of the project's outputs and results.

1. Introduction

MTR purpose and objectives

The evaluation corresponds to a Mid-term Evaluation of the project "Sound Management of POPs Containing Waste in Mexico", which was requested by the Country Office of the United Nations Development Program (UNDP). UNDP acts as the implementing agency of the Global Environment Facility (GEF). In particular, the purpose of the evaluation is to: identify potential problems in the design of the project; assess progress in achieving the objectives established in the Project Document (Prodoc) and the use of economic resources and the financing; identify and document lessons learned; and provide recommendations on specific actions that must be carried out to improve project implementation. The evaluation period runs from October 13, 2015 to September 30, 2018. Although, it is important to mention that project activities started on April 25, 2016, since there were delays in the hiring of the Project Coordinator and the establishment of the Project Coordination Unit.

The evaluation was based on criteria of relevance, effectiveness, efficiency, impact and sustainability, which are established in the Guidance for Conducting Midterm Reviews of UNDP-Supported, GEF-Financed Projects, developed by UNDP for mid-term evaluations. In addition, the evaluation examined the following aspects of the project:

- i. Design and strategy of the project
- ii. Progress in achieving results
- iii. Sustainability of the results
- iv. Project implementation and adaptive management
- v. Project risks
- vi. Logical Framework Analysis

Points ii) throughout iv) were rated according to the scales used in the aforementioned Guidance, which are presented in Table 4. In addition, the conclusions were developed and recommendations were issued as a result of the project evaluation. The definitions for the different points evaluated have been described in the Terms of Reference (TORs), but a summary of these points is included in the following lines:

- i. The relevance of the project was analyzed along with the participation requirements of key stakeholders in order to verify that these requirements have been met during the project implementation. Also, the results framework was analyzed to verify that results have been correctly obtained and are in line with the SMART criteria;
- ii. It was determined how the project has evolved with respect to the indicators of progress and the project contribution to policies and programs of the UNDP, GEF and the national government.
- iii. Regarding the project implementation, the management arrangements used, the quality of the implementation by the executing agency, the adaptive management, the M&E and the adjustments made, the participation of stakeholders, as well as the management of the finances were analyzed.
- iv. The risks that could affect the sustainability (financial, technical, socio-economic, institutional and political) of the actions carried out during the project implementation were also analyzed.

v. The evaluation addressed the criteria of Relevance, Effectiveness, Efficiency, Sustainability and Impact, described in the Guidance developed by UNDP.

In this way, it is expected that the Mid-term Evaluation will extract the lessons learned and deliver recommendations that improve the viability of the project in terms of its implementation, results and future sustainability. Likewise, it is expected that the evaluation will allow UNDP and its partners to identify the signs of success or failure of the project's implementation, in order that necessary adjustments can be made to direct the project towards the accomplishment of its results.

Scope and methodology

As mentioned previously, the methodology to conduct Mid-term Evaluations of the UNDP was used. This methodology is based on the results and the cause-effect relationship of the activities carried out, in which it is expected to obtain a direct relationship between the inputs and the outcomes obtained. In addition, the evaluation identifies the contribution of the interventions in the improvement of the systems intervened, in terms of financial matters, regulation and control, and strengthening, among others.

Project stakeholders included government institutions at the federal, state and municipal levels; industry associations; recycling companies; UNDP; and civil organizations, among others. To obtain the testimonies of these stakeholders, specific semi-structured interviews were used for each stakeholder, which covered the criteria of relevance, effectiveness, quality of implementation and use of resources, as well as the use of work plans and monitoring and evaluation tools (included the Tracking Tools). The evaluation was carried out in a participatory manner in order that people involved in the project were able to provide their opinions on the design and implementation of the project and areas for its improvement. To ensure the reliability of stakeholders' testimonies, the interviews were conducted in private in order to protect the sources of information.

To accomplish the objective of this evaluation, the evaluation questions matrix was elaborated (see Annex 5). Nevertheless the above, the different stages of the project were analyzed, as well as, the financial and adaptive management, in accordance with Table Nº1.

Stage	Criteria	Item to review
	Relevance	It will try to verify if the project is aligned with priorities and programs from GEF, UNDP, national and local government agencies, and project's beneficiary actors. Verify if outputs and expected outcomes from the project are in line with the problem scale, level of financing, implementation time, institutional capacities and economic, social and political facts, and project location.
Design	Project indicators	Check if indicators established on the Prodoc comply with the SMART criteria.
Design	Implementation arrangements	Assesses agreements and consultations made with relevant stakeholders, before the project was approved by GEF. It also verify if responsibilities for each stakeholder are specified "a priori" in the Prodoc.
	Assumptions and risks	Assesses main information sources and its accuracy to verify that main project assumptions and risks had a factual basis. In this aspect, baselines, stakeholder and development context analysis are essential
	Institutional capacities	Verify if project design analysis properly considers the implementation capabilities of each relevant stakeholder. The project contribution to

Table N°1: Analysis plan implemented

Stage	Criteria	Item to review			
		institutional strengthening of stakeholders (government, companies from energy sector, communities involved, etc.) will also be verified.			
	Gender approach	Verify if the project includes a gender approach for women participat and provide equal opportunities to them. Also, if the project beneficiar are equitable for men and women. In case of a gender approach is included in the project, it will be necessary to make recommendations integrate this issue in the project.			
	Integration	Verify if the project took advantage of experiences from similar projects previously implemented.			
	Use of M&E tools	Verify if the project logic framework matrix was used as management tool. Also, if there was a systematic mechanism of M&E to provide recommendations on project adjustments, and if there were proper and checkable annual work plans.			
	Financing	Check if project resources and co-financing are suitable to the current situation and if commitments for financing are being accomplished. Besides, verify the elaboration of annual budgets and if procurement standards meet UNDP standards. Also, if there was monitoring for expenses, audits and leverage of additional resources. Verify if the M&E system had the necessary resources to accomplish its work. Analyze effectiveness and efficiency of expenditures. Identify weakness and strengths and make recommendations to improve weaknesses found.			
	Quality of UNDP support	Verify if there is a results-oriented approach, and assess the type of support provided and its appropriateness (technical, management, facilitation), as well as the quality of risk management, annual reports and national ownership.			
	Project's national executing agency	Verify if there are contingency plans, M&E, proper risk management, quality of annual reports, national empowerment.			
Execution	Interaction with stakeholders	Verify if activities/outputs/outcomes planned have been obtained during project implementation. Verify the work of the Directive Committee, type of decisions made and the activity of stakeholders.			
	Adaptive management	Verify if project management adapts to the real context of implementation. Potential causes of this situation would be improper indicators, change of economic, political and social contexts, very ambitious objectives, new stakeholders, etc. Verify if exists a project revision and if proposed changes are being implemented and if these changes are affecting project results.			
	Attainment of results	Verify if project objectives were achieved (global and development) or are on track. Verify if activities and outputs are being implemented as planned in the Prodoc. Verify if impacts will be obtained when the project is finished and in the long term.			
	National ownership	Verify if project results, its activities or objectives are in the plans, programs, policies, regulations from government and stakeholders.			
	Mainstreaming	Assesses the level of involvement of actors in project implementation. Verify if results are in line with priorities from UNDP, GEF, national government, local authorities and stakeholders. Also, If there has been Income generation as a result of the project, or If poverty has decreased			

Stage	Criteria	Item to review			
		or there has been an improvement of governance in areas intervened by the project.			
	Integration	Verify how the project was coordinated with other similar and/or complementary projects, which may be from UNDP or not, and may be implemented in the same areas intervened by the project. It will also check if there is an approach for gender and minority groups (for instance, to verify equal access to opportunities, benefits and information). In the same way, it will check if there is a human rights approach (for instance, if there is a promotion of civil organizations, transparency, effective participation on decision making processes and freedom of expression).			
	Sustainability	Verify if there are regulatory, financial and political conditions to sustain project results in the future. Identify if there are social, political, environmental, governance and financing risks that would affect sustainability of project results.			
	Replication	Verify if there are opportunities to replicate the project experience other sectors and locations, and to disseminate lessons learnt.			
	Impacts	Verify if development objectives are being achieved and if reductions of environmental stress targeted by the project are on track. Analyze cause -effect of project impacts and their probability of permanence.			
		permanence.			

In order to assesses progress towards results, a matrix with indicators and mid-term goals and finalterm goals was elaborated and rated according to UNDP's MTR Guidance. The format of the matrix is shown in Table N°2.

Goals/Objecti ves/Results	Indicator	Baseline	Level of 1st PIR (self- reported)	Midterm target	End-of- project target	Midterm Level and Assessm ent	Achievement Rating	Justification for rating
Objecti								
ve								
Result 1								
Result 2								
Result 3								
Result 4								

Finally, rating for the project was made according to each stage (design, implementation, results, sustainability) and the scheme shown in Table N°3. The ratings used for each project stage are shown in Tables N°4,5 and 6.

Table No3: MTR Ratings and Achievement Summary used by GEF¹.

Measure	MTR ratin	g	Achievement Description
Project strategy	N/A		
Progress towards results	Level of attainment of the objective Level of attainment of Result 1 Level of attainment of Result 2 Level of		
	attainment of Result 3		
Project implementation			
and Adaptive			
management			
Sustainability			

Table Nº4: Ratings for Progress towards Results and Objectives.

Rating	Abbreviation	Concept
Highly Satisfactory	HS	The objective/outcome is expected to achieve or exceed all its end- of-project targets, without major shortcomings. The progress towards the objective/outcome can be presented as "good practice".
Satisfactory	S	The objective/outcome is expected to achieve most of its end-of-project targets, with only minor shortcomings.
Moderately Satisfactory	MS	The objective/outcome is expected to achieve most of its end-of- project targets but with significant shortcomings
Moderately Unsatisfactory	MU	The objective/outcome is expected to achieve its end-of-project targets with major shortcomings.
Unsatisfactory	U	The objective/outcome is expected not to achieve most of its end- of-project targets.
Highly Unsatisfactory	HU	The objective/outcome has failed to achieve its midterm targets and is not expected to achieve any of its end-of-project targets.

¹IDEM 2, page. 19

Table No5: Ratings for Project Implementation and Adaptive Management used.

Rating	Abbreviation	Concept
Highly Satisfactory	HS	Implementation of all seven components – management arrangements, work planning, finance and co-finance, project-level monitoring and evaluation systems, stakeholder engagement, reporting, and communications – is leading to efficient and effective project implementation and adaptive management. The project can be presented as "good practice".
Satisfactory	S	Implementation of most of the seven components is leading to efficient and effective project implementation and adaptive management except for only few that are subject to remedial action.
Moderately Satisfactory	MS	Implementation of some of the seven components is leading to efficient and effective project implementation and adaptive management, with some components requiring remedial action.
Moderately Unsatisfactory	MU	Implementation of some of the seven components is not leading to efficient and effective project implementation and adaptive, with most components requiring remedial action.
Unsatisfactory	U	Implementation of most of the seven components is not leading to efficient and effective project implementation and adaptive management.
Highly Unsatisfactory	HU	Implementation of none of the seven components is leading to efficient and effective project implementation and adaptive management.

Table No 6: Ratings for Project Sustainability used.

Rating	Abbreviation	Concept
Likely	L	Negligible risks to sustainability, with key outcomes on track to be achieved by the project's closure and expected to continue into the foreseeable future.
Moderately Likely	ML	Moderate risks, but expectations that at least some outcomes will be sustained due to the progress towards results on outcomes at the Midterm Review.
Moderately Unlikely	MU	Significant risk that key outcomes will not carry on after project closure, although some outputs and activities should carry on.
Unlikely	U	Severe risks that project outcomes as well as key outputs will not be sustained.

Methods and procedures for data collection

The kind of information analyzed, which was generated during the development of the project, was the following:

- The information generated by the project team (progress reports, studies carried out, minutes of meetings of the committees created, among others).
- Contextual information (policies and government plans, institutional programs, technical studies and scientific articles on POP pesticides and electronic waste, among others).
- Information integrated of other activities and policies (e.g. similar complementary projects under implementation).
- Baseline information and situation regarding the project.

The methodology used to collect and analyze the information was the following:

- Documentary review: Project Document (Prodoc), project progress reports and other publications derived from project activities (consultancies, baseline studies, technical papers, financial statements, etc.) were analyzed;
- Interviews to key stakeholders: interviews to project team, UNDP officials, government officials involved in the project, participating civil society organizations, electronic waste recycling companies, pesticide associations, customs laboratory, among others (for more details see Annex 6) were made. Thus, a set of open and semi-structured questions were proposed to be applied to people to be interviewed.
- Direct observation in the field: Visits were made to electronic waste recycling companies and to a warehouse that stores pesticides.

The information compiled was analyzed using the method of triangulation or cross-checking of information, in order to compare and verify key situations of project implementation with the information collected through interviews and progress reports and other publications. Thus, conclusions obtained will be balanced and objective to the extent possible to avoid the bias of the informants.

It is highlighted that interviews, conducted to key stakeholders, provided information and points of view alternatives to those provided by the project team and the UNDP. The interviews were conducted with as many stakeholders as possible, including the perspective and opinions of different stakeholders and sectors involved in the project. This may partially compensate for the subjectivities and bias of informants. It is worth mentioning that interviews were private and did not have the presence of the project team or UNDP, in order to protect the confidentiality of the source.

In particular, to visualize the adaptive management of the project, the Prodoc, including its assumptions, risks, indicators, results, etc., was contrasted with the current progress of the project, to identify adjustments made during project implementation. Also to verify that these adjustments have contributed to the accomplishment of project objectives and results. This same exercise was carried out to determine the relevance and participation of stakeholders.

The financial analysis was focused on the review of the expenditure and co-financing figures shared by the project team. The information published in the UNDP ATLAS system was also revised. This exercise tried to visualize general aspects of budget execution, such as the weight of the expense of the project personnel respect to the total budget; the evolution of the expense by year and by category or output, the expenses on consultants, etc. As a reference, the annual audit carried out on UNDP projects was also reviewed. Moreover, the observance of the procurement norms of UNDP was verified through interviews with UNDP procurement staff and the PCU. No acquisitions of great cost were identified.

The evaluation questions matrix (Annex 2) presents the type of information required and its sources.

Activities performed

The activities carried out are described below, which are in accordance with the Work Plan presented in the Evaluation Inception Report.

Activity 1. Presentation of the UNDP Mexico team to the consultants in charge of the evaluation. Through a Skype videoconference, held on August 7, 2018, the presentation of the UNDP Mexico team was made to the consultants conducting the evaluation. In the virtual meeting, the project progress was broadly addressed in order to discuss the most suitable sites to carry out the mission. It was agreed that mission would be carried out from October 1 to 15, 2018 and include field work in Mexico City, Colima -to address mainly the issue of management and elimination of identified obsolete pesticides- and Jalisco -due to the progress achieved related to the management of electronic waste-.

Activity 2. Request and review of information on the project. Prior to the start of the evaluation, the information generated during project implementation was requested to the person in charge of the Monitoring and Evaluation of the project. This information is part of the most relevant information for the evaluation. The information requested is presented in Annex 3.

Activity 3. Making the Inception Report. This activity corresponds to the elaboration of the Evaluation Inception Report, which explained the objective and scope of the evaluation, and the methodology to be used to ensure that the evidence generated is credible, reliable and useful, thus this supports the recommendations that derive from this evaluation. The Evaluation Matrix was also included, which specifies the main evaluation criteria, and the indicators and milestones that would be contrasted against these criteria. The report also included the work plan with the breakdown of activities to be carried out and the outputs to be generated along with a description of the planning of the mission and its tentative agenda.

Activity 4. Accomplishment of the mission. Based on the Inception Report, field work was carried out to collect empirical information, which was the other part of the relevant information for the evaluation. During the evaluation mission, a project discussion was carried out with the Project Coordinating Unit. During these sessions, the progress of each component and objective of the project was discussed, in order to understand how the project is being implemented, which are the strengths and weaknesses of the project implementation and design process, and the future sustainability of its activities and results. The mission's agenda was also discussed with the Project Coordinating Unit and UNDP.

Field visits and interviews were conducted in Colima and Tecomán (state of Colima), the city of Guadalajara (Jalisco state), the city of Queretaro (state of Queretaro) and Mexico City. The criteria for the selection of these sites were based on the level of progress of the activities, the relevance of the progress, the possibility to add relevant states to the project (this is the case of Queretaro) and the coverage of the two central themes of the project: POP pesticides and electronic waste.

The mission included a closing meeting, held on October 15 at the SEMARNAT facilities, in which the preliminary findings were presented by the consultants to the Project Coordinating Unit, UNDP and SEMARNAT officials. The evaluation schedule is shown in Table 7.

Table Nº7: Schedule of the Mid-term Evaluation

		August, 20	18			Septemb	oer, 2018			0	ctober, 2018				November,	2018			Dece
Task name	Aug 5	Aug 12	Aug 19	Aug 26	Sep 2	Sep 9	Sep 16	Sep 23	Sep 30	Oct 7	Oct 14	Oct 21	Oct 28	Nov 4	Nov 11	Nov 18	Nov 25	Dec 2	Dec 9
Video conference inception meeting	•																		
INception Report					•														
Evaluation mission																			
Draft Report															•				
Report Review																			
Final Report																			

Mission Planning

Once the mission's agenda was discussed with the Project Coordinating Unit and UNDP, this Unit was in charge of coordinating the interviews and visits with stakeholders. The final version of the agenda is presented in Annex 3. Annex 4 presents the final list of interviewed stakeholders, which accounts for a total of 53 people. The interviews covered a wide spectrum of stakeholders at the federal level such as SEMARNAT and SENASICA-SAGARPA, and State authorities of Jalisco, Baja California, Queretaro and Colima (such as the Ministry of Health and Social Welfare of Colima) and Mexico City. The interviews also included representatives from UNDP, NGOs, recycling companies, business associations of the electrical and electronic sector and pesticides, and research institutions.

In general terms, the topics discussed were the following: i) level of institutional strengthening; ii) level of ownership of project results by stakeholders; iii) level of coordination and participation of stakeholders during the design and implementation of the project; iv) quality assurance processes of the studies/consultancies carried out; v) projections of project implementation activities; and vi) level of coordination among the participating institutions (SEMARNAT, state and municipal governments, recycling companies and among others involved).

Methodology limitations

The strength of the methodology lies in its participatory approach and the broad coverage of the interviewed stakeholders, which allowed evaluators to have a vision of the project from different perspectives, including the perspective of the beneficiaries, implementers, the advisors or participants in technical committees, stakeholders which may subject to regulation, participants in the pilot studies, officials from UNDP Mexico and the Latin American and Caribbean region, and project designers. This large number of stakeholders can reduce the bias of the informants.

However, since the evaluation has a specific time frame, the analysis of the evidence was focused on the most relevant issues that may affect the accomplishment of project's objectives, leaving aside possible problems that would provide a complete view of project status.

It is also important to mention that the mission was carried out in the transition period towards a new administration of the federal government in the country, which generated uncertainty about the full project adoption by the incoming administration.

Evaluation report structure

This report has <u>6 sections</u>. The <u>cover page</u> shows a general information of the project (project budget, identification codes, implementing agencies, deadlines, etc.), followed by <u>a list of</u> <u>abbreviations</u> and <u>an executive summary</u>, in which the reader can find an outline of the project, the main findings, recommendations and conclusions, along with the general qualification of the project.

In <u>Section 1</u>: Introduction, the scope and objectives of the evaluation work, the description of the methodology used and the main milestones of this work can be found in this section.

<u>Section 2</u> focuses on the analysis of the country's development context, the problem addressed by the project and the planned approach to solve it, deadlines for the project implementation, its immediate objectives, expected results and key indicators, as well as arrangements for coordination and partnerships with stakeholders.

<u>Section 3</u> shows the findings of the evaluation, which cover the design, implementation (of activities and financial), results obtained and sustainability of the project.

In <u>Section 4</u> the rating of the project can be found, and <u>Section 5</u> shows all the conclusions, recommendations and lessons learned. Finally, <u>Section 6</u> presents the annexes, in which information on the mission's agenda, the TdR of the consultancy (Annex 1), the Logical Framework Matrix (Annex 2), the list of persons interviewed (Annex 4) and the list of documents reviewed (Annex 6) are included.

2. Project description and its development context

General context

Mexico is a country with large economic and demographic dimensions. At the beginning of 2018, it occupies the tenth position in the world in population with 124.7 million inhabitants. At the end of 2017, the country had a Gross Domestic Product (GDP) of \$ 18.2 billion pesos. From 2007 to 2017, the annual variation of growth in terms of GDP has gone down, from 2.2% to 2.05%. This period included several fluctuations and the 2008 crisis, which aggravated its economy, causing GDP to decrease by -5.2% in 2009. As the political uncertainty related to the electoral political cycle decreases, investment growth is expected to be accelerated from the end of 2018 onwards.

The contribution to the GDP of the primary sector (agriculture, livestock, forestry, fishing and hunting) was 3.2% with \$ 579.2 million pesos at the end of 2017; to the secondary sector was 29.6% with 5.4 billion pesos and to the tertiary sector was 62.8% with 11.4 billion pesos. In the last decade, the variation of the contribution of the primary sector has remained constant from 2007 to 2017, going from 3.1% to 3.2%; for the secondary sector has gone down from 34.5% to 29.6%, which has been affected by a substitution effect of the tertiary sector that has increased in the period from 58.1% to 62.7%.

In terms of human development, Mexico is considered to have a 'high human development' with an HDI of .077 reported at the end of 2017. However, 43.6% of the population approximately still lives in poverty, with 7.6% in food poverty or extreme situation at the end of 2016. These figures show the great inequality that prevails in the country. Mexico is one of the most unequal countries in the world, with a Gini index of 0.43. Thus, in terms of income, the three richest deciles concentrate 63% of the country's total wealth, while the three poorest deciles concentrate only 9%. Disparities in income are added to inequities in terms of access to public services, implementation of human rights and marginalization between states, and between municipalities inside states.

Situation of electronic waste containing POPs in Mexico

Electronic waste is a growing concern in Mexico, as in the rest of the world, since the manufacture and use of electronic products increases without the development of adequate management schemes for post-consumer waste (INECC, 2006). According to the Prodoc, an e-waste generation between 150,000 y 250,000 tons per year was estimated for the country in 2006, considering that the half of 300,000 and 500,000 tons are recycled or disposed of. In 2013, an estimate revealed a

generation between 613,643 and 753,205 tons per year. According to the Prodoc, as a result of the change from analogue to digital television in the country, this last estimate must be added to a generation of approximately 500,000 tons of waste between 2014 and 2015, due to the disposal of 50 million TV sets.

The POPs present in the components of the electronic devices correspond to Polychlorinated Biphenyls (PCBs) and Polybrominated Biphenyls (PBDEs), the latter known as brominated flame retardants, in which the OctaBDE-c is included. According to the National Implementation Plan of Mexico (2016), between 1970 and 2004, a significant proportion of the global production of OctaBDE-c was used as a flame retardant in plastic housings and other parts of electronic devices. These devices include computers, their monitors and televisions with cathode ray kinescope. Thus, 242,415 tons of plastic contaminated with OctaBDE-c were determined for Mexico based on an estimate of the volume of computer stocks monitors and televisions with kinescope manufactured before 2005, which will require an environmentally appropriate treatment.

In Mexico City, the presence of PBDEs was detected in the leachate and sludge of the Bordo Poniente landfill, currently closed, and in the effluents and sludge from the San Juan Ixhuatepec wastewater treatment plant (García, et al., 2017). They were also detected in the sediments of four coastal lagoons in Yucatan, Mexico (Valenzuela, et al., 2018), as well as in the coastal marine sediments of Baja California (Macías, et al., 2016).

Situation in the pilot states

a) **Baja California.** This state closed 2016 with a GDP of \$ 527,730 million pesos in constant prices. 55% of its economic activity is made up of tertiary activities, with trade contributing significantly to GDP. Baja California hosts the largest number of economic units manufacturing electronic devices, accounting for 190 in 2018, mainly in Tijuana and Mexicali. The existence of an authorized company for the recycling of cathode ray tubes and leaded glass from monitors and waste TVs is highlighted.

b) <u>Jalisco.</u> The state of Jalisco recorded a GDP of \$ 1,159,662 million pesos in 2016. Its main economic activity is made up of tertiary activities with 62.2% contribution, especially trade. Jalisco is another of the states that groups several companies manufacturers of electronic devices has currently (2018) 112 economic units that manufacture electronic devices.

c) <u>Mexico City.</u> Mexico City had a GDP of \$ 2,958,539 million pesos in 2016. 89.6% of its economic activity is made up of tertiary activities, mainly commerce. Currently, Mexico City has 114 economic units that manufacture electronic devices. It has three authorized companies for the handling of polychlorinated biphenyls residues.

POPs pesticides and associated waste

As a result of government support for industrialization and agricultural technification, Mexico was a major producer of organochlorine pesticides in Latin America, becoming the main producer of DDT in the region since 1959 and also increasing its capacity for the production of other insecticides like toxaphene. In 1968, the federal government created parastatal agrochemical industries dedicated to the production of DDT, hexachlorobenzene and toxaphene. These include FERTIMEX, which was subsequently privatized and is currently identified as one of the most important contaminated sites with POPs pesticides. Between 1975 and 1981, the annual average of organochlorine consumption was 3,550 tons, which was gradually decreasing. In 1984, it only represented 10% of the total chlorinated consumption (Romero, 2009).

Due to international pressure, the privatization of FERTIMEX and the interruption of agricultural support many formulators closed and the use of pesticides decreased in the country. In addition, the economic crisis of late 1994 and the signing of the Free Trade Agreement with the United States

and Canada, which discouraged the development of national agriculture of small and medium farmers (Romero, 2009). The current legal situation of POPs pesticides in the country is shown in Table 8.

In 2008, Mexico participated in the project *Elimination of DDT reserves in Mesoamerica*, in which approximately 87.5 tons of DDT inventoried in the country were exported for incineration in France (OPS, 2008). According to the Prodoc, SEMARNAT has currently an inventory of POPs pesticides and associated waste of 308 tons, of which, according to the dangerousness level category, 42% are highly hazardous and 38% are classified as extremely dangerous.

A biomonitoring study, conducted in children living in the vicinity of contaminated sites in the country, identified high concentrations of POPs in 55% of the cases.

Currently, an annual production of 65,000 tons of pesticides is estimated, whose main use is concentrated in the states of Sinaloa, Chiapas, Veracruz, Nayarit, Colima, Sonora, Baja California and Tamaulipas..

Prohibited	Without registration	Registries recently canceled	With current registration
Aldrin	Heptachlor	Chlordane	PFOS sulfluramide
Dieldrin	Hexachlorobenzene (HCB)	Lindane	Pentachlorophenol and its salts
Endrin	Toxaphene	DDT	
Mirex	Pentachlorobenzene	Endosulfan	
Chlordecone	Alpha-Hexachlorocyclohexane		
	Beta- Hexachlorocyclohexane		

Table 8. Legal status of POPs pesticides in Mexico

Institutionality

The Ministry of Environment and Natural Resources (SEMARNAT), through the General Office of Integral Management of Materials and Risky Activities (DGGIMAR), is the main partner institution in the implementation of the project, followed by the National Health Service, Safety and Agrifood Quality (SENASICA) of the Ministry of Agriculture, Livestock, Rural Development, Fisheries and Food (SAGARPA), which supports work related to POPs pesticides and associated waste.

SEMARNAT was created in 2000 aiming at promoting a national policy of environmental protection that would respond to the growing national expectation of protecting natural resources and achieving an impact on the causes of pollution and the loss of ecosystems and biodiversity. It is necessary to highlight that the environmental policy is a governmental cross-cutting policy. The responsibilities conferred by the General Law of Ecological Equilibrium and Environmental Protection, relevant for this evaluation, are the following:

- ✓ The formulation and implementation of the national environmental policy
- ✓ The application of environmental policy instruments and the regulation of actions for the preservation and restoration of the ecological balance and the protection of the environment that take place in assets and areas of federal jurisdiction
- ✓ The issuance of Mexican official standards and the monitoring of their compliance in the matters indicated in this Law

- ✓ The regulation and control of activities considered highly hazardous, and the generation, management and final disposal of materials and waste that are dangerous for the environment or ecosystems, as well as for the preservation of natural resources.
- ✓ Participation in the prevention and control of environmental emergencies and contingencies, in accordance with the civil protection policies and programs established for this purpose.
- ✓ The assessment of the environmental impact of the work or activities referred to in article 28 of this Law and, where appropriate, the issuance of the corresponding authorizations
- ✓ The attention of the matters that affect the ecological balance of two or more States
- ✓ The promotion of the application of technologies, equipment and processes that reduce pollutant emissions from any source, in coordination with the authorities of the States, the Federal District and the Municipalities

In its hierarchical structure, SEMARNAT has the DGGIMAR, whose main duties are to apply the general policy on hazardous materials and waste and the remediation of contaminated sites; issue, suspend, revoke or cancel authorizations and registers for the management of hazardous materials and waste, the transfer of contaminated sites and the treatment of contaminated soils; and coordinate with the states and municipalities to formulate and implement remediation programs in sites contaminated with hazardous waste, as well as to identify them.

SENASICA is a deconcentrated body of SAGARPA created in 2001, which replaced the National Commission of Agricultural Health. In accordance with its Internal Regulation, it is up to the Minister of SAGARPA to propose the national policy on plant, animal, aquaculture and fishery health, agrofood safety, organic production and, biosafety of genetically modified organisms derived from the biotechnology under the duties of SAGARPA. This is conducted in order to reduce risks in agricultural production and public health, strengthen agricultural productivity and facilitate the national and international commercialization of regulated goods, and assist national security instances, in terms of the applicable legislation.

In particular, SENASICA implemented the National Program of Collection of Empty Containers of Agrochemicals and Related Products: "Keep a Clean Field." This program aims to reduce contamination risks, intoxication problems and health effects of agricultural workers for pesticides exposure. Moreover, the program establishes mechanisms for the management, collection, disposal and recycling of empty containers to prevent their reuse. It also includes actions to raise awareness among the population on the Proper Use and Management of Agrochemicals, in coordination with the Local Boards of Plant Health, municipal presidencies, associations of producers, distributors of agrochemicals, trading companies, UNIFRUT, COESPRIS and AMOCALI A.C.

Normative

The General Law of Ecological Equilibrium and Protection of the Environment is the governing legal instrument of the national policy on the environment. Its provisions are intended, inter alia, to promote sustainable development and establish the bases to guarantee the right of every person to live in a healthy environment for their development, health and well-being; preserve, restore and improve the environment; promote the sustainable use, preservation and, where appropriate, the restoration of soil, water and other natural resources; to prevent and control air, water and soil pollution; and define the attributions of the three levels of government in these matters and establish the mechanisms of coordination between the authorities and the private and social sectors.

The purpose of the General Law for the Prevention and Integral Management of Waste is the prevention of the generation, recovery and integral management of hazardous waste, solid urban waste and special waste. It also aims to prevent sites contamination by waste and carry out their remediation; establish the bases to apply the principles of recovery, shared responsibility and integral management of waste, and establish coordination mechanisms in these matters between the Federation, the states and the municipalities, among others.

In terms of country development planning, the National Development Plan 2013-2018 has 5 national goals, 31 strategic objectives and 3 cross-cutting strategies. Particularly, the national goal "Mexico Prospero" includes the objective 4.4 "Promote and guide an inclusive and facilitating green growth that preserves our natural heritage, and at the same time, generates wealth, competitiveness and employment". In the diagnosis, the plan points out that the country's economic growth is closely linked to the emission of greenhouse gases, the excessive generation of solid waste, air pollution, untreated wastewater and the loss of forests and jungles. It was estimated that the economic cost of depletion and environmental degradation represented 6.9% of GDP in 2011.

In order to implement the plan, sectoral programs were published, including the Sectoral Program on Environment and Natural Resources 2013-2018. There is also the Program for the Prevention and Integral Management of Waste, which aims to promote a comprehensive management of solid urban waste and special waste in the country, through the financing of studies or programs for the prevention and integral management of waste. It also includes the development of infrastructure for the collection, transport and final disposal systems, and the material or energy use of waste.

Project description

Problems that the project aims to address

The project aims to find appropriate management solutions for the growing flow of electronic waste that affects the country. It focus mainly on e-waste whose content of POPs is known and released to the atmosphere as UPOPs, which have been handled incorrectly, affecting the health of waste handlers, the population and the environment.

The identified equipment are the following: i) TV (LCD, CRT, others); ii) Computers (monitors, CPUs, tablets); iii) audio players; iv) cell phones; v) entertainment and internet access devices.

Due to information limitations, the project intends to begin to address the issue, focusing on 5 types of e-waste through the following:

- i) Improvement the information (preparation of national and state inventory);
- ii) Estimating the flows of these wastes and the potential emissions derived from their mismanagement;
- iii) Introduction of new federal and state regulations that allow the country to be aligned with international norms and NAFTA countries. In addition, the project has the objective to create a sustainable market for the proper handling, treatment and disposal of this type of e-waste;
- iv) Strengthening the auditing bodies to increase control in the management, import and export of these wastes;
- v) Involvement of the private sector that manufactures these products and those that carry out recycling and recovery of waste through pilot experiences in 3 states. This would generate lessons learned and good practices that can be applied to the reality of the country;
- vi) Preparation of replication strategies throughout the country.

On the other hand, the project also seeks to improve the management of POPs contained in pesticide residues, by preparing a national inventory; develop obsolete pesticides management

plans and also for remediation of contaminated sites; improve management of empty pesticide containers and the proper elimination of these residues.

Environmental and Development Objectives

<u>It should be understood that the fundamental environmental objective</u> of this project is 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.

Although the project does not explicitly indicate a <u>development objective</u>, this can be to strengthen the capacities of federal and state government institutions, as well as the private sector, in order to establish sound management of POPs waste (e-waste and pesticides), which allows the country to fulfill its obligations under the Stockholm Convention.

Activities, outputs and expected outcomes

The project is expected to eliminate around 168 g TEQ from WEEE and 400 tons of POPs pesticides and associated residues.

It also has to elaborate a proposal of regulations to improve WEEE management (especially those containing POPs), which include the reclassification of WEEE as hazardous waste, and the introduction of financing mechanisms that can support the collection, recycling, treatment and disposal of WEEE, as well as modifications to strengthen the regulation of obsolete pesticides.

It is also expected that the project conducts pilot experiences for WEEE management in 3 states, in collaboration with state authorities, the private sector and NGOs. The pilots aims to extract lessons learned, identify good practices, prepare state WEEE management plans and replicate these experiences at the national level.

it is also expected that the project can carry out pilot experiences in 3 other states for the sound management of obsolete pesticides, with their respective management plans, and elaborate remediation plans for contaminated sites and identify gaps in the legislation that prevent sound management of these obsolete pesticides.

In total, there are 6 components that the project must address, the four main components are summarized in Table N 0 9.

Component	Number of activities	Number of outputs
Component 1: Strengthening institutional and public policies and capacities regarding POPs and sound chemicals management	5	1
Component 2: Reduction of POPs releases from e-waste processing at State and waste processor levels	11	2
Component 3: Reducing risks through elimination of POPs pesticides stockpiles and wastes	9	3
Component 4: Obsolete pesticide management capacity strengthening	5	1
Total	30	7

Table №9: Main components and number of expected activities of the project

Main Indicators

The Prodoc specified 47 indicators, which are shown in Table Nº10. As can be seen in the table, the global environmental objective is measured through: having a revised regulatory framework, which must be analyzed and modified to promote compliance with sound chemical management (in particular of e-waste and pesticides); the reduction of UPOPs emissions; the development of state e-waste management plans; having an inventory of obsolete pesticides; the elimination of identified obsolete pesticides; and also having state management plans for obsolete pesticides (Indicators 1-6). Based on these indicators, other more detailed indicators are established that account for the accomplishment of the 7 expected outputs as a result of the implementation of the project, and the development objective. This would be achieved through the coordination between the federal and state governments, the strengthening of institutions to enforce legislation and the participation of the private sector in activities of recycling, final disposal and elimination of e-waste and pesticides (indicators A1.1-A1.5, B2.1-B2.9; C3.1-C3.3; D4.1-D4.2; E5.1-E5.3; F6.1-F6.3; G7.1-G7.5).

Project Objective		Indicators
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		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
operations in Mexico	2	Grams TEQ of UPOPs emission reduced
	3	Development of State level e- waste management plan
	4	Inventory (quantity and locations) of obsolete pesticides finalized
	5	Tons of obsolete pesticides destroyed (per compound) and mode of destruction (tons and costs/ton)
	6	Provincial Management Plans for obsolete pesticides established

Table Nº10: Global project indicators

Outcomes		Indicators
	A1.1	Strengthened regulatory and legislative framework
Outcome A): National legal and regulatory framework strengthened to enhance	A1.2	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.
enforcement and compliance capacity for Stockholm Convention (SC) obligations within the country's overall cound chemicals	A1.3	Training at State level on inspection of POPs substances and products containing new POPs.
the country's overall sound chemicals management framework, in particular potential POPs release from e-waste management and pesticides.	A1.4	Analytical and monitoring capacities of federal inspectors, Customs and chemical labs enhanced
	A1.5	Sustainable capacity to support Stockholm Convention reporting and information exchange (Enhanced Stockholm Convention reporting and information exchange
Outcome B): Development and implementation	B2.1	Establishment of State level regulatory and legal framework
of State pilot level e-waste management plan in three States: Baja California, Jalisco and Federal	B2.2	Development of WEEE stewardship levies and EPR to foster sustainable financing of sound management of e-waste
District of Mexico City and projection to entire country.	B2.3	State and national inventory on e-waste generation and mass flow balance
	B2.4	Development and implementation of State level Management Plans
	B2.5	Development and implementation of outreach strategy
	B2.6	Training strategy on e-waste management guides developed
	B2.7	Number of training workshop conducted

Indicators				
B2.8	Characterization study of nationwide recycling industry to establish a registration and certification system			
B2.9	Establishment of nationwide e- waste information exchange platform			
C3.1	Number of demonstration pilot projects with introduction of BAT/BEP			
	in formal recycling facilities			
C3.2	Number of demonstration pilot projects in informal recycling plants to			
	bring operation up to environmentally sound operational and			
	compliance level			
	Feasibility study and design of integrated recycling facility			
D4.1	Availability of inventory of remaining POPs pesticide stockpiles and			
	associated waste			
D4.2	Availability of Waste Management Plans at 3 States (Chiapas, Sinaloa, Jalisco)			
E.5.1	Effective commercial options for environmentally sound destruction			
	of POPs pesticide stockpiles and wastes			
E.5.2	Amount of POPs pesticide stockpiles and waste destroyed			
E.5.3	Feasibility study for recycling of used pesticide containers			
F.6.1	Number of remediation plans for high priority POPs contaminated			
	sites			
F.6.2	Number of first phase remediation plans for POPs pesticides			
	contaminated sites			
F.6.3	Availability of national programme for on-going management of POPs			
-	pesticide contaminated sites			
G7.1	Availability of an assessment covering national institutional capacities			
	for implementation of state level obsolete pesticides management			
67.0	plan			
	Outreach and training programmes developed			
67.3	Availability of national pesticides waste management guidelines			
G7.4	Reinforcement of State and municipal level obsolete pesticide and			
	used containers collection programme delivered			
G7.5	National replication programme for sustainable pesticide management			
	B2.9 C3.1 C3.2 C3.3 D4.1 D4.2 E.5.1 E.5.2 E.5.3 F.6.1 F.6.2 F.6.3 G7.1 G7.2 G7.3 G7.4			

Key stakeholders

According to the Prodoc and the interviews conducted, the key stakeholders involved in the project are shown in Table No. 11. ANATEL is an important stakeholder in the WEEE sector; however, it has not participated in the project implementation and a meeting with their representatives was not possible to carry out. Therefore, the causes of its lack of interest are unknown.

Stakeholders	Project implementation Role						
SEMARNAT	Coordination of all activities, since waste management falls within its jurisdiction, is a focal point of the Stockholm Convention						
	Support in the implementation of components 3 and 4, is the Ministry that runs the						
SACADDA	programmes of collection of pesticides used containers. Key in co-financing						
SAGARPA							
	components 3 and 4.						
	Is an association of the main companies that produce and distribute pesticides in Maxima It actions PROCYT and UMEAAC, which are two organizations of						
0	Mexico. It gathers PROCYT and UMFAAC, which are two organizations of						
Amocali	enterprises that produce and distribute pesticides. Amocali is in charge of the						
(Campo Limpio)	Campo Limpio program for the collection and handling of empty containers of						
	pesticides. It is one of the co-financiers of the private sector and will support the						
	development of a management plan.						
	Key allies to implement management plans for both wastes. They have within						
State governments	their jurisdiction "Special Management Waste" (for e-waste) and have information						
	as to the pesticides contaminated sites. Provide co-financing to Components 2, 3						
	and 4.						
OEMs, Recyclers and	Allies in the implementation of pilot demonstration projects. Key actions in the						
Metallurgical extractive	co- financing of Components 2, 3 and 4, and the National Replication Programme						
industries							
Community-based	Key groups for ensuring that the ameliorated management practices are adopted						
groups, particularly	throughout value chain. Recipients of training and dissemination of best practices.						
infomal sector collectors	Consulted and integrated in the overall recycling value chain for ensuring						
and recyclers	inclusiveness and sustainability.						
Anatel and Canieti	They are key organizations of manufacturers and sellers of cellular phones,						
	electronics goods in general. They will support Management Plan development.						
	UNDP-Mexico is the Project Implementing Agency that works to overcome						
United Nations	poverty and promote sustainable development in Mexico. UNDP-Mexico offers						
Development Program	guidance, technical support, management tools, and theoretical and practical						
(UNDP-Mexico)	knowledge to national- and regional-level institutions to aid in implementing						
	public policies, initiatives, and projects intended to overcome poverty.						
PROFEPA	Inspects hazardous waste facilities.						
SAT Laboratory Customs	Inspects the incoming and outgoing shipments of waste.						
NGOs (Red Queretana de							
Manejo de Residuos A.C.;	Follow up on the issues of POPs, WEEE and pesticide residues in Mexico and participate in						
México, Comunicación y	the TAC of the project.						
Ambiente A.C.; Biosan y							
ECOVIA)	Institution related to SEMADNAT in charge of research and scientific development in						
INECC	Institution related to SEMARNAT in charge of research and scientific development in						
	environmental matters. It elaborated the first inventories of WEEE in the country.						

Table No 11. Main project stakeholders

M&E and replication activities

The project contains the corresponding standard elements used by the GEF, such as the quarterly reports, the implementation of the inception workshop, preparation of the PIR, AOP, etc. Table Nº19 of Section 3 contains a detail of the activities that would be carried out during the 5 years of project implementation.

Project's gender policy

Due to the differentiated toxicological effects that can occur in men, women and infants as a result of exposure to POPs, and the levels and frequency of exposure considering the work roles that each can play, the project considered important to take into account these differences during project interventions and project policies. Thus, the PRODOC specified that during the project implementation, the main concerns of vulnerable groups, including women working in processes related to the project, and the poor, would be addressed, in order to assess and strengthen the capacities to reduce POPs exposure. Likewise, the project should ensure the participation of women in the trainings provided and in the strengthening of capacities. In addition, there would be two general strategies: the awareness and multi-stakeholders participation, which together would help ensure the successful implementation of the gender perspective in the project².

Implementation arrangements

SEMARNAT is the national institution responsible for the coordination and execution of the project, and the development of specific outputs and activities, considering their capabilities and competencies. This Ministry is the focal point of the Stockholm Convention. The National Project Director is the main representative of SEMARNAT and is in charge of the general project leadership. SENASICA is a project co-executing institution, which provides support in the implementation of project components 3 and 4, linked to the management of POPs pesticides and associated waste.

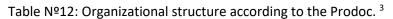
Project implementation is overseen by the Project Steering Committee, which is managed by SEMARNAT and UNDP. The Committee is responsible for making consensual decisions on project management, especially on operational plans, annual reports and the budget of the project. It was envisaged that the Committee would meet four times a year to review the project progress and approve subsequent work plans and the budget. It has also the responsibility to approve and supervise the contracts of the Project Coordination Unit (PCU).

The PCU is responsible for the overall financial and operational management of the project. For this, it must follow the UNDP rules and procedures. In particular, it develops the Annual Operational Plans (AOPs), the progress reports, the M&E framework, in close coordination with SEMARNAT and key stakeholders. It is led by a coordinator and supported by technical staff and a project administrator.

There is a Technical Advisory Committee (TAC) that provides a discussion forum among project participants on the implementation of specific project activities. The Committee would have the support of project staff and the participation of key organizations and institutions, such as SEMARNAT, SAGARPA, representatives of the industry, other instances of state and municipal governments, civil society organizations and higher education institutions. The TAC would provide advice for the technical decision making of the project and would meet twice a year to monitor project progress and provide strategic guidelines for operational decisions.

Table Nº12 shows the organizational structure to implement the project.

² Prodoc (English version), page 26.





Complementarity with other projects and activities

The project would complement the efforts initiated since 2006 to inventory POP pesticide stocks and determine the generation of electronic waste. The project was expected to catalyze efforts to meet the country's commitments to the Stockholm Convention, included in the National Implementation Plan for Mexico (NIP). Moreover, a strong synergy was considered with the project "Environmentally sound management and destruction of PCBs in Mexico" also financed with GEF resources. It was also expected an exchange of lessons learned with similar projects that UNDP implements in other countries, such as Nicaragua for the case of pesticides and China for electronic waste.

Due to this kind of projects approved by GEF are not common, it will seek collaboration with the Chinese GEF/UNDP project currently underway, which addresses the problem of POPs in WEEE in that country, in order to exchange experiences and carry out useful adaptations for Mexico.

3. Findings

3.1. Project strategy

Inclusion of another relevant project's experience

GEF projects that deal with the elimination of POPs contained in electronic waste are not common, thus there are not many experiences at the international and national level for this type of waste. Due to China's project was the first GEF project approved to eliminate POPs in e- waste, exchange meetings were held in Guadalajara, Mexico with those responsible for China's project for the collection, transport and recycling of e-waste. In addition, the project has participated in several international workshops in Latin America and the Caribbean to show the Mexico's project progress in this field to other countries, which are already carrying out projects related to this problem.

The project has also made the integration of activities with the Office of Restoration of Contaminated Sites of the SEMARNAT, and has complemented SEMARNAT's Contaminated Sites Information System (SISCO). It has also worked in the strengthening of the National Program for the Collection of Empty Containers of Agrochemicals of SENASICA and the private sector.

Design

The project overall environmental objective is to minimize the impacts on the environment and human health of POPs emissions from electronic waste and obsolete pesticides. The development objective, although not explicit in the project, is to strengthen institutions in Mexico to develop an environmentally sound system for the management of electronic waste and POPs pesticides and associated waste.

³ prodoc inglés pág 51.

The Prodoc clearly shows the main problems that must be addressed in this project, which are addressed in an appropriate manner through the project activities. That is, the project design keeps a vertical logic between the identified problems and the actions proposals to solve them. Particularly, the problem derives from the rapid industrial development of the country that has generated a considerable amount and continuous growth of waste electronic and electrical equipment (WEEE). Thus it is essential to establish a proper federal and state waste management system and align the existing legislation with the other members of NAFTA. It would also support the country to accomplish Mexico's commitments to the Stockholm Convention and the Basel Convention. In addition, the lack of preventive actions in the handling of pesticides and of a strengthened and updated legislation has generated the accumulation of obsolete pesticides.

The strategy to introduce an adequate management system for WEEE and obsolete pesticides containing POPs is well elaborated and contains 2 important stages to generate the desired effect. The first stage consists of reviewing existing legislation, identifying their gaps, and establishing proposals for financial mechanisms that can give impetus and sustainability to the activities of collection, transport, recycling and final disposal of WEEE. This along with the training of Customs and Profepa officers that could strengthen their inspection and monitoring capacities, and the improvement of coordination between federal and state authorities to implement waste management activities.

The second stage consists in the elaboration of management plans and elimination of POPs in WEEE and POPs pesticides and associated waste, at the state level (in 3 pilot states for each type of waste).

It also considers strengthening management capacities for state and federal authorities through the implementation of good management practices, the selection and prioritization of contaminated or potentially contaminated sites, as well as, the development of management and remediation plans.

At this point, it is important to emphasize that the substantial approach with respect to WEEE (which has 57% of the project budget) is to work on 5 specific products, in which experience indicates that there are greater chances of finding POPs⁴: i) TV, ii) PC and laptops, iii) audio equipment; iv) telephones and v) portable telephones. Equipment of entertainment and for internet access could also be added to the list. The project document was designed based on this specific e-waste. In the same way, the Prodoc was designed only to address POPs pesticides and associated waste, those products and materials contaminated with POP pesticides. It is assumed that this waste is also contaminated due to the inappropriate storage conditions existing in the country. The figures No. 1 and 2 show the Theories of Change for WEEE and POP pesticides, respectively.

Logic framework

Regarding the logical framework, the first observation to be made is that intermediate goals were not considered for the mid-term, which makes more difficult to establish the aspects in which the project is delayed. Theoretically, all project outputs and outcomes could be obtained during the last year of project execution, giving the impression that the activities are still on time, since the execution periods were established in a very broad manner. However, as will be seen in section 3.2, there are important activities that should be already accomplished in the middle of the period, such as the elimination of POPs pesticides stockpiles and associated waste, and electronic waste recycling activities in 3 pilot states.

Some of the results indicators refer to outputs rather than outcomes. For example, "revised and amended regulatory framework ...", "number of deaths/diseases avoided" or "decrease in concentrations of POPs in environmental matrices" would be more appropriate for the objective indicator. For performance indicators, it could be more appropriate "number of inspections carried out by officials trained to identify POPs" instead of "training at the state level ...".

⁴ During the PPG, it was determined that 90% of electronic waste in Mexico corresponded to TV and PC containing PBDEs.

Fig. №1: Theory of Change for WEEE part of the project (The TOC was divided in Fig. 1 and 2 due to lack of space).

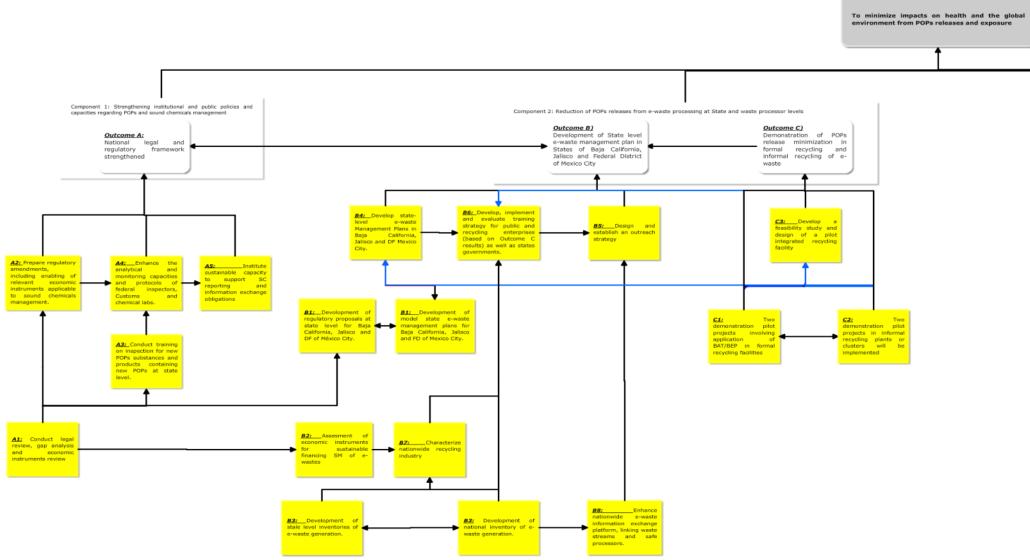
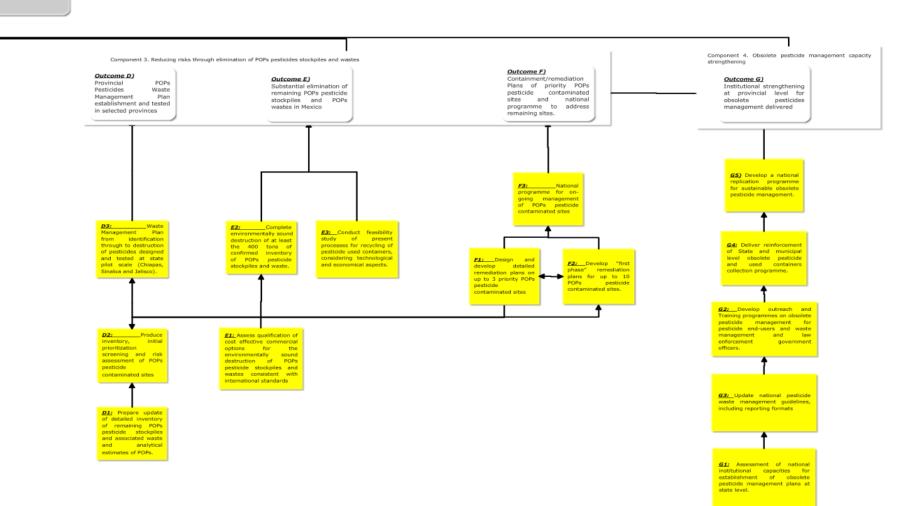


Figure Nº2: *Theory of change for pesticide part of the project.*





Alignment with national priorities

The project is still relevant for Mexico due to the constant increase of electronic waste and, particularly, to comply with the Stockholm Convention. The update of the Mexico's NIP, carried out in 2016, indicates the lack of information on the subject and the role of this POPs project of UNDP to provide more information on the inventory of electronic waste and obsolete pesticides.⁵

In addition, this project also addresses the problem of POPs obsolete pesticides and contaminated sites management, although the updated NIP indicates that 95% of the obsolete pesticides stockpiles registered in 2008 have been reduced and 100% of DDT stocks has been eliminated. However, it is still necessary to identify small quantities of obsolete pesticides dispersed in the country belonging to a large number of owners. This would still require a robust protocol to collect information and the elaboration and implementation of appropriate management plans.⁶

In the current Development Plan 2013-2018, the project can be included in the line of action "Achieve a comprehensive management of solid, special and hazardous waste, including the recovery of materials and the minimization of the risks to the population and the environment". This line of action is included in the Strategy 4.4.3: "Strengthen the national climate change policy and the environmental protection to move towards a competitive, sustainable, resilient and low carbon economy"⁷.

With regard to the new Development Plan 2018-2024 proposed by the new government, the project could be included in the modification of the environmental justice system, particularly in its point a) "Harmonize existing legislation and its alignment with international conventions adopted by the country" and apply an integral management policy of solid waste⁸; however a comprehensive management system for electronic or hazardous waste and the extended responsibility of the producers are not mentioned.

Sustainability and viability

The main problem of project sustainability is that it lies in the reforms to the legal framework. These reforms include the amendment to the waste law to reclassify electronic waste from "special waste" to "hazardous waste". This amendment involves the participation of many actors, which are not under the control of the project. In general, this kind of amendment implies time-consuming discussions and procedures that exceed the project life. However, the current classification and the pilot experiences that will be developed for electronic waste could catalyze an adequate management of e-waste at the national level and achieve greater support to amend the current waste legislation.

Another aspect, that is not sufficiently covered in the Prodoc, is the introduction of new taxes for e-waste generators in order to establish a system for their management, which also depends on the introduction of new legal provisions. This situation could also mean long processes and discussions.

Replication approach

The Prodoc contains specific actions to replicate the experiences and lessons learned, which should be elaborated during the second half of the project execution.

⁵ "NATIONAL PLAN FOR THE IMPLEMENTATION OF THE STOCKHOLM CONVENTION ON PERSISTENT ORGANIC POLLUTANTS IN MEXICO 2016 ", SEMARNAT, June 2016, p. 17.

⁶ IDEM ref 4, page 34.

⁷ "National Development Plan 2013-2018 ": page 135;

http://www.snieg.mx/contenidos/espanol/normatividad/MarcoJuridico/PND 2013-2018.pdf

⁸ "National Project 2018-2024 ": p. 293, 294, 295; <u>http://morenabc.org/wp-content/uploads/2017/11/Plan-de-Nacion-de-Morena.pdf</u>

Gender Considerations

In general terms, the Prodoc mentions gender considerations, however it does not propose the elaboration of a specific gender strategy to address particular problems of women and infants affected by exposure to electronic waste and POPs pesticides. It is only mentioned that the project will guarantee access to women in training and awareness activities. It seems that gender was not included during the stakeholders consultations stage⁹.

UNDP's Comparative Advantage

The execution modality selected for this project was the national execution (NEX), in which UNDP provides support for financial services, experience in procurement and specific advisory services - when required - (identification of national and international experts). In addition, the project progress is monitored through the Program Analyst of the UNDP Office in Mexico and the Regional Technical Advisor (RTA), which also provide advice on project implementation and suggest changes when appropriate.

Regarding the relative advantage of UNDP, the most relevant advantage is that UNDP has an office in Mexico with local professional staff, which provides an advantageous understanding of the culture and the functioning of local institutions, its economy and projections as a country. On the other hand, UNDP can properly understand the reasons why certain procedures, approaches and practices work well in one place, but not necessarily in another due to its experience in carrying out other projects in the country and the international experience in the design and execution of projects in other countries.

3.2. Progress towards attainment of results

Management procedures

The Prodoc established that SEMARNAT, through the Direction General for the Integral Management of Materials and Risky Activities (DGGIMAR), would be the project executing agency. A Project Coordination Unit (PCU) would be established to be in charge of the daily project management. UNDP would make available a program officer to monitor activities and ensure the accomplishment of project's objectives according to the timeframes and indications established in the Prodoc, while also administering resources from GEF.

DGGIMAR had to select professional staff that would constitute the PCU, which currently consists of 8 professional people. During the evaluation mission, it was found that PCU made decisions that would have a high impact on the subsequent project development. Firstly, the authority wished to hire PCU staff and external consultants without enough experience in the subject in order to strengthen national capacities in this matter. Thus, the possibility to have consultants that UNDP frequently used to support these activities, especially on the subject of electronic waste, was left aside.

The authorities also decided that the internal areas of DGGIMAR would participate in the discussion of project activities, mainly in the elaboration and revision of TORs for the project's consultancies, as well as, the revision of partial reports issued by the project's external consultants.

It was also found that project scope, with respect to electronic waste containing POPs, was changed. In effect, the Prodoc clearly established that project activities would be focused on 5 or 6 types of electronic waste (TV, PC, audio players, mobile phones and equipment for entertainment and internet access). However, at the beginning of project implementation the number of types of electronic waste to be addressed was extended to 34 (that is, appliances were added). This decision was made considering that e-waste problem included a wider range of waste in Mexico, thus this major problem should be address through the project¹⁰. As a consequence, all project

⁹ See Prodoc "SESP Annex 1. Checklist of detection of social and environmental risk", "Principle 2: Gender equality and empowerment of women", p. 79.

¹⁰ Annual Report 2016.

components related to e-waste began to be executed according to this new vision, which is more general as avoid the focus on few appliances.

This vision caused the loss of focus on electronic waste containing POPs, transforming this part of the project into a general WEEE management experience. The TORs for key project outputs, such as the national and state inventories of WEEE, clearly show the loss of focus on POPs and the Stockholm Convention. The TORs for these inventories indicate the need to know the amount of e-waste generated from 5 types of products, namely:

- 1) Temperature regulation equipment,
- 2) Monitors with cathode rays, televisions, liquid crystal and plasma screens (laptops, notebooks, tablets),
- 3) Large equipment (washing machines, dryers, stoves, photovoltaic panels, copiers, printers),
- 4) Small equipment (vacuum cleaners, coffee makers, microwave ovens, toasters, fans, razors, scales, calculators, video game consoles, radios, video cameras, electronic toys, household tools, monitoring and control instruments) and,
- 5) Telecommunications equipment (cell phones, GPS, pocket calculators, routers, PCs, landlines).

Although it was mentioned in the TORs that POPs content and emission factors would be assessed by type of material in a subsequent stage, the document does not address the identification of waste containing POPs or the release of UPOPs derived from burning e-waste, thus these issues were taken out of the inventories¹¹. Conversely, the Predoc indicated the analytical estimation of POPs content and their unintentional emissions by using emission factors from technical literature for the 5-6 products aforementioned, and the use of UNEP toolkit to estimate the sources of PCCD/F and carry out chemical analysis of samples¹².

Therefore, the final report of the inventories has the same problem: the POPs issue only appears in the title of the report and its rationale, but its content refers to the generation of WEEE in the country. In addition, the report does not indicate what WEEE contain POPs and lacks the specific section to assess this issue¹³. Moreover, there is no an estimation of unintentional releases and content of POPs in the selected e-waste as it was not required in the TORs. This activity is important to determine the progress in the reduction of these releases through the pilot studies that would be carry out in the selected states.

The same situation is found in the model management plans for WEEE, which are another key project output. The TORs describe the problem of POPs in e-waste, but the activities do not mention these compounds nor their relationship with this type of waste. The TORs do not request to carry out any specific activity for the management of WEEE containing POPs or procedures to estimate the potential emissions of these compounds. Conversely, all activities are framed in the handling of WEEE, in which the 34 products are included¹⁴.

This output is still under development, its second progress report also reflects the loss of focus on POPs in e-waste. This is based on the review and assessment of the current state management plans for WEEE.¹⁵ The consultancy is in the process of contract rescission due to irregularities identified by the UCP.

¹¹ See SDP-44-2016 of July 22, 2016 and annual report 2016.

¹² Prodoc in English, p. 16

¹³ "Develop the inventory of electronic waste generation in Mexico, at the national and state levels, as well as, the detailed inventories for the states of Jalisco, Baja California and Mexico City; calculate the material flow balance by product category for the volume of electronic waste generated; and prepare a prospective analysis ", August 18, 2017, ADHOC Consultores Asociados S.C.

¹⁴ TdR for bidding SDP-39-2017: "Proposal for the provision of: Evaluation of Waste Management Plans for electrical and electronic equipment in Mexico and preparation of the Model Management Plan".

¹⁵ "Evaluation of Management Plans for waste electrical and electronic equipment in Mexico and preparation of the Model Management Plan ", OSCAR Consultores, April 2018.

Finally, regarding the output on guidelines of good practices for the management of WEEE, the TORs do not specify to study procedures to identify WEEE containing POPs, its segregation and estimations of its content and emissions for the manipulation of this type of WEEE¹⁶. This could provide methodological basis for the subsequent calculation of eliminated POPs quantities and emissions that would be accounted as a result of the pilot cases. Although the consultancy report includes the concept of POPs in WEEE, the focus is on PCBs and does not include a list of products that could potentially include POPs nor how they need to be segregated and handled in a recycling plant. Thus, the guidelines only include a description of the regulatory aspects of WEEE in terms of storage and dismantling and lack specific management procedures to identify WEEE containing POPs and how to manage them and estimate quantities of these compounds in the different products¹⁷. Therefore, no method can be found to estimate the amounts that are recycled and the avoided emissions of POPs through the procedures shown in the good practice guide. As highlighted previously, the focus is on the general management of WEEE without specificity in POPs.

The project also established a Project Steering Committee (PSC), which was made by DGGIMAR (who presides over the Committee), UNDP and SENASICA. The coordinator of the PCU participates in the Committee by providing technical inputs and information on the project implementation. The first observation on this aspect is that the main stakeholders and project partners should be represented in the PSC, such as the state authorities of the pilot states and the social organizations active in the areas of WEEE, POPs and POPs pesticides. Also, there should have been a representative of, for example, OEM companies to discuss strategic issues on handling WEEE in Mexico.

According to the experience of the international consultant, the participation of the PCU in the PSC is not appropriate, since, in general, the project coordinators assist the PSC through informing on the project progress and the problems encountered. This facilitates the deliberations of the members of the PSC, whose main role is to provide a strategic vision to the project and facilitate and promote decision-making in the institutions that each member represents.

In the case of the evaluated project, the members of the PSC are limited to DGGIMAR, SENASICA and PCU. There is no an external representative to address the issue of POPs in WEEE, nor other relevant stakeholders. The participation only of SENASICA partly explains the greater effort that the project has made in the activities related to obsolete pesticides and empty pesticides containers program. In the meetings held by the PSC there has not been invited representatives related to WEEE to provide their vision on the recovery and recycling of e-waste. There have not been discussions either on the convenience or feasibility of introducing amendments to existing regulations and explore ways to make their approval possible.

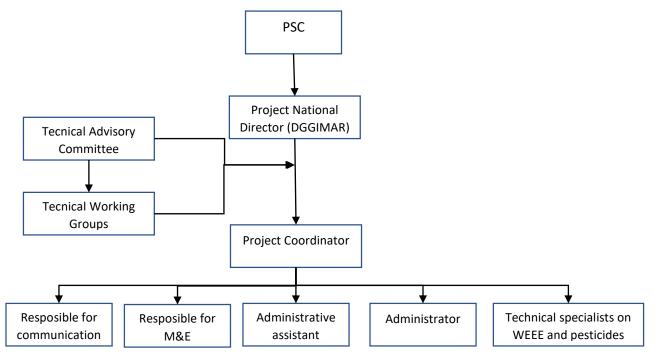
Another body created by the project is the Technical Advisory Committee (TAC), made up of 30-38 participants representing the government sector (mainly SEMARNAT and SENASICA), the private sector, NGOs and authorities of the pilot states. Unfortunately, the TAC discussed both project themes. It would have been more convenient to divide the committee into two committees, one for WEEE and one for pesticides.

In addition to the TAC, 5 project working groups were created on the following topics: i) Normativity; ii) WEEE; iii) Pesticides, iv) Communication and v) Transboundary movements. The scheme used in these groups is similar to the TAC. Approximately 20 stakeholders participate per group. The outline of the organization of the project can be seen in Fig. N^o3.

¹⁶ Proposal for the provision of Development of guides to good practices for the integral and environmentally sound management of waste electrical and electronic equipment in Mexico.

¹⁷ Consulting services: "ELABORATION OF GOOD PRACTICE GUIDES FOR THE INTEGRAL AND ENVIRONMENTALLY APPROPRIATE MANAGEMENT OF WASTE OF ELECTRICAL AND ELECTRONIC APPLIANCES IN MEXICO", Deliverable 5, "Guidelines of Good Practices for the integral and environmentally adequate management of WEEE", Kuradzo, Engineering with Environmental Value, April 18, 2018.

Fig. Nº3: Project organigram.



Financial aspects

The project has a cash donation of GEF of US \$ 5.72 million and includes counterpart commitments for a total of US \$ 23.1 million, which comprise in-kind contributions and investments from the private sector. Thus, the total resources are US \$ 28.82 million, whose breakdown is shown in Table Nº13. Regarding the co-financing, It should be noted that commitment letters only total US \$ 13.52 million, the details of this information are shown in Table Nº 14.

Table № 15 shows the total budget and the expected disbursements as indicated in the Prodoc. It is worth mentioning the importance of the components 2 and 3- from the point of view of the effort in the use of resources -, which have 83% of the total GEF project resources. This importance is reconfirmed as the co-financing for these components represents 82% of the total co-financing.

It should also be mentioned that component 2, related to the reduction of POPs in the handling of e-waste through demonstration pilot projects at the state level, has 57% of the total GEF resources, while the elimination of POPs pesticides and associated waste reaches 26%.

With respect to disbursements executed between March 2016 and August 2018 (approximately 2.5 years), it worth to mention that only 32% (approximately) of the budget planned for the first half of the project has been disbursed (US \$ 947,000 versus US \$ 2.92 million of planned budget). On the other hand, the expenses for M&E and project staff amount to 32% of the budget used (US \$ 260,000), which represents an over-expenditure of 63% with respect to the budget planned in the Prodoc (US \$ 187,000). Table Nº 16 shows the details of the expenditures made by the project.

Table Nº13: Project total resources

Item/US\$	GEF	Co-financing	Total
Component 1: Strengthening institutional and public policies and capacities regarding POPs and sound chemicals management	200.000	800.000	1.000.000
Component 2: Reduction of POPs releases from e-waste processing at State and waste processor levels	3.250.000	13.750.000	17.000.000
Component 3: Reducing risks through elimination of POPs pesticides stockpiles and wastes	1.500.000	5.000.000	6.500.000
Component 4: Obsolete pesticide management capacity strengthening	350.000	1.750.000	2.100.000
Component 5: Monitoring and evaluation	150.000	600.000	750.000
Component 6: Project Management	270.000	1.200.000	1.470.000
Total	5.720.000	23.100.000	28.820.000

Table Nº 14: Project co-financing according to the letters of commitment of stakeholders.

Institution	Amount US\$
UNDP Mexico	55.000
Government - federal and state authorities-	11.016.750
SEMARNAT	1.700.000
Baja California state	500.000
SEMADET Jalisco	316.750
SENASICA	8.500.000
Private Sector	7.300.000
AMOCALI	2.500.000
BIOSEA	500.000
CANIETI	2.000.000
VIZ RESOURCES MANAGEMENT, SA DE CV	2.300.000
Total	13.516.750

Component/year (US\$)	2015	2016	2017	2018	2019	2020	Total (US\$)	% GEF total
Component 1: Strengthening institutional and public policies and capacities regarding POPs and sound chemicals management	60.000	59.500	36.500	33.500	7.500	3.000	200.000	3%
Component 2: Reduction of POPs releases from e- waste processing at State and waste processor levels	109.200	1.057.500	1.127.000	753.800	202.500	-	3.250.000	57%
Component 3: Reducing risks through elimination of POPs pesticides stockpiles and wastes	92.000	421.500	423.000	303.500	255.200	4.800	1.500.000	26%
Component 4: Obsolete pesticide management capacity strengthening	12.500	77.000	98.000	95.750	66.750	-	350.000	6%
Component 5: Monitoring and evaluation	27.000	9.500	47.000	9.500	12.500	44.500	150.000	3%
Component 6: Project Management	49.550	52.000	52.000	52.000	52.000	12.450	270.000	5%
Total Amount (US\$)	350.250	1.677.000	1.783.500	1.248.050	596.450	64.750	5.720.000	100%
% Expenditure estimated on the total	6%	29%	31%	22%	10%	1%	100%	

Table №16: List of planned expenses as indicated in the Prodoc.

Item/year	2016	2017	2018	Total (US\$)	% expenditure
Component 1: Strengthening institutional and public policies and capacities regarding POPs and sound chemicals management	9.082	62.485	11.262	82.828	9%
Component 2: Reduction of POPs releases from e-waste processing at State and waste processor levels	56.174	198.417	116.170	370.762	39%
Component 3: Reducing risks through elimination of POPs pesticides stockpiles and wastes	208	83.458	29.033	112.699	12%
Component 4: Obsolete pesticide management capacity strengthening	23	10.828	63.935	74.786	8%
Component 5: Monitoring and evaluation	25.452	24.444		49.895	5%
Component 6: Project Management	108.242	147.140	678	256.060	27%
Total (US\$)	199.179	526.771	221.079	947.029	100%

The PCU elaborated the project AOPs and annual budgets, whose summary is shown in Table №17. There is an overestimation of 42% in 2016, with an amount over 200% for component 2 and 44% for the staff item. It should be noted that component 5 of M&E includes the salary of the professional responsible for this task, thus the overestimation for the staff item would be approximately 34%.

Due to AOPs are not supported by an annual strategy document that indicates and justifies the priorities, it is difficult to understand the logic used to prepare the budgets. In fact, these budgets could not be executed in full (US \$ 1.3 million planned budget versus US \$ 947,000 effectively disbursed).

		2016		2017		2018
ltem/year	US\$	% (AOP/Prodoc)	US\$	% (AOP /Prodoc)	US\$	% (AOP /Prodoc)
Component 1: Strengthening institutional and public policies and capacities regarding POPs and sound chemicals management	44.57	74%	62.078	104%	90.319	247%
Component 2: Reduction of POPs releases from e-waste processing at State and waste processor levels	230.00	211%	294.196	28%	151.637	13%
Component 3: Reducing risks through elimination of POPs pesticides stockpiles and wastes	109.00	118%	73.511	17%	141.618	33%
Component 4: Obsolete pesticide management capacity strengthening	11.00	88%	55.502	72%	91.269	93%
Component 5: Monitoring and evaluation	31.298	116%	22.782	240%	30.000	64%
Component 6: Project Management	71.150	144%	51.932	100%	45.000	87%
Total	497.018	142%	560.001	33%	549.843	31%

Table №17: Project Annual budgets (*).

(*) Source: Own elaboration based on the annual budgets shared by the project. The 2016 budget was extracted from the corresponding AOP.

Regarding disbursements made, Table №18 shows that payments, for a total of US \$ 705,557 were made to 6 companies, of which Adhoc Consultores (WEEE inventory), GEA Grupo de Economistas (Characterization of the formal and informal e-waste recycling industry in Mexico) and Grupo Consultor en Medio Ambiente S.C. (diagnosis of the empty pesticides containers program) provided services for US \$ 86,000, US \$ 93,000 and US \$ 72,000, respectively. In addition, the travel agency FLIGHT CENTER TRAVEL GROUP MEXICO SA provided services for US \$ 79,000. There are blank cells for US \$ 296,000, of which US \$ 237,000 correspond to the project management item.

Table Nº18: Distribution of the main project contracts.

Company	Amount (US\$)	% of expenditure
ADHOC CONSULTORES ASOCIADOS, S.C.	86.460	9%
AMBIENS, CONS. SUST. Y GEST. CLIM. SA CV	35.920	4%
FLIGHT CENTRE TRAVEL GROUP MEXICO SA DE	79.165	8%
GEA GRUPO DE ECONOMISTAS Y ASOCIADOS SC	92.926	10%
GRUPO CONSUL MEDIO AMB Y PLAN ESTR. S.C.	71.947	8%
KURADZO INGENIERIA AMBIENTAL, S.C.	43.541	5%
Blank cells	295.598	31%
Total	705.557	75%

Co-financing

At the time of the Mid-term Evaluation, the PCU had not estimated the contributions made by project partners, thus preparation of co-financing reports will become a priority issue during the project second phase.

The interviews conducted and the project data indicate that private sector contributions have not been made, particularly the investments to improve the processes of recovery and recycling of WEEE. SENASICA, the main co-financer in the topic of pesticides, has not made the estimation of its contribution derived from its empty pesticides containers program. AMOCALI and UMFFAAC are in the same situation as they have not made this estimate either.

As discussed earlier in this section, the commitment letters for co-financing provided to the evaluators are not enough to cover the US\$ 23 million goal indicated in the project. Thus, resources are missing by US\$ 10 million. Due to the level of delay in the project implementation and the time necessary for the private sector to be able to finalize the investments suggests that co-financing will not be made within the project's execution period. This is also due to the fact that these resources are closely related to the approval of reforms to the waste law to reclassify WEEE and establish financing mechanisms that make viable the activity of recovery and recycling of e-waste.

Monitoring and Evaluation System (M&E)

The Prodoc establishes a set of milestones for the implementation of M&E activities throughout the project life, which are shown in Table Nº19.

M&E activity type	Responsible parties	Deadline Start according Prodoc: October 13, 2015	Actually Performed Start: March 31, 2016	
National project coordinatorInception Workshop and report(NPC); UNDP country office,PNUD RSC		December 2015	April 25, 2016	
Measuring of baseline indicators and means of verifying project results UNDP/SEMARNAT/PCU will oversee the recruitment of specific studies and institutions, and delegate responsibilities to relevant members of the project team.		Start, middle and project end (during the evaluation cycle), and annually when necessary.	WEEE and POP pesticides' Inventory studies. No POPs and COPNI emissions have been measured in WEEE.	
Measurement of Means of Verification for Project Progress on output and implementation	Oversight by NPC, Project team	Annually prior to ARR/PIR and to the definition of annual work plans		
ARR/PIR	PCU, UNDP CO, UNDP RSC	Annually	2016, 2017	
Regular project status/ progress reports	PCU	Quarterly	2016 (Aug, oct, dec); 2017 (may, july, oct, dec); 2018 (april, july)	
Project Steering Committee Meetings	NPC, UNDP CO	Following Project IW and subsequently at least Quarterly	2016 (may, dec); 2017 (april, oct, dec); 2018 (march, april)	
Technical Advisory Committee Meetings	NPC, UNDP CO, UNDP RSC	Annually	2016 (september); 2017 (june)	
Mid-term Review	PCU, UNDP CO, UNDP RSC, External Consultants (i.e. review team)	At the mid-point of the project implementation (April 2018)	Oct-2018	
Final evaluation	PCU, UNDP CO, UNDP RSC, External Consultants (i.e. review team)	At least three months before the end of project implementation (July 2020)	N/A	
Project Terminal Report	UCP; UNDP country office, local consultant	At least three months before the end of project implementation (July 2020)	N/A	
Financial Audit	PCU, UNDP CO, local consultant	Annually (2016, 2017, 2018, 2019, 2020)	Only for 2017.	
Lessons learned	Project team, UNDP-CO, UNDP- RSC	Annually and at the end of the project.	Each quarterly report contains a section on lessons learned, but there is no an annual document to compile and integrate these lessons learned.	
Visits to field sites (UNDP staff travel costs to be charged to IA fees)	UNDP CO, UNDP RSC (as appropriate) , Government representatives	Annually	PCU makes visits to each pilot state, but there is no record or report on results from these visits.	

Table No. 19: Summary of the M&E system established in the project document.¹⁸

¹⁸ Prodoc, p. 58, Section 6: M&E and Budget Plan.

Project's Board of Directors (PBD)

As indicated in section "Implementation Arrangements", a board of directors was established to support the implementation of the project, which should consist of the main stakeholders involved in POP's WEEE and pesticide issues. However, this critical board was only integrated by the PCU, UNDP, SEMARNAT and SAGARPA-SENASICA (the latter focused on the topic of pesticides), without the presence of other key project stakeholders as are the authorities of the pilot states, representatives of the business community focused on WEEE, and relevant NGOS. The PBD had six quarterly meetings between 2016 and 2018, plus an extraordinary one in April 2018, where most of the issues for discussion have been problems arising from the inventory of pesticides and empty containers.

As can be seen in table No. 20, the imbalance produced in favor of pesticides within the PBD is notorious, both in the treatment of the issues and in the agreements taken, where 28 of them have been on pesticides and only 9 on WEEE. Meetings' minutes account for long discussions on pesticides, while those for WEEE are quite short, which is normal considering that SAGARPA-SENASICA cannot deliver inputs on WEEE because it is not of its competence or specialization.

Regarding to the periodicity of the meetings, the evaluators estimate that it is an excess to have 4 annual meetings, considering that the common practice in GEF projects is having annual meetings with a maximum of 2, and in cases of extreme urgency there could be three in a year.

Although the Prodoc establishes quarterly meetings for the PBD, the minutes and interviews carried out indicate that this organization became more operative than strategic for the project, where it is noted that the PCU arrives at these meetings presenting the problems of project operation which the PBD had to resolve.

LA UCP does not concur with solutions or strategies to overcome these situations, thus the PBD spends much of its time discussing operational issues instead of focusing on project strategic issues such as alliances' policies and sustainability of the results obtained. Also, the main decisions taken to change or expand the project activities have not been documented in the meetings' minutes, as for example, the increased coverage for the electronic waste inventory.

Meeting	Pesticides' discussion issues	Discussion issues for WEEE	General Project progress	Number of issues discussed	Agreements on pesticides	Agreement s on WEEE	Agreements on project's general implementation
may-16	0	0	7	7	0	0	8
dec-16	6	1	1	8	2	0	4
apr-17	2	4	2	9	4	5	1
oct-17	2	2	6	10	8	2	1
dec-17	5	4	5	14	4	0	2
mar-18	8	4	5	14	10	2	1
apr-18 ²⁰							

Table No. 20: Topics covered and decisions by topic (WEEE and pesticides) during PBD meetings¹⁹.

¹⁹ Own elaboration from the minutes of meetings of the JDP

²⁰ Only the farewell of Mr. Cesar Murillo was discussed

The Technical Advisory Committee (TAC)

In addition to the PBD, a non-resolutive technical advisory committee formed by the main players from the WEEE and pesticides sector- whether they come from the private sector, academia, research, NGO and government sector- was created. This committee, whose objective was to provide expert technical advice had only met twice (September 2016 and June 2017).

The first observation on the operation of this TAC is that the issues of pesticides and WEEE were discussed jointly in both meetings, whose main operational feature is informative workshop type with an approximate duration from 4 through 6 hours, which does not allow for a thorough discussion of any of the two project's topics.

The number of participants who oscillated between 30 and 40 people does not help neither, and they had no previous knowledge on both the consultancies and project progress reports, thus these meetings were informative rather than based on expert advice about specific subjects, with little possibility of real participation and contribution from the participants of this committee.

Another problem identified with this committee is the absence of a workplan allowing for a systematic operation in time, with goals, deadlines, roles and clear commitments for all participant stakeholders. Due to this lack of prospect, most members notice a deficiency in the direction and objectives for this group, which has resulted in a failure in continuity and follow-up of its work, being these additional to the perception among its members that their knowledge and capacities are not considered for the decision-making process, which has finally resulted in a lack of appropriation of the project products and also a disinterest in participating in this committee.

The evaluators consider that the specialized technical knowledge of this committee is being untapped, considering the challenges posed by the project and the risks identified like the difficulty to identify POPs and country's obsolete pesticides, along with the implementation of effective management plans for WEEE at national and state level. The above become more important when considering that members of the Committee interviewed commented that the amount of obsolete pesticides could exceed the 400 tones mentioned in the Prodoc, and the little participation - for example- in the elaboration of the inventory for WEEE, in the consultancies on the evaluation of states' management plans, and in the guide of good management practices for these wastes.

The Working Groups (WG)

These WG were created to enable a more systematic and operational work in project's specific areas and thus solve the problems encountered in the TAC. These WGs are 3, whose details are shown in table No. 21.

As it can be seen, these groups suffer from the same problem as the TAC, since there is no continuity or workplan consistent with objectives, goals, deadlines, roles nor responsibilities. In addition, the format used for the group dealing with WEEE and pesticide is informative workshop type (duration between 4-5 hrs.) with a number of participants that does not allow a thorough discussion of the topics covered neither. The Customs group is narrower and alike to what a working group could be.

WG	Subject	No. of participants	Members	Meetings
Comercio	Prevention of illicit traffic of electrical and electronic equipment wastes and POPs pesticides	10-13	Customs, Central Laboratory; PROFEPA, SEMARNAT- DGGIMAR; PCU's specific Consultants	March 13th and 27 th ,
Pesticides	Inventory of pesticides	36	COPEFRIS; Customs' general administration; AMBIES (consultant); UMFFAAC; INECC; Procyt; DGGIMAR; SEMARNAT; SAGARPA- SENASICA; AMOCALI.	May 30, 2017
WEE	Waste of electrical and electronic equipment (WEEE)	49	Technology companies, environmental authorities, consultants, PCU, INECC, etc.	June 8, 2017; 27 Sept 2017

Table N º 21: Technical Working groups of the project

Reporting

The UCP has complied with all the requirements specified in the Prodoc, such as submission of quarterly and annual reports, and elaboration of PIRs.

In the case of quarterly and annual reports, these are based on activities, which are not related to the indicators nor deadlines stipulated in the project document. These do not identify priority components or activities neither, so they are a story on progress and problems encountered during their implementation.

With this type of report, it is difficult to distinguish the real progress of project's key activities and their deviations from what was originally planned in the Prodoc. This situation was detected in several meetings of the JDP, but no rectifications have been observed about it by the UCP²¹.

On the other hand, the rationalization of a strategy to implement the project is not found in these reports, nor measures to overcome the difficulties encountered are noted, thus much time is invested during PBD meetings in discussions on how to solve project operational problems that should be responsibility of the PCU, which should be the one proposing solutions and strategies where the PBD should resolve the ways to facilitate the implementation of these strategies through management in both their own institutions or with third parties.

In the particular case of quarterly reports, these are very rich in information, but are not useful to determine whether or not the scheduled results are being achieved, as they are not clear and straightforward in specifying how deviated from its target is the progress reported, or, if the result was reached.

Planning

The UCP elaborates the project's annual work plans (AWP) and annual budgets. <u>With regard to The AWPs</u>, these documents have been presented in 3 different formats, the latter being apparently extracted from the UNDP procurement system. The common feature of these POA is that they are budgets of activities that relate to a component of the project, but this planning is not compared to that originally planned in the Prodoc, so that activities that cannot be implemented are transferred from one year to another, without explaining the deviation or delay with what was supposed should be carried out in a certain fiscal year.

These POAs are not supported by any strategic documents that analyze the project's priorities as originally conceived and the ways to achieve these results. There is no an identification of actors and their relative importance for the project or activity that is planned neither, nor the risks involved and possible actions to minimize them are assessed.

²¹ Minutes' meetings 14-Dec 2016, page 2; and October 2017, p. 10; 18 Dec-2017, Page 4.

Therefore, the main shortcoming of these AWPs is that they do not give a vision on what is desired and the way to achieve it, there is no strategy that supports each activity, which are not prioritized according time and their impact on the potential results that will be achieved with them.

As an example of the foregoing, for the key decision taken to move from 5 types of WEEE to the 34 that were finally worked on the project, no assessment of its impact on project's resources was observed, nor in the execution schedule, nor its added value for the results of the project. It is worth noting that this decision, together with the low presence of representatives from WEEE sector in the PBD significantly blurred the project's orientation, leaving the COP issue in WEEE relegated to the background, and actually converting it into a WEEE management project with very low-visibility of the Stockholm Convention, which is the fundamental matter that allowed the financing of this project.

<u>With respect to the annual budgets</u>, these are very similar to the AWPs and present the planning for project's quarterly expenditures. It should be mentioned that different formats for each execution year were used, making even more difficult to carry out an analysis and follow-up of these budgets. On the other hand, none of these budgets are related to any specific result nor the expenses originally stipulated in the Prodoc, therefore it is not possible to assess the delay or over-expenditure made for each of the project components.

As a final remark, either these expenses are not prioritized according to the importance of the activities that are intended to be implemented.

<u>The UCP also used a custom-made tool in Excel format to perform project planning and monitoring</u>²². With this tool, the UCP carried out an exercise to weight the 6 components of the project, using criteria that have not been reported or systematized, so the reasons under which this ranking of components were made are unknown. As a result of the foregoing, component 2 corresponding COP emissions reduction from WEEE remained at a relative weight of 35% (in contrast to the Prodoc budget of 57% of GEF resources), while component 3 for pesticide disposal weighted 30% (26% of the project budget), thus this later issue was left almost equally important with regard to the elimination of POPs from WEEE, which would also explain in some way the emphasis on pesticide issues discussed at the PBD meetings.

Prioritizing and estimating the relative importance of components and activities is part of the planning and management process of any project and it is of paramount importance in defining the strategies to follow in order to achieve the desired results. Despite of above, it is noted that this process with criteria clearly established was not performed in this project.

On the other hand, the tool elaborated is complex to use, because it weights individual activities and their contribution to the desired result, so continuous update the Excel table to maintain its usefulness is required, situation that does not happen because the tracking was performed only until December 2017. Table No. 22 shows the detail of the revaluation of the project components and its comparison with the budget from the Prodoc, as a measure of its relative importance.

²² POP wastes' programatic progress

Component	Relative weight according PCU (%)	Relative weight according Prodoc (as % from project budget)
Component 1: Strengthening public and institutional policies and capacities related to the proper management of chemicals and POPs	15	3
Component 2: Reduction of POPs from electronic waste processing at state and waste processor levels	35	57
Component 3: Risk reduction through the elimination of accumulated inventories of POPs pesticides and other residues.	30	26
Component 4: Strengthening the management capacity of obsolete pesticides	10	6
Component 5: Monitoring and evaluation	4	3
Component 6: Project Management	6	5

Table No. 22: Relative weight granted by the PCU to the different components of the project.

Adaptive Management

The UCP reported a number of difficulties in implementing the project, such as the lack of knowledge of UCP members in UNDP's bidding and procurement processes, slow approval of the WEEE inventory tender by CAP²³ and in the elaboration of ToR of the different consultancies due to the technical complexities of it. Problems have also been reported to access information on expired pesticide stocks²⁴ and unavailability of cooperation by COPEFRIS to work on pesticide registration issues and locate the above-mentioned stocks

In the case of pesticides, the inventory elaborated does not have proper technical support to establish for certain that the quantities found correspond to the reality of the country, so neither the PCU nor SEMARNAT can state categorically these as ultimate amounts, and declare that the search for this type of waste will continue until the completion of the project. However, there is no planning and strategy to identify more stocks of POPs and other obsolete pesticides, considering that it was also decided to inventory and destroy them. Contaminated sites with POPs' pesticides have not been identified and there is no clarity neither on the path forward to address this activity.

The UCP also reported that the only authorized waste incineration plant does not meet the minimum standards to ensure that dioxin and furan emissions are under the level established for these purposes, because the kiln would not reach the temperatures needed to safely elimination of pesticides. In accordance with the above, the destruction of pesticide residues has not begun due to the low amounts found and the lack of viable technological alternatives to proceed with either their destruction or final disposal.

On the other hand, the tendering process for the consultancy to evaluate the POP's content in WEEE²⁵ was declared void, so this important activity was postponed for 2018, having as a consequence that the determination of the baseline for the pilot projects to track the progress in eliminating POPs.

In the case of PIRs, there is a clear difference between what was reported by the project coordinator and what was reported by the UNDP offices of Mexico and Panama. The PCU does not report implementation delays as a problem and it qualifies itself the progress in development towards the objective (DO) as "Satisfactory", while

²³ Informe Anual 2016, pag 2 y sección 4: PROBLEMAS/ASPECTOS RELEVANTES

²⁴ En el informe final de la consultoría de actualización del inventario de plaguicidas caducos, se enviaron 228 encuestas a 11 Estados, pero no se reportó cuántas realmente fueron respondidas, ni una estimación del universo total en estudio.

²⁵ Informe Anula 2017, pag 4

UNDP offices in Mexico and Panama report it as "moderately satisfactory" and the project implementation as "moderately unsatisfactory" with a risk rated as "substantial"²⁶.

As mentioned in Section xxx, the PCU lacks strategies to address the different problems encountered and delegates to the PBD the resolution of these situations, which has resulted in lengthy discussions in its meetings. Unfortunately, when the PCU encounters a problem such as the little collaboration found to collect data from COP and obsolete pesticides, it insists on continuing the same path without designing specific alternative strategies for solve every problem. As a result, the UCP starts to postpone key project activities without elaborating a plan to develop them, thus the unresolved problem is moved from one year to another.

Risk Management

The UCP reported the risks encountered and their rating in each annual progress report. During 2016, the difficulty of obtaining information on WEEE from state governments and recycling companies were reported as "high", whereas high risks were not identified. For example, the assumptions that obsolete pesticide residue quantities were not met was considered "low", even though that erroneous or outdated assumptions in the project's design phase were identified. Risks that holders of obsolete pesticides would not wish to provide information, as well as delays in recruitment of consultants and non-compliance with schedules planned in the Prodoc were also rated as "low" and/or "medium".

However, in the first quarterly report of 2017, the risk of identifying locations for pesticide stockpiles was reported as "critical", which changed the rating in the following quarterly reports, but the results of the efforts that changed the classification for this risk were not really known.

The same happens with the elimination of POP's emissions in WEEE and pesticide residues, activities that are reported as delayed, but this did not constitute a serious risk according to these reports²⁷.

These risk estimates were proven to be erroneous, considering the project's current implementation delay, showing disbursements of only 20% of what is planned in the Prodoc, as well as the level of co-financing, which has not been assessed by the PCU at the time of the midterm review.

The minimal amount of POPs and obsolete pesticides identified through inventory updating was noted by the PBD in its meetings, and it was considered as a risk that requires attention and a close follow-up. This issue was discussed more broadly in the next PBD's meeting as there was not significant progress; however, the issue is not addressed at subsequent meetings, the last being held on April 4- 2018²⁸.

As mentioned above, the UCP did not develop a strategy to implement every project component, where stakeholder analyses and the way on how to achieve their collaboration would be done. The communication strategy also made no progress in this regard and is focused to the production of broadcast material, instead of identifying and addressing the different types of actors found in the two project subjects (WEEE and pesticides) to promote their collaboration on the project.

Therefore, annual and quarterly reports indicate superficially the actions to be taken to mitigate these risks, but they do not address the root of the problems, nor elaborate alternative actions that could be taken in case of failure.

Stakeholder involvement

As mentioned above, a Technical Advisory Committee and 5 thematic working groups on regulations, communication, transboundary borders, WEEE and pesticides participated, involving about a hundred key players

²⁶ PIR 2018, pag 58 en adelante.

²⁷ Informe Anual de progreso 2017, UCP a PNUD México, pág 11.

²⁸ Minutas de Reuniones JDP: 2º/4/2017; Oct 2017; dic 2017

from both project issues, coming from academia, from academia research, authorities, government and the private sector.

SEMARNAT is actively involved in the development of the project, through its different areas collaborating in the review of the ToR's project consultancies, in legal advice on the destruction of obsolete pesticide stocks, and in the identification of these in the country as well.

SENASICA is also actively involved in the project, having a high degree of satisfaction about the scope achieved so far and the great usefulness and benefit of the project, although it appears to have had difficulty in promoting the participation of states' plant health committees, which are considered as potential holders of obsolete pesticides.

The ownership of the project's activities by the TAC has been very low, mainly due to its informative nature, the lack of consistency of its meetings and the absence of a shared agenda with the PCU. The actors have consistently declared their disillusionment with these instances because their views have not been taken into account and that, in most cases, they have only been used to facilitate the implementation of consultancies from which they do not know their TdRs or their scopes, and they have also stated not agreeing -in same cases- with the methodologies used by the consultants.

Another important aspect to highlight is that most of the actors interviewed have expressed their dissatisfaction with the products obtained from some of the consultancies carried out. The consultancies mentioned are the WEEE inventory, the diagnosis of the containers' obsolete pesticide program and the guide of good practices for WEE²⁹. On the other hand, the suitability of these consultants has also been questioned, mentioning that they did not have sufficient knowledge of the sectors where they were working. Therefore, without going into qualifying the stakeholders' opinions as correctly or incorrect, their majority perception of the poor quality and scope of the products of these consultancies, put the project in a difficult situation, because it makes project products have a low probability of use and replication. In addition, WEEE and pesticide inventories have not been officially validated by SEMARNAT.

Understanding of the project by the UCP

The project is well behind schedule in the implementation of its main components (WEEE inventory, WEEE POPs emissions, pesticide inventory, POP emission reduction from WEEE management in 3 states, and state plans and disposal of stockpiles of POP' pesticide wastes and associated residues). To understand these backlogs, which are not just because of problems of delays in tenders or procurement, an analysis on the concepts that the PCU has incorporated into the project's implementation should be carry-out. *The first and very important one was the increased scope* that was introduced to the inventory of WEEE, and the self-imposed need for the project to cover all WEEE issues, a situation for which the project was not designed.

The second factor concerns the roles of the PBD, TAC and technical working groups. The composition of the PBD caused a serious imbalance in favor of pesticides, due to the absence lack of representatives from the WEEE sector in this group. On the other hand, the role of the PBD is also wrong, as the PCU used this group to present a list of problems and situations on which the PCU should have had clear proposals on how to resolve them. This lack of solutions and strategies resulted in that PBD's meetings focusing on lengthy discussions on how to resolve these operational problems, rather than discussions on how to facilitate project management in order to implement these strategies on how to resolve conflicts and project implementation problems emanated from the PCU. This also resulted in a lack of rigorousness in the solutions proposed, as there is no follow-up for the decisions taken by the PBD.

<u>With regard to TAC and working groups</u>, these are not really participatory, they are just informative workshops that do not allow for informed opinions on the activities that the project is performing, due to the lack of a

²⁹ The evaluation team also revised the final report for the inventory of POP's plaguicides and coincides on the lack of technical rigorousness in the development of the consulting.

roadmap and the sharing of progress reports from the various consultancies. It should be added to this, that consultations about ToRs and consultancies' scope were made in none of these groups. The problem that arises from these groups is that key actors are asked for collaboration, but they are not given any possibility to have an "ex-ante" opinion on the different concepts of the project's work, but they work on the basis of consummate facts and short-time workshops, so with this scheme it is very difficult to achieve real support and commitment to the project's objectives from the actors.

<u>A third element is an understanding of what the project is trying to achieve and its priority tasks</u>. Key activities are postponed without seeking solutions and without considering that the proposed results must be achieved in a finite timeframe. These concerns are also found in the PIRs for 2017 and 2018³⁰. An example of the above is the WEEE inventory, where it is difficult to determine the actual quantities of the 5 products stipulated in the Prodoc, as well as the main generators and recyclers, let alone an estimate of potential UPOPs' emissions. However, the PCU stated that it has 8 companies identified to implement pilot experiences for emissions' reduction, so the evaluators assume that the PCU is trying to continue operating with the same scheme as what has been done so far.

The same situation could apply to WEEE management plans at state level, as the PCU is currently trying to develop a model based on existing state level management plans, leaving aside the specificities of each state and in addition, this model will be developed by external consultants, which would have to be implemented by the states' authorities.

According to the evaluators' concept, these plans should have the participation of the parties involved from the beginning of their design and implementation, which would involve the implementation of specific working groups with a clear agenda regarding the activity objectives, results and implementation timeline.

A fourth element to explain the misalignment in the project's approach and implementation can be found in the *type of management imposed in the UCP*, which appears excessively centralized and which tries to cover all the complications of the subject that the project seeks to address, without making alliances to overcome implementation problems, nor does it take advantage from the capabilities and knowledge that different actors can provide. The partnerships that the project carries out with state and municipal authorities, private sector and academy do not provide sufficient space for effective participation of these actors, placing them on an almost "beneficiaries" level of the project and not as "partners."

Progress to date

Table No. 23 shows the current project's progress according to the documentation reviewed and interviews conducted. Since the project document did not contain targets for the mid-term review, an exercise was carried out to estimate these targets according to the initial work plan proposed in the Prodoc, the results matrix and the section "Project Objectives, results and products/activities"³¹.

³⁰ The PIR 2018 doubts about the coordinator's real understanding on the project strategy established in the prodoc. ³¹Prodoc: 44-46, 15 and 29-37

Table No. 22. Draiget Dragrass an	ad rations for attainmont	of its objectives rea	ulto and producto
Table No.23: Project Progress ar	na ratings for attainment	of its objectives, res	suits and products.

Project strategy	Indicator	Baseline	Level at 1st PIR (June 2017)	Mid-term target	Target at the end of the project	Mid-term level and assessment (October 2018)	Rating for achievements	Rating justification
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	Grams TEQ of UPOPs emission reduced	Maximum potential generation of dioxins and furans with a range of 246.68 and 287.51 g TEQ./year	No reductions	starting	15% reduction in POPs from WEEE (42 gTEQ/year), equivalent to approximately 168 g TEQ during project implementation, starting from year 2.	No reductions. The PCU will start pilot projects to implement the BP/BAT guidelines once pilot companies are selected.	MU	The project developed a national and state inventory for WEEE, increasing the number of Prodoc's product types from 5 to 34, without yet estimating UPOPs emission baseline for the products specified in the inventory. At the time of the MTR, pilot projects had not been initiated, but 8 companies interested in participating was reported. This objective will not be achieved with the current pace of implementation of pilot projects, nor the measurement of POP content in selected devices. SEMARNAT has not made official the result of this inventory. The PCU has a misunderstanding of the project strategy delineated in the Prodoc, as the guides are product from the pilot experiences, where good practices, available technologies and lessons learned according to the reality of the country are distilled. The PCU has started backwards, developing the guides first and implementing the pilot projects afterwards. With the current project's strategy idea, this goal will not be met, due to the actual delay in its implementation, as well as the lack of baselines to estimate UPOPs emissions in the companies selected.

Project strategy	Indicator	Baseline	Level at 1st PIR (June 2017)	Mid-term target	Target at the end of the project	Mid-term level and assessment (October 2018)	Rating for achievements	Rating justification
	Elimination of POPs pesticides and related wastes.	307.56 tons obsolete pesticides identified at last official update in March 2012.	No reductions	,	Environmentally sound destruction of at least 400 tons of obsolete pesticides	No pesticide elimination. The project could not find the stocks of POP pesticides and related wastes reported in the Prodoc.	MU	The inventory update for POP pesticide wastes did not find the 400 tons mentioned in the Prodoc, and it could identify only 96 ton. It also does not establish that these are the final amounts and it leaves the inventory activity open until the end of the project. Serious technical deficiencies were identified during implementation and monitoring of the work carried out for the inventory update (***). Currently, there is no robust, objective, agreed and documented planning and strategy to identify more stocks of these pesticides, in order to reach conclusions based on the real stocks of these pesticides in the country. The PCU has a misunderstanding on the concept of POP pesticide residues and related wastes, as the Prodoc states that stocks of total residues found alongside POP pesticides will be eliminated, increasing the inventory to non- POP obsolete pesticides without justifying this enlargement. It is also reported that the only incineration company authorized by SEMARNAT does not meet the technical requirements to minimize dioxin and furan emissions from the process (the kiln would not reach the minimum required temperatures). Confinement and export are available options for these wastes. The reduction target will not be met at the current pace of implementation of the project, which is severely behind schedule in its main components, nor there is a conviction that the quantities found are effective, thus lowering the level of elimination for the project cannot be possible at this time. The inventory update has not been made official by SEMARNAT.

Project strategy	Indicator	Baseline	Level at 1st PIR (June 2017)	Mid-term target	Target at the end of the project	Mid-term level and assessment (October 2018)	Rating for achievements	Rating justification
	Regulatory and legislative framework strengthened	Non- integrated frame with proper chemical handling	Elaborated preliminary proposal for amendment, which will be supplemented by a study of economic instruments.	Regulatory amendments prepared, including economic instruments.	Regulatory and legal improvements in process under the Mexican hazardous waste law and its regulations	No progress in the legislative process. It is reported that a consultancy on economic instruments for WEEE waste management is underway and a consultancy on evaluation of re-categorization of WEEE to "hazardous waste" will be carried out in the first half of 2019.	MS	According to the current level of project implementation, the proposal could be finalized by 2020, but without beginning the internal discussion process in SEMARNAT or in congress. The project is also supporting the official Mexican standard NOM-161- SEMARNAT-2011 that regulates wastes considered as "special" and their management plans. The project also supports the analysis and formulation of Mexico City's draft environmental standard (PROY-NADF-019- AMBT-2018) regarding WEEE management. The consultancy for assessing the regulatory impact is still in progress, with no report on its progress status.
Result A: National legal and regulatory framework strengthened	Training at State level on inspection of POPs substances and products containing new POPs (PROFEPA and Customs)	Nothing implement ed	Workshop is being prepared for identification and inspection of obsolete pesticides to be implemented in August 2017. 25 customs officers from 15 checkpoints with high level of pesticide imports will be trained, as well as central and regional customs laboratories.	Starts in year 1, with an average of 40 trained staff/year, with approximately 100 trainees by the time of the MTR.	200 federal and state inspectors trained.	Together with Mexico's ozone unit, 24 officers from customs, PROFEPA and COPEFRIS were trained on illegal trade of POP and ozone layer depleting substances (ODS). Agenda included information on prohibited pesticides, import/export procedures, harmonized code and customs tariff codes for POP pesticides, and demonstration of the use of chemical detection equipment. Assessment for customs inspection and surveillance capabilities to identify WEEE and PO pesticides is underway. Cooperation with Customs for POP analytical determination was also established, and a task	MS	Although the number of 200 trained staff by the time of the MTR is only indicative, it appears that the 24 inspectors trained are well below of what is expected at this stage of the project. On the other hand, the evaluators have not had access to the workshops' agendas, which have focused on the risks of POP in general and on the issue of pesticides and ozone-depleting substances, so the subject of POPs in WEEE and the products containing them does not it has been specifically covered, and the distribution of time devoted to the various topics is unknown, considering that these trainings were carried out in conjunction with the Mexico's Ozone Unit. On the other hand, the interviews conducted indicate that officials from customs and Profepa do not know yet which WEEE products contain POPs, so this line of work should be strengthened. No issues are identified to meet the target of the 200 trainees at the end of the project, but the agendas for these workshops must be developed in a way that the objective of

Project strategy	Indicator	Baseline	Level at 1st PIR (June 2017)	Mid-term target	Target at the end of the project	Mid-term level and assessment (October 2018)	Rating for achievements	Rating justification
						force was created to prevent the illicit trade of WEEE and pesticides.		focusing on POP trade issues in WEEE and pesticides, according to the training needs identified.
	Increased analytical and monitoring capabilities of federal inspectors, customs and chemical laboratories.	Nothing implement ed	(i) an assessment of baseline capabilities was initiated; (ii) laboratories' network was identified; (ii) work with INECC for this activity was started.	This begins 1.5 years before MTR, with an average of about 33 trained officials/year, with a progress of approximately 50 trained persons by mid-term period.	100 federal inspectors, customs officers and personnel from chemical laboratories trained, and capacity strengthened.	 i) Collaboration was established with Customs' central laboratory, for determination of obsolete pesticides found in warehouses, placing this activity as co-financing. The training of the 24 inspectors on the use of portable detection equipment reported in the previous activity, is also charged to the present activity ii) partnership with INECC is initiated to identify chemicals in WEEE, develop of sampling and analysis procedures for POPs in electronic waste and pesticides, residue analysis of POPs in empty pesticide containers, assessment of analytical capacities and a national inter- laboratory exercise. 	MS	The training of the 24 staff performed under the previous activity does not seem sufficient to reach the target of 100 trainees. The activity with INECC and the customs' laboratory is important to define current analytical capabilities and define lines of action to strengthen them and carry out the necessary trainings to the actors of the system. So far, the evaluators have not had access to the document that formalizes the work between SEMARNAT and INECC, and the customs' laboratory, as well as the workplan to achieve the desired results. The strengthening target could be achieved at the end of the project, but attention should also be paid to strengthening the network of laboratories at the national level.

Project strategy	Indicator	Baseline	Level at 1st PIR (June 2017)	Mid-term target	Target at the end of the project	Mid-term level and assessment (October 2018)	Rating for achievements	Rating justification
	Sustainable capacity to support reports to the Stockholm Convention, and information exchange.	Limited activities	I) support in preparation of Mexico's report to the convention; (ii) INECC oversees the operation of the SCRC Mexico regional center.	It cannot be estimated from the prodoc	i) Increas e in reporting to the Stockholm convention and exchange of information; (ii) participation in the global POP's monitoring network; (iii) Mexico takes a leading role in its regional network.	i) A consultancy was contracted to make an assessment on the NIP's implementation, the action plan and recommendations, which is in the early stages of development; (ii) the project attends meetings of several working groups related with chemicals.	S	The country will have an assessment and an action plan for the implementation of its NIP, which together with the collaboration agreements with INECC and customs' laboratory, capacity building will be created to deliver better reports to the Stockholm Convention. In addition, INECC is the supervisory entity of the Mexico's regional center. It is very likely that the strengthening in reporting and information exchange of between Mexico and its counterparts, and its leadership role in the region can be achieved at the end of the period.
<u>Outcome B):</u> Development and implementation of State pilot level e-waste	Establishmen t of State level regulatory and legal framework	None	Study on regulations conducted in 3 pilot states: Baja California, Jalisco and DF Mexico City. No regulatory proposals submitted.	Elaboration of proposals for amendments in final stage, with a progress of approximately 80%.	Development of legal amendments at state level for sound management of WEEE.	No progress in the development of proposals. Project informs on the evaluation of state management plans and its participation in a series of statewide workshops to discuss management plans.	MI	The study lists a considerable number of regulations at federal, state, and municipal levels, indicating the need for update them. The study does not have a chapter for conclusions and recommendations, nor does it provide a preliminary proposal to adjust state level (Jalisco, Baja California, CDMX) and municipal regulations. This result is delayed and the project is likely to fail to submit a proposal for pilot states' regulations.
management plan in three states: Baja California, Jalisco and Federal District of Mexico City and projection to the entire country	Development of WEEE stewardship levies and EPR to foster sustainable financing of sound management of e-waste	None	The study of economic instruments at state level is being elaborated under result A, and it is expected to be completed in Sept. 2017.	Development of economic instruments with a progress of approximately 25%.	i) administration levies established; (ii) EPR mechanisms developed to promote sustainable financing	Consulting for comparative analysis of economic instruments ended between Oct-Dec 2017. However, there is no proposal for implementation of the selected economic instrument but is left for a coming consultancy.	MS	The study lacks a preliminary proposal on regulations and the way of implementation for the "advance fee payment for recycling", and its preparation is left for an undefined later stage. This important product could be made during the project's second half for internal discussion in SEMARNAT and, perhaps its discussion would go to Congress before the project ends.

Project strategy	Indicator	Baseline	Level at 1st PIR (June 2017)	Mid-term target	Target at the end of the project	Mid-term level and assessment (October 2018)	Rating for achievements	Rating justification
	State and national inventory on e-waste generation and mass flow balance	Obsolete or inadequate data.	National inventory and inventories for the 3 pilot states under development, it is estimated to be completed on Sept. 2017.	Inventories in final stage of development, with a progress of approximately 80%.	improved determination of e-wastes generated, and	National and state level inventory (3) completed. It does not include waste generators and does not identify POP containing products, nor it makes an estimation of UPOPs emissions, as stipulated in the prodoc.	MU	The effort made, while important to the overall issue of WEEE, does not address the main aspects of POPs in the 5 products defined in the Prodoc, which are fuzzy in the development of the study, thus it will be necessary a re-calculation for these specific products and estimate their potential UPOPs emissions during decommissioning and recycling process, so there is no estimated baseline for POPs at national and state level, nOr for companies that could be part of the pilot projects to reduce emissions. This important activity is significantly delayed and considering that the study will need to be adjusted for the products indicated in the Prodoc, it is very likely that this goal will not be met at the end of the project.
	Development and implementati on of management plans at state level	Limited	No progress noted, it is expected that the legislation consulting reviews the plans in some states; and inventory and characterizatio n of the recycling industry's studies are pending.	Development of state management plans started, with a progress of approximately 50%.	•	No progress. It is reported that the contract with Oscar Consultores is in the process of being terminated due to the irregularities found.	MU	The consultancy is stopped and only two progress reports have been submitted, containing only definitions of terms and an analysis of national and international regulations, categorization of WEEE, etc. Again, there is no specific section on how to identify POPs in WEEE nor its management, so the main topic financed by the project remains diffuse and unplanned. The consultancy was based on the evaluation of current state management plans and development of a model management plan for WEEE in the states was expected. This product is significantly behind schedule and it is probable that a proposal for these plans will not be available before the project is completed.

Project strategy	Indicator	Baseline	Level at 1st PIR (June 2017)	Mid-term target	Target at the end of the project	Mid-term level and assessment (October 2018)	Rating for achievements	Rating justification
	Developing and implementin g outreach strategies	None	Dissemination strategy elaborated.	Development of dissemination strategy started, with an approximate progress of 38% of the goal.	Dissemination program for general public and departmental governments developed, implemented and results evaluated.	No formal document establishing a project dissemination strategy was found, nor a strategy to characterize key project stakeholders and how to approach them in order to commit them with the project.	MU	The project apparently has a non-formal strategy, focused on the participation of the PCU in different type of events and workshops to raise awareness on WEEE issues. In addition, the project aims to promote and strengthen local waste collection campaigns, situation that does not seem useful for the development of state plans. This component should be refocused to meet the objective of informing and, in addition, identify key actors and their importance in state governments, besides indicating a way for approaching both the informal and formal WEE recycling sector. As the project is in its third year, it is possible that this strategy may not be fully implemented, due to the urgency of starting POPs elimination activities in WEEE as soon as possible, with its corresponding assessment for emission reductions.
	 (i) Training strategies for electronic waste management developed; (ii) Guides elaborated; (iii) Number of training workshops held 	None	 i) Contr act of a consultant to develop BEP/BAT guidelines; (ii) good practice training workshops not performed. These will be implemented once the guidelines have been developed. 	design starts at the beginning of year 2; but implemented after pilot projects	i) Trainin g strategy for general public, WEEE recycling companies, and state governments developed, implemented and results evaluated; (ii) 500 participants in the training; (iii) 2 guides elaborated.	PCU reports that it has a training strategy, but evaluators can't find the document. Existence of drafts for good practice guides is also reported.	MU	There is a misunderstanding regarding these activities, as the project reports that it has already developed the guides for best practice that include 5 documents: (i) Generation of WEEE, ii) collection and transport, iii) treatment, (iv) maximization of value, and (v) disposal. It should be noted that Prodoc's strategy was to first carry out the pilot projects for management, recycling and reduction of POP emissions from the process, and then extract the good practices and lessons learned that would be appropriate to the reality of the country. The PCU is conducting this activity backwards, as pilot recycling activities are not yet started. Just as it is been acted upon, project products will be formally obtained, but they will not respond to the strategy approved by the GEF. It should be noted that it will be difficult to train 500 people from public and

Project strategy	Indicator	Baseline	Level at 1st PIR (June 2017)	Mid-term target	Target at the end of the project	Mid-term level and assessment (October 2018)	Rating for achievements	Rating justification
								private sector plants, due to the backlog of pilot projects.
	Characterizat ion study of nationwide recycling industry to establish a registration and certification system	None	 i) natio nal characterizati on of the formal industry finalized; (ii) partial characterizati on of informal industry; (iii) registration of formal industries tested at pilot level; (iv) no advances in certification. 	Study in final development stage, together with the registration and certification system, with an advance of approximately 80%.	i) inventory of formal and informal recycling companies; (ii) registration and identification system for recycling companies established; (iii) 20 companies certified; (iv) increase in the number of registered companies.	 i) Inventory of formal and informal companies completed. 153 companies were found nationwide and 78 were found in the 3 pilot states.; (ii) a companies' voluntary registration system was implemented on the project website; iv) there is no progress in the certification process. 	MU	The registration system implemented in the project's website (http://www.residuoscop.org/empres as/) is voluntary is in a preliminary stage, and it has been fed from the data from the consulting of the recycling industry characterization. However, no new companies like waste generators have registered, in order to become a real exchange platform. It needs more work, and clear and transparent procedures to companies. Although it is reported that the certification system will be implemented, there is no specific workplan to achieve this goal. Because the project is already in its third year of implementation, it is not visualized that the registration and certification system may be operational by the end of the project, but only at the proposal level and perhaps in pilot test.
	Establishmen t of nationwide e- waste information exchange platform	None	Platform implemented on the project's website, which includes voluntary registration for recycling companies (<u>www.residu</u> <u>oscop.org/e</u> <u>mpresas</u>).	Start of implementation of the platform, with an approximate advance of 12%.	information exchange system established, connecting WEEE waste streams with secure processors.	It corresponds to the register of companies. No exchange between companies has been observed with this tool.	MS	No new companies like waste generator have been registered, so that it can become a real exchange platform. It needs more work, and clear and transparent procedures for companies. This product could be completed at the end of the project, but it might not be operational.
<u>Outcome</u> <u>C):</u> Demonstration of POPs release minimization in	Number of demonstratio n pilot	None	noted, 10 recycling companies	start 1.5 years before the MTR, with an approximate advance of 40%.	least 2 interventions implemented.	No significant progress noted. The PCU reports that pilot projects will be implemented once the guides are completed by	MU	The project begins the other way around with this activity, as the guides should be the result from pilot experiences, showing a PCU's poor understanding regarding the strategy proposed in the Prodoc. Companies have not

Project strategy	Indicator	Baseline	Level at 1st PIR (June 2017)	Mid-term target	Target at the end of the project	Mid-term level and assessment (October 2018)	Rating for achievements	Rating justification
formal recycling and informal recycling of e- waste	projects with introduction of BAT/BEP in formal recycling facilities		assess their operation and practices.			the end of 2018. In the meantime, companies have not been selected, but the criterion will be to select those that already demonstrate good practices.		been selected, nor is there a baseline against UPOPs emission reductions will be compared. Due to the delay of this component, there is a high probability that the reduction target set by the Prodoc will not be met.
-	Number of demonstration pilot projects in informal recycling plants to bring operation up to environment ally sound operational and compliance level	None	No progress noted, study to evaluate informal enterprises will begin in the second half of 2017.	Start 1.5 years before the MTR, with an approximate advance of 40%.	At least 2 interventions implemented.	No significant progress noted. The PCU reports that pilot projects will be implemented once the guides are completed by the end of 2018. In the meantime, companies have not been selected, but the criterion will be to select those that already demonstrate good practices.	MU	The project begins the other way around with this activity, as the guides should be the result from pilot experiences, showing a PCU's poor understanding regarding the strategy proposed in the Prodoc. Companies have not been selected, nor is there a baseline against UPOPs emission reductions will be compared. Due to the delay of this component, there is a high probability that the reduction target set by the Prodoc will not be met.
	Feasibility study and design of an integrated recycling facility	None	No progress, it is expected to begin by year 4 of project implementatio n.	Start 1.5 years before MTR with an approximate advance of 83%, but in parallel with the pilot experiences.	Feasibility study with project design completed, identification of financing and options with a private sector proponent.	No progress, it is expected to be performed in the first half of 2019, once the pilot projects are completed.	MU	Because there are no advances in the pilot projects, this activity will be surely carried out in 2020, so it is likely that this goal cannot be achieved considering that, in addition, there must be a company interested in developing this recycling plant.

Project strategy	Indicator	Baseline	Level at 1st PIR (June 2017)	Mid-term target	Target at the end of the project	Mid-term level and assessment (October 2018)	Rating for achievements	Rating justification
<u>Outcome D):</u> <u>Provincial</u> POPs pesticides Waste Management Plan	Availability of inventory of remaining POPs pesticide stockpiles and associated waste.	Outdated and incomplete inventory	(i) Submission of 200 surveys addressed to distributors in 11 states; (ii) establishment of partnerships with state and local authorities to support information collection; (iii) located 219 kg of POP pesticides and 4 ton of methyl parathion (non-POP).	In final stage with approximately 83% progress: (i) detailed inventory; (ii) initial prioritization; (iii) risk analysis including training of public officials and service providers.		Inventory still open, 96.3 ton of POP pesticides and associated wastes were found.	MU	The project has could not locate the 400 ton of COP and associated waste, mainly due to access to information problems in the states and health authorities. A lack of technical rigor in the consultancy for the inventory updating was also detected, which makes its results inconclusive or represents a significant advance in the identification of POP pesticide stocks. There has been significant progress in Colima, where this state declared itself as a waste generator and it will implement a management and destruction plan. In Tula, Hidalgo, pesticide wastes were also found, amounting to 3.6 tons in both states, whose wastes will be used in protocol tests in a cement facility. This inventory has not been officialized by SEMARNAT.
establishment and tested in selected provinces	Availability of Waste Management Plans at 3 States (Chiapas, Sinaloa, Jalisco)	Not available in all states	No progress. The inventory of pesticide wastes and pilot states will be selected based on this inventory and the assessment of the empty containers' program. The plans will be drawn up in parallel with the risk analyses of contaminated sites.	Start 6 months before MTR with approximately 17% advance.	3 management plans designed and tested at pilot scale, ranging from identification to destruction of POP pesticides.	management plan for the	MS	Colima was not initially included in the pilot states, but it has extensively collaborated with the project to identify its stocks of POP's pesticides and obsolete pesticides. No progress in the elaboration of management plans for the other two pilot states, mainly because the limited information provided by the states and their authorities. A guide for elaboration of pilot plans at state level is in progress. These plans could be ready by the end of the project, but not their implementation.

Project strategy	Indicator	Baseline	Level at 1st PIR (June 2017)	Mid-term target	Target at the end of the project	Mid-term level and assessment (October 2018)	Rating for achievements	Rating justification
OutcomeE):SubstantialeliminationeliminationfremainingPOPspesticidestockpilesandPOPswastesinMexicostate	Effective commercial options for environment ally sound destruction of POPs pesticide stockpiles and wastes	None	Study under development, it is expected to be completed by third quarter of 2017.	Study completed	Available domestic and export market commercial destruction options assessed	Study complete.	S	The study concludes that there are 3 pesticide incineration plants approved in the country, where it is unknown whether two of them are in operation and the third (SIMARI) does not comply with the recommendations established by IPAH and endorsed by the convention secretariat (it does not meet residence times or recommended temperatures). In the case of co-processing in cement kilns, there is an express prohibition on the use of concentrated pesticides in the production of alternative fuels and only empty containers that have been triple washed can be received. Finally, for the case of confinement, there is only one company authorized to receive pesticides. The export of pesticides for incineration abroad appears to be the option favored by FAO or the EU. The study recommends modifying the permits of cement plants to perform the destruction in Mexico (*). Further investigation into this matter would be necessary, as the company declares operating temperatures between 982 and 1204 °C and its limit would be the treatment of Chlorine Persistent Compounds and Bio-accumulative above 47,500 ppm (**).

Project strategy	Indicator	Baseline	Level at 1st PIR (June 2017)	Mid-term target	Target at the end of the project	Mid-term level and assessment (October 2018)	Rating for achievements	Rating justification
P p s a	Amount of POPs poesticide stockpiles and waste destroyed	400 tons of confirmed inventory of pesticide stockpiles	inventory of 400 tons described in	Start destruction one year before MTR, with an advance of approximately 13%	Elimination of 400 ton of COP and associated pesticide residues.	No pesticide elimination. The project has not been able to find stocks of COP pesticide and associated wastes.	MU	The COP's inventory update for pesticide wastes does not find the 400 tons specified in the Prodoc, but it does not establish that the amounts found are definitive quantities and leaves the inventory activity open until the end of the project. The PCU has a misunderstanding on the concept of POP pesticide wastes and associated, as the Prodoc states that stocks of all stockpiles of wastes found alongside POP pesticides will be eliminated, and it was also expanded to other obsolete pesticides without justifying their inclusion. It is also reported that the only incineration facility authorized by SEMARNAT does not meet the technical requirements to minimize dioxin and furan emissions from the process (the kiln would not reach the appropriate minimum temperatures). Confinement and export options are available for this waste and it was reported that the only interested plant withdrew this operation. The other option is co-processing in cement kilns, but for this it is necessary to find another cement facility to carry out the testing protocols required by SEMARNAT in order to comply with the regulations. The reduction target will not be met at the current pace of project implementation, which is severely delayed in its main components, nor is there a conviction that the quantities found are effective, so the level of elimination for the project cannot be lowered. The inventory update has not been officialized by SEMARNAT.

Project strategy	Indicator	Baseline	Level at 1st PIR (June 2017)	Mid-term target	Target at the end of the project	Mid-term level and assessment (October 2018)	Rating for achievements	Rating justification
	Feasibility study for recycling of used pesticide containers	None	Without progress, it is expected to complete the consultancy to evaluate the empty containers' program during the first 3 months of 2018. Results from the consultancy will be recommendati ons to improve the program and identify improvements in the management of this type of waste.	Study starts 1.5 years before MTR, with an approximate advance of 75% progress.	(i) Study of technological and economic aspects of recycling pesticide containers; (ii) Action plan elaborated and costs estimated.	According to the PCU, there is a final report of the consultancy "Analysis of technical-economic feasibility of alternatives for the decontamination from agrochemical and pesticides' plastic containers to be recycled in Mexico".	MS	There is a progress of only 25% for the activity, the market analysis of the technology has not been performed because the economic feasibility analysis has not been made. No schedule to complete this study is reported. This product could be achieved during the second half of the project. A final report is available, but the evaluation team has not had access to the report's final text, so no assessment on its content can be ca be made, but the first progress report dated March 5, 2018 was reviewed.
<u>Outcome F):</u> Containment/re mediation of priority POPs pesticide contaminated sites and national programme to address remaining sites	Number of remediation plans for high priority POPs contaminate d sites	None	Identified a contaminated site (fertimex), where project supported with analysis for determination of with POPs. Selection of contaminated sites is postponed until completion of	Plans at final stages with an estimated progress of 75%.	3 remediation plans elaborated, including cost estimations for costs.	No progress. It is reported that the project is supporting the SISCO's updating (computer tool to develop SEMARNAT's inventory of contaminated sites). The development of the remediation plans is postponed for the third year of implementation of the project.	MU	Although there is a tentative list in SEMARNAT about country's potentially contaminated sites, no prioritization has been made and a consultancy is supported to update the SISCO computer system instead, whose TORs are under elaboration so hopefully, the results of this consultancy could be available in the second half of 2019. This product is far behind schedule and it should start with the identification and prioritization of contaminated sites based on the current listing and field observation, if this goal is to be met before the end of the project. In addition to the above, there is not a clear and

Project strategy	Indicator	Baseline	Level at 1st PIR (June 2017)	Mid-term target	Target at the end of the project	Mid-term level and assessment (October 2018)	Rating for achievements	Rating justification
			pesticide waste inventory.					robust pathway to follow in order to identify these sites.
ч	Number of first phase remediation plans for POPs pesticides contaminate d sites	None	Design of remediation plans are postponed until the project's third year of implementatio n, pending from the update of the national programme for the remediation of contaminated sites by SEMARNAT.	Start 6 months before MTR, with an estimated advance of 25%.	i) 10 preliminary remediation plans generated; (ii) implementation arrangements including the identification of cleanliness and financing.	No progress. It is reported that the project is supporting the SISCO's updating (computer tool to develop SEMARNAT's inventory of contaminated sites). The development of the remediation plans is postponed for the third year of implementation of the project.	MU	Although there is a tentative list in SEMARNAT about country's potentially contaminated sites, no prioritization has been made and a consultancy is supported to update the SISCO computer system instead, whose TORs are under elaboration so hopefully, the results of this consultancy could be available in the second half of 2019. This product is far behind schedule and it should start with the identification and prioritization of contaminated sites based on the current listing and field observation, if this goal is to be met before the end of the project. In addition to the above, there is not a clear and robust pathway to follow in order to identify these sites.
	Availability of national programme for on-going management of POPs pesticide contaminate d sites	None	Project supports the updating of SEMARNAT's national program.	Start 1.5 years before MTR, with an approximate advance of 38%.	National program addressing contaminated sites in general, with specific emphasis on sites contaminated with POPs	A full-time consultant was hired to support the "Directorate of Restoration of Contaminated Sites" in the development of the Program. SEMARNAT published the document on its website: https://www.gob.mx/ semarnat/documento s/programa-nacional- de-remediacion-de- sitios- contaminados?idiom =es. This Plan has not yet been formalized and this is expected to happen during	MS	The UCP has an erroneous understanding of the strategy established in the Prodoc, as this national plan would be the result of experiences from high-priority site remediation plans and 10 preliminary plans. Apparently, the national plan is the product of a desk job t this moment. Therefore, there is a product that would not meet the requirements of obtaining prior experience by developing some remediation plans before proceeding with the development of the national programme.

Project strategy	Indicator	Baseline	Level at 1st PIR (June 2017)	Mid-term target	Target at the end of the project	Mid-term level and assessment (October 2018)	Rating for achievements	Rating justification
						the new administration that begins in Dec 2018.		
<u>Outcome G):</u> Institutional strengthening at provincial level for obsolete pesticides management delivered	Availability of an assessment covering national institutional capacities for implementati on of state level obsolete pesticides management plan	State and national level programm e not matching obligations of internation al convention s	Assessment will start on Oct-Dec 2017.	Start 1.5 years before MTR, with an approximate advance of 50%.	legal loophole analysis; (iii) priorities and	Only the legal analysis was developed, but it was determined not to perform the analysis of national and state institutional capacities for the management of obsolete pesticides. It was decided to start training without this product.	MU	There is a problem of understanding here- on the part of the JDP and the PCU - about the Prodoc's strategy for this activity. This, in fact, proposes the development of a comprehensive strategy for the management of empty containers and it also calls for coordination between government bodies involved, the development of a sectoral responsibility's analysis and the establishment of an operational sectoral protocol to promote good practices, to eventually conduct training. The PCU decides to perform a diagnosis with SEMARNAT's internal groups and with the state authorities from Jalisco and Yucatan, to reach the conclusion that there are no capabilities in the states. However, the scope of the activity proposed in the Prodoc is much broader than that, as it is also defined that from capacity and legal assessments, priorities and action plans should be identified, in conjunction with the implementation of public-private sector partnerships. It should also be mentioned that the Prodoc strategy is focused on strengthening states' capabilities for inspection and compliance according to their responsibilities, together with supporting users in the handling of obsolete pesticides. With the current approach it will not be possible to obtain the desired result in the strategy stipulated in the Prodoc.
Ľ	Outreach and training programmes developed	None	Project participates in numerous events to raise awareness on responsible use of pesticides,	Start 1.5 years before MTR, with an approximate advance of 38%.	100 end-users of pesticides, waste management and supervising authorities trained.	4 training workshops have been held in the states of Michoacán, Oaxaca, Yucatan and Zacatecas, aimed at producers, agriculture technicians,	MS	The target of 100 trainees has been exceeded so far. The project has also participated as speaker at international conferences on food safety, and other technical event on producers and inspectors. However, it should be noted that the evaluators have not accessed a training planning document, their objectives

Project strategy	Indicator	Baseline	Level at 1st PIR (June 2017)	Mid-term target	Target at the end of the project	Mid-term level and assessment (October 2018)	Rating for achievements	Rating justification
			but a specific programme of dissemination and training is not developed by the project.			safety advisors and students, on good practices in the use of pesticides and their risk to health and the environment, including POPs. 460 persons have been trained (78 women and 382 men). 54 operators of temporary empty container collection centers from 22 states (14 women and 40 men) were also trained.		and agendas for the topics covered in the workshops. The PCU should prepare a report containing this information to provide a clearer view of the contribution of these trainings to the project objectives. The prodoc's strategy was also aimed to train inspectors in the compliance of obsolete pesticide management's regulations.
	Availability of national pesticides waste management guidelines	Present guidelines not matching obligations of internation al convention s	Project works on updating national guidelines for the management of obsolete pesticides. No progress is indicated.	It begins 2.5 years before the MTR, with approximately 63% progress in the development of guidelines.	One guide updated reflecting international practices and lessons learned.	A consultancy was contracted for the development, in conjunction with SENASICA, of a manual on the use and sound management of agrochemicals. This manual is finalized and has been used and distributed during training workshops as a tool required by the federal law on health planning.	MU	There is a problem of misunderstanding of the prodoc's strategy for this result. The assessment of national and state capacities for the implementation of state management plans for obsolete pesticides, which would also include reporting formats, was a required activity that had to be carried out before the elaboration of the guide, in order to incorporate that information and the international experience. The project elaborated a "Manual for Sound Use and Management of Pesticides in the field", which does not constitute a national guideline on pesticide wastes' management but is rather a manual for correct use of application of procedures for other pesticide wastes, although PRODOC points out "Update national pesticide waste management guidelines", i.e. the emphasis is on pesticide wastes. Similarly, the PRODOC indicates the updating of formats, which are not mentioned or included in the manual. It is not clear what

Project strategy	Indicator	Baseline	Level at 1st PIR (June 2017)	Mid-term target	Target at the end of the project	Mid-term level and assessment (October 2018)	Rating for achievements	Rating justification
								the purpose of the manual is, as it is not set out in its own content.
	Reinforceme nt of State and municipal level obsolete pesticide and used containers collection programme delivered	Outdated State level used pesticide containers programm es	national capacities will		•	The evaluation of the empty containers' program was completed in conjunction with SENASICA and the states of Jalisco and the Yucatan Peninsula. A proposal for a national programme including the recommendations made by the evaluation and experiences of other NAFTA's countries and Latin America, especially Brazil is pending.	MS	The study makes 62 recommendations to improve the national plan for empty containers. This result could be achieved before the end of the program. The PCU reports that delays in the consultancy were due to the difficulty in obtaining the necessary information. The proposal for a national programme including the consultancy's recommendations remains pending.
	National replication programme for sustainable pesticide management	None		Program start at the time of the MTR, with a advance of close to 20%.	A national replication program for sustainable management of obsolete pesticides developed.	No progress, it is postponed for the fourth year of implementation of the project.	MS	A present, the lack of an assessment of the real states' capabilities, priority lines of action in this area and a functional public-private partnership, makes it difficult to believe that at the end of the project there would have experiences and lessons learned that serve as an input to a nationwide replication program.

(*): Contract No. IC-2017-018: "Technical and economic evaluation of treatment methods and/or final disposal of obsolete pesticides containing persistent organic pollutants, and analysis of nationally installed technical capacity; Mexico City, November 23, 2017.

(**): <u>http://simari.com.mx/servicios/oxidacion-termica</u>

(***): With regard to the inventory of obsolete pesticides, a significant lack of technical rigor in the work carried out, and a serious doubt about the full implementation of the activities committed in the ToRs are identified. Namely, the absence of a robust basis for explaining and justifying the methodology used in the light of previous efforts in this area is denoted; there is no evidence of the use of statistical tools for the application of a survey as part of the methodology; there appears to be no link between the conceptual and research information requested in the ToRs with the methodological proposal proposed, nor is that information used to support or explain the results obtained; the results of the inventory appear to be incomplete considering the proposed methodological proposal, and are also poorly explained; the conclusions and recommendations are general and reflect the lack of expert knowledge in the field. There is no serious analysis of whether or not further stocks of POPs pesticides are found, considering the provisions of the PRODOC and the previous pesticide inventories, which did not in any case report stocks exceeding 200 Tons.

3.3. Remaining barriers

The main remaining barriers that the project must face are the following:

Management

The decisions taken by the PCU and SEMARNAT have meant that the implementation of the most important components of the project has been systematically postponed, significantly increasing the risk that the project may not be able to fulfil its main purpose (pesticide elimination and emission reductions in WEEE management), and leave in discussion a legislative proposal to regulate electronic and pesticide waste, capacities strengthened in the states thanks to the implementation of pilot projects for emission reduction of POPs contained in WEEE and its consequent state management plans.

The misunderstanding of the PCU and SEMARNAT's authorities on the strategy and implementation schedule of the activities proposed in the Prodoc, where some activities are requirements to start others (e.g. execute WEEE pilot projects first and then elaborate guides; institutional capacity assessment and implementation of pesticide training plans afterwards, etc.), is leading the implementation of this project on a pathway in which the desired results will not be achieved, both in quality and relevance.

Nor have the partnerships been developed to reach the required eliminations or to agree on the regulatory framework, because the TAC and the working groups have no influence on the development of the various activities implemented, which has resulted in indifference of these stakeholders from the products and results of the project.

The most significant barrier to overcoming is the lack of direction and understanding that the PCU has imprinted on the project. If the current approach of un-participatory management and misinterpretation of what the project seeks to address and solve, the results originally proposed by the Prodoc and for which it was approved by the GEF will not be achieved.

Sustainability

If the current approach for project implementation continues, focused on little participation of key stakeholders and without the development of partnerships with the private sector, state, municipal and federal authorities, the results achieved by the project would not be sustained.

Social y Political

No risks for social and political instability in the country is identified. However, it is necessary to make intensive efforts with the new authorities of the federal government and with those of the pilot states in order to agree mechanisms leading to the continuity of the project.

Institutional and governance

The project will face its second stage of implementation with a new national government and with new authorities in some of the states in which it is working. From an institutional point of view, there are no major problems of lack of institutionality or governance in the country.

Environmental

No significant environmental problems than those that currently exist in the country are identified.

4. Project Ratings

Parameter	MRT Assessment		Description of the achievement
Project strategy			It does not apply at this stage
	Level of achievement of the global environmental objective: Minimize negative impacts on health and the global environment through chemicals' appropriate management and handling operations and reduction of POPs' emissions, as well as exposure to POPs from electronic and pesticide wastes in Mexico.	U	Considering the current project management approach and the delays noted in the elimination of POPs in both WEEE and pesticides, the overall environmental objectives could be partially met, with severe deficiencies.
	Level of achievement for the development objective (not explicitly declared in prodoc): development of national and states' capacities to develop and implement a sound management and disposal system for WEEE and pesticide wastes containing POPs in the country (it includes legislation, control, sound management and final disposal), in order to meet the commitments set out by the Stockholm Convention		SEMARNAT's internal management on hazardous waste and Colima's state authorities are expected to be strengthened. WEEE's recycling companies and SENASICA would also be favored in the management of their respective activities, as well as customs office and INECC, which would strengthen their role. However, the prospect for the short and medium term for the approval of amendments to the legal framework for WEEE and empty pesticide containers' wastes is not positive due to the lack of discussion of the proposed regulations and the resistance of the industry involved.
Progress in achieving results	Level achievement of Result A: National legal and regulatory framework strengthened	MS	A legal proposal for discussion in Congress could be available, as well as have customs and Profepa officials trained. However, with the current approach for training focused mostly on pesticides, competences of these entities in identifying WEEE containing POPs would not be strengthened, nor on the nature of these residues.
	Level of achievement for Result B: Development and implementation of pilot management plans at state level in Baja California, Jalisco and Federal District and dissemination to the rest of the country.	MU	Inventories for WEEE were carried out with an expanded scope from 5 to 34 products, blurring completely the POP issue in this inventory; generators of e-wastes and POP containing products not identified or estimated. On the other hand, the assessment of WEE's state plans is stopped, and development of state pilots' plans does not begin, and no formal dissemination and training strategies are observed. The project has already developed the best practices and available technology guides for WEEE, without first implementing WEEE's pilot management experiences in the pilot states, so it is very likely that these guides will not reflect the experience or reality of the country on this issue.
	<u>Level of Achievement of Result C:</u> Demonstration on minimization of POP emissions in formal and informal recycling facilities of electronic wastes.	U	Implementation approach focused on assessments and limited stakeholder participation, with significant delays in the main project components. At this pace of implementation and with the current project approach, the goal of elimination of POPs in WEEE and pesticide wastes, could be partially achieved with significant

Parameter	MRT Assessment		Description of the achievement
			implementation issues
	<i>Level of Achievement Result D:</i> Establishment of a provincial-level plan for management of confirmed POPs' pesticide wastes in selected provinces.	MS	Colima's state plan is for review in SEMARNAT, but the other two do not yet begin. The inventory of pesticide wastes lacks technical rigor, is inconclusive and does not have a robust, objective and consensual strategy to identify additional stocks. The study of options for destruction of these wastes questions the technical suitability of the only authorized facility to incinerate this type of waste, remaining only the options of export of wastes and to continue the co-processing tests in cement facilities prior approval by SEMARNAT, or its confinement at an authorized site. Some of the results could be achieved, but with significant deficiencies.
	 Level of Achievement Result E: Substantial elimination of the remaining stocks of POPs pesticides and wastes in Mexico. Level of Achievement Result F: Containment or remediation of priority sites contaminated POPs pesticides and national programme for treatment of remaining sites. 		Considering the current project management approach, the delays observed in the elimination of POPs pesticides and associated wastes, the overall environmental objectives could be partially met with severe deficiencies.
			Potential contaminated sites have not been identified in order to implement their respective remediation plans, and there is no robust and clear strategy for identification and prioritization of sites. In addition, the PCU has a misunderstanding of the project's strategy, as it develops a national plan on contaminated sites before conducting field experiences, so it starts upside down. Therefore, partial results could be obtained
	<i>Level of Achievement Result G:</i> Institutional strengthening at state level for obsolete pesticides management.	MU	There is a misunderstanding of the project strategy established in the Prodoc. The national capacities' assessment was not carried out, which was an activity prior to the design of national guidelines on obsolete pesticide management, and to the replication plan. With this approach, the result could be partially achieved, but with shortcomings in its concept and usefulness.
Project execution and adaptive management		MU	Lack of strategies for approaching stakeholders and the misunderstanding of the project strategy, as well as the lack of real participation of the actors involved, leads to the PCU having no alternative pathways to address the different situations encountered and, therefore, rigid management is implemented.
Sustainability		MU	The main risk is the current approach of a non-participatory management and misunderstanding of the project strategy, which results in most actors not having ownership of the project's outputs and results.

5. Conclusions

Design

In general terms, the project strategy is clear and logical. It has the weakness of not setting targets for project's the mid-term evaluation, although its main goals may be obtained from the proposed implementation schedule and strategy.

It can also be stated that some of the indicators set out in the project correspond to outputs rather than results, so special emphasis on this issue should be present in the development of future projects.

With regard to its relevance, the project is completely necessary and is in the Mexico's NIP and also in the legislation and international commitments in this area.

Implementation

The decisions taken by the PCU and SEMARNAT have meant that implementation of the most important project components has been systematically postponed, increasing significantly the risk that the project will not be able to fulfil its purpose (elimination of POP pesticides and reduction of UPOPs emissions during management of WEEE), and leave for discussion a legislative proposal to control electronic and pesticide wastes, capacities strengthened in the states through the implementation of pilot projects for POP emission reductions contained in WEEE, and their consequent state management plans.

The misunderstanding of the PCU and SEMARNAT about the strategy and schedule for the activities proposed in the Prodoc, where some of them are prior requirements to start others (e.g. first execute WEEE's pilot projects and then elaborate guides; institutional capacity assessment first and then implementation of pesticide training plans, etc.), is leading the implementation of this project on a pathway in which the desired results will not be achieved in quality, timeliness and relevance.

There is also a backlog in other important activities, such as the development of WEEE states' plans, training of inspectors and the development and implementation of remediation plans for contaminated sites, to name a few examples.

The lack of understanding of the project strategy meant that it was intended to address the country's entire problem of WEEE, thus the increase from 5 products to 34 had a significant impact on the targeting of activities, losing sight that the main project objective was the elimination of POPs contained in WEEE, and not to address the overall problem of WEEE. As a result, there is no baseline for the products containing POPs and their emissions estimates, and pilot projects in the 3 states have not been able to begin, which - due to their complexity, misconceptions in their implementation and delays -, have high likelihood of not be correctly implemented and to achieve the emission reductions within the timeframe proposed in the Prodoc strategy.

The above situation is also found in POP pesticides and associated wastes. There is no progress in the elimination of these wastes, contaminated sites have not been identified and prioritized, and a significant inventory for POP pesticides and associated wastes has not been developed, where an erroneous understanding of the project strategy has also been noted.

Most of stakeholders interviewed have a poor perception about the quality of the consultancies contracted by the PCU, such as the WEEE's inventory, the good practices guide, the evaluation of WEEE's state management plans and the assessment of the national program of empty containers. This means that these products and results have little chance of being adopted by the stakeholders

and puts a barrier to the PCU that will be very difficult to overcome, which is the reliability in the PCU's work.

If the current approach of the project continues, it is very likely that POP elimination and reduction targets in WEEE and pesticide wastes will not be met at the end of the project, also due to the delays and complexity of these activities.

Planning, M&E

The UCP has complied with all reports requested, as well as with the preparation of the AWPs. The main problem arises from the misunderstanding of the project strategy, which is reflected in these AWPs. First, these documents are a list of activities, deadlines and budgets which are not supported by strategic documents indicating the associated concepts and priorities in the implementation of activities and products.

The UCP used a follow-up tool in excel format, where activities were brought together and relative importance to the various components of the project was rated, without known criteria and supported by an explanatory document, so it was not very useful and it was discontinued by the end of 2017.

UNDP needs to make more efforts in M&E of the project's progress, by performing more field visits and have a more independent relationship with the relevant project stakeholders.

The TAC and the technical working groups are not contributing to the achievement of the project results, mainly due to the lack of an effective stakeholder participation and the absence of a clear work agenda defining roles, deadlines, procedures and targets. If this type of organization continues in this way, these groups will be merely recipients of information.

There is a significant problem in the composition of the PBD, as the WEEE sector has no representatives in this group, which has meant a noticeable imbalance in favor of pesticide issues, since SENASICA/SAGARPA do participate in this instance.

The adaptive management carried out by the PCU has been poor, mainly due to a very rigid management that precluded the working groups and TAC from participating effectively and provide their inputs, so the PCU continues to implement the activities in this way, even if the expected results are not being achieved. Therefore, definition of alternative strategies to overcome the problems encountered is missing.

Gender

Progress reports attempt to include statistics showing women's participation in project-driven activities, but there has been no strategy to address women-specific problems laboring in WEEE and obsolete pesticides activities. The PCU reported that a consultancy will be contracted to define this issue.

Financial

At the time of the MTR, the disbursements made correspond to only 32% of the planned in the prodoc (US\$ 947,000 versus US\$ 2.92 million).

Expenditures in personnel amount to 32% of the total amount spent (US\$ 260,000 versus US\$ 167,0000), with an overspend of 73% compared to the planned in the prodoc.

The level of compliance with the co-financing committed cannot be determined by this MTR, since the PCU has not made this calculation.

6. Recommendations

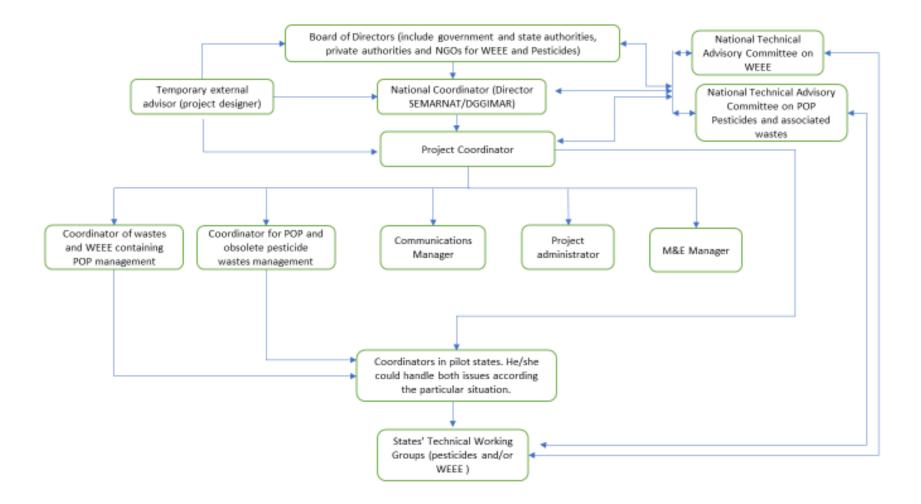
- Extend the project for an additional year and stop/pause ongoing and scheduled activities.
- ✓ Take 1-2 months to understand the logic of the project and plan the focus and organization of the project. Use the project designer (1-2 weeks) as a consultant to explain exactly the objectives, scopes, activities, etc., to the Project Coordinating Unit. He might have an external project advisory role.
- ✓ A mission to the country by the Panama's UNDP Regional office would be very positive, to explain in conjunction with the UNDP Mexico Country office- the objectives, main outputs and results of the project to the new federal and state authorities at the highest possible level.
- ✓ To assign urgency to activities/products involving elimination/reduction of POPs, such as the pilot demonstration projects in the formal sector, the states' management plans and elimination of the 96 ton of pesticides identified (as a sign of progress).
- ✓ Assess the benefit of resuming the TV recovery plan from the analogue blackout, once the resolution of the appeal against the federal government is issued during the project timeline and the electronic wastes can be mobilized.
- ✓ Conduct a technical assessment of the main project products (e.g. inventories and management plans for WEEE and pesticides) in the light of the Prodoc and the proposed reorganization, and make adjustments to what was made in order to align it to the main approach of the project: POPs in WEEE and pesticides, their sound management and disposal/elimination, adoption of good practices and lessons learned.
- ✓ Start thinking about developing the project's exit strategy at least 1 year before its completion.
- Elaborate a project's gender strategy of the project from now on.
- ✓ Start the development of a replication strategy during the last year of the project.
- Establish a simpler project's M&E system focused on achieving results rather than activities, with a plan for visits, ad-hoc indicators, internal reports and follow-up of consultancies.
- Improve the AWP through the development of supporting documents that clearly explain strategies for addressing the different project outcomes and outputs, the priorities that are established and the relative importance of each product and activity, in addition to establishing the logical sequence for each of them.
- Implement a reporting system for co-financing contributions from the different institutions. It is suggested that it might be very useful to generate a system similar to that implemented by UNDP-Uruguay's "Environmental Sound Life-Cycle Management of Mercury Containing Products and their Wastes" project.
- Reorganize the PCU in order to settle a Project Coordinator and two Thematic Specialists, one for pesticides and one for WEEE who, under the supervision of the project coordinator, should organize and coordinate aspects of their expertise and according to specific terms of reference. The Project Coordinator should have extensive and recognized experience in waste issues and coordination of large-scale projects, combined with a significant capacity of dialogue and interaction with high-levels authorities. Thematic Specialists should be recognized experts in each of the issues (pesticides and WEEE).
- Include local coordinators in pilot states, who would have good dialogue with municipal and state authorities, as well as good relationships with local private sector stakeholders (electronic and RyR companies, farmers' organizations, etc.).
- ✓ Reorganize the project's national technical committees: define formal work agendas with clear desired objectives, activities and deadlines. Also define the roles of the stakeholders and the scope and responsibility of these groups (e.g. specific consultation on ToR, review of

progress reports, collaboration that might be provided for the best implementation of products, etc.).

✓ *Think about establishing technical committees at state/local level*, using the same logic as for the national committees mentioned above.

The proposal organizing the project is shown in the following figure.

Proposal for the organization structure of the project



7. Lessons Learned

When starting the implementation of a project, care should be taken in order to not extend the scope of the activities and outputs for which the project was not designed for, and therefore, it is unable to provide solutions.

During the design of the project, attention should be paid to include targets for the project's midterm implementation in order to facilitate the mid-term evaluation and at the same time, to provide a clear estimation on the progress that is intended to during the first half of the project execution.

In case of incorporating 2 issues that have little relation in a single project (in this case the only relationship are POPs), care should be taken in the design of the project execution arrangement in such a way that the roles and responsibilities for each of the issues are clearly differentiated.

When creating instances of participation for executing a project, it must ensure that stakeholders' participation is real and not just formal. In addition, these bodies must have their scope, responsibilities, work agendas, objectives, targets and deadlines clearly defined, in order to have them working systematically over time.

Similarly, when requesting the collaboration of key stakeholders, it is expected that they wish to play a more active role in decisions that fall within their competence, such as opinion on ToR, guidance on technical consultancies, review of progress reports, etc. It cannot be supposed that they will act as mere project's beneficiaries.

The elaboration of AWP from excel sheets alone is not sufficient to explain the strategy used by the projects' executing units, so they should be supported by clear and concise strategy documents.

Annexes

Annex 1: ToR for midterm evaluation

Annex 2: Project Results Framework

	Indicator	Baseline	End of Project Target	Source of Verification	Risks and Assumptions
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, and amendment process initiated to reflect an overall Sound Chemicals Management framework and to align with Stockholm and Basel Conventions Relevant government officials, private sectors, end-users trained and awareness raised	Draft amended regulatory, legal and economic instruments Progress on regulatory and legal modification process Training programmes and materials Training reports Survey on awareness	Risks: - Amendment of regulatory and legal framework process may take long time for adoption - None or low cooperation from defined States - Electronic OEMs not intereste - PROFEPA may not enforce control on POPs - Spread of POPs spread througl increased climate change induced extreme weather Applications - Consultations emphasizing on
	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	Progress report sand project completion reports	 Consultations emphasizing on development of regulative works at beginning of project implementation, with concrete proposals and close follow-up actions

	Indicator	Baseline	End of Project Target	Source of Verification	Risks and Assumptions	
			dismantle and final disposal technologies 42 g TEQ/year POPs release minimized in formal and informal recycling of e- waste	Completion reports Technical reports from demonstrations		
	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	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,	Updated inventory report Progress reports and destruction reports Inventory of contaminated sites report 3 containment and remediation plans Management Plan documents	 environment, numan neatin and corporate social responsibilities. National distributors lagging commitment can possibly be supported and reinforced through interventions from international headquarters of OEMs As results of gap analysis on regulatory and legal measures, concrete proposals and action plans will be developed to support and facilitate coordination and enforcement efforts of various authorities Risk of exposure to POPs (pesticides) will be developed will be intervented by climinating known existing stockpiles in the country. Management Plans developed will ensure proper warchousing condition until final disposal in environmentally sound manner 	
Component 1: Strengthening	institutional and public policies a	nd canacities regarding POP	Sinaloa and Jalisco	ment		
component r. ou engineming		and capacities regarding 1 01	sano souna circuiteais manage			
Expected Outputs: Dutcome A): National legal A1) Legal review, gap analysis and economic instruments reviewed in the context of the national sound chemicals policies and activities for potential POPs e-waste management and pesticides. strengthened to enhance enforcement and compliance apacity for Stockholm within the country's overall A2) Regulatory amendments prepared. A1 Training on inspection for new POPs substances and products containing new POPs at state level conducted. A) Analytical and monitoring capacities of federal inspectors, Customs and chemicals labs enhanced. within the country's overall A5) Sustainable capacity to support SC reporting and information exchange obligations in place.						
sound chemicals management framework, in particular potential POPs	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	Amended legislative measures	Risks:	

· · · · · · · · · · · · · · · · · · ·	Indicator	Baseline	End of Project Target	Source of Verification	Risks and Assumptions
release from e-waste management and pesticides			Regulations to align with international conventions, in particular, Stockholm and Basel Conventions	Progress of legislative process	 Regulatory and legal amendment takes long time for adoption Lack of interest of PROFEPA
	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	Training materials and training reports	and other officials to cooperate to enforce control of POPs <u>Assumption:</u> - Amended regulations and
	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	Training materials and training reports	integration with an overall SCM framework will facilitate better coordination between authorities for management of pesticides and e-waste
	Sustainable capacity to support Stockholm Convention reporting and information exchange	Limited activities	Enhanced Stockholm Convention reporting and information exchange; participation in Global POPs Monitoring Network and Mexico taking leadership role in its regional network	Stockholm Conversion reports and information exchange. Meeting reports	 Legal gap analysis will encourage action plan to be developed to support coordination and enforcement efforts of various authorities
Component 2: Reduction of P	OPs releases from e-waste proces	sing at State and waste proces	sor 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	development of WEEE stewardsh B3) State and national level inver- releases developed. B4) Management Plans developed one in North bordering with the U B5) Outreach strategy designed a chain. B6) E-waste training delivered and tested.	uments documented and recomm ip levies and EPR mechanisms, ntories of e-waste generation, a 1 for e-waste in state levels. Pilo inited States (Baja California), J nd implemented including publ d best practice sound manageme recycling industry documented, ed.	nendations on fostering the susta supported by full lifecycle accou- teressociated mass flow balances a of demonstration projects based of aliseo and Federal District of M- ic awareness/ motivation for sup int guidelines for municipalities a , and registration and certification	inable financing of sound managunting and cost studies. Ind analytical estimates of POF on these plans developed, imple éxico City. pporting capture of e-waste at s and recycling enterprises as well on system to ensure the adoption	loped. gement of e-waste prepared, including 's content and potential unintentional mented and evaluated in three States: source, and a cost effective collection as states governments developed and on of environmentally sound e-waste Risks:

Indicator	Baseline	End of Project Target	Source of Verification	Risks and Assumptions
Development of WEEE stewardship levies and EPR to foster sustainable financing of sound management of e-waste	None	WEEE stewardship levies established and EPR mechanisms developed to foster sustainable financing	Lifecycle accounting and cost studies of WEEE levies and EPR establishment	 Low interest or cooperation from defined state government Electronic OEMs not interested Difficulty in identifying
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 release better estimated	Updated State and national e-waste inventories	informal recycling facilities and no interest in participation - Low interest in c-waste management by recycling
Development and implementation of State level Management Plans	Limited	Management Plans on lifecycle management (LCM) developed, implemented and evaluated in three States (north bordering United States, Jalisco and Federal District)	State level Management Plans Implementation results	enterprises and general public <u>Assumption:</u> - Extensive consultations during PPG stage solidified interest and secured co-financing commitments ensures active participation
Development and implementation of outreach strategy	None	Outreach and communication programme for general public and state level government developed, implemented and results evaluated 15 times events organized and 300 participants	Outreach and communication strategy evaluation report Public awareness materials and events reports Public awareness perception/motivation assessment	 Informal recyclers may be enticed by improved technologies that will produce better yield and high profit Public awareness and outreach programme will bring attention and promote awareness among general public, recycling enterprises, and government
Training strategy on e-waste management guides developed Number of training workshop conducted	No active activities	Training strategy for public, recycling enterprises and state governments developed, implemented and results evaluated 500 participated in the training 2 guidelines produced	Training materials Training reports	officials - Better collection mechanism and improved dismantling and processing technologies will attract formal recyclers due to improved yields and higher profits - National inventory and
Characterization study of nationwide recycling industry to establish a registration and certification system	None	Inventory of formal and estimation of informal recycling facilities Registration and certification system established for c-waste recycling industry, with 20 of the facilities certified. Increase in the number of registered facilities	Inventory list of formal recycling enterprises and estimation of informal facilities List of registered and certified/qualified recyclers	established registration and certification system will required recycling enterprises practice environmentally sour management of e-waste

Indicator	Baseline	End of Project Target	Source of Verification	Risks and Assumptions
Development of WEEE stewardship levies and EPR to foster sustainable financing of sound management of c-waste	None	WEEE stewardship levies established and EPR mechanisms developed to foster sustainable financing	Lifecycle accounting and cost studies of WEEE levies and EPR establishment	 Low interest or cooperation from de fined state government Electronic OEMs not interested Difficulty in identifying
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 release better estimated	Updated State and national e-waste inventories	informal recycling facilities and no interest in participation - Low interest in e-waste management by recycling
Development and implementation of State level Management Plans	Limited	Management Plans on lifecycle management (LCM) developed, implemented and evaluated in three States (north bordering United States, Jalisco and Federal District)	State level Management Plans Implementation results	enterprises and general public <u>Assumption:</u> - Extensive consultations during PPG stage solidified interest and secured co-financing commitments ensures active participation
Development and implementation of outreach strategy	None	Outreach and communication programme for general public and state level government developed, implemented and results evaluated 15 times events organized and 300 participants	Outreach and communication strategy evaluation report Public awareness materials and events reports Public awareness perception/motivation assessment	 Informal recyclers may be enticed by improved technologies that will produce better yield and high profit Public awareness and outreach programme will bring attention and promote awareness among general public, recycling enterprises, and government
Training strategy on e-waste management guides developed Number of training workshop conducted	No active activities	Training strategy for public, recycling enterprises and state governments developed, implemented and results evaluated 500 participated in the training 2 guidelines produced	Training materials Training reports	officials - Better collection mechanism and improved dismantling and processing technologies will attract formal recyclers due to improved yields and higher profits - National inventory and
Characterization study of nationwide recycling industry to establish a registration and certification system	None	Inventory of formal and estimation of informal recycling facilities Registration and certification system established for c-waste recycling industry, with 20 of the facilities certified. Increase in the number of registered facilities	Inventory list of formal recycling enterprises and estimation of informal facilities List of registered and certified/qualified recyclers	 established registration and certification system will required recycling enterprises to practice environmentally sound management of e-waste

	Indicator	Baseline	End of Project Target	Source of Verification	Risks and Assumptions		
Outcome D): Provincial POPs pesticides Waste Management Plan establishment and tested in	 D1) Update detailed inventory of remaining POPs pesticide stockpiles and associated waste and analytical estimates of POPs prepared. D2) Inventory verified and complemented, initial prioritization screening and risk assessment of POPs pesticide contaminated sites produced including training on site assessment for relevant government officials and service providers. D3) Waste Management plan from identification through to destruction for pesticides designed and tested at state pilot scale. 						
selected provinces	Availability of inventory of remaining POPs pesticide stockpiles and associated waste	Inventory outdated and complete	Detailed inventory updated, prioritization screening conducted and risk assessment of POPs pesticide contaminated sites produced	Obsolete POPs pesticide and waste inventory Risk assessment reports	Risks: - Process of updating inventory ineffective or incomplete Assumption: - Consolidation of information		
	Availability of Waste Management Plans at 3 States (Chiapas, Sinaloa, Jalisco)	Not available at all States	3 Waste Management Plans from identification through destruction of POPs pesticides designed and tested at state pilot scale	State Waste Management Plans Implementation reports	available from principle historical holders of POPs and general obsolete pesticide inventories as well as establishing secure care, custody and financial/liability arrangements particularly considering historical state involvement and current private sector role		
Outcome E): Substantial elimination of remaining POPs pesticide stockpiles and POPs wastes in Mexico	Expected Outputs: E1) Qualification of cost effective commercial options for the environmentally sound destruction of POPs pesticide stockpiles and wastes consistent with international standards. E2) Environmentally sound destruction of at least 400 tons and up to 1,000 tons of POPs pesticide stockpiles and waste. E3) Technology of recycling processes for used pesticide containers assessed.						
	Effective commercial options for environmentally sound destruction of POPs pesticide stockpiles and wastes	None	Available domestic and export market commercial destruction options assessed	Shortlist of viable and likely competitive commercial options	<u>Risks</u> : - Limited or unqualified commercial options - Technically inefficient or not		
	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 be conducted during project implementation	Progress and completion reports	 Technically interfective destruction cost-effective destruction options <u>Assumption</u>: Availability of viable and like competitive commercial option 		
	Feasibility study for recycling of used pesticide containers	None	Technological and economical aspects of recycling used pesticide containers studied. Action plan designed and costs estimated	Experts reports			

	Indicator	Baseline	End of Project Target	Source of Verification	Risks and Assumptions			
Outcome F): Containment / remediation of priority POPs pesticide contaminated sites and national programme to	F2) First phase remediation plans	Expected Outputs: F1) Detailed remediation plans on up to 3 priority POPs pesticide contaminated sites designed and developed. F2) First phase remediation plans for up to 10 POPs pesticide contaminated sites developed. F3) A national programme for ongoing management of POPs pesticide contaminated sites enhanced.						
address remaining sites	Number of remediation plans for high priority POPs contaminated sites	None	3 Detailed remediation plans designed inclusive of costs estimates	Remediation plans; contracts for plan implementation; completion reports	<u>Risks</u> : - Inventory updating and identification of contaminated sites incomplete			
	Number of first phase remediation plans for POPs pesticides contaminated sites	None	10 Preliminary containment and remediation plans generated; implementation arrangements including identification of clean up financing identified	Preliminary containment and remediation plans; and associated implementation and financing plans	 Inadequate financial resources to implement containment and remediation activities at identified contaminated sites Limited financial and human resources to implement national 			
	Availability of national programme for on-going management of POPs pesticide contaminated sites	None	National programme addressing contaminated sites in general with specific emphasis on POPs contaminated sites	Programme document	programme <u>Assumption:</u> - Risk assessment study to proactively identify and mitigate financial and human resources needs			
Component 4: Obsolete pestio	cide management capacity strengt	hening						
Outcome G): Institutional strengthening at provincial level for obsolete pesticides management delivered	Expected Outputs: G1) Assessment of national institu G2) Outreach and training progr government officers. G3) National pesticide waste man G4) State and municipal level obs G5 National replication programm	ammes on obsolete pesticide a agement guidelines, including re olete pesticide and used contain	management for pesticide end- eporting formats, updated. ers collection programme reinfo	users, waste management serv	aken rice providers, and law enforcement			
	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	National capacity assessed, gap analysis conducted, priorities and action plans identified, public-private partnership initiated	Assessment reports and action plans	<u>Risks</u> : - Lack of interest of state level authorities to buy in - Inefficient and ineffective inspection and enforcement			
	Outreach and training programmes developed	None	100 Pesticide end-users, waste management and low enforcement governmental officials trained	Programme materials and training reports	efforts <u>Assumption</u> :			

Indicator	Baseline	End of Project Target	Source of Verification	Risks and Assumptions
Availability of national pesticides waste management guidelines	Present guidelines not matching obligations of international conventions	1 Guidelines updated to fully reflect international practices and lessons learned	Guidelines document	 Extensive stakeholders consultations during PPG stage and project implementation Trainings conducted to strengthen capacities will ensure sustainable ongoing programmes
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 experiences of other NAFTA and other Latin American countries	State level used pesticide container programmes	
National replication programme for sustainable pesticide management	None	National replication programme s for sustainable obsolete pesticide management developed	Replication programme	

Component 5: Monitoring and evaluation

Outcome H): Monitoring, learning, adaptive feedback, outreach, and evaluation	Expected Outputs: H1) M&E and adaptive management applied to project in response to needs, mid-term evaluation findings with lessons learned extracted. H2) Lessons learned and best practices are disseminated at national level.						
	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	Various M&E and substantial reports Mid-Term Review and Terminal Evaluation reports	Risks: - Failure to exercise timely and effective M&E activities and adaptive management due to capacity issue		
	Lessons learnt and experience documented and disseminated; post-project action plan formulated	None	Lessons and experience documented and disseminated	Knowledge products (publications, printed, audio-visual and promotional materials); post-project action plan	Assumptions: - Efficient M&E to facilitate achievement of outcomes and project objectives		

Component 6: Project Management

Output I): Strengthened project management capacities and efficiency	Expected Outputs: 11) Institutional capacity strengthened for project management 12) Project smoothly implemented and all results specified achieved and sustainable					
	Institutional established and capacities strengthened to achieve timely project implementation and disbursement	Limited existing staff	National project team established, staffed, equipped. National project team trained and capacities strengthened	Project APRs, PIRs, CDRs	Risks: - Inadequate capacity and insufficient coordination will impact project implementation	

Indicator	Baseline	End of Project Target	Source of Verification	Risks and Assumptions
Training needs identified; project personnel trained or relevant requirements of GI and UNDP on project management		Staff trained and project management capacity strengthened	Training reports	Assumptions: - Efficient project management will lead to timely achievement of outcomes and project objectives
Routine project managemen activities undertaken to ensi- the smooth and timely implementation of the proje The activities include but ne limited to: drafting TORs, s and contract with consultan organize M&E activities, organize the review of substantial report	ure set. ot elect	Efficient and effective project management leading to achievement of project objectives and sustainability ensured	Progress and annual reports, mission reports and achieved outcomes National replication programme	

Annex 3: Mission Agenda

Fecha	Horario	Actor	Sede	Temas a tratar	
01-oct-18	9:00-10:30	Unidad Coordinadora del Proyecto, PNUD, otros.	PNUD	Reunión de apertura de la misión. Discusión de los principales puntos que se abarcarán en la evaluación, ajustes agenda, metodología, etc.	
01-oct-18	10:30:00-11:30	Alicia y Arturo	PNUD M&E	 i) avances del proyecto; ii) sistema de seguimiento utilizado por PNUD y la UCP; iii) reportes; iv) cambios realizados al proyecto. 	
01-oct-18	11:30-13:30	Edgar González Alejandra Cerna Víctor González Brenda Tagle	PNUD	Rol de PNUD en proyecto; apoyos brindados, procedimientos de licitaciones estudios, gastos, principales situaciones del proyecto.	
01-oct-18	13:30-16:00		Comida y traslado		
01-oct-18	16:00-16:30	Unidad Coordinadora del Proyecto Miguel Ángel Espinosa	SEMARNAT	Presentación detallada por parte del equipo de proyecto sobre: i) cada resultado y producto; ii) situaciones relevantes presentadas en la ejecución; iii) ejecución de gastos; iv) situación del cofinanciamiento; v) sistema de monitoreo y evaluación implementado, vi) manejo adaptativo y medidas correctivas implementadas; vii) proceso de adquisiciones, viii) nivel de coordinación intrainstitucional e interinstitucional, ix) proyecciones para la sostenibilidad de resultados obtenidos a la fecha; x) transversalización, xi) análisis de los indicadores proyecto y nivel de avance para su logro, xii) logros obtenidos a la fecha, xiii) otros.	
01-oct-18	16:00-16:30	Gloria Melendez	PROCCYT	 i) Conocimiento general y participación de la entidad en el proyecto; ii) consultorías realizadas en el marco del proyecto; iii) aportes de proccyt al proyecto; v) situación de los residuos de plaguicidas y envases vacíos en México; vi) relación y comunicación con el equipo de proyecto. 	

02-oct-18	9:00-11:45	UCP	SEMARNAT	Presentación detallada por parte del equipo de proyecto sobre: i) cada resultado y producto; ii) situaciones relevantes presentadas en la ejecución; iii) ejecución de gastos; iv) situación del cofinanciamiento; v) sistema de monitoreo y evaluación implementado, vi) manejo adaptativo y medidas correctivas implementadas; vii) proceso de adquisiciones, viii) nivel de coordinación intrainstitucional e interinstitucional, ix) proyecciones para la sostenibilidad de resultados obtenidos a la fecha; x) transversalización, xi) análisis de los indicadores proyecto y nivel de avance para su logro, xii) logros obtenidos a la fecha, xiii) otros.	
02-oct-18	12:30-14:00	Rúben Lazos Rogelio Jiménez	SEDEMA	 i) relación con el proyecto; ii) actividades en conjunto con proyecto; iii) normativa estatal aplicable a plaguicidas COPs e e-wastes; iv) participación en planes de gestión e-wastes y plaguicidas COP; v) situación monitoreo sitios contaminados y comunidades aledañas. 	
02-oct-18	14:00-16:30	Comida y traslado			
02-oct-18	16:30-18:00	Fernando Solis	CANIETI	 i) relación con el proyecto; ii) actividades en conjunto con proyecto; iii) normativa estatal aplicable a e-wastes; iv) participación en planes de gestión e-wastes; v) capacitaciones 	
03-oct-18	9:30-11:00	Arturo Rodríguez Abitia Felipe Olmedo	PROFEPA	 i) Situación en la fiscalización sobre residuos peligrosos en general, e e- wastes, plaguicidas y sitios contaminados en particular; ii) desafíos de las regulaciones existentes (tanto en texto de la regulación como en su aplicación); iii) capacitación recibida; iv) necesidades en fiscalización. 	
03-oct-18	11:30-13:00	Arturo Gavilán Miguel Martínez Ania Mendoza	INECC	 i) actividades Min salud en tema COPs, inventarios y plaguicidas COPs; ii) actividades monitoreo COPs en matrices ambientales y humanas; iii) normativa aplicada a COPs y plaguicidas COP y su cumplimiento; iv) rol min. Salud en planes de manejo COPs; v) relación con el proyecto. 	
03-oct-18	13:00-16:00			Comida y traslado	
03-oct-18	16:00-17:30	Hugo Fragoso Silvia Rojas Alma Liliana Tovar	SENASICA	 i) relación con el proyecto; ii) actividades en conjunto con proyecto; iii) normativa estatal aplicable a plaguicidas COP; iv) participación en planes de gestión; v) capacitaciones; vi) inventario almacenamiento plaguicidas COPs y sitios contaminados. 	

				i) relación con el proyecto; ii) actividades en conjunto con proyecto; iii)
04-oct-18	09:30-11:30	Amada Velez	UMFFAAC	normativa estatal aplicable a e-wastes; iv) participación en planes de
04 000 10	05.50 11.50			gestión e-wastes; v) capacitaciones
04-oct-18	12:00-13:30	UCP	SEMARNAT	Continuación discusión implementación del proyecto
04-oct-18	13:30-13:00		-	Comida
03-oct-18	13:00-17:00	UCP	SEMARNAT	 i) Continuación discusión diseño y marcha del proyecto; ii) ajustes a la agenda
04-oct-18	17:00-18:30	Ricardo Ortiz Conde	SEMARNAT	 i) relación con el proyecto; ii) actividades en conjunto con proyecto; iii) normativa estatal aplicable a e-wastes; iv) participación en planes de gestión e-wastes; v) capacitaciones
05-oct-18	08:30-11:00	UCP	SEMARNAT	 i) Progreso del proyecto; ii) discusión sobre la estrategia seguida por la UCP; iii) participación de actores.
05-oct-18	11:00-12:30	Kasper Koefeld	UNDP Regional	 i) estado implementación del proyecto; ii) posibilidades de alcanzar las metas de eliminación; iii) estrategia seguida por la UCP; iv) rol del PNUD en el seguimiento y asesoría del proyecto.
05-oct-18	13:00-13:30	UCP	SEMARNAT	 i) relación con los actores principales; ii) relación con las autoridades estatales; iii) roles y atribuciones de los comités técnicos y de la LDP.
05-oct-18	13:30-15:00			Comida
05-oct-18	15:00-18:00	UCP	SEMARNAT	 i) cofinanciamiento; ii) gastos del proyecto; iii) situación de cooperación y entrega de información por parte de los estados y otros actores.
06-oct-18			Sa	lida a Jalisco
08-oct-18	9:00-10:30	Biol. Madgalena Ruiz Rigoberto Román Eduardo Parra Consuelo Correa	SEMADET	 i) relación con el proyecto; ii) actividades en conjunto con proyecto; iii) normativa estatal aplicable a plaguicidas COPs e e-wastes; iv) participación en planes de gestión e-wastes y plaguicidas COP; v) situación monitoreo sitios contaminados y comunidades aledañas.
08-oct-18	10:30-11:30	Saúl Guzman Gobierno de Baja California Secretaría de Protección al Ambiente	SEMADET	Representante del gobierno de BC (SPA)
08-oct-18	11:30-12:00		•	Traslado

08-oct-18	12:00-14:00	Recovery Metals Gerardo López Roberto Hernández	SEMADET	 i) relación con el proyecto; ii) actividades en conjunto con proyecto; iii) normativa estatal aplicable a plaguicidas COPs e e-wastes; iv) participación en planes de gestión e-wastes y plaguicidas COP; v) situación monitoreo sitios contaminados y comunidades aledañas.
08-oct-18	14:00-16:00			Traslado y Comida
08-oct-18	16:00-17:30	Belmont Recycling Juan Carlos Hernández Patricia Amaral	SEMADET	 i) relación con el proyecto; ii) actividades en conjunto con proyecto; iii) normativa estatal aplicable a plaguicidas COPs e e-wastes; iv) participación en planes de gestión e-wastes y plaguicidas COP; v) situación monitoreo sitios contaminados y comunidades aledañas.
09-oct-18	6:00-9:00			Salida a Colima
09-oct-18	10:00-11:30	Ricardo Jiménez	SECRETARÍA DE SALUD	 i) actividades Min salud en tema COPs, inventarios y plaguicidas COPs; ii) actividades monitoreo COPs en matrices ambientales y humanas; iii) normativa aplicada a COPs y plaguicidas COP y su cumplimiento; iv) rol min. Salud en planes de manejo COPs; v) relación con el proyecto.
09-oct-18	11:30-13:00	Cecilia Alejandra Vuelvas	DELEGACIÓN SEMARNAT COLIMA	 i) relación con el proyecto; ii) actividades en conjunto con proyecto; iii) normativa estatal aplicable a plaguicidas COPs e e-wastes; iv) participación en planes de gestión e-wastes y plaguicidas COP; v) situación monitoreo sitios contaminados y comunidades aledañas.
09-oct-18	13:00-15:30			Comida Traslado a Tecomán
09-oct-18	15:30-17:00	Grupo Ibanova	TECOMAN	i) relación con el proyecto; ii) actividades en conjunto con proyecto; iii) normativa estatal aplicable a plaguicidas COPs; iv) participación en planes de gestión plaguicidas COP; v) situación monitoreo sitios contaminados y comunidades aledañas; vi) capacitaciones; vii) perspectivas.
09-oct-18	17:00-18:00	Visita a sitio de almacenamiento de plaguicidas caducos en Tecomán	TECOMAN	i) inspección visual del sitio; ii) entrevistas con operarios.
09-oct-18	21:00			Regreso a Ciudad de México
10-oct-18		UCP		Discusión sobre los aspectos de entendimiento e implementación del proyecto.

		Cristina Cortinas Laboratorio Central de Aduanas		 i) percepción y conocimiento sobre la implementación del proyecto; ii) participación; iii) prioridades en el tema de residuos de plaguicidas. i) Conocimiento del proyecto; ii) actividades realizadas con la UCP; iii) situación de aduanas en el control de importaciones de residuos en general; iv) necesidades de actualización de partidas arancelarias para los RAE.
11-oct-18	6:00			Traslado a Querétaro
11-0ct-18	10:00	Álvaro Núñez. Experto en manejo de residuos electrónicos y economía circular	JERAPP, REMSA, PLAMESA, EcoMakerShop Querérato	 Participación en el proyecto; ii) características de la actividad de recuperación y reciclaje de RAE; iii) rentabilidad del negocio; iii) recolección de residuos RAE.
11-oct-18	16:00			Traslado a Cd de México
12-oct-18	9:00-11:00	Dr. Guillermo Roman	SEMARNAT Encargado del diseño del	 i) Proceso de elaboración del proyecto; ii) intención y objetivo del proyecto; iii) fortalezas y debilidades; iv) implementación y
			Proyecto	prioridades.
12-oct-18	11.00-13:00	Interna Evaluadores	Proyecto SEMARNAT	prioridades. Discusión sobre hallazgos preliminares.
12-oct-18 12-oct-18	11.00-13:00 3:00-6:00	Interna Evaluadores Discusión con el equipo del proyecto		,
		Discusión con el equipo	SEMARNAT	Discusión sobre hallazgos preliminares.
12-oct-18	3:00-6:00	Discusión con el equipo del proyecto	SEMARNAT SEMARNAT	Discusión sobre hallazgos preliminares. Discusión de cierre con Equipo de Trabajo

Annex 4: List of Interviewees

No	Name	Surname	Position	Institution	e-mail
1	Ana Luisa	Salazar Ortiz	Coordinadora general	Amocali, A.C.	asalazar@campolimpio.org.mx
2	Juan Carlos	Hernández	Guerrero	BT Recicling Solutions	juancarlosh@belmont- trading.com
3	patricia	Amaral	Macias	BT Recicling Solutions	patriciaa@belmont-trading.com
4	Fernando	Solís Diaz	Gerente de Normalización	CANIETI	fsolis@canieti.com.mx
5	Jeanett	Trad	miembro	CANIETI	jeanett.trad@hoganlovells.com
6	Víctor	Oropeza	Miembro	CANIETI	fsolis@canieti.com.mx
7	Sofia	Chávez	Direccion General	casa Cem -Vias Verdes A	schavez@casacem.org
8	Martel	Martínez Jiménez	PRESIDENTE	CESAVECOL	martel_doc@hotmail.com
9	Ricardo	Jiménez	Subcomisionado	COESPRIS	ricardo.jimenez@salud.gob.mx
10	Gloria	Meléndez	Directora Ejecutiva	Protección de cultivos, ciencia y tecnología A.C	
11	Ania	Mendoza	Jefe de Departamento	INECC	ania.mendoza@inecc.gob.mx
12	Arturo	Gavilán	Director de Área	INECC	arturo.gavilan@inecc.gob.mx
13	Miguel Ángel	Martínez Cordero	Subdirector	INECC	miguel.martinez@inecc.gob.mx
14	Álvaro	Núñez	Líder	JerApp	anunez@juntaentregayrecicla.co m
15	Carlos	Álvarez	Presidente	México, Comunicación y Ambiente A.C.	activista@carlosalvarezflores.com

No	Name	Surname	Position	Institution	e-mail
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Annex 5: Evaluation Question Matrix

Criterio de Evaluación	Preguntas	Indicadores	Fuentes
RELEVANCIA: La medida en la que una actividad se adapta a las prioridades de desarrollo local y nacional y a las políticas organizativas, incluidos los cambios a lo largo del tiempo.	¿El proyecto es relevante en términos de las prioridades y necesidades del país para hacer frente a los posibles impactos derivados de la exposición a los COP?	i) Porcentaje del presupuesto total del proyecto aportado por el gobierno mexicano; ii) El manejo adecuado de químicos y residuos incluido en los programas de planeación de las secretarías de medio ambiente federal y estatales; iii) se cuenta con un diagnóstico o estudios sobre la situación de los COP en el país.	PRODOC, programas de planeación en materia de medio ambiente federal y estatales, entrevistas a funcionarios de alto nivel de la SEMARNAT, SENASICA, entre otros; actas o minutas de reuniones entre las secretarías participantes en el proyecto para el diseño del proyecto, estudios o diagnósticos publicados sobre COP en el país.
La medida en la que el proyecto está de acuerdo con los programas operativos del Fondo para el Medio Ambiente Mundial (FMAM) o con las prioridades estratégicas sobre	¿El proyecto está alineado con las prioridades de PNUD México y del FMAM?	i) Metas de los planes operativos del FMAM y ii) Metas del programa país del PNUD; iii) Metas UNDAF	Planes de trabajo del FMAM y del PNUD, presupuesto disponible para el tema, entrevistas con el equipo de PNUD, actas o minutas de reuniones.
las que se financió el proyecto. <u>Nota:</u> En retrospectiva, la cuestión de la relevancia a menudo se convierte en una pregunta sobre si los objetivos de una intervención o su diseño son aún adecuados dados los cambios en las circunstancias.	¿Es importante el proyecto para las entidades federativas con problemas vinculados a la emisión y exposición de COP?	i) Número de actividades, relacionadas con la gestión de químicos y la reducción de emisiones y de exposición a COP, realizadas por las entidades federativas, particularmente de aquellas participando en los estudios piloto.	Reportes de avances del proyecto (PIR, reportes trimestrales), presupuesto ejercido en actividades con los estados, entrevistas a funcionarios estatales participando en los estudios piloto, documentos de políticas locales y actas o minutas de reuniones.
	¿Cómo se inserta el proyecto en las prioridades y actividades de los gobiernos estatales, las empresas recicladoras y los laboratorios químicos y otros actores clave?	 i) Presupuesto etiquetado para apoyar a gobiernos estales, empresas recicladoras y laboratorios químicos, entre otras; ii) Número de actividades, relacionadas con la gestión de 	PRODOC y reportes sobre la ejecución del presupuesto, reportes de avances del proyecto, planes de trabajo, entrevistas a los actores clave, documentos de

Criterio de Evaluación	Preguntas	Indicadores	Fuentes
		químicos y la reducción de emisiones y de exposición a COP, realizadas por estos actores; ii) inversiones de empresas privadas para la ejecución del proyecto.	políticas locales y actas o minutas de las reuniones.
	¿Cómo participaron las autoridades estatales y otros actores principales en la etapa de diseño del proyecto y cómo han participado en la implementación del mismo? ¿Se incluyeron las prioridades locales?	 i) Número de consultas realizadas para el diseño del proyecto; ii) Número de ajustes al proyecto derivados de las consultas; iv) Nivel de participación de los actores a nivel nacional y estatal durante el desarrollo del proyecto. 	Actas o minutas de las reuniones y consultas realizadas, planes de trabajo, reportes de avances del proyecto, presupuesto ejercido para tales tareas, entrevistas a autoridades estatales, organismos de la sociedad civil, entre otros y documentos de políticas locales.
	¿El proyecto toma en consideración las realidades nacionales (marco de políticas e institucional) tanto en su diseño como en su implementación?	 i) Grado en el que el proyecto apoya las líneas de acción de los programas sectoriales de SEMARNAT y SAGARPA vinculados con sustancias químicas y residuos (incluidos los plaguicidas obsoletos); ii) Apreciación de interesados clave con respecto al nivel de adecuación del diseño e implementación del proyecto a las realidades nacionales, locales y capacidades existentes; iii) Coherencia entre las necesidades expresadas por los interesados nacionales y el criterio PNUD-GEF; iv) Nivel de involucramiento de funcionarios gubernamentales y otros socios en el proceso de diseño del proyecto. 	Programas sectoriales de SEMARNAT y SAGARPA; PRODOC; entrevistas a socios e interesados clave en el proyecto.

Criterio de Evaluación	Preguntas	Indicadores	Fuentes
	¿Los objetivos, resultados, productos y las actividades son aún válidas, dado el contexto de implementación actual del proyecto?	 i) Programas sectoriales y programas operativos anuales de SEMARNAT, SAGARPA, SAT, entre otras instancias con actividades en los temas abordados en el proyecto; ii) elaboración de normatividad relacionada con la gestión racional de sustancias químicas y residuos; iii) el proyecto se encuentra incluido en planeación y metas anuales de SEMARNAT y SAGARPA; iv) número de acuerdos o actividades de coordinación entre la federación y las entidades federativas participando en los estudios piloto sobre las materias de trabajo del proyecto. 	Programas sectoriales y programas operativos anuales de SEMARNAT, SAGARPA, SAT. Planes de trabajo, reportes de avances y presupuestos del proyecto, entrevistas con actores clave en la ejecución del proyecto, documentos de políticas locales, actas o minutas de las reuniones.
<i>EFECTIVIDAD:</i> La medida en la que se alcanzó un objetivo o la probabilidad de que	¿Existen vínculos lógicos entre los resultados esperados del proyecto y el diseño del proyecto (en términos de los componentes del proyecto, elección de socios, estructura, mecanismos de implementación, alcance, presupuesto, uso de recursos, etc.)?	i) Nivel de coherencia entre los resultados esperados y el diseño de la lógica interna del proyecto; ii) tipo de indicadores para medir el éxito del programa.	PRODOC, entrevistas a interesados clave del proyecto, informes anuales del proyecto.
se logre.	¿La gestión adecuada de productos químicos y la reducción de las emisiones y la exposición a COP es una prioridad para los actores clave, especialmente para los estados piloto?	Existencia de estrategias estatales o municipales sobre sustancias químicas y/o residuos; ii) Nivel de participación en el proyecto de las entidades federativas seleccionadas como estudio piloto y de las autoridades	Estrategias estatales o municipales sobre sustancias químicas y/o residuos, planes de trabajo y reportes de avances del proyecto, reportes del presupuesto ejercido, entrevistas

Criterio de Evaluación	Preguntas	Indicadores	Fuentes
		aduanales y de inspección a nivel federal.	a funcionarios estatales y autoridades aduanales y de inspección y actas o minutas de reuniones.
	¿En qué medida se están cumpliendo los objetivos del proyecto, tanto a nivel nacional como estatal?	 i) Número de actividades del proyecto realizadas; ii) Porcentaje de avance en el cumplimiento de los indicadores del marco de resultados del PRODOC. 	Reportes de avances del proyecto, PRODOC y entrevistas al equipo del proyecto y al equipo PNUD, autoridades estatales, entre otros actores clave para el proyecto.
	¿En qué medida se ha logrado involucrar a las autoridades federales y estatales, y a otros actores clave para recibir capacitación sobre el manejo adecuado de químicos y los efectos de los COP?	i) Nivel de participación de autoridades estatales y federales en los cursos y talleres de capacitación brindados en el marco del proyecto.	Reportes de avances del proyecto, PRODOC y entrevistas al equipo del proyecto y al equipo PNUD y personas capacitadas.
	¿En qué medida se están logrando identificar las alternativas de mejor costo efectividad para promover el reciclaje de residuos electrónicos y la destrucción de las existencias de plaguicidas COP y otros residuos?	i) Número de alternativas identificadas para promover el reciclaje de residuos electrónicos y la destrucción de las existencias de plaguicidas COP y otros residuos con alto potencial de ser implementadas en el país.	Reportes de avances del proyecto y entrevistas a los consultores de los estudios que abordan estos temas.
	¿En qué medida se está fomentando la incorporación de las propuestas de cambio a la regulación actual de COP para asegurar su alineación con la	 Número de acciones de acercamiento o cabildeo por parte de las autoridades competentes para fomentar la incorporación de las 	Reportes de avances del proyecto y entrevistas a las autoridades competentes vinculadas con el proyecto.

Criterio de Evaluación	Preguntas	Indicadores	Fuentes
	regulación internacional de esos contaminantes?	propuestas de cambio a la regulación actual de COP.	
	¿Los Planes de trabajo anuales se encuentran en línea con los recursos y objetivos del proyecto?	 i) Planes de trabajo y presupuestos son acordes con los resultados esperados del proyecto. 	Planes de trabajo anuales, presupuestos reportados y entrevistas al equipo del proyecto y al equipo PNUD y beneficiarios del proyecto.
	¿Se realizaron los ajustes necesarios para enfrentar situaciones imprevistas (manejo adaptativo)?	i) Número de ajustes realizados al proyecto para enfrentar situaciones imprevistas y ii) Planes de trabajo y presupuestos son acordes con los resultados esperados del proyecto.	Reportes de avances del proyecto, planes de trabajo anuales, presupuestos reportados, entrevistas al equipo del proyecto y al equipo PNUD y beneficiarios del proyecto, actas o minutas de reuniones.
<i>EFICIENCIA:</i> La medida en la que el proyecto se está implementando de manera eficiente de conformidad con las normas y los estándares internacionales y nacionales.	ntando de manera onformidad con las estándares actividades adecuado? ¿Qué indicadores, iii) pertinencia de las prácticas de sistematización de metas; iv) Número de ajustes experiencias se están llevando a realizados al proyecto derivados del	Reportes de avances del proyecto, planes de trabajo anuales y entrevista al encargado (a) del M&E del proyecto.	
	¿Se realizaron las actividades y se obtuvieron los productos y resultados de acuerdo con lo planeado?	 i) Número de actividades planeadas que se ejecutaron y ii) Porcentaje de avance en los productos y resultados comprometidos. 	Reportes de avances del proyecto, planes de trabajo anuales y entrevistas al equipo del proyecto y del PNUD y beneficiarios del proyecto, entre otros.

Criterio de Evaluación	Preguntas	Indicadores	Fuentes
	¿Cómo se manejaron los riesgos y supuestos del proyecto? ¿Cuál ha sido la calidad de las estrategias de mitigación de riesgos desarrolladas?	 i) Integridad de la identificación de riesgos y supuestos durante la planeación y el diseño del proyecto y ii) Calidad de los sistemas de información establecidos para identificar riesgos emergentes. 	Documentos del proyecto; reportes de avance trimestral y anual; entrevistas al equipo del proyecto y del PNUD e interesados clave.
	¿Han sido eficientes y adecuados los procesos de gobernanza del proyecto o requieren ajustes?	 i) Roles, responsabilidades y canales de comunicación se encuentran bien definidos entre los participantes en el proyecto y ii) Mecanismos de coordinación efectivo. 	Entrevistas al equipo del proyecto y del PNUD y a beneficiarios y otros interesados clave del proyecto.
	¿Se logró reunir recursos de contrapartida y/o adicionales para los objetivos del proyecto?	i) Cantidad y origen de recursos asignados	Reportes de avances del proyecto, planes de trabajo anuales, presupuestos reportados y entrevistas al equipo del proyecto y del PNUD e interesados clave (p.ej. empresarios).
	¿Qué otros proyectos con financiamiento nacional y/o internacional se están ejecutando en los mismos territorios que el proyecto GEF-Residuos COP y cómo se vinculan con éste?	i) Número y nombre de proyectos identificados con financiamiento nacional y/o internacional que se están ejecutando en los mismos territorios que el proyecto GEF- Residuos COP (p.ej. proyecto financiado por GIZ) y ii) Número de acciones de coordinación establecidas entre el proyecto GEF-Residuos COP y los otros proyectos identificados.	Reportes de avances del proyecto, planes de trabajo anuales, presupuestos reportados y entrevistas al equipo del proyecto y del PNUD e interesados clave (p.ej. representantes de GIZ).

Criterio de Evaluación	Preguntas	Indicadores	Fuentes
RESULTADOS: Los cambios positivos y negativos, previstos e imprevistos y los efectos producidos por una intervención de desarrollo. En términos del FMAM, los resultados incluyen el rendimiento directo del proyecto, de corto a mediano plazo, y el impacto a mayor plazo que incluye beneficios al medio ambiente mundial, efectos de repetición y otros efectos locales.	¿En qué medida se están minimizando los impactos negativos a la salud y al medio ambiente a través del manejo adecuado de productos químicos y la reducción de las emisiones y la exposición a COP, particularmente de los contenidos en los residuos electrónicos y de plaguicidas COP? ¿Qué factores han contribuido a lograr o no alcanzar los resultados planeados?	 i) Número y efectividad de las actividades que han promovido un manejo adecuado de químicos; número y efectividad de las actividades que han permitido una reducción de las emisiones de COP; y iii) Número y efectividad de las actividades que han disminuido la exposición a COP. 	Reportes de avances del proyecto, planes de trabajo anuales, presupuestos reportados y entrevistas al equipo del proyecto y del PNUD y beneficiarios del proyecto (p.ej. autoridades estatales capacitadas).
	De acuerdo con los resultados alcanzados hasta el momento, ¿en qué medida se espera que se cumplirá con las metas de fin de proyecto?	i) Porcentaje de avance en el cumplimiento de los indicadores del marco de resultados del PRODOC.	Reportes de avances del proyecto, planes de trabajo anuales, presupuestos reportados y entrevistas al equipo del proyecto y del PNUD y otros actores que se consideren relevantes.
SOSTENIBILIDAD: La capacidad probable de que una intervención continúe brindando beneficios durante un período posterior a su finalización. El proyecto debe ser sostenible tanto ambientalmente, como financiera y socialmente.	¿Las autoridades y actores relevantes a nivel federal y estatal podrán seguir implementando un manejo adecuado de químicos y las mejores prácticas para el reciclaje de residuos electrónicos y la eliminación de plaguicidas obsoletos y otros residuos COP cuando el proyecto finalice?	 i) Número de planes de manejo de residuos electrónicos y de eliminación de plaguicidas obsoletos en proceso de elaboración que incluyan acciones en el mediano y largo plazo; ii) Cantidad de recursos humanos y financieros comprometidos para la continuación de la implementación de los planes de manejo en los estados y 	Reportes de avances del proyecto, planes de trabajo anuales, presupuestos reportados y entrevistas al equipo del proyecto y del PNUD y otros actores que se consideren relevantes.

Criterio de Evaluación	Preguntas	Indicadores	Fuentes
		recicladoras piloto; iii) presupuesto gubernamental relacionado con la gestión de sustancias químicas y residuos.	
	¿Las autoridades y actores relevantes a nivel federal y estatal están adquiriendo las destrezas y el conocimiento requerido para un manejo adecuado de químicos y las mejores prácticas para el reciclaje de residuos electrónicos y la eliminación de plaguicidas obsoletos y otros residuos COP?	 i) Número de capacitaciones realizadas sobre el manejo adecuado de químicos, los riesgos de los COP y las mejores prácticas para el manejo de residuos electrónicos y la eliminación de plaguicidas obsoletos; ii) Nivel de utilidad de las capacitaciones; iii) Número de planes de manejo de residuos electrónicos y de eliminación de plaguicidas obsoletos diseñados de manera participativa con los actores clave. 	Reportes de avances del proyecto, planes de trabajo anuales, presupuestos reportados y entrevistas al equipo del proyecto y del PNUD y otros actores que se consideren relevantes (p. ej. Personas capacitadas).
	¿Existen factores de índole social, político, económico. ambiental o técnico que impidan continuar con la implementación del manejo adecuado de químicos y de las mejores prácticas para el reciclaje de residuos electrónicos y la eliminación de plaguicidas obsoletos y otros residuos COP, una vez concluido el proyecto?	 i) Número de acuerdos y/o acciones de cooperación con actores sociales; ii) Porcentaje del presupuesto gubernamental asignado al manejo de químicos y residuos (humanos y financieros); iii) Número de planes y/o porgramas institucionales de mediano y largo plazo que aborden el tema; iv) Número de planes de financiamiento propuestos por el sector privado. 	Reportes de avances del proyecto, planes de trabajo anuales, presupuestos reportados y entrevistas al equipo del proyecto y del PNUD y otros actores que se consideren relevantes (p. ej. empresarios, ONG participando en el proyecto).
	¿Las autoridades y actores nacionales y estatales, se encuentran empoderados y comprometidos con la	 i) Número de acuerdos y/o acciones de cooperación con actores sociales; ii) Número de acciones de coordinación o colaboración entre la federación y los 	Reportes de avances del proyecto, planes de trabajo anuales, presupuestos reportados y entrevistas al equipo del

Criterio de Evaluación	Preguntas	Indicadores	Fuentes
	minimización de los impactos negativos de los productos químicos y los COP a mediano y largo plazo?	piloto; iii) Porcentaje del presupuesto	actores que se consideren relevantes (p. ej. autoridades de los estatales participando en los

Annex 6: List of Revised Documents

Document	Туре
Documento del Proyecto (PRODOC)	Estratégica
PIR/APR	Informes
GEF tracking tools	Informes
Informes anuales de avances del proyecto	Informes
Informes trimestrales de avances del proyecto	Informes
POAs	Informes
Presupuestos anuales	Financiera
Gastos del ATLAS de PNUD en Excel	Financiera
Informes de cofinanciamiento	Financiera
Informes de auditoría	Financiera
Términos de Referencia	Estratégica
Country program del PNUD	Estratégica
UNDAF	Estratégica
Plan Nacional de Desarrollo o estrategia de desarrollo del país	Estratégica
Estrategia, plan o programa nacional para el manejo de químicos y de residuos	Estratégica
Actas/minutas de la Junta del Proyecto (Comité Directivo) y de sus Grupos de Trabajo Temáticos	Estratégica
Informes del Comité Técnico	Estratégica
Informes de " <i>peer reviews</i> " o procesos de validación de principales productos (si es aplicable)	Informes
Informes técnicos de todos los productos	Informes
Materiales de comunicación del proyecto y materiales que sean relevantes para la evaluación producidos por el proyecto.	Informes
Actas de reuniones con socios y beneficiarios	Informes
Tabla con hitos principales del proyecto	Informes

No.	Document	No.	Document
1	07-28-15_COUNCIL_LETTER.pdf	174	Carta_SICyT.PDF
2	1515514101_Electronic waste -Good Read.pdf	175	Carta_VIZ RESOURCES MANAGEMENT (ENG).docx
3	17398_cortinas1.pdf	176	Carta_VIZ RESOURCES MANAGEMENT_Spanish.pdf
4	20149_Final_Report_ES_estudio_grontera Norte.pdf	177	minuta pac_MAACOPs_final (comentada).docx
5	2016-Diagnostico-nacional-sobre-la-situacion-de-los- contaminantes-organicos-persistentes-en-Mexico.pdf	178	minuta pac_MAACOPs_final.docx
6	20160701_calidadAire_PG_DGGIMAR_C_Murillo.pdf	179	OFICIO_SEMARNAT.pdf
7	2017_prevention_intervention_strategies_ewaste_meeting_report _508.pdf	180	UNDP PIMS4686 Mexico E-waste SESP-2.pdf
8	carta_RAPAM_2018.pdf	181	Cofinancing_GobBajaCalifornia_English.pdf
9	dia06-ErickFelipeJimenez01.pdf	182	Cofinancing_GobBajaCalifornia_Spanish.pdf
10	Diagnostico RAEE_mexico2007.pdf	183	SEMARNAT Cofinancing Letter_English Translation.pdf
11	Final report_E C S_WEEE_EU_2013.pdf	184	SEMARNAT oficioSPPA_755_19dic_cofinanciamiento proy COPs GEF.pdf
12	GEF_POPs_Tracking_Tool_0.xls	185	UNDP PIMS4686 CEO Endorsement Request_Mexico E-Waste and POPs Pesticides_FINAL_20150108.doc
13	Global-E-waste Monitor 2017 .pdf	186	UNDP PIMS4686 Mexico E-waste ProDoc_FINAL_20150108.docx
14	Guia_ciudadana_para_la_aplicacion_del_Convenio_depdf	187	UNDP PIMS4686 Mexico E-waste SESP.pdf
15	guía Buenas practicas COP_2012.pdf	188	UNDP%20PIMS4686_Mexico%20E- Waste%20and%20Obsolete%20Pesticides_GEF%20POPs%20Tracking%20Tool_20 141222.xlsx
16	ijaes.pdf	189	Cofinancing_GobBajaCalifornia_English.pdf
17	INCYTU_18-008_RAEE_mexico_art.pdf	190	Cofinancing_GobBajaCalifornia_Spanish.pdf
18	Integración del Diagnóstico Nacional sobre la_plaguicidas_2007.pdf	191	SEMARNAT Cofinancing Letter_English Translation.pdf
19	IPOL_STU2016571398_ES.pdf	192	SEMARNAT oficioSPPA_755_19dic_cofinanciamiento proy COPs GEF.pdf
20	Libro-Plaguicidas-Final-14-agst-2017sin-portada.pdf	193	UNDP PIMS4686 CEO Endorsement Request_Mexico E-Waste and POPs Pesticides_FINAL_20150108.doc

No.	Document	No.	Document
21	Mexico E-waste SESP_social_env_scree_UNDP.pdf	194	UNDP PIMS4686 Mexico E-waste ProDoc_FINAL_20150108.docx
22	Pentaclorofenol toxicología y riesgos para el ambiente.pdf	195	UNDP PIMS4686 Mexico E-waste SESP.pdf
23	persistent_organic_pollutants_towards_pops_free_future_FB19_e n.pdf	196	UNDP%20PIMS4686_Mexico%20E- Waste%20and%20Obsolete%20Pesticides_GEF%20POPs%20Tracking%20Tool_20 141222.xlsx
24	PIF.pdf	197	090417_Mesa_Santiago_Empa.pdf
25	PLAGUICIDAS-RESTRINGIDOS_mexico.pdf	198	2010TRINAOverview.pdf
26	plaguicidas_mexico.pdf	199	BMI - Mexico Consumer Electronics Report Q4 2009.pdf
27	Plan-de-Nacion-de-Morena_2018-2024.pdf	200	Capacitación Regulación Ambiental REMSA 2012.pptx
28	Plan-Nacional-de-Desarrollo-PND-2013-2018.pdf	201	Collector Best Practices Final.pdf
29	presentacion_RAEE_mex_2009.pdf	202	e_waste_guide_pacific.pdf
30	proyecto UNIDO_RAE_LAC.pptx	203	Reciclaje_de_residuos_electronicos_en_AmericaLatina_Boeni-Silva-Ott- FINAL.pdf
31	RAEE_instituciones educativas_2016.pdf	204	2011_taller_ree_pres_rramirez.pdf
32	report_2014_mexico_SC.doc	205	In_Cycle_presentacion[1].ppt
33	Residuos de Manejo Especial (RME) _ Secretaría de Medio Ambient.pdf	206	04-17-2013 ID 5179 rev PIF.pdf
34	resumenejecutivo_inventario_raee_final_COP México.pdf	207	07-28-15_COUNCIL_LETTER.pdf
35	resumenejecutivo_inventario_raee_final2015.pdf	208	5179-2013-04-24-161155-GEFReviewSheetGEF5.pdf
36	RyR_RAEE_mexico.pdf	209	5179-2013-05-15-155938-STAPReviewAgency.pdf
37	STAP_review_2.pdf	210	5179-2015-07-20-133806-GEFReviewSheetGEF5.pdf
38	STAR_review.pdf	211	UNDP_PIMS4686_CEO_Endorsement_Request_Mexico_E- Waste_and_POPs_Pesticides_June_26_20152pdf
39	UNEP-POPS-NIP-Mexico-COP5.Spanish_2016.pdf	212	UNDP_PIMS4686_Mexico_E-waste_ProDoc_June_26_2015.pdf
40	UNEP-POPS-TOOLKIT-2012-En.pdf	213	Anexo2PresentaciónPAC(Tecnica)GRM.pptx
41	UNEP-POPS-TOOLKIT-PCDD-PCDF-EFs.Sp.xls	214	Fase preparatoria Plaguicidas_borrador.pptx

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42	CLEAN FINAL HHPs Mexico Fernando Release.pdf	215	Presentacion PNREVAA 2014.pdf
43	HHHP in Mexico 2018REV.pdf	216	PresentacionElectronicos271113.pptx
44	Libro Plaguicidas Final 14 agst 2017.pdf	217	Presentacion_FasePreparatoria_Plaguicidas_Proccyt_Umffaac_CampoLimpio.ppt x
45	Recommendations HHP in mexico 2017 T.pdf	218	Presentación PAC EWASTE.ppt
46	Resumen Ejecutivo -Libro HHP Mex 2017 INGLES final.pdf	219	Presentación Frisco 21050514.pptx
47	Archivos-20180726T144451Z-001.zip	220	Ejecución ResiduosCOP Junio 2018.xlsx
48	PIR_2017_COP.docx	221	GEF PRODOC.pdf
49	PIR_2018_COP.docx	222	PRODOC (comentado).docx
50	PRODOC_COP_Mexico.docx	223	PRODOC (firmado).pdf
51	Solicitud de documentos_POP_Mexico 1.xlsx	224	PRODOC 92723 (MTR-2018).docx
52	Tabla de hitos del proyecto.xlsx	225	PRODOC 92723.docx
53	PRODOC e waste final a firma.docx	226	PRODOC e waste final a firmaprev.docx
54	PRODOC_00092723_COPs_UNDP.pdf	227	ProDoc Marco de Resultados b.xlsx
55	~\$ODOC e waste final a firma.docx	228	ProDoc Marco de Resultados.xlsx
56	PRODOC inglés.pdf	229	Anexo5Procurement Plan Template 2015 00086441.xlsx
57	GT Comercio 270318.pdf	230	Anexo6POA2015ProyCOPs_86441_100815.xlsx
58	GTComercio 130318.pdf	231	Catalogo de Cuentas IPSAS.xls
59	Minuta GTT- PLAG 30052017.pdf	232	Producto 2 Plaguicidas Rev GRM.docx
60	Minuta GT-RAEE 08062017.pdf	233	Reporte_Plaguicidas_13DIC (ENG).docx
61	Minuta GT-RAEE 27092017.pdf	234	02 INFORME FINAL electronicos PNUD_final_OCTAVIO.pdf
62	poa 2016.pdf	235	2 Producto empresas recicladoras.docx
63	poa 2017.pdf	236	Dictamen Jurídico Residuos electrónicosRevGRM.docx
64	poa 2018.pdf	237	Informe de Apoyo Fase PRODOC.pdf
65	Presupuesto 2016.pdf	238	INFORME FINAL 2 electronicos PNUD_final_sep2014.docx
66	Presupuesto 2017.pdf	239	INFORME FINAL electronicos PNUD_final_sep2014.docx

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67	Presupuesto 2018.pdf	240	INFORME FINAL REEE Fase PRODOC.docx
68	Presupuesto anual inicial (AWP).PDF	241	SINTESIS electronicos PNUD_final_sep2014.docx
69	(Gastos) CDR 92723 Anual 2016.pdf	242	Tercer entregable PNUD producto final con recomendaciones (ENG) 5AGO14.docx
70	(Gastos) CDR 92723 Anual 2017.pdf	243	CARTA - SEMARNAT - DR. ROMAN - PNUD - 24 JULIO 2014 - AMOCALI, A.Cpdf
71	Gastos Atlas 2016 -2018.xlsx	244	Definiciones.docx
72	Informe de Auditoria 2017.pdf	245	Directorio_Actores_Proyecto_Plaguicidas.xlsx
73	A3.1 Diagnóstico Aduanas.docx	246	Fabricacion_fertilizantes_pesticidas y otros.xlsx
74	B1.1 Plan Manejo Modelo.docx	247	Fabricación_fertilizantes_pesticidas y otros.docx
75	B6.1 Guías Buenas Prácticas.pdf	248	Fase Preparatoria Plaguicidas.docx
76	D3.1 Plan Manejo Colima.docx	249	INFORME ANUAL 2013 - COMISION DE COMUNICACION Y DIFUSION - AMOCALI, A.Cpdf
77	E3.1 Desc. Envases.docx	250	INFORME ANUAL 2013 -COMISION DE LOGISTICA DE CAT - AMOCALI, A.Cpdf
78	G4.1 PNREVA.pdf	251	Oficio_Confidencialidad_SENASICA.pdf
79	A1.1 Marco Legal.pdf	252	PLAN DE MANEJO PUBLICO NOVIEMBRE 2010.pdf
80	A1.2 Instr. Económicos.pdf	253	Reporte_Plaguicidas_13DIC.docx
81	B3.1 Inventario RAEE.pdf	254	agroq-triple-lavado.pdf
82	B7.1 Caracterización.pdf	255	FORMATO%20DE%20REPORTE%20DE%20RECOLECCION%20- %20JUNIO%202011%20TABLA%20DE%20REPORTES.pdf
83	D1.1 Inv Plaguicidas.pdf	256	LGPGIR.pdf
84	D1.2 Análisis COP.pdf	257	NOM%20052%20SEMARNAT%202005.pdf
85	E1.1 Tecnologías Disp. Final.docx	258	plamrevp.pdf
86	PIR 2017.docx	259	PRESENTACIONCAMPOLIMPIO.pdf
87	PIR 2018 PRELIMINAR.docx	260	presentacion_AFIPA_Programa_Envases_AGOSTO_2011.pdf

No.	Document	No.	Document
88	2017PortfolioIndicators ResiduosCOP.xlsx	261	REGLAMENTO-LGPGIR.pdf
89	2018PortfolioIndicators ResiduosCOP (2).xlsx	262	triplelavado.pdf
90	2018PortfolioIndicators ResiduosCOP.xlsx	263	3. Publicaciones_Información_residuos de plaguicidas_2007-1.docx
91	People safeguarded.pdf	264	3. Publicaciones_Información_residuos de plaguicidas_2007-2.doc
92	Tracking tool 2018 (2).xlsx	265	3.3.docx
93	Tracking tool 2018.xlsx	266	Boletín_Feb_2011_Resultados.pdf
94	~\$2017PortfolioIndicators ResiduosCOP.xlsx	267	Boletín_Feb_2012_Resultados.pdf
95	Informe Anual 2016.docx	268	Capacidades_Analíticas_Plaguicidas.docx
96	Informe Anual 2017.docx	269	CLORDANO.pdf
97	Informe 2016-Q1.pdf	270	DDT_Eliminado_es.pdf
98	Informe 2016-Q2.pdf	271	DDT_y_Malaria_México.pdf
99	Informe 2016-Q3.pdf	272	guia.pdf
100	Informe 2016-Q4.pdf	273	GUÍA PARA EL MANEJO ADECUADO DE PLAGUICIDAS.pdf
101	Informe 2017-Q1.pdf	274	Historia_del_DDT.pdf
102	Informe 2017-Q2.pdf	275	informe_final_plaguicidas.pdf
103	Informe 2017-Q3.pdf	276	Inventario_Plaguicidas_Caducos_2007.docx
104	Informe 2017-Q4.pdf	277	lindano_es.pdf
105	Informe 2018-Q1.pdf	278	Objetivo_General_Plaguicidas.xlsx
106	Informe 2018-Q2.pdf	279	PARAN_sobre_lindano.pdf
107	TDR A1.1 Marco legal.pdf	280	Plan de Acción Regional para el Manejo del Clordano.docx
108	TDR A1.2 Inst. Económicos.pdf	281	Planes_de_Acción_de_Plaguicidas.docx
109	TDR A2.1 Impacto cambio categoría.pdf	282	Presentación_PNUD_y_MA.pdf
110	TDR A3.1 Diagnóstico Aduanas.pdf	283	Presentación_PNUD_y_MA.ppt
111	TDR A5.2 Fortalecimiento PNI -CE.pdf	284	Inventario Plaguicidas Obsoletos_PROCCYT.xlsx
112	TDR B1.1 Plan Manejo Modelo.pdf	285	Reporte_Plaguicidas_PROCCYT_2014.docx
113	TDR B3.1 Inventario RAEE.pdf	286	Reporte_Plaguicidas_PROCCYT_2014.xlsx

No.	Document	No.	Document
114	TDR B5.1 Estrategia Comunicación.pdf	287	inventario de plaguicidas-08 12 (3).xlsx
115	TDR B5.3 LTA Comunicación.pdf	288	inventario de plaguicidas-08 12 (3)_ddgimar.xlsx
116	TDR B6.1 Buenas Prácticas RAEE.pdf	289	INVENTARIO PLAGUICIDAS DGGIMAR.pdf
117	TDR B7.1 Caracterización industria.pdf	290	INVENTARIO PLAGUICIDAS JULIO 2010_DGGIMAR.xls
118	TDR B8.1 Sitio web.pdf	291	Inventario Plaguicidas Obsoletos 100211.xls
119	TDR B8.2 Migración- Registro empresas.pdf	292	Inventario Plaguicidas Obsoletos 100211_revisado.xlsx
120	TDR C2.1 Plan - Piloto Informalidad.pdf	293	Areas de colaboracion_UMFFAAC_PROCCY_Campo Limpio-PNUD.docx
121	TDR D1.1 Inventario Plaguicidas.pdf	294	Etiqueta para enviar correspondencia UMFFAAC_PROCCYT_Campo_Limpio.docx
122	TDR D1.2 Det. Analítica COP.pdf	295	Oficio Colaboracion Campo Limpio_feb2014.docx
123	TDR D3.1 Plan Manejo Colima.pdf	296	Oficio Colaboracion PROCCYT_Plaguicidas_feb2014.docx
124	TDR E1.1 Tecnologías Eliminación.pdf	297	Oficio para solicitar Inf y reunion AMIFAC_Plaguicidas_dic2013.docx
125	TDR E3.1 Descontaminación Plásticos.pdf	298	Oficio para solicitar Inf y reunion COFEPRIS_Plaguicidas_feb2014.docx
126	TDR G4.1 Diagnóstico PNREVA.pdf	299	Oficio para solicitar Inf y reunion SENASICA_Plaguicidas_feb2014.docx
127	TDR H1.1 MTR Internacional.pdf	300	Oficio para solicitar Inf y reunion UMFFAAC_Plaguicidas_dic2013.docx
128	TDR H1.1 MTR Nacional.pdf	301	OficioAMIFAC-1.jpg
129	PNI México 2017.pdf	302	OficioAMIFAC-2.jpg
130	Minuta JP 2016-1.pdf	303	OficioUMFFAAC-1.jpg
131	Minuta JP 2016-2.pdf	304	OficioUMFFAAC-2.jpg
132	Minuta JP 2017-3.pdf	305	Agenda Reunion Campo Limpio_PROCCYT-PNUD_temas a tratar.docx
133	Minuta JP 2017-4.pdf	306	Agenda Reunion Campo_Limpio_PROCCYT-PNUD.docx
134	Minuta JP 2017-5.pdf	307	Areas de colaboracion_UMFFAAC_PROCCY_Campo Limpio-PNUD.docx
135	Minuta JP 2018-6.pdf	308	Areas de colaboracion_UMFFAAC_PROCCY_Campo Limpio-PNUD.pdf
136	Minuta JP 2018-7.pdf	309	CROQUIS Amocali.JPG
137	Minuta CTA 20 jun 2017.pdf	310	Croquis_PROCCYT.JPG
138	Minuta CTA 29 sep 2016.pdf	311	Lista de requerimientos_UMFFAAC_PROCCYT_Campo Limpio.docx

No.	Document	No.	Document
139	Agenda Evaluación de medio termino.xlsx	312	Lista de requerimientos_UMFFAAC_PROCCYT_Campo Limpio.pdf
140	Avance programático Residuos COP- Ponderación por actividades.xlsx	313	Minuta_Campo Limpio PROCCYT-PNUD_18Feb.docx
141	Memoria del 1er. Taller Nacional para Operadores de CAT 080518.pdf	314	Minuta_Campo Limpio PROCCYT-PNUD_18Feb.pdf
142	P5-FactSheet_2.pdf	315	Presentacion_FasePreparatoria_Plaguicidas_PROCCYT_Amocali.pptx
143	Ppt_InstEco_RAEE_2018-1.pptx	316	Resumen de la reunion PROCCYT_Campo_Limpio_PNUD_18feb.docx
144	Presentación final pnud-cops-legal.pptx	317	Thumbs.db
145	PRODOC 92723 (MTR-2018).docx	318	Agenda Reunion UMFFAAC-PNUD.docx
146	Recicladoras_Presentación final 08jun17 vPNUD (1).PPTX	319	Agenda Reunion UMFFAAC-PNUD_temas a tratar.docx
147	ResiduosCOP (Mid Term Review).pptx	320	Areas de colaboracion_UMFFAAC_PROCCY_Campo Limpio-PNUD.docx
148	Resumen Ejecutivo ampliado (002).pdf	321	Areas de colaboracion_UMFFAAC_PROCCY_Campo Limpio-PNUD.pdf
149	Testimonios ResiduosCOP 1.mp4	322	Croquis_UMFFAAC.JPG
150	2017-PIR-PIMS4686-GEFID5179.docx	323	Lista de requerimientos_UMFFAAC_PROCCYT_Campo Limpio.docx
151	2018-GEF-PIR-PIMS4686-GEFID5179.docx	324	Lista de requerimientos_UMFFAAC_PROCCYT_Campo Limpio.pdf
152	Cofinanciamiento Compromisos.xlsx	325	Minuta_UMFFAAC-PNUD_21Ene.docx
153	CARTA AMOCALI (ENG).docx	326	Minuta_UMFFAAC-PNUD_21Ene.pdf
154	CARTA BIOSEA (ENG).docx	327	Presentacion_FasePreparatoria_Plaguicidas_UMFFAAC.pdf
155	CARTA CANIETI - (ENG).docx	328	Presentacion_FasePreparatoria_Plaguicidas_UMFFAAC.pptx
156	CARTA PNUD SPANISH (ENG).docx	329	Resumen de la reunion UMFFAAC_PNUD_21ene.docx
157	CARTA SEMARNAT 4JUN15 (ENG).docx	330	Plan de Negocios (Anexos) Rev GRM.docx
158	CARTA SENASICA (ENG).docx	331	Plan de Negocios Recicladora Rev GRM.docx
159	9 CARTA- OFICIO SEMADET (ENG).docx		16718463916 (TORs-CONTRATO).pdf
160	0 CartaAMOCALI_Spanish.pdf		16983543916 (TORS-CONTRATO Revisión jurídica).pdf
161	1 CartaCANIETI_Spanish.pdf		Contrato_Abogado_Proyecto_COPs.pdf
162	CartalPN_English.docx	335	Contrato_Electronicos_Proyecto_COPs.pdf
163	CartalPN_Spanish.pdf	336	Programa Consultores Proyecto COPs_ver_02.xlsx

No.	Document	No.	Document
164	CartaLACY_Spanish.pdf	337	PROPOSED SCHEDULE FOR PROJECT DOCUMENT ELABORATION.docx
165	65 CartaPNUD_Spanish.pdf		Tors_ABOGADO_Proyecto_COPs.docx
166	CartaSEMARNAT_English.docx	339	Tors_ELECTRONICOS_Proyecto_COPs.docx
167	CartaSEMARNAT_English2.docx	340	Tors_PRODOC.docx
168	CartaSEMARNAT_Spanish.pdf	341	Note to the fila Justificación Finiquito OSCAR Consultores.docx
169	CartaSENASICA_Spanish.pdf	342	UNDP_Plan de Manejo_Minuta 16.01.18.pdf
170	Carta_Biosea_Spanish.pdf	343	Romero, T.T., Cortinas de Nava, C. y Gutierrez A. J. Diagnóstico nacional sobre la situación de los contaminantes orgánicos persistentes en México. México.
171	Carta_GobBC_English.docx	344	Flores, R., FJ Pérez, M. Rodríguez, SE Medellin, E Van Brussel, AC Cubillas, L Carrizales, F. Díaz (2017) Biomonitoring of persistent organic pollutants (POPs) in child populations living near contaminated sites in Mexico. Science of the Total Environment. Volume 579. P:1120-1126.
172	Carta_GobBC_Spanish.pdf	345	OPS, 2008. Eliminación de las reservas del DDT en Mesoamérica. Quinta Reunión del Comité Directivo. Programa regional de acción y demostración de alternativas sostenibles para el control de vectores de la malaria sin el uso de DDT en México y Centroamérica. En: https://www.paho.org/mex/index.php?option=com_docman&view=download& alias=237-eliminacion-del-ddt-y-otros-cops-en-meso- america&category_slug=presentaciones&Itemid=493
173	Carta_SEMADET_Spanish.pdf	346	Irma GG, Elvira SS, Arturo GG, Erik BM, Gonzalez-Gonzalez LA (2017) Brominated Flame Retardants (BFRS) Analysis in Leachates and Sludge from a Land II and Wastewater Plant in the Metropolitan Area of Mexico City. J Environ Anal Toxicol 7: 459. doi: 10.4172/2161-0525.1000459
348	Macías, Z. J., Ramirez, A. N., Hernández G. F. Y Mejia T. A. (2016). On the sources of PBDEs in coastal marine sediments off Baja California, Mexico. Science of The Total Environment. Volume 571, 15 November 2016, Pages 59-66.	347	Valenzuela-Sánchez, I.S., Gold-Bouchot, G., Hernández-Núñez, E. et al. Bull Environ Contam Toxicol (2018) 101: 160. https://doi.org/10.1007/s00128-018-2347-z

Annex 7: Itinerary of the evaluation

Comentarios al informe preliminar de la Evaluación de Medio Término del proyecto Manejo adecuado de residuos conteniendo Compuestos Orgánicos Persistentes en México

Con relación al informe preliminar de la Evaluación de Medio Término del proyecto Manejo adecuado de residuos conteniendo Compuestos Orgánicos Persistentes en México, solicitada por la oficina de país del Programa de las Naciones Unidas para el Desarrollo (PNUD), quien funge como agencia implementadora del Global Environment Facility, y que se realizó entre el 1 y el 15 de octubre de 2018, se ponen a consideración de los evaluadores las siguientes observaciones.

Nº	Statement	CPU's Comment (1st round)	Response and/or actions taken by the evaluation team	CPU's Comment (2ond round)	Response and/or actions taken by the evaluation team (2ond round)
	La portada señala como fecha del informe: 21 de noviembre 2018			Favor de actualizar para evitar confusión con versiones anteriores	Corregido
	En Recomendaciones: ✓ Incluir coordinadores locales los estados pilotos, que tengan buena interlocución con autoridades estatales y municipales, además de buena relación con los actores privados locales (empresas electrónicas y de RyR, organizaciones de agricultores, etc.).	Anteriormente se les explicó a los evaluadores que no es conveniente esta Recomendación		Respecto a esta para estrecharlacolaboración con los gobiernos estatales, no estamos de acuerdo con ella con base en las siguientes consideraciones:1 El alojamiento de personal contratado por PNUD en oficinas remotas puede generar confusión sobre las responsabilidades asignadas; así como sobre la estructura y organigrama del proyecto.2 Las oficinas anfitrionas con frecuencia aprovechan a este personal para suplir deficiencias en las capacidades	Los evaluadores consideran pertinente esta recomendación, la cual puede ser aceptada, rechazada por la UCP, o bien, la UCP puede hacer una contrapropuesta para resolver el problema de la baja participación de los actores locales en el proyecto.

Nº	Statement	CPU's Comment (1st round)	Response and/or actions taken by the evaluation team	CPU's Comment (2ond round)	Response and/or actions taken by the evaluation team (2ond round)
				tienen que ver con los objetivos del proyecto. 3 La carga de trabajo no lo justifica y; 4 Todavía no existen elementos para la elaboración de planes de manejo de residuos COP en los estados piloto, lo cuales se obtendrán como resultado de la implementación y evaluación de los proyectos piloto previstos en el PRODOC, mismos que apenas iniciarán este año.	
1	En Agradecimientos: Quisiéramos agradecer al personal de las oficinas de PNUD de México y Panamá y <u>al equipo ejecutor</u> del Proyecto por su apoyo. También quisiéramos agradecer la colaboración prestada por las asociaciones empresariales de manufacturas de aparatos electrónicos y de formulación de plaguicidas, las empresas de reciclaje de RAEE, y <u>a las</u> <u>organizaciones</u> agrícolas involucrados.	En Agradecimientos: Quisiéramos agradecer al personal de las oficinas de PNUD de México y Panamá y a <u>la Unidad Coordinadora</u> del Proyecto por su apoyo. También quisiéramos agradecer la colaboración prestada por las asociaciones empresariales de manufacturas de aparatos electrónicos y de formulación de plaguicidas, las empresas de reciclaje de RAEE, y <u>a los</u> <u>comités de sanidad vegetal</u> agrícolas involucrados.	Corregido	Sin comentario	

Nº	Statement	CPU's Comment (1st round)	Response and/or actions taken by the evaluation team	CPU's Comment (2ond round)	Response and/or actions taken by the evaluation team (2ond round)
2	En Abreviaturas y siglas: COPs	En Abreviaturas y siglas: COP	Corregido	Sin comentario	
3	En Hallazgos (pp. ii): El proyecto ha logrado posicionar de nueva cuenta la relevancia de la minimización de riesgos un apartado específico para COPs, y con SENASICA	En Hallazgos (pp. ii): El proyecto ha logrado posicionar la relevancia de la minimización de riesgos un apartado específico para COP, y con SENASICA	Corregido	Sin comentario	
4	En Segundo párrafo pp. iii: Los actores entrevistados han cuestionado la calidad de algunos productos y la falta de experiencia de los consultores contratados para estos efectos. Los cuestionamientos se centran en productos claves como los inventarios de RAEE y residuos de plaguicidas, las guías de buenas prácticas para RAEE, el diagnóstico del programa de envases vacíos de plaguicidas, entre otros.	Algunos actores podrían haber hecho este cuestionamiento al no haber visto cumplidas sus expectativas sobre el proyecto y/o sobre su participación en él. Para esclarecer lo anterior, se sugiere incluir en el informe datos estadísticos sobre las respuestas de los actores entrevistados, protegiendo en todo momento la confidencialidad de las respuestas. Esto podría contribuir a una interpretación más objetiva de los resultados de las entrevistas y saber qué porcentaje de los actores comparte esta percepción.	Se obtuvieron las estadísticas solicitadas con respecto a la opinión de las 54 personas entrevistadas. Se encontró que el 48.5 % de las personas entrevistadas (16 personas), que participan en el proyecto (excluyendo a las personas entrevistadas del PNUD y de la Unidad Coordinadora del proyecto - 12 personas- y a las personas que no han participado en el proyecto -8 personas-), tienen una opinión negativa sobre los productos generados por el proyecto. El 39% (13 personas) no opinaron sobre la calidad técnica de los productos, aunque sí participan en el proyecto y el 12% tiene una opinión positiva de los productos (4 personas). Con base en estas estadísticas se hizo el ajuste a la redacción del párrafo en comento.	Sin comentario	
5	En Página v: Reorganizar la UCP: pensar en un coordinador con buena llegada a niveles de autoridad altos y con alto	La UCP ya está organizada de esa manera.	Actualmente, la UCP está constituida por un solo Coordinador del Proyecto. La propuesta del equipo de evaluación es que exista	Favor de cambiar el término de Coordinadores	Corregido con aclaración:, "quienes bajo la supervisión del coordinador de proyecto debieran organizar y coordinar los aspectos

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	nivel de gerencia de proyectos. Establecer, además, 2 coordinadores temáticos (RAEE y plaguicidas) encargados de cada componente del proyecto. Evaluar la conveniencia de retomar el plan de recuperación de TV del apagón analógico.	Debe considerarse que el proceso está actualmente detenido por un amparo.	un Coordinador del Proyecto y dos Coordinadores Temáticos, los cuales no están concebidos en la actual organización. Se ajustó el texto del párrafo para asegurar la claridad de esta propuesta. Se modificó el texto de la recomendación sobre la recuperación de TV como resultado del apagón analógico, para mencionar el proceso de amparo al que está sujeto ese programa.	Temáticos por Especialistas Temáticos. Lo anterior, para evitar confusión en la UCP con el rol del Coordinador del Proyecto con los otros colaboradores. Aplica en la sección de Recomendaciones	relativos a su experticia y de acuerdo a términos de referencia específicos."
6	En Introducción (pp. 1): Particularmente, la evaluación tiene como propósito identificar problemas potenciales <u>en el diseño</u> <u>del proyecto</u> , evaluar el progreso en la consecución de los objetivos establecidos en el Documento del Proyecto (PRODOC) y el uso de los recursos económicos y el financiamiento, así como identificar y documentar lecciones aprendidas y proporcionar recomendaciones sobre acciones específicas que deban realizarse para mejorar la ejecución del proyecto. las actividades del proyecto comenzaron en mayo de 2016,	La evaluación no parece abarcar cabalmente al diseño del proyecto. Más allá de la identificación de la falta de metas intermedias, no se hace ninguna otra observación en el documento. las actividades del proyecto comenzaron <u>el 25 de abril de 2016</u> con el taller de arranque,	Se dio mayor visibilidad a las aseveraciones realizadas sobre el diseño del proyecto en el apartado de hallazgos del resumen ejecutivo y del documento in extenso. Adicionalmente, se corrigió la fecha de inicio del proyecto.	Sin comentario	
7	En Planificación de la Misión (pp. 9): Una vez discutida la agenda de la misión con <u>el equipo ejecutor</u> y el PNUD,	En Planificación de la Misión (pp. 9): Una vez discutida la agenda de la misión con la <u>Unidad</u> <u>Coordinadora del Proyecto</u> y el PNUD,	Corregido	Sin comentario	

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	En Situación de los residuos electrónicos conteniendo COP en México (pp. 11): En México, se estimó una generación de residuos electrónicos entre 300,000 y 500,000 toneladas al año en 2006, mientras que una estimación para el 2013 reveló una generación entre 613,643 a 753,205 toneladas al año. Como consecuencia del cambio de televisión analógica a digital en el país, a esta última estimación se le debe sumar una generación de aproximadamente 500,000 toneladas de residuos entre 2014 y 2015, por el desecho de 50 millones de televisores. Así, con base en una estimación para México sobre el volumen de las existencias de computadoras, sus monitores y televisores con cinescopio fabricados antes del 2005, se determinaron 242,415 toneladas de plástico contaminado con OctaBDE-c, que requerirá de un tratamiento ambientalmente adecuado. Baja California alberga al mayor número de unidades económicas fabricando aparatos electrónicos, contabilizando 190 en 2018, principalmente en Tijuana y	Se sugiere incluir la fuente de los datos proporcionados. Para el caso de Jalisco se sugiere añadir que ahí se agrupan varias empresas fabricantes de aparatos electrónicos.	Atendido	Sin comentario	

Nº	Statement	CPU's Comment (1st round)	Response and/or actions taken by the evaluation team	CPU's Comment (2ond round)	Response and/or actions taken by the evaluation team (2ond round)
9	En Plaguicidas COP y caducos asociados (pp. 12): se exportaron aproximadamente 87.5 toneladas de DDT inventariado en el país para su incineración en Francia. De acuerdo con la SEMARNAT, actualmente se cuenta con un inventario de plaguicidas COP y caducos de 308 toneladas, de las cuales el 42% tiene una categoría de peligrosidad de altamente peligrosa y el 38% se clasifica como extremadamente peligrosa.	Se sugiere incluir la fuente de los datos proporcionados.	Atendido	Sin comentario	
10	En Institucionalidad (pp. 12): Inocuidad y Calidad Agroalimentaria de la Secretaría de Agricultura, Ganadería, Desarrollo Rural, Pesca y Alimentación, que apoya el trabajo relacionado con plaguicidas COP y caducos.	Inocuidad y Calidad Agroalimentaria (SENASICA) de la Secretaría de Agricultura, Ganadería, Desarrollo Rural, Pesca y Alimentación (SAGARPA), que apoya el trabajo relacionado con plaguicidas COP y caducos, <u>así como en la</u> <u>recolección de envases vacíos</u> <u>de plaguicidas</u> .	Atendido	Sin comentario	
11	En Objetivos Ambientales y de Desarrollo (pp. 15) Se debe entender que el objetivo ambiental fundamental de este proyecto está centrado en la disminución de emisiones de COP provenientes del manejo inadecuado de residuos electrónicos resultantes del uso de 5 productos que se sabe tienen contenidos de COP.	El objetivo planteado en el Prodoc dice a la letra: Minimizar los impactos a la salud y al medio ambiente mediante el manejo adecuado de químicos y la reducción de emisiones COP, así como la exposición a COPs a partir de las operaciones de manejo de	Corregido	Sin comentario	

Nº	Statement	CPU's Comment (1st round)	Response and/or actions taken by the evaluation team	CPU's Comment (2ond round)	Response and/or actions taken by the evaluation team (2ond round)
		desechos electrónicos y plaguicidas en México.			
12	En Cuadro No. 9 (pp.16): En total son 6 <u>resultados</u> los que el proyecto debe lograr, los que se resumen en el Cuadro Nº9. Se indican 32 actividades	En total son 6 <u>componentes</u> los que el proyecto debe lograr, <u>los cuatro principales</u> se resumen en el Cuadro №9. Son 30	Corregido	Sin comentario	
13	En Cuadro de principales indicadores (p.16):	No es plenamente coincidente el cuadro presentado con el que aparece en el ProDoc. Se sugiere alinearlo y explicarlo para abonar a la claridad del documento.	Corregido y atendido	Favor de editar la tabla para que se vean las líneas que dividen las columnas y filas, así como el contorno de la tabla	Tabla corregida.
14	En Cuadro No. 11 (pp. 19) se indica que SAGARPA: tiene información sobre los sitios contaminados por dichas sustancias. Amocali (Campo Limpio) Es una asociación de las principales compañías que producen y distribuyen plaguicidas en México. Reúne a PROCYT y UMFFAAC, que son dos empresas que producen y distribuyen de plaguicidas; brindarán apoyo para identificar y hacer el inventario de existencias de plaguicidas obsoletos y cofinanciarán en conjunto a los componentes 3 y 4. Anatel, Canieti y Amocali Son 3 organizaciones clave de fabricantes y vendedores de	Es conveniente aclarar que SAGARPA no cuenta con esta información, la que en todo caso debería tener la SEMARNAT. Amocali (Campo Limpio) Es una asociación de las principales compañías que producen y distribuyen plaguicidas en México. Reúne a PROCYT y UMFFAAC, que son asociaciones de fabricantes y formuladores de plaguicidas. Amocali opera el programa Campo Limpio, para la recolección y manejo de envases vacíos de plaguicidas. Anatel, Canieti y Amocali	Corregido	Sin comentario	

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	teléfonos celulares, electrónicos en general, y de plaguicidas, respectivamente. Serán responsables del desarrollo del plan de manejo.	Anatel y Canieti Son organizaciones clave de fabricantes y vendedores de teléfonos celulares y electrónicos en general. Amocali recoge envases vacíos de plaguicidas y de plaguicidas. Serán responsables del desarrollo del plan de manejo Amocali y los generadores de residuos electrónicos.			
15	En cuadro No. 12 (pp.21):	Se destaca que existen diferencias en las versiones del ProDoc en inglés y español.	Las diferencias entre el Prodoc en inglés y en español fueron identificadas y comentadas durante la evaluación. No obstante, estas diferencias no son atribuibles a los evaluadores. Se resalta que los evaluadores tomaron como referencia el Prodoc en inglés debido a que es el oficial, por lo que la figura No. 12 se tomó del Prodoc en inglés, la cual fue únicamente traducida como parte de la atención al comentario para brindar mayor claridad.	Sin comentario	
<mark>16</mark>	Segundo párrafo de la página 22: Debido a que es el segundo proyecto de este tipo aprobado por el FMAM, se tratará	Debido a que es el segundo proyecto de este tipo aprobado por el GEF, se tratará	Corregida la sigla. Se incluyó tracking changes, debido a que párrafo está en página 21.	Sin comentario	
17	En Hallazgos (pp. 22): Éste es el segundo proyecto aprobado por GEF a nivel mundial que trata sobre la eliminación de COP contenidos en residuos	Se sugiere citar fuente. Hasta donde sabemos, si bien existen experiencias en este sentido, no es el caso del GEF.	Se hizo la revisión y no se pudo comprobar la afirmación por lo que fue borrada del párrafo.	Sin comentario	

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	electrónicos y como tal no existen muchas experiencias a nivel internacional como nacional para este tipo de residuos. El proyecto también ha realizado actividades de integración con la <u>unidad</u> de sitios contaminados de la SEMARNAT, así como también ha colaborado en para complementar el Sistema de Información de Sitios Contaminados (SISCO) de SEMARNAT <u>y fortalecer el</u> Programa Nacional de Recolección de Envases Vacíos de Agroquímicos de SENASICA y el sector privado.	Se comentó a los evaluadores que en Sudamérica se ha llevado este tema en varios países, como Colombia, Argentina, Brasil, Costa Rica, Ecuador, etc. El proyecto también ha realizado actividades de integración con la <u>Dirección de Restauración</u> de sitios contaminados de la SEMARNAT, y colaborado en para complementar el Sistema de Información de Sitios Contaminados (SISCO) de SEMARNAT. <u>Por otro lado, se ha trabajado en el</u> <u>fortalecimiento</u> del Programa Nacional de Recolección de Envases Vacíos de Agroquímicos de SENASICA y el sector privado.	Se acogió la aclaración		
18	En Alineación con prioridades nacionales (pp. 26): Además, este proyecto también aborda el problema de plaguicidas COP obsoletos y manejo de sitios contaminados, aunque la actualización del <u>NIP</u> indica que el 95% de las existentes al 2008 ha sido reducido y el 100% de las existencias de DDT.	Además, este proyecto también aborda el problema de plaguicidas COP obsoletos y manejo de sitios contaminados, aunque la actualización del <u>PNI</u> indica que el 95% de las existentes al 2008 ha sido reducido y el 100% de las existencias de DDT.	Se acoge comentario y se mejora: "Además, este proyecto también aborda el problema de plaguicidas COP obsoletos y manejo de sitios contaminados, aunque la actualización del PNI indica que el 95% de las cantidades existentes al 2008 han sido reducidas y eliminadas el 100% de las existencias de DDT."	Sin comentario	
18	Tercer párrafo de la página 29:		Se modificó el párrafo:	Sin comentario	

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	El proyecto también estableció una Junta Directiva del Proyecto (JDP), la cual estaba conformada por DGGIMAR (quien la presidía), PNUD, SENASICA y la UCP. La primera observación sobre este aspecto es que en la JDP debieran estar presentes los principales actores y socios del proyecto como, por ejemplo, las autoridades estatales de los estados pilotos, las organizaciones sociales activas en los temas de RAEE, COPs y plaguicidas COP, así como también debiera haber habido un representante, por ejemplo, de las empresas OEM para discutir temas estratégicos del manejo de RAEE en México. Cuarto párrafo: De acuerdo con la experiencia del consultor internacional, no es apropiado que la UCP sea parte de la JDP	Con base en las figuras que muestran la estructura del proyecto, la JDP es distinta al Comité Técnico Asesor. Con excepción de las autoridades estatales, parece haber una confusión en este párrafo.	El proyecto también estableció una Junta Directiva del Proyecto (JDP), la cual estaba conformada por DGGIMAR (quien la presidía), PNUD, SENASICA, donde también participaba el coordinador de la UCP para entregar insumos técnicos e información sobre la marcha del proyecto.". El párrafo enfatiza que la UCP estaba conformada por ministerios o entidades gubernamentales y no se incorporaron importantes actores de la sociedad civil, industria e investigación para discutir los asuntos estratégicos del proyecto. Sin perjuicio de que varios de estos actores participaron en los comités técnicos, la naturaleza de ellos era totalmente operativa y de entrega de información, sin ningún poder para influir en las decisiones del proyecto, atribución que si tiene la JDP.		
19	Primer párrafo, página 30: se crearon <u>3 g</u> rupos de trabajo del proyecto sobre los siguientes temas: <u>i) comercio; ii) plaguicidas y</u> <u>iii) RAEE</u> .	se crearon <u>los siguientes</u> grupos de trabajo: <u>Normativo,</u> <u>RAEE, Plaguicidas,</u> <u>Comunicación γ de</u> <u>movimientos</u> <u>transfronterizos</u> .	Se ajustó el párrafo: "se crearon 5 grupos de trabajo del proyecto sobre los siguientes temas: i) Normativo, ii) RAEE, iii) Plaguicidas, iv) Comunicación y v) movimientos transfronterizos."	Sin comentario	
20	En Cuadro 23 (pp. 45) Columna de Justificación de la valoración, se indica: Se denotaron serias deficiencias técnicas en la realización y	Se solicita se indique a qué deficiencias se refieren.	Atendido. Se incluyo una nota al pie de tabla explicando las deficiencias identificadas.	Sin comentario	

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	seguimiento del trabajo realizado para la actualización del inventario.				
21	En Cuadro 23 (pp. 46) Columna de Justificación de la valoración, se indica: Durante la misión se informó sobre un taller realizado en Manzanillo que incluyo a 150 personas (se repite en pp. 47). los evaluadores no han tenido acceso a las agendas de capacitaciones	Este dato parece estar mezclado con otro taller llevado a cabo en la Cd de México. Se sugiere revisar los documentos. Esta información fue proporcionada a los evaluadores oportunamente.	Efectivamente había una confusión con Manzanillo, así que se removió de ambos párrafos. Sin embargo, dentro de la documentación entregada por el proyecto, no se encuentran las agendas de las capacitaciones que se realizaron en conjunto con la Unidad Ozono, así que no es posible conocer el peso relativo de los RAEEE en estas capacitaciones.	Sin comentario	
22	En Cuadro 23 (pp. 47) Columna de Justificación de la valoración, se indica: los evaluadores no han tenido acceso a los convenios de colaboración con INECC y laboratorio de aduanas, así como tampoco al plan de trabajo para lograr los resultados deseados	Es de destacar que no existe un convenio de colaboración, sino un oficio que formaliza el trabajo entre la SEMARNAT, a través del proyecto, y el INECC.	Se incluyó la observación.	Sin comentario	
23	En Cuadro 23 (pp. 56) Columna de Justificación de la valoración, se indica: Se tiene un avance de solo el 25% de la actividad	Esta consultoría ya fue concluida. Al momento de la evaluación, parece que se tomaron sólo los primeros informes. Se comentó con los evaluadores que la consultoría quedaría concluida en octubre.	Por el momento no se puede acceder al cambio de texto. El problema es que solo tenemos un informe de avance y el informe del segundo trimestre del 2018 indica que solo el 25% de la consultoría está realizada. Si pudiesen enviarnos el informe final, entonces podría retirar este comentario.	Se anexa el informe del Q4 trimestre y el informe final 2018 para su valoración.	Se corrigió el párrafo, pero de todas maneras, no tenemos el informe final del "Estudio de factibilidad para el reciclado de contenedores de plaguicidas usados" en el Google drive, por lo que la situación del contenido es la misma, no se puede apreciar el contenido y conclusiones del informe. Lo que tenemos es un primer informe técnico, que corresponde al Producto 2, con la metodología a seguir y fecha del 5 de marzo de 2018. De hecho, en la información compartida a los

Nº	Statement	CPU's Comment (1st round)	Response and/or actions taken by the evaluation team	CPU's Comment (2ond round)	Response and/or actions taken by the evaluation team (2ond round)
					evaluadores, este estudio aparece en la carpeta de Informes Técnicos en curso.
24	En Cuadro 23 (pp. 57) Columna de Nivel y Evaluación, se indica: Se contrató un consultor a tiempo completo para la elaboración del programa en SEMARNAT, quién revisó el documento, pero no se ha oficializado y se espera que esto suceda durante la nueva administración que comienza en Dic 2018.	Por favor indicar a que consultor se refieren los evaluadores. Parece haber una confusión.	Se acoge el comentario. Se precisó que fue el consultor que apoyó a SEMARNAT en la elaboración del plan nacional de remediación de sitios contaminados.	Sin comentario	
25	En Cuadro 23 (pp. 58) Columna de Justificación de la valoración, se indica: las capacidades de los estados para inspección y cumplimiento de la normativa,	Los plaguicidas, tal y como están clasificados el día de hoy, son residuos peligrosos y son atribución de la federación y no de los estados.	Se acoge comentario. Sin embargo, de acuerdo al Prodoc en párrafo 66 de la versión en inglés, se establece este fortalecimiento de capacidades. Sin ser un especialista, me imagino que algunas atribuciones tendrán los estados, por lo menos a nivel de manejo. Para no entrar en conflicto se agrega "de acuerdo a sus atribuciones".	Sin comentario	
26	En Cuadro 23 (pp. 59) Columna de Justificación de la valoración, se indica: Los evaluadores no han tenido acceso al documento	Todos los documentos están en el sharepoint proporcionado a los evaluadores.	No se puede acceder al cambio deseado, ya que la revisión de la documentación entregada no muestra el "Manual de Buen Uso y Manejo de Agroquímicos". Se realizó una búsqueda por internet siguiendo el título y se encontraron 2 publicaciones: una se Sinaloa y otra de Querétaro	Se anexa el manual que estaba disponible en el Sharepoint donde se podían consultar la información para la evaluación, para su conocimiento.	Se corrigió el comentario. Sin embargo, el objetivo del producto era obtener "Disponibilidad de lineamientos nacionales para el manejo de residuos de plaguicidas", el cual no se logra, ya que el estudio se enfoca en el uso correcto de plaguicidas en general y con respecto a los residuos, éste se centra en envases vacíos, dejando de lado otro tipo de residuos de plaguicidas. Asimismo, el PRODOC señala la

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					actualización de formatos, los cuales no se mencionan ni se incluyen en el manual. Semáforo ahora es rojo.
27	En Cuadro de página 82: Mismo cuadro, página 83: Mismo cuadro, página 84: Mismo cuadro, página 85:	Hace falta llenar una celda con los temas a tratar con PROCCYT. UMFFAAC no tiene que ver con residuos electrónicos. SEMADET no tiene que ver con situación y monitoreo de sitios contaminados. Falta completar varias celdas.	Arreglado arreglado Solo era una pregunta para ver el conocimiento de la autoridad acerca de este problema y su visión. Se completaron todas.	Sin comentario	