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Quito, June 4, 2021







Mid-Term Evaluation of the Project: "National Program for the Environmentally Sound Management and Life-Cycle Management of Chemical Substances"

Project Summary Sheet

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Name of the Project | National Program for the Environmentally Sound Management and Life-Cycle Management of Chemical Substances | | | | |
| GEF Project ID | 9203 | Financial Summary | Approved by GEF | Executed to the MTE (\*) | % |
| UNDP ID number | 103569 | In Cash | | | |
| Country | Ecuador | GEF grant | 8,490,000 | 3,538,092 | 42% |
| Co-financing (USD) | | | |
| MAATEC | 3,102,082 |  | 0% |
| MERNR | 3,540,834 |  | 0% |
| Private companies | 2,498,373 |  | 0% |
| Region | Latin America and the Caribbean | Subtotal co-financing in Cash (GEF+partners) | 9,141,289 |  | 0% |
| GEF Focal Area | Chemicals and Waste | Co-financing in-kind (USD) | | | |
| GEF Focal Area Objectives (OP/SP) | CW-1: Develop the conditions, tools and enabling environment for the sound management of harmful chemicals and waste; | MAATEC | 12,902,459[[1]](#footnote-2) | 7,021,894 | 54% |
| MERNR | 9,431,442[[2]](#footnote-3) | 32,175,997 | 341% |
| CW-2: Reduce the prevalence of harmful chemicals and waste and support the implementation of clean alternative technologies / substances. | MSP | 4,797,818 | 2,658,467 | 55% |
| Agrocalidad | 1,453,220 | 871,932 | 60% |
| Other government agencies | 1,412,325 | - | 0% |
| Private companies | 1,432,875 | 891,135 | 62% |
| Project Gender Marker | GEN1 | Total in-kind | 31,430,139 | 43,619,425 | 139% |
| Total Project Resources | 49,062,428 | 47,157,516 | 96% |
| National Executing Agency | MAATEC | Other partners involved | MSP, APROQUE, Customs, BCE, BanEcuador, INEN | | |
| Responsible Party | MERNNR | Start date | | Project Operational Closing Date | |
| Mid-term Evaluation | | Prodoc | 22-03-2018 | According to PRODOC | 22-03-2023 |
| PRODOC | 22-9-2020 | Real | 20-08-2018 | Real | N/A |
| Real | 30-01-2021 | Substantive Review? | No | Follow-up visit report | No |
|  |
| Final Evaluation Date | | Evaluator | | | |  |
| PRODOC | 23-12-2022 | Jorge Leiva V. | | | |  |
| Real | N/A | International Consultant | | | |  |
| (\*): as of March 15, 2021 | |  |  | Balance (USD) | 4,951,908 |  |

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Undoubtedly, this work and its conclusions and recommendations would not have been possible without the collaboration of the different stakeholders involved in the project.

Quito, May 17, 2021

Abbreviations and acronyms

|  |  |
| --- | --- |
| AGROCALIDAD | Ecuadorian Phytosanitary and Zoosanitary Regulation and Control Agency |
| AME | Ecuadorian Municipalities Association |
| AOP | Annual Operating Plan |
| APCSA | Crop Protection and Animal Health Industry Association |
| APROPLASMIN | Beneficiation, Smelting and Refining Plants Owners Association of the Province of El Oro |
| ARCOM | Mining Regulation and Control Agency |
| ASGM | Artisanal and Small-Scale Gold Mining |
| CBA | Cost-Benefit Analysis |
| CFM | Competitive Fund Mechanisms |
| ENAMI EP | National Mining Company of Ecuador |
| GAD | Decentralized Autonomous Government |
| GEF | Global Environment Facility |
| GoE | Government of Ecuador |
| Hg | Mercury |
| ICM | Interinstitutional Coordination Mechanism |
| IIGE | Institute of Geological and Energy Research |
| INEN | Ecuadorian Institute of Normalization |
| INIAP | National Institute of Agricultural Research |
| INNOVAGRO | Ecuadorian Chamber of Industry for Innovation and Agricultural Technology |
| LCM | Life-Cycle Management |
| M&E | Monitoring and Evaluation |
| MAATEC | Ministry of Environment, Water and Ecological Transition |
| MAG | Ministry of Agriculture and Livestock |
| MERNNR | Ministry of Energy and Non-Renewable Natural Resources |
| MPCEIP | Ministry of Production, Foreign Trade, Investment and Fisheries |
| MTE | Mid-Term Evaluation |
| PIF | Project Identification Form |
| PIR | GEF Project Implementation Report |
| PNGIDS | National Program for the Comprehensive Management of Solid Waste |
| POP | Persistent Organic Pollutant |
| PSC | Project’s Steering Committee |
| SENAE | National Customs Service of Ecuador |
| UNDP | United Nations Development Programme |

Executive Summary

Objective and purpose of the evaluation

This consultancy corresponds to the Mid-Term Evaluation (MTE) of the full-size GEF project called "National Program for the Environmentally Sound Management and Life-Cycle Management of Chemical Substances" (hereinafter GEF-Chemicals Project), which was requested by the country office of the United Nations Development Programme (UNDP), acting as the implementing agency of the Global Environmental Facility (GEF); the Ministry of Environment, Water and Ecological Transition (MAATEC) is the national executing agency and project leader, while the Ministry of Energy and Non-Renewable Natural Resources (MERNNR) is the party responsible for some specific project interventions.

The purpose of the evaluation is to identify potential problems in the project design, evaluate the progress in achieving the objectives established in the Project Document (PRODOC) and identify the factors of success or failure in the current conditions of project implementation. Furthermore, the management of adaptation to contextual changes and use of resources - including co-financing - was also analyzed, as well as identifying and documenting lessons learned and providing recommendations on specific actions to be taken to improve execution for the second stage of the project.

The evaluation covered the period from March 23, 2018 to December 31, 2020, with a national geographic coverage, including Quito and Guayaquil, as well as the main project intervention areas (Cayambe, La Libertad - Santa Elena, Portovelo - Zaruma/Machala - El Oro, Camilo Ponce Enriquez - Azuay). During the process, the evaluator interviewed 73 people, which included the executing team, officials from the MAATEC, the MERNNR, the Ministry of Public Health (MSP), the Central Bank of Ecuador (BCE), etc., along with academia, community organizations and NGOs , among others. This provides a vision on the execution of the project with less bias from the informant.

It is important to mention that the GEF-Chemicals Project began its operation in August 2018 with the hiring of the coordinator and that the mid-term evaluation process was carried out between January 28 and May 14, 2021.

Project Description

The project - whose duration is five years (2018-2023) - seeks to protect human health and the environment from the impact of harmful chemicals, in particular POPs and mercury through the application of a sound management of chemicals system (SMC) with emphasis on the life-cycle of these substances.

The implementation of the project is expected to eliminate 120 tons of obsolete POPs and UPOPs pesticides and another 30 tons of obsolete repackaged pesticides disposed of in local treatment plants, increase the collection and disposal of empty pesticide containers by 90 tons, as well as the use of new POPs and their unintentional release into the environment (30 tons). For unintentional POPs (UPOPs) the ultimate goal is to reduce the release by 25 g-TEQ. On the other hand, it is expected to reduce the use/release of mercury (2 tons) in artisanal small-scale gold mining and by 35 kilos/year of products containing this substance (mainly luminaires and medical equipment). It is also expected to sensitize and train 11,778 people on the sound management of these substances.

To achieve these objectives, the project considers the following components:

1. Strengthening of institutional capacity, the legal and policy framework for SMC (training, preparation of financial plans to improve national reports on POPs and Mercury, establishment of institutional coordination mechanisms, increased capacities of analysis laboratories).
2. Elimination of stocks and reduction of the use and release of POPs, mainly in the pesticide sector.
3. Implementation of measures to reduce and eliminate Mercury in priority sectors (ASGM, luminaires and medical products), with improvements in access to financing for ASGM.
4. Knowledge Management, M&E and Dissemination of outcomes.

The project has a GEF grant of USD 8.49 million, of which approximately USD 3.5 million of GEF funds have been disbursed in the various project activities. Moreover, it has co-financing commitments that reach USD 40.57 million.

Findings

### Design

Regarding the project document, it makes a diagnosis of the situation of artisanal gold mining and POPs, the related institutions and their challenges. The outcomes matrix contains 14 indicators, some of which are confused with the outputs and goals. Additionally, some do not meet the SMART criteria (specific, measurable, achievable, relevant, time-bound), and are difficult to verify. Some examples of the aforementioned are the indicators for the project objective (number of jobs, number of direct beneficiaries reducing their exposure to POPs, number of jobs), the indicators for outcome 1, such as capacity building (it is not enough to train a number of people to attribute a change and/or use of the knowledge acquired, the proposals for regulations, technical guides, etc. are rather products than an outcome indicator). In another identified case, the number of people sensitized may be an indicator of activity, but the indicator that would measure a change in behavior would be, for example, the number of practices adopted as an outcome of training or sensitization.

Section 3.1 of the report shows an analysis of the indicators with some examples.

### Execution

The implementation of the project started in August 2018 (5 months of delay) and has unfolded in a context of institutional, economic, political and health crisis that has meant changes cuts in government priorities, staff cuts in ministries, merger of public institutions (the case of MAATEC and MERNNR) and a high turnover of authorities, in addition to mobility restrictions that have certainly impacted the progress of the project and the way it relates to its partners.

Despite the above, there has been significant progress to date, including the elimination of 146 tons of POPs and obsolete pesticides and 14 tons of products containing mercury (Hg), respectively. Furthermore, in order to improve institutional coordination and access to financing for artisanal gold miners and the implementation of a competitive fund mechanism to support community organizations, local authorities and academy, among others, a series of regulatory proposals for waste management with POPs and Hg have been prepared.

The second stage would still leave important challenges pending, such as the approval and implementation of the proposed regulations and the national institutional coordination mechanism for the management of chemical substances. Decisions should also be made to prioritize and focus on activities that directly contribute to achieving the desired outcomes, such as identifying a strategy to control and reduce new POPs and Hg in products, increasing the collection, transport, recycling and disposal of empty pesticide containers by 90 tons, implementing a strategy to strengthen 5 mineral processing plant facilities and implementing the ASGM credit system and incentives for their formalization, and decontaminating at least one site contaminated with pesticides.

So far, the project team has had to concentrate on executing activities focused mainly on the creation of technical inputs and POPs elimination experiences in order to move forward within a very uncertain and changing institutional context, expressed in a high turnover of authorities and public officials, which has brought a workload and responsibility beyond what is desirable, This has left the perception among its partners that even though there is a good relationship, there is a need to improve the participation spaces for MERNNR and MSP, as well as in some internal instances of the MAATEC, especially those related to the legal and regulatory aspects of the project, in order to improve the ownership of the project's outcomes. This is due to the fact that contacts with stakeholders need to be more consistent over time and have a clear work agenda that states the scope, start and final objective of the collaboration with the project partners, who have also presented discontinuity in opinions and personnel that could provide fluidity and consistency in the institutional approaches. For this reason, they find themselves with initiatives that apparently do not have much support in practice or that have lost validity during the continuous changes of authorities.

### Financial Issues

Regarding financial execution, about USD 3.5 million (42% of the GEF funds) have been disbursed as of March 2021 (approximately 3 years), but these are 33% short of what was planned for the 3 years of execution and with a balance to be executed of 40% between 2022 and 2023, in the event that the entire 2021 budget is disbursed. When analyzing outcome by outcome, there is a downward trend in disbursements starting in 2020, mainly due to the restrictions imposed by the pandemic that prevented activities with miners and local authorities that require face-to-face interaction. It is worth mentioning that outcomes 2 and 3 constitute 80% of the total project resources.

The Government of Ecuador has fulfilled its co-financing commitments, reaching 96% of the commitment, while private contributions only reach 23% of the committed level.

Finally, it is worth mentioning that one of the five projects of the competitive fund is behind schedule (EMGIRS Educational Eco-Center) due to administrative reasons in the awarding and signing of contracts by the project; the two projects of the National Polytechnic School had to start later because adequate climatic conditions were required for their start-up; and, the Heifer and ASORF projects are under execution.

Key Conclusions

### Design

The analysis of the prodoc and the interviews carried out show that the project design has several flaws that will need to be reviewed during the second stage of implementation. Indeed, several of the indicators are not SMART, since some are difficult to measure and corroborate (such as Hg decreases in ASGM), while others refer to products or deliverables, but do not measure a change with respect to the baseline. The statements for the outcomes established by the prodoc also require further elaboration, especially outcome 4, which should clearly be the knowledge management component to scale, disseminate and share the experience learned at the local, regional and global levels, together with extracting the lessons learned and formulate an exit strategy for the project.

### Execution

The first point to be highlighted is that the country's institutional instability, dragged since 2017, affected the implementation of project activities, mainly due to the high turnover of authorities and the discontinuity in institutional contacts and agreements reached by the project executing unit with the various institutional partners.

Subsequently, the crisis unleashed by the pandemic put on hold the field activities where personal contact is relevant to build trust, especially the relationship with ASGMs. The combined effect of these factors was that the different regulatory proposals had not been approved or could not be implemented (ICM, ASGM credits and other initiatives), as well as a delay on the field activities with the miners.

Despite the above, the project has made great progress, especially in the elimination of POPs pesticide residues (Component 2) and Hg in luminaires (Component 3), where the final goals were exceeded in advance.

Additionally, the project has prepared 9 policy and regulation proposals and submitted them to the authority, among which the following can be highlighted: (1) Articulated Organic Environment Code (COA, for its Spanish acronym); (2) Ministerial agreement proposal for the update of instructions for the registration of chemicals and chemical substances; (3) Proposal for the Regulation of the National Committee on Environmental Quality; (4) Proposal for the modification of Ministerial Agreement 140; (5) Technical guide for pesticides; (6) Technical guide for products with Hg; (7) Ministerial Agreement proposal for the POPs Green Point incentive (under development); (8) Incineration Ministerial Agreement proposal (under development) and (9) Safety Cells Ministerial Agreement proposal (under development).

Proposals for credit mechanisms for ASGM miners were also developed and an existing credit type with potential application to finance janchera entrepreneurships was identified, among the most important ones. A competitive funds financial mechanism is also being implemented to enable community organizations such as jancheras, municipalities and universities to implement innovative projects to seek new trade alternatives and new income for women's organizations, improve waste disposal infrastructure, and explore bioremediation and heavy metal recovery techniques on riverbanks contaminated by gold mining activities.

During the second stage of its implementation, the project faces challenges, some beyond its control, such as the political, economic, social and health instability that the country is going through - and that will continue for several more years -, which has meant the dismissal of numerous public sector employees, affecting the MAATEC and MERNNR, the project's main implementing partners, and that will continue to affect the implementation and achievements of the project.

The remaining challenges refer to the fact that most of the regulatory, financial and coordination proposals have not been approved and the most relevant ones, such as the ICM and the credit mechanism for ASGMs, have not been approved so far. On the other hand, the strategy for implementing Hg-free technologies for mineral processing plants and related laboratories is defined, so its implementation should take place in the second half of the project.

The strategy to address the control and elimination of new POPs and Hg in products is encountering difficulties, since these compounds are found in minimal quantities in an immeasurable variety of product types and brands, coupled with the fact that the tariff headings do not discriminate between products with or without these chemicals and that their technical specifications do not include information that allows knowing the type of POPs associated with the product.

Regarding the reduction of Hg in sectors other than ASGM, what has been collected so far reached 3.9 kg of the target of 10 kg of Hg for the mid-period. The final elimination goal of 175 kg of Hg could be met by targeting products with some Hg content, such as amalgams and medical equipment. Currently, an Extended Producer Responsibility (EPR) model for disused luminaires is being worked on, as well as the necessary arrangements with Customs for the prohibition/restriction of Hg-added products.

Although the project has already developed several proposals for interinstitutional and regulatory coordination, greater interaction with key stakeholders will be needed to achieve its implementation. An example of this is the proposed regulation for the discharge of mining effluents to surface waters and riverbanks, which will require further dialogue during the second half of the project with the implementing partner MERNNR, since this entity has the authority in this area, as well as greater knowledge of ASGM mining.

### Planning, M&E

The results of the 73 interviews carried out show that most of the project partners positively value their activities and have provided important institutional support to strengthen the management of waste and products with POPs and Hg. There is also a clear perception on the part of some of the project partners, such as the MSP, MERNNR, the beneficiary private companies and some MAATEC instances, that greater communication with them is needed, as well as their more active inclusion in the design and implementation of project activities. If this perception is not improved, there could be a situation in which there is no real cooperation, let alone ownership of the project outcomes.

There was also concern among some of the project's beneficiaries and partners that the time required to award and sign contracts for the projects awarded through the Competitive Funds Mechanism (La Libertad GAD, the two EPN projects, goldsmithing and the EMGIRS Educational Eco-center) could be improved, as their execution is at least six months behind schedule.

The project has complied with all reporting and M&E formalities required of GEF projects, but the way of reporting based on indicators that are not appropriate to measure the project's progress towards its outcomes in most cases (e.g., output rather than outcome indicators, low ambition, some difficult to measure) means that most of the targets are shown as met and/or exceeded, minimizing the challenges that the project must face. This situation occurs regardless of the reporting format and scheme established by UNDP, which has been applied in its entirety by the project.

The risk analyses performed so far also do not show an adequate level of analysis to explain the delays in some project activities.

Regarding the PSC, it has fulfilled its strategic role and has approved important modifications to the project, such as the elimination of the mobile pilot plant for ASGM, the budgets and work plans and, although it was not finalized, the authorization for the purchase of six incinerators for municipal hospitals.

### Financial

Regarding budget execution, the disbursements of GEF resources reach approximately 42% of the total (approx. USD 3.5 million), while the reported co-financing amounts to 96% of what was committed in the prodoc, reaching USD 47 million as of March 2021. However, co-financing by private companies only reaches 23% of what was initially committed.

The analysis indicates that expenses have been 33% below what was planned in the prodoc for a 3 year implementation period, where the level of disbursements by outcome has never reached the initial estimate, observing a worrying downward trend in 2020, mainly influenced by the institutional problem of the country and the pandemic that has affected all the project's field activities, but also by some slow administrative processes already mentioned above.

Finally, it can be concluded that, ***at the current rate of expenditure, at the end of the fifth year of the project it is likely that there will be a significant remainder of GEF resources***, since the pandemic will continue perhaps well into 2022 and there will also be a change of government in May 2021, a situation that is known to generate additional delays because the new authorities will have to learn about the scope and outcomes of the project.

### Gender

The project has implemented a gender strategy that has been reflected mainly in the inclusion of a gender mainstreaming approach in contracted consultancies, training and competitive fund projects, which are prepared and implemented by women's organizations , as is the case of goldsmithing and agriculture for jancheras.

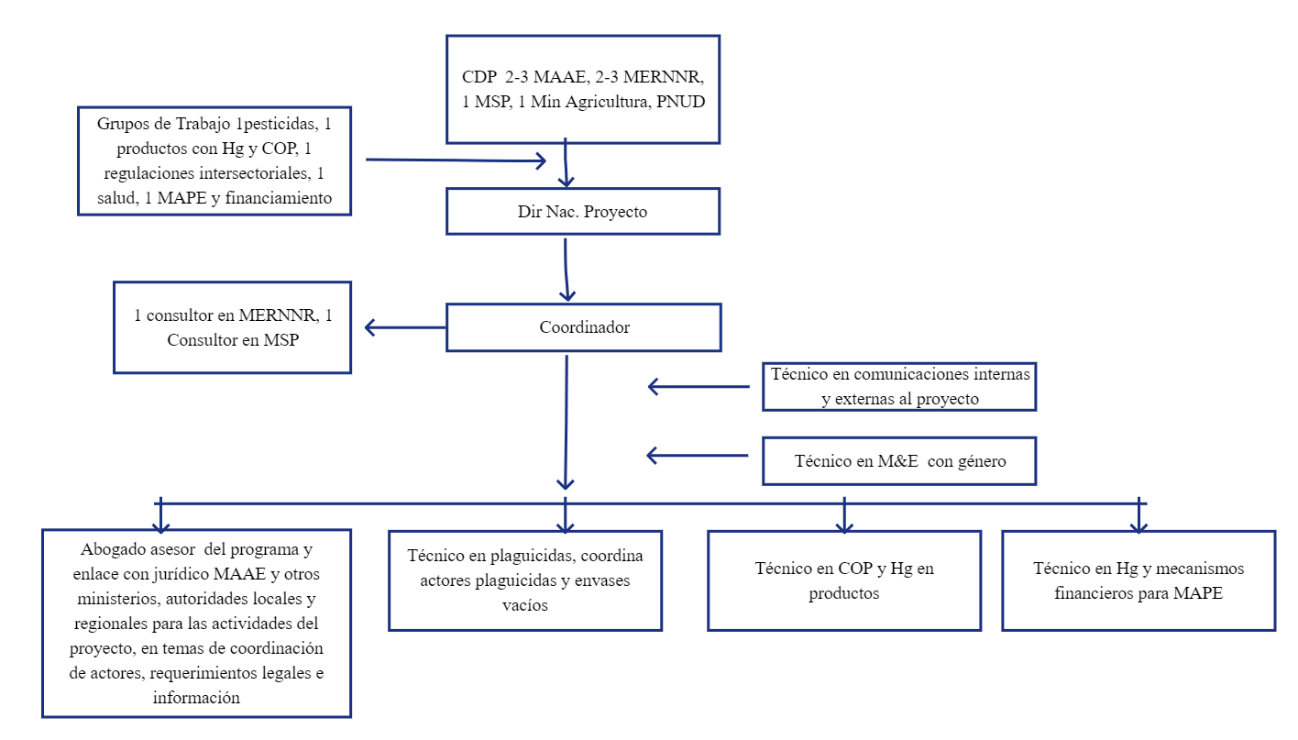
### Sustainability

The sustainability of the project is moderately probable, since institutional, economic and sanitary instability will continue for a few more years, so the probability of having resources to maintain and scale the outcomes of the project is limited.

Recommendations

| Rec # | Mid-term evaluation recommendation | Responsible Entity | Implementation timeframe |
| --- | --- | --- | --- |
| 1 | Institutional problems and restrictions imposed by the pandemic have affected the implementation of the project, resulting in lower disbursements than initially estimated and in the delay of some key outcomes and the need to reformulate some of them, which may not be achieved by the end of the project (March 2023). Therefore, it is suggested to evaluate by the end of 2021 whether the project will be able to achieve its objectives within the deadlines stipulated in the Prodoc in order to -if applicable- introduce the necessary corrections. | UNDP | Dec.2021-February 2022 |
| 2 | There are indicators that are not suitable for measuring project progress, but cannot be changed due to the lengthy review process by the GEF. It is suggested to clarify and specify the meaning and scope of these (identified in Section 3.1) and adjust their goals if necessary, such as, for example, the 35 kg/year Hg reduction, the 30 tons of "new POPs releases" or whether the financial strengthening plans for national reports should have permanent budget lines and a follow-up on how the new knowledge acquired is used. | MAATEC, MERNNR, UNDP | July 2021 |
| 3 | The progress reports do not clearly disclose the challenges faced by the project nor the level of implementation of some key outcomes, e.g., elimination of Hg in luminaires and other products, remediation of sites contaminated with PRAS, elimination of new POPs, adoption of ICM, ASGM credits, support to the 5 processing plants and associated laboratories. It is suggested to report in terms of progress towards outcomes based on established associations, responsibilities of each partner and of course specific indicators associated with outputs and intermediate outcomes to be defined in a work program. | MAATEC, MERNNR, UNDP | July 2021 |
| 4 | For the second stage of implementation, the project should have a strategy to approach its partners in terms of involving those officials with possibilities of institutional continuity in the design, planning and review of consultancy reports relevant to them. This approach should be based on a mutually agreed work agenda, with specific activities, responsibilities and outcomes, so that officials are committed to and take ownership of the project's outcomes. | MAATEC, MERNNR, UNDP, MSP. | July 2021 |
| 5 | Establish a new approach based on priorities, focused on outputs and services that have a clear relationship with the expected outcomes, not dispersing efforts in more proposals, but ensuring the adoption of the current ones, eliminating non-core outputs and activities. It is suggested to focus on approving the regulatory instruments already proposed, elimination strategy of Hg and new POPs in products, identify and analyze two additional contaminated sites before terminating this activity, increase in the collection of empty pesticide containers, ASGM credits, exit strategy, see regulation of surface water contamination in ASGM. | MAATEC, MERNNR, UNDP | July 2021 |
| 6 | The aforementioned approach should be associated with a new work team structure, aimed at advising and supporting the partners rather than directly executing the actions. It is suggested to reformulate the way of working with the project partners and decentralize the execution of certain key outcomes, based on an analysis of the partners' needs to meet the established goals. Specifically, it is proposed to integrate a consultant in the MERNNR and another in the MSP that responds to the executing team and the institution that hosts them, so that it can have a direct impact on them. | MAATEC, MERNNR, UNDP | July 2021 |
| 7 | It is suggested to analyze how to integrate other institutions that are considered relevant for the second stage of project implementation, such as the MSP, Customs or COMEX, into the PSC and/or other participatory instances of the project, and to improve the balance between the MAATEC and MERNNR, either as permanent members or as guests. | UNDP, MAATEC, MERNNR | July 2021 |
| 8 | It is suggested that the working groups be formalized and that they have their own representatives who can accompany the project team in the PSC meetings or other instances to be defined. In this regard, the functioning of the current working groups and the creation of ad-hoc groups (at least until the ICM is approved) should be evaluated to define the credit mechanisms for ASGM and jancheras (BCE, BanEcuador, Ministry of Production, for example) and the legal and administrative mechanisms necessary to implement them. The members of these groups should be designated by the institutions as technical working groups with a limited mandate to agree on a work agenda with specific outcomes, deadlines and responsibilities. | MAATEC, MERNNR,  UNDP | July-August 2021 |
| 9 | For the annual financial reports, it is suggested to incorporate comparisons with what was planned in the prodoc and with the originals approved in January of each year, rather than presenting expenditures compared to the adjusted budgets, which are always in line. The purpose is to identify gaps and modalities of adjustments in the strategies. | MAATEC, UNDP | 2021-2023 |
| 10 | It is also suggested to carry out annual audits or at least two during the execution of the project for the purpose of controlling its operations: one in the middle of the project's execution period to make adjustments, if necessary, and another at the end. | UNDP | 2021-2023 |
| 11 | In the case of AOPs, it is suggested that they be supported by an implementation strategy document for the corresponding period that is concise, but that explains the reasons why the activities are being carried out, their dependencies with others and which are parallel or if others can be carried out. | MAATEC  UNDP  MERNNR | 2021-2023 |
| 12 | For the administrative department, a review of the awarding and implementation processes of CFM projects and other procurements is suggested, in order to verify the bottlenecks and information gaps that beneficiaries may have. | MAATEC, UNDP | May-July 2021 |
| 13 | It is very likely that the priorities of the country's new authorities are related to the recovery of the economy and the fight against the pandemic, so activities such as waste and chemical management could be secondary. It is recommended that the project team make an analysis of the new stakeholders and implement a communication strategy with a specific discourse according to the primary interests of each one of them, where -for example- the discourse has greater emphasis on the fact that the project facilitates and orders economic recovery, beyond the merely environmental. In the case of artisanal gold mining, it will help with regulatory and financial instruments that encourage legal production and also establish clear rules for investments in the sector, ensuring an orderly and transparent work for the stakeholders involved. In the case of Health, it should be emphasized that regulatory activities for the management of hospital waste (including Hg) are in line with cutting the transmission of diseases and the emergence of diseases among health workers.  This communication strategy should also include continuity in contacts, work schedule and information with the progress of the project activities. | Project executing unit, UNDP. | July 2021 |

The following is the proposed structure for the second stage of the project, which could lead to greater participation and more consistent and fluid processes among the stakeholders.



PSC 2-3 MAATEC, 2-3 MERNNR, 1 MSP, 1 Min. Agriculture, UNDP

National Project Director

Working Groups: 1 pesticides, 1 products with Hg and POPs, 1 intersectoral regulations, 1 health, 1 ASGM and financing

1 consultant in MERNNR, 1 consultant in MSP

Coordinator

Project’s internal and external communications expert

M&E and gender expert

Lawyer, advisor of the program and legal liaison to the MAATEC and other ministries, local and regional officials for the project activities on issues regarding stakeholder coordination, legal requirements and information

Pesticide expert, coordinates pesticide stakeholders and empty containers

POPs and Hg products expert

Hg and ASGM financial mechanisms expert

## Lessons learned

The project was developed in a very short time (6 months), compared to others of a similar size and topic. As a consequence, the prodoc presents some deficiencies in the design of its indicators, outcomes and in the knowledge management component. This situation should be considered in the design of new projects, so that it has a more robust review system and that saves problems in interpreting terms and in measuring outcomes.

In line with the above, the development of indicators should consider that their level of ambition is achievable and measurable, but that it implies an achievement and not a goal that is so easily achieved. On the other hand, an outcome statement should state a change in a baseline situation, and its indicator should be a metric that reflects this change and not express it in terms of an output or an activity.

Institutional and pandemic crises bring with them the anxiety to implement outputs and activities, so the path of centralized implementation in the executing team is the most helpful recipe, but it brings a cost that is the lack of interest and ownership by the partners.

For future projects, when implementing them in critical institutional and health contexts, an effort should be made to isolate the situations that can be handled by the project from those that do not depend on it, in order to take measures regarding what can be handled, which would be achieved with a more detailed risk analysis.

Project teams must be careful in the way they report their achievements, since the use of high-level indicators - which are also not adequate - is not recommended. In this regard, it should be balanced with the challenges that they are having and in the identification of more adequate indicators to measure progress, even if they are for internal use of the projects.

Rating of the Project

| Parameter | MTE rating | | Achievement description |
| --- | --- | --- | --- |
| Project's Strategy |  |  | Does not apply at this stage |
| Progress in achieving outcomes | ***Extent of achievement of the global environmental objective:*** To protect human health and the environment through the adoption of environmentally sound management and life-cycle management of chemical substances in Ecuador. | HS | The protection of the population's health has been improved by the elimination of pesticide and Hg residues, exceeding the elimination goal established by the project. The challenge for the second stage of implementation is for the project to ensure, through its proposals and regulatory measures, that the country can update the inventories of expired pesticides and Hg residues and the application of good practices for their storage and proper final disposal. |
| ***Extent of achievement of the development objective:*** Establishment of institutional association and coordination mechanisms for financing the sustainable management of chemicals | MS | Although the proposals for financial mechanisms and regulatory and institutional reforms have been submitted, there is still no timeframe for the Government of Ecuador to formally approve and subsequently implement them. The project has been very effective in training and raising awareness among public officials, private stakeholders, community organizations and the population in general about the harmful effects and proper management of products and waste containing POPs and Hg . Institutional instability has hindered this achievement, which is why the project and UNDP could intensify their efforts with the new authorities during the second half of the project's implementation. |
| ***Extent of achievement of Outcome 1:*** Strengthen the institutional capacity and the legal and regulatory framework for the Sound Management of Chemical Substances (SMC) based on a Life-Cycle Approach. | MS | Although training plans for public and private institutions were designed and implemented, including 2 POPs and Hg analysis laboratories, the predominant outcome of this component is the establishment of an institutional coordination mechanism to develop and implement medium and long-term policies for chemicals, which has not yet been achieved. To date, there has been a proposal since 2019 that has not been approved, and there are no deadlines or commitments from the MAATEC to convene the committee that should approve this important initiative. Institutional instability has undermined this achievement, which is why the project and UNDP could intensify their negotiations with the new authorities during the second half of the project's implementation. |
| ***Extent of achievement of Outcome 2:*** Elimination of POPs stocks and reduction of the use and release of initial POPs and those recently listed (including those contained in products). | S | Although elimination greater than the prodoc target for POPs and related pesticide residues was achieved, there is uncertainty in the elimination of new POPs in products. Furthermore, the estimation of the reduction of UPOPs emissions in trained companies and due to forest fires must be specified, since the training alone is not enough to automatically attribute the emission reduction/elimination. The decontamination of contaminated sites is also on hold, as the PRAS activity only consisted of analyzing the soils at one site, with the outcome that the site was not contaminated; therefore, analyses should be performed for one or two additional sites before concluding this activity. The project prepared proposals for standards and approved a project to improve a residential waste dump site in the La Libertad GAD, to be implemented during the second half of the project. As has happened with the other outcomes, the pandemic has undermined the achievement of project outcomes, by abruptly changing the government's priorities. A stabilization of the institutional situation and of the pandemic is expected during the second half of the project, so it is estimated that the desired outcomes can be achieved. |
| ***Extent of achievement of Outcome 3:*** Implementation of measures for the reduction and elimination of Hg from priority sectors. | MS | The prodoc estimates a reduction in Hg of 35 kg/year, which would result in an estimated 175 kg at the end of the project. The goal at mid-term is 10 kg, of which 3.92 kg of Hg integrated in 14 tons of luminaire waste have been eliminated. The final reduction goal of 175 kg of Hg in sectors other than ASGM could be met by focusing on amalgams or with greater effort if medical equipment is prioritized. There is a policy proposal for restricting the importation of products with Hg, which, if approved by COMEX, would allow the goal to be reached. Although a reduction of 561 kg is reported for the elimination of Hg in ASGM due to the adoption of good practices, its corroboration is not reliable and it cannot be assumed that all those trained have adopted the good practices. This calculation method based on assumptions stems from the fact that the legal prohibition on the use of Hg does not allow for the collection of information in the field. On the other hand, the credit mechanism for the formalized ASGMs is not yet operational. To encourage informal ASGMs, the mining registry -which has been closed since 2015- is expected to be reopened during 2021, which would allow the project to have a greater incentive for this type of miners. |
| ***Extent of achievement of Outcome 4:*** Raise awareness, ensure project follow-up, and disseminate project outcomes and experiences. | HS | This outcome has exceeded the prodoc's expectations in that it has generated a public awareness campaign and produced a large number of studies, guides and dissemination material. However, the challenge ahead is to turn this component into one of real knowledge management, where project beneficiaries and stakeholders can exchange experiences, draw lessons learned and promote scaling up of outcomes. Furthermore, a project exit strategy should be developed. |
| Project execution and adaptive management |  | S | The executing team has managed to navigate difficult political and institutional circumstances, compounded by the pandemic, which has forced a change in the way of interacting with partners and beneficiaries. However, the risk assessment reported in the PIRs could be improved during the second half of the project, so as not to minimize the impacts of these risks (institutional and stakeholder) on project execution caused by the political and institutional crisis that has been dragging on in the country for more than 4 years. |
| Sustainability |  | ML | There is a high probability that it will not be possible to allocate sufficient resources to sustain some of the project's achievements, due to the economic, institutional and health problems the country is facing. |

1. Introduction

Purpose and objectives of the mid-term evaluation

This consultancy corresponds to the Mid-Term Evaluation (MTE) of the full-size GEF project called "National Program for the Environmentally Sound Management and Life-Cycle Management of Chemical Substances" (hereinafter GEF-Chemicals Project), which was requested by the country office of the United Nations Development Programme (UNDP), acting as the implementing agency of the "Global Environmental Facility" (GEF); the "Ministry of Environment, Water and Ecological Transition" is the national executing agency and project leader, while the "Ministry of Energy and Non-Renewable Natural Resources" is the party responsible for specific project interventions.

The purpose of the evaluation is to identify potential problems in the project design, evaluate the progress in achieving the objectives established in the Project Document (PRODOC), manage the adaptation of the project to contextual changes and use of project resources - including co-financing - as well as identifying and documenting lessons learned and providing recommendations on specific actions to be taken to improve project execution.

Furthermore, the mid-term evaluation will identify the factors of success or failure in the current conditions of implementation of the project. This, in order to recommend the corresponding corrective actions or deepen those practices that may lead to the achievement of the expected outcomes.

The evaluation covered the period from March 23, 2018 to December 31, 2020, with a national geographic coverage, including Quito and Guayaquil, as well as the main project intervention areas (Cayambe, La Libertad - Santa Elena, Portovelo - Zaruma/Machala - El Oro, Camilo Ponce Enriquez - Azuay). It is important to mention that the GEF-Chemicals Project began its operational stage in August 2018 with the hiring of the coordinator, with the other program technicians being hired between the months of October and November 2018.

It is worth mentioning that the mid-term evaluation process was carried out between January 28 and May 14, 2021.

Scope and Methodology

As mentioned above, the methodology for conducting UNDP mid-term evaluations was used. This methodology is based on the outcomes and the cause-effect relationship of the activities carried out, where it is a matter of obtaining a direct relationship between the inputs and the outcomes obtained; this, in addition to identifying the intervention's contribution in the improvement of the intervened systems, whether in financial terms, regulation and control, strengthening, among others.

Project stakeholders included government entities at the national, district, and municipal levels, agrochemical-related industrial associations, UNDP, and civil organizations, to name a few. To gather the testimonies of these stakeholders, semi-structured interviews were used for each relevant stakeholder, covering the relevance, effectiveness, quality of implementation and use of resources criteria, as well as the use of work plans and monitoring and evaluation tools (including Tracking Tools). The evaluation was carried out in a participatory manner so that all those involved in the process were able to provide their perspectives on the design and execution of the project, as well as identify areas for improvement. To ensure the reliability of the stakeholders' testimonies, these interviews were conducted in private, in order to protect the sources of information.

To achieve the objective of this evaluation, the evaluation question matrix was developed (see Annex 5). Notwithstanding the foregoing, the different stages of the project were analyzed, as well as the financial and adaptive management, according to Table No. 1.

Table No. 1: Analysis plan implemented

| Stage | Criteria | Item to review |
| --- | --- | --- |
| Design | Relevance | Verify whether the project is included within the priorities and programs of the GEF, UNDP, national and local government agencies, as well as the priorities of the stakeholders who will benefit from the project. |
| Verify if the outputs and expected outcomes of the project are in accordance with the magnitude of the problem, the level of financing, execution time, institutional capacities and the economic, social and political reality of the country and location of the project. |
| Project Indicators | Verify if the indicators established in the prodoc meet the SMART criteria |
| Implementation Arrangements | Review of agreements and consultations with relevant stakeholders before the project was approved by the GEF. Verify also if the responsibilities of each stakeholder are specified a priori in the project document. |
| Assumptions and Risks | Analysis of the main sources of information and their accuracy, to verify that the main assumptions and risks of the project had a real basis. In this regard, baselines, stakeholder and development context analysis are essential. |
| Institutional Capabilities | Verify whether the project design analysis adequately weights the implementation capabilities of each relevant stakeholder. The project's contribution to capacity building of the stakeholders involved (government, electricity sector companies, communities involved, etc.) will also be verified. |
| Gender Approach | Verify if the project contemplates this approach in the participation of women, equal opportunities and if the benefits of the project are equal for men and women. If this approach does not exist, make recommendations to integrate this issue in this type of project. |
| Integration | Verify if the project took advantage of the experience of similar projects previously executed. |
| Execution | Use of M&E Tools | Verify whether the project's logical framework was used as a management tool, whether there was a systematic M&E mechanism to make the necessary adjustments to the project, and whether there were adequate and controllable annual operating plans. |
| Financing | Verify if the amounts of the project and co-financing are adequate to the present reality and if the financing commitments are being fulfilled. In addition, verify the preparation of annual budgets and procurement rules that meet UNDP standards and whether there was monitoring of expenditures, audits and whether additional funding could be leveraged. |
| Verify if the M&E system had the necessary resources to fulfill its functions. Analyze the efficiency and effectiveness of the expenditures made. Point out weaknesses and strengths and recommendations to improve the weaknesses found. |
| Quality Support UNDP | Verify if there is a focus on outcomes, type of support provided and its opportunity (technical and management, facilitation), quality of risk management and annual reports and adaptation. |
| Project executing agency | Check if there are contingency plans, M&E, adequate risk management, quality of annual reports, national ownership |
| Interaction with stakeholders | Verify if what was planned has a relationship with what has been actually achieved during the implementation of the project. |
| Verify the operation of the steering committee, types of decisions taken and activity of the stakeholders. |
| Adaptive management | Verify if the project management adapts to the real context of implementation. Possible causes can be inadequate indicators, change in the economic, political and social context, very ambitious objectives, new stakeholders, etc. |
| Verify if there is a review of the project and if the proposed changes are being applied and if they are affecting the outcomes of the project. |
| Achievement of outcomes | Verify whether the project's objectives (global and developmental) were achieved or are on track to be achieved. |
| Verify if the activities and outputs are being carried out according to plan. |
| Verify if the impacts will be achieved once the project is finished and in the long term. |
| National Ownership | Verify if the outcomes of the project, or its activities or objectives are found in plans, programs, policies, regulations of government entities and key stakeholders. |
| Extent of stakeholder involvement in the execution of the project. |
| Transversality | Verify if the outcomes are in line with the priorities of the UNDP, GEF, national government, authorities and local stakeholders. Income creation as an outcome of the project, reduction of poverty, improved governance in the intervened areas. |
| Integration | Verify how the project was coordinated with other projects similar and/or complementary to it, whether or not they are UNDP projects and that may be under implementation in the project's areas of intervention. Also, it will be verified whether there is a gender and minority group approach (e.g., equal access to opportunities, benefits and information). Likewise, it will be verified whether there is a human rights approach (e.g., promotion of organizations, transparency, effective participation in decision making and freedom of opinion). |
| Sustainability | Verify if the regulatory, financing and political conditions exist so that the project outcomes can be maintained in the future. |
| Verify if there are social, political, environmental, governance and financial risks that may threaten the sustainability of project outcomes. |
| Repetition | Probability of replicating the experience in other sectors or localities, dissemination of lessons learned. |
| Impacts | Verify whether progress is being made on development objectives and whether the project is on track to reduce the environmental stresses that are the subject of the project. |
| Analyze the causality - effect on the impacts of the project and their likely permanence. |

For the analysis of the outcome achievement, a matrix was developed with the project's mid-term and final indicators and goals, and they were assessed according to the UNDP mid-term evaluation guide. For this, Table No. 2 was used.

Table No. 2: Outcome achievement evaluation matrix for the first half of the project period.

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Goal/Objective/Outcome | Indicator | Initial reference level | Level in the 1st PIR (self-reported) | Mid-term goal | Project mid-term level and evaluation | Achievements' rating | Rating rationale |
| Objective: |  |  |  |  |  |  |  |
| Outcome 1 |  |  |  |  |  |  |  |
| Outcome 2 |  |  |  |  |  |  |  |
| Outcome 3 |  |  |  |  |  |  |  |
| Outcome 4 |  |  |  |  |  |  |  |

Finally, a project rating was determined, according to the stage (design, implementation, outcomes and sustainability), according to the scheme shown in Table No. 3. The used ratings and their meaning for each project's stage and area that were included in Table No. 3, are presented in Tables 4, 5 and 6.

*Table No. 3: Rating scale used, according to the GEF methodology[[3]](#footnote-4).*

|  |  |  |  |
| --- | --- | --- | --- |
| Parameter | MTE rating | | Achievement description |
| Project's Strategy | N/A |  |  |
| Progress in achieving outcomes | Extent to which the objective has been achieved |  |  |
| extent to which outcome 1 has been achieved |  |  |
| extent to which outcome 2 has been achieved |  |  |
| extent to which outcome 3 has been achieved |  |  |
| Project execution and adaptive management |  |  |  |
| Sustainability |  |  |  |

Table No. 4: Rating scale used for progress in achieving objectives and outcomes

|  |  |  |
| --- | --- | --- |
| Rating | Abbreviation | Concept |
| Highly satisfactory | HS | It is expected to achieve or exceed the objectives/outcomes established for the end of the project without major shortcomings. Progress towards the achievement of objectives/outcomes can be presented as a “good practice” |
| Satisfactory | S | Most of the objectives/outcomes established for the end of the project are expected to be achieved with only minimal shortcomings. |
| Moderately satisfactory | MS | Most of the objectives/outcomes established for the end of the project are expected to be achieved, but with significant shortcomings. |
| Moderately unsatisfactory | MU | Most of the objectives/outcomes established for the end of the project are expected to be achieved, but with serious shortcomings. |
| Unsatisfactory. | U | Most of the established objectives/outcomes are not expected to be achieved by the end of the project. |
| Highly unsatisfactory | HU | The mid-term objectives/outcomes have not been achieved and none of those established for the end of the project are expected to be achieved. |

Table No. 5: Rating Scale used for implementation and adaptive management of the project

| Rating | Abbreviation | Concept |
| --- | --- | --- |
| Highly satisfactory | HS | The implementation of the seven components - management mechanisms, work planning, financing and co-financing, project-level monitoring and evaluation systems, stakeholder involvement, information and communication - is leading to an effective and efficient execution and adaptive management. The project can be presented as a “good practice.” |
| Satisfactory | S | Implementation of most of the seven components is leading to an effective and efficient execution and adaptive management, except for a few that require corrective actions. |
| Moderately satisfactory | MS | The implementation of some of the seven components is leading to an effective and efficient execution and adaptive management, although several of the components require corrective actions. |
| Moderately unsatisfactory | MU | The implementation of some of the seven components is leading to an effective and efficient project execution and adaptive management; most of the components require corrective actions. |
| Unsatisfactory. | U | Implementation of most of the seven components is not leading to an effective and efficient project execution and adaptive management. |
| Highly unsatisfactory | HU | None of the seven components is being implemented in a way that leads to an effective and efficient project execution and adaptive management |

Table No. 6: Rating Scale used for the Sustainability of the project

|  |  |  |
| --- | --- | --- |
| Rating | Abbreviation | Concept |
| Likely | L | Minimal risk to sustainability; major outcomes are on track to be achieved at the conclusion of the project and are expected to continue for the foreseeable future |
| Moderately likely | ML | Moderate risks, but it is expected that at least some of the outcomes can be sustained due to the progress observed in the achievement of the goals during the mid-term evaluation. |
| Moderately unlikely | MU | Significant risk that major outcomes will not continue after project completion, although some outputs and activities should continue. |
| Unlikely | U | Serious risk that project outcomes and key outputs will not be sustainable. |

Data collection methods and procedures

The type of information analyzed during the development of the mid-term evaluation was the following:

* The information generated by the project team (progress reports, studies carried out, minutes of committee meetings, among others).
* Contextual information (government policies and plans, institutional programs, technical studies and scientific articles on POPs pesticides, small-scale gold mining and Mercury uses, among others).
* Information integrated with other activities and policies (e.g., similar complementary projects under implementation).
* Baseline information and status regarding the project.

The methods used to collect the information are described below:

* ***Document review:*** analysis of the project document (PRODOC), project progress reports and other publications derived from project activities (consultancies, meeting minutes, baseline studies, technical and scientific publications, financial statements, etc.).
* ***Key informant interviews:*** 73 people were interviewed including the project team, UNDP officials, involved government officials (MAATEC, MERNR, MSP, Customs, etc.) at the national and provincial levels, participating civil society organizations, pesticide company associations and the National Customs Service, among others (for more details see Annex 4). For this purpose, a series of open-ended and semi-structured questions were proposed to the interviewees.
* ***Direct field observation:*** due to the health crisis caused by the COVID-19 pandemic, the assessment mission and field visits were replaced by online interviews with key stakeholders.

The information gathered was analyzed using the information triangulation method, in order to verify key situations of the project execution context, with the information gathered through interviews and progress reports and other publications, so that the conclusions obtained are balanced and as objective as possible to avoid informant bias.

It is highlighted that the interviews provided information and alternative points of view to those provided by the project team and UNDP. The interviews were conducted with as many stakeholders as possible (affected or benefited by the project), which may partially compensate for the subjectivities and bias of the informant. It is worth mentioning that, in order to protect the confidentiality of the source, the interviews were confidential and were not attended by project or UNDP personnel.

In particular, to visualize the adaptive management of the project, the PRODOC and its assumptions, risks, indicators, outcomes, etc., were contrasted with the actual progress of the project, to identify what adjustments were made and to verify that they facilitated progress towards the project's objectives and outcomes. This same exercise was carried out to determine the relevance and participation of the stakeholders.

The financial analysis was based on a review of the expenditure and co-financing figures provided by the project team and also on the information published in the UNDP ATLAS system. This exercise tried to visualize general aspects of budget execution, such as the weight of project staff spending within the total budget, the evolution of spending per year and per category or product, spending on consultants, etc. Similarly, it was verified that UNDP procurement standards have been met through interviews with UNDP and project procurement personnel, highlighting that no high-cost procurement was identified.

The evaluation question matrix (Annex 6) presents the type of information that was required and its sources.

Activities carried out

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

Activity 1. Online kick-off meeting with UNDP Ecuador and the Project Executing Team, where the progress of the project was broadly discussed as a basis for discussing the locations to carry out the “virtual mission” activities. It was agreed that it would take place between March 15 and April 3, 2021 and would include interviews at the national (Quito and Guayaquil), provincial and municipal levels (La Libertad, Cayambe, Portovelo, Machala and Camilo Ponce Enríquez). The main subjects addressed were legislation, the preparation of technical and regulatory proposals, the processes for eliminating pesticide and mercury residues, and the participation of stakeholders at all these levels.

Activity 2. Request and review of project information. Prior to the start of the project, the project executing team and UNDP were asked for the information generated on the project, which constitutes a part of the most relevant information for the evaluation. The requested information is presented in Annex 3.

Activity 3. Completion of the inception report. This activity corresponds to the development of the Evaluation Inception Report, which explained the objective and scope of the evaluation, as well as the methodology to be used to guarantee that the evidence generated is credible, reliable and useful and, therefore, supports the recommendations derived from this evaluation. The Evaluation Matrix was also included, specifying the main evaluation criteria and the indicators and milestones against which said criteria were evaluated, the work plan with the breakdown of the activities to be carried out and the outputs to be developed, and a description of the mission planning and tentative agenda.

Activity 4. Carrying out the "virtual mission." Based on what was established in the Inception Report, the work of gathering empirical information was carried out, which constituted the other part of the fundamental information for the evaluation. During this period, the project's progress was discussed with the project's executing team, in order to provide the necessary knowledge on how the project was implemented, as well as the strengths and weaknesses of the project's development process, its execution and the future sustainability of its activities and outcomes. The work agenda was discussed with the executing team and UNDP officials.

The criteria for the selection of interviews at the provincial and local levels were based on the extent to which the activities were advanced and their relevance.

The “mission” included a closing meeting, held on April 1, 2021 with the presentation of the preliminary findings of the evaluation by the consultants to the project executing team and UNDP officials. The evaluation schedule is shown in Fig. No. 1.

Fig. No. 1: Timeframe of the mid-term evaluation



Mission planning

Once the interview schedule had been discussed, the Project Coordinating Unit was in charge of coordinating with the key stakeholders, which is presented in Annex 3, while in Annex 4 the list of interviewed stakeholders is presented. A total of 73 people were interviewed, covering a broad spectrum of stakeholders at the national level such as MAATEC, Customs, Agrocalidad, MERNNR, MSP and provincial authorities and GADs such as the prefecture of El Oro to verify the management of mercury in artisanal mining. Business associations related to agrochemicals (Guayaquil) and mineral processing (El Oro province), universities and NGOs were also included.

The issues discussed - in general terms - were the following: i) level of strengthening of participating institutions, both public and private; ii) level of project outcome ownership by key stakeholders; iii) level of coordination and participation of stakeholders in the development and execution of the project; iv) projections for the implementation of project activities; v) level of coordination among participating institutions (mainly MAATEC, MERNNR, Customs, MSP, Agrocalidad, provincial and municipal governments, empty container recycling organizations and mineral processors, among others).

Limitations and strengths of the methodology

The strength of the methodology lies in its participatory nature and the wide coverage of stakeholders interviewed (73 people), which together allowed to have a vision of the project from different perspectives, including that of the beneficiaries, implementers, working groups, regulated stakeholders, project participants in the field and UNDP Ecuador officials. Thanks to the large number of stakeholders involved, informant bias can thus be reduced.

One of the main limitations for this evaluation, due to the pandemic, is the impossibility of conducting field visits to directly observe the project's achievements and interview all those involved face-to-face. On the other hand, since communities generally have limited internet access (which may also be true with cell phone signals), there is a risk that some interviews may not be conducted by these means.

On the other hand, the high turnover of authorities and public officials made it more difficult to obtain a clearer view of the ownership of the issues addressed by the project and its short and medium-term projection.

Structure of the evaluation report

This report has **6 clearly identified *sections*** . The **cover page** shows general project information (amounts, identification codes, implementing and executing agencies, deadlines, etc.), followed by **a list of abbreviations** and **an executive summary** where the reader will find a summary of the project, the main findings, recommendations and conclusions, as well as the project's overall rating.

In **Section No. 1: Introduction**, the scope and objectives of the evaluation work can be found, as well as a detail of the methodology used and the main milestones of this work.

**Section 2** then focuses on the analysis of the country's development context in relation to the problem to be addressed and how to tackle it, detailing the expected timeframe for project implementation, its immediate objectives, expected outcomes and key indicators, as well as the coordination and partnership arrangements with key stakeholders involved.

In **Section 3** the findings of the evaluation appear, which cover the design, execution (financial and activities) and the outcomes obtained and their sustainability.

**Section 4** contains the project rating, while ***Section 5*** shows all conclusions, recommendations and lessons learned. Finally, **Section 6** corresponds to the annexes, which contain information on the mission agenda (Annex 4), consultancy ToR (Annex 1), Logical Framework Matrix (Annex 2), Project Progress Matrix (Annex 3), list of people interviewed (Annex 5) and list of documents reviewed (Annex 6).

1. Description of the project and its development context

General context

Ecuador is a signatory to the Stockholm Convention on Persistent Organic Pollutants (POPs) and the Minamata Convention on the manufacture and use of mercury, and must therefore meet certain deadlines for the reduction and elimination of the manufacture and use of these substances in the country.

These substances are highly hazardous to human health and also have a high potential to contaminate ecosystems and their food chains.

The main uses of POPs are in agriculture - mainly in the form of pesticides - where poor storage of empty containers and expired pesticides result in high risks for operators and generate highly hazardous contaminated sites. POPs are also produced during the burning of materials and grasslands and are found in a number of electronic products.

On the other hand, the use of mercury in the country is found mainly in gold production by artisanal mining, lighting, and in medical items such as thermometers and pressure gauges.

Although Ecuador has regulations on POPs and mercury, there is still a need to improve institutional coordination, management standards for these substances, as well as their monitoring, control and final disposal. On the other hand, users need greater awareness of the dangers of handling these products and work alternatives that allow them to reconvert or improve their economic activity to a more sustainable one (especially true for artisanal mining).

Finally, it should be mentioned that for several years, the institutions in charge of regulating and controlling these substances have had their budgets reduced as a consequence of the drop in oil prices and the political instability of the last 4 years, a situation that has been further aggravated by the effects of the COVID-19 pandemic that has affected the country since March 2020.

Project Description

The project - whose duration is five years (2018-2023) - seeks to protect human health and the environment from the impact of harmful chemicals, in particular POPs and mercury through the application of a sound management of chemicals system (SMC) with emphasis on the life-cycle of these substances.

The implementation of the project is expected to eliminate 120 tons of obsolete POPs and UPOPs pesticides and another 30 tons of obsolete pesticides repackaged and disposed of in local treatment plants, increase the collection and disposal of empty pesticide containers by 90 tons, as well as the use of new POPs and their unintentional release into the environment (30 tons). For unintentional POPs (UPOPs) the ultimate goal is to reduce the release by 25 g-TEQ. On the other hand, it is expected to reduce the use/release of mercury (2 tons) in artisanal small-scale gold mining and by 35 kilos/year of products containing this substance (mainly luminaires and medical equipment). It is also expected to sensitize and train 11,778 people on the sound management of these substances.

To achieve these objectives, the project considers the following components:

1. Strengthening of institutional capacity, the legal and policy framework for SMC (training, preparation of financial plans to improve national reports on POPs and Mercury, establishment of institutional coordination mechanisms, increased capacities of analysis laboratories).

2. Elimination of stocks and reduction of the use and release of POPs, mainly in the pesticide sector.

3. Implementation of measures to reduce and eliminate Mercury in priority sectors (ASGM, luminaires and medical products), with improvements in access to financing for ASGM.

4. Knowledge Management, M&E and Dissemination of outcomes.

The project's coverage is at the national level, where the main activities for drafting regulations, standards and establishing the institutional coordination mechanism are centered in Quito, while those related to POPs pesticides include Guayaquil and Cayambe, and those related to ASGM are centered in Camilo Ponce Enríquez and Zaruma - Portovelo and Chinapintza (the latter was rejected due to safety problems).

The project has a GEF grant of USD 8.49 million and co-financing commitments that reach USD 40.57 million. According to what was reported by the project, approximately USD 3.5 million of GEF funds have been disbursed in the various project activities.

### Activities, outputs and expected outcomes

Table 7 shows the main objectives and products that the project should achieve in its intermediate and final execution stages. Regarding the mid-term performance commitments, these can be summarized as follows:

* 1 financial plan to improve national reporting on statistics/indicators for POPs, Hg and other chemicals of concern
* 1 capability development plan
* 1 institutional coordination mechanism
* 4 working groups (UPOPs, POPs and Hg in products, Pesticides and ASGM).
* 10 institutions with developed capacity to improve monitoring of chemicals of concern.
* 2 analytical laboratories with increased capacity.
* 5 policies, regulations, guidelines and standards revised and/or developed, to achieve the LCM of chemicals.
* 0 tons of obsolete pesticides POPs and UPOPs and related residues eliminated.
* 5 g-TEQ of UCOP reduced
* 0 tons of new POPs releases reduced.
* Reduction of mercury use/release in ASGM by 500 kg/year to a non-industrial level.
* 10kg of mercury use/release avoided in priority non-ASGM sectors.
* 1 financial product developed/improved to increase access to financing for the ASGM sector.
* Raised awareness of 3,533 people on the sound management of chemicals.
* 13 of the GEF M&E requirements met
* Adaptive management was applied
* 10 case study reports, publications, presentations, articles (web-based), etc. summarizing lessons learned, best practices and experiences have been disseminated nationally, regionally and globally.

Table No. 7: Summary of the main components and objectives of the project as per the Project Document

| No. | Component | Objective | Expected mid-term outcome | Goal at the end of the project |
| --- | --- | --- | --- | --- |
| 1 | Strengthening institutional capacity | Preparation and implementation of 4 financial development and capacity building plans | 1 financial plan to improve national reporting on statistics/indicators for POPs, Hg and other chemicals of concern | 2 financial plans |
| Increased capacity of 12 private or public entities to address chemicals of concern. | 1 capability development plan | 2 capability development plan |
| 1 institutional coordination mechanism | 12 private or public entities with increased capacity |
| 4 working groups |
| 10 institutions with developed capacity to improve monitoring of chemicals of concern. |
| 2 analytical laboratories with increased capacity. |
| Developed and/or revised sixteen (16) policies, regulations and standards to achieve the LCM of chemicals. | 5 policies, regulations, guidelines and standards revised and/or developed, to achieve the LCM of chemicals. | 5 policies, regulations, guidelines and standards revised and/or developed, to achieve the LCM of chemicals, that include: |
| 3 Ministerial Agreements (MAs) and their implementation guidelines to address the LCM of chemicals reviewed and/or developed and submitted for approval. |
| 9 tools (guidelines, standards, methodologies, etc.) for the management of chemicals of concern reviewed/developed. |
| 2 national plans developed for the substitution of POPs or Hg-containing products and the management of wastes containing POPs or Hg. |
| 2 industrial incentives developed and proposed for implementation that support conversion to processes that present fewer risks and result in less harmful products. |
| 2 | Elimination of POPs stocks and reduction of the use and release of initial and newly listed POPs (including those contained in products). | 120 tons of obsolete pesticides POPs and UPOPs and related residues eliminated. | 0 tons of obsolete pesticides POPs and UPOPs and related residues eliminated. | 120 tons of obsolete pesticides POPs and UPOPs and related residues eliminated. |
| 1 updated inventory |
| 1 contaminated site cleaned/remediated |
| Collection, transportation, recycling and disposal of empty pesticide containers increase by 90 tons |
| 25 grams toxic equivalent (TEQ) of reduced UCOPs | 12.5 g-TEQ | 25 g-TEQ |
| 7 facilities evaluated |
| 7 facilities with BEP/BAT recommendations |
| 2 sites/facilities with BEP/BAT |
| 1 contaminated site cleaned/remediated |
| 30 tons of new POPs releases, reduced. | 0 | 30 ton |
| 10 suspicious imported products analyzed |
| Cost-benefit analysis and evaluation of the cost of inaction for 2 priority products |
| Gradual elimination (with SENAE) and waste management of 2 main POPs-containing products |
| 3 | Implementation of measures for the reduction and elimination of Hg from priority sectors. | Reduced 2 tons of mercury use/release in ASGM to a non-industrial level | Reduction of mercury use/release in ASGM by 500 kg/year to a non-industrial level. | 2 ton |
| Hg Baseline (Camilo Ponce Enríquez, Portovelo and Chinapintza) |
| Mobile training plant installed and operating at the "base" location. (Note: modified by a proposed sale of mineral with 5 plants and 2 laboratories as pilots) |
| 350 ASGM miners and mining communities trained |
| 5 processing plants (2 occasionally used by women) supported in the improvement of their mineral processing. |
| 3 mining groups (1 are women miners) supported in their formalization processes. |
| 1 demonstration pilot implemented, focusing on gravity recovery of Hg from contaminated tailings. |
| 35 kg/year of mercury use/release avoided in priority sectors (other than ASGM). | 10 kg | 35 kg |
| Mercury baseline, for medical devices and lighting products |
| Impact assessment on women/men lighting devices and products |
| List of available alternatives for medical devices and lighting products |
| Existing options for the disposal and treatment (national/international level) of mercury-containing products and their wastes |
| Cost-benefit analysis and evaluation of the cost of inaction in the selection of mercury-free alternatives and waste management/treatment options. |
| Progressive incorporation of mercury-free alternatives in 1 high-profile CS facility. |
| 1 pilot in the electricity sector implemented for the disposal and/or improved management of used mercury-containing lamps |
| Environmentally sound treatment/disposal of 10 tons of mercury-containing waste. |
| Improved access to financing for the ASGM sector through the development/improvement of 2 financial products. | 1 financial product developed/improved to increase access to financing, for the ASGM sector | 1 competitive fund mechanism with 5 ASGMs participating |
| 1 ASGM processing plant using incentives for cleaner systems |
| 1 industrial mining processing plants using incentives for cleaner systems. |
| Responsible gold purchased at a higher price by a legal public or private buyer. |
| 4 | Raise awareness, ensure project follow-up and disseminate project outcomes and experiences. | 11,778 people (3,533 women and 8,245 men) were made aware of the sound management of chemicals. | 3,533 people were made aware | 11,778 people were made aware |
| 13 of the GEF M&E requirements met | 29 of the GEF M&E requirements met |
| adaptive management was applied according to the MTE | adaptive management was applied according to the MTE |
| 10 reports | 28 reports |

Main indicators

The Prodoc contains 14 indicators to measure the project's outcomes, which are not presented here because they are a repetition of the goals for each component or outcome, with the exception of "No. of jobs created", which is one of the achievement indicators for the project's general objective. As will be seen below, these indicators do not meet the SMART criteria.

Main stakeholders

The Project Document (ProDoc) provides an analysis of the main stakeholders involved in the project, most of which are state agencies, beneficiary communities and private sector stakeholders, specifically artisanal gold mining, the electricity sector and some business associations.

The key partners are the MAATEC and the MERNNR who are the co-executing entities of the project with specific responsibilities to fulfill. Other key institutions are MAG (including Agrocalidad) for the issue of obsolete agrochemicals, management of empty containers and UPOPs generated mainly by agricultural burning.

The following table shows a summary of stakeholder participation in the project.

Table No. 8: Main partners and their roles in the project, according to the prodoc

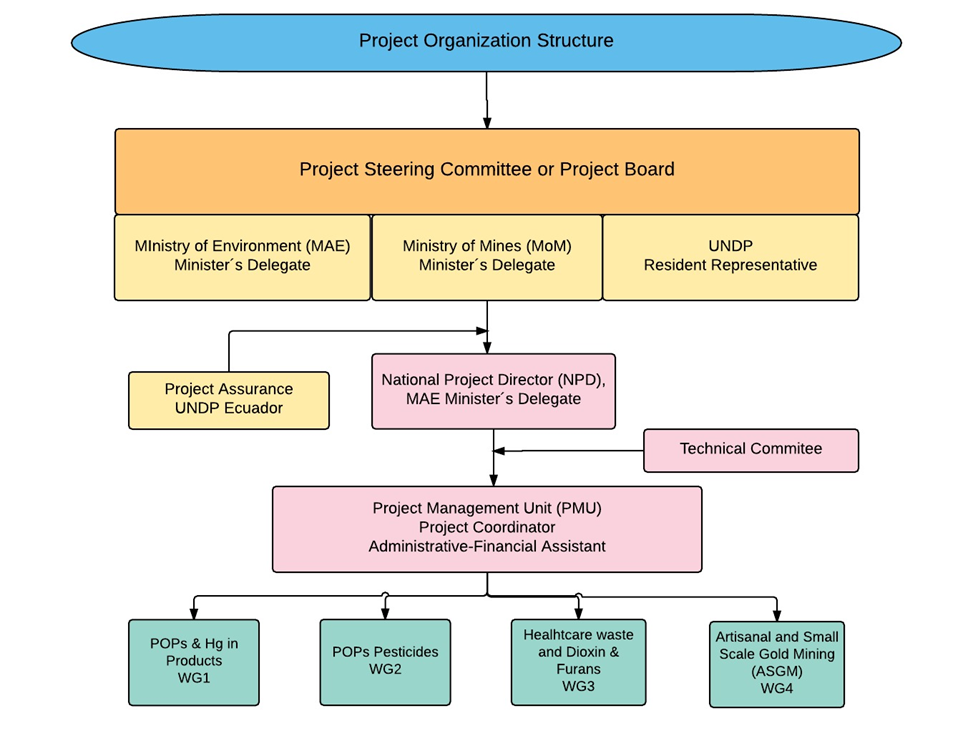
|  |  |
| --- | --- |
| **Stakeholder** | **Role** |
| **MAATEC** | * Project Implementing Partner (Leader). |
| **MERNNR** | * Project Manager for activities related to the mining sector under Component 3. Support the reduction of mercury from ASGM to a non-industrial level. * Support the identification of mining groups interested in formalization or in the formalization process. * Support the identification and selection of mining plants to improve mineral and tailings processing at processing centers. * Support ASGM awareness and training of miners. |
| **MSP** | * Components 2 and 3: * Support the selection of incineration facilities; * Support the gradual elimination/reduction of mercury devices and emission reductions of UPOPs. |
| **Agrocalidad** | * Component 2: * Inventory and elimination of 30 tons of obsolete POPs and UPOPs pesticides. |
| **APCSA & INNOVAGRO** | * Agrochemical companies private sector grouping * Support inventory and elimination of obsolete POPs and UPOPs pesticides. * Increase collection and disposal of empty pesticide containers. * Support the evaluation of pesticide rinse areas/contaminated sites of members. |
| **Financial Institutions/Banks** | * Participate in staff training * Develop/improve a financial product that serves the ASGM sector. |
| Central Bank of Ecuador | * Able to purchase gold from legalized ASGM operations (Due diligence to miners to qualify them as certified Agents/gold suppliers. * Develop and sign a partnership/agreement with a local bank to provide credit to the ASGM sector to encourage cleaner and responsible production. |
| **COMEX** | * Supports the review/development of a Ministerial Agreement to address POPs and Hg in products (including import tariffs to discourage certain goods containing chemicals). |
| **MERNNR** | * Support the development/dissemination of awareness materials. * Support for the selection of 1 electric company for Hg reduction. * Support the formulation of management and gradual elimination/elimination plans for mercury-containing lighting products. |
| **MIPRO** | * Support the development/revision of standards, methodologies and appropriate management for the LCM of chemicals. * Support the development of 2 industrial incentives for cleaner production. * Support the identification of suitable industrial entities for participation in projects. |
| **Waste disposal companies** | * Provide data on waste treatment, storage, disposal of known chemicals. * Allow for the assessment of facilities, including surroundings. |

Implementation Arrangements

The national implementing institution for the project is the MAATEC, while MERNNR is the co-executing agency responsible for the ASGM-related components. There is also a Project’s Steering Committee (PSC), which is the highest decision-making and strategy formulation body, and is made up of the above ministries plus the UNDP country office.

A Technical Committee supports the National Project Director (NDP) in the issues addressed by the project and there are 4 working groups that support the activities of the Project Management Unit (PMU), which has a coordinator who is directly supervised by the NDP. Fig. 2 shows the governance of the project.

Fig. No. 2: Organizational scheme of the project according to the prodoc.



1. Findings
   1. Project's Strategy

### Design

The prodoc provides an analysis of the baseline situation for the management of POPs, Hg and chemicals in general. In the context of the project, the main economic activities causing the problem of POPs pesticide residues (expired pesticides, empty containers in agriculture), UCOP release (agricultural burning, incineration of medical waste, landfills, etc.) and Hg contamination (ASGM, medical instruments, lights, etc.) are identified.

It also diagnoses the needs that must be addressed to improve the situation caused by chemical contamination and essentially focuses on the lack of capacity and technical knowledge to properly manage these substances and their residues, awareness, incentives and access to financing for ASGM.

With respect to public institutions, emphasis is placed on the lack of coordination among them and the lack of capacity to supervise regulated operations. It also indicates that greater controls are needed in the processes of importing POPs products, but the diagnosis is not clear in specifying the needs of the public apparatus in terms of training and policy development, leaving the impression that there is a broad policy framework on the subject (except for cost-benefit methodologies). The project's ToC outline is clearer in this regard than the development challenge narrative itself.

Therefore, the project logic points to a series of steps necessary to achieve the outcome corresponding to the project's development objective, which would be to improve the country's capacity in chemicals management and ensure that the GoE has the capacity to develop, improve and implement policies and regulations for LCM of chemicals and wastes.

### Logical Framework

As indicated, the outcome matrix contains 14 indicators that are confused with outputs and targets and do not meet the SMART (specific, measurable, achievable, relevant, time-bound) criteria.

As an example of the above, the indicators for the project objective are not in line with the project's mission statement (protect human health and the environment, adoption of management...). First, a measure on POPs and mercury emissions reduction or their residues would be more consistent with this objective. The institutional objective of adopting an improved chemicals management system is not directly linked to financial mechanisms, but rather to the creation of the institutional coordination mechanism and the number of regulations, technical standards and chemicals management standards adopted by the GoE and regulated stakeholders. Incentive mechanisms are important, but they are at a lower level in this case and would correspond more to a partial outcome indicator.

New jobs are an additional dimension of the project, not necessarily linked to the environmental or institutional objective.

The number of direct project beneficiaries in terms of POPs and Hg exposure reduction is one way to measure health success, but it is a difficult indicator to measure in terms of direct population exposed before and after the project at a given site.

With respect to the indicators to measure progress for outcome No. 1, there are 2 indicators in one (4 plans + capacity building), which should be measured separately. Financial plans are important, but correspond more to an output, as the measured outcome could be the "No. of improved national reports with permanent budget allocations."

For capacity building, having a training plan and implementing it consistently is not a correct measure, since what we are trying to measure is the use given to the new knowledge acquired by the stakeholders involved, therefore, a better indicator would be, for example, "No. of improved chemical management practices implemented by the stakeholders trained by the program." The regulations developed/reviewed do not indicate an outcome, which would be adoption by the institutions involved."

The indicators for outcome No. 2 are good for measuring POPs and Hg emission reductions. However, the wording of the indicators should refer to the measurement of the outcome itself and not be mixed with the targets. In the specific case of the project, the indicators and their targets are redundant.

In some situations, the indicator should be more explanatory to avoid interpretations, as for example in the indicator "30 tons of new POPs releases reduced". This quantity does not indicate whether they are pure POPs or contained in products, nor is it possible to know whether even with these POPs in specific products, these substances are being released or not, so it can be considered as the weight of POPs reduced without considering the entire residue, or worse, even if the product with POPs is not eliminated, there may be no releases, at least in a long period of time. In addition, the target further confuses what is desired by stating that the goal is to "reduce the use and release of new POPs", since the more precise wording for this target should be "quantity of products imported into the country containing new POPs reduced by XXX tons," for example. In any case, it would be advisable for the target not to be a repetition of the indicator statement, but only to indicate how much or what is to be achieved in a given time frame.

Therefore, the indicator as it stands is inaccurate and difficult to measure, so a more appropriate one for this outcome might be "reduced/eliminated quantity of products containing new POPs."

Improved access to finance for ASGM is not an indicator, but an outcome, so the most suitable indicator to measure it could be "No. of specific financial products available for ASGM."

Outcome 4 is the least achieved of all, as it has mixed knowledge management and M&E components. The number of people made aware is not an outcome measure. The correct indicator should be, for example, "No. of people implementing good practices and technologies for chemicals management." Reports and studies published on the web are also not a good indicator for an outcome of knowledge and experience sharing to replicate and/or scale up project outcomes. An example of an indicator could be the following: "Number of practices implemented through peer-to-peer exchange during project implementation."

In reference to the mid-term goals, they are not clear for several of the desired outcomes, so it is difficult to verify their progress, mainly because there is no definition of intermediate outcomes that could be measured qualitatively or quantitatively. For example, for the mid-term and final targets of Outcome No. 1, there is redundancy in the plans. However, the ICM and the working groups should be in place at the beginning of the project, the same applies to the capacity building of the 10 public sector institutions and the 2 laboratories, so it could be understood as achieved if this is reached at the end of the project, even if its effects on the project outcomes are late or minimal.

The same situation is present in all the project outcomes, which is attributable to the fact that their statements are very narrow in scope. For example, for Outcome No. 2 (elimination of POPs) it could have been broader to accommodate intermediate outcomes and indicators, such as "Actors involved reduce exposure to POPs and new POPs, thanks to the identification of stocks and application of management techniques for their residues in the agricultural sector and in selected products." This is an example of an outcome that primarily indicates a change in the situation, made by someone using the inputs provided by the project. In addition, it also allows you to follow (technical) trainings and specific products. It is not subjective either, it is measured primarily by the tons disposed of, by whom (which was already known) and the type of management (final disposal, export, disposal of packaging, etc.).

### Aligning with national priorities

The project is fully in line with the country's commitments under the Stockholm (POPs) and Minamata (Hg) Conventions. For the issue of obsolete pesticides, the project is based on inventories conducted during 2016 by public and private institutions (Agrocalidad, APCSA, Innovagro), which identified the main locations where these wastes were stored.

On the other hand, with respect to Hg, the baseline for medical and lighting products was created in accordance with the Minamata objectives for the elimination of this type of products in the country. In addition, Ecuador has made efforts to regularize informal artisanal miners.

Although Prodoc makes an exhaustive analysis of the situation of POPs and Hg in the country and shows the activities that have been carried out to reduce their use, there is a lack of a clearer description of the areas where regulatory reforms are most needed, where only in the section referring to indicator 1.2 it states that the ministerial agreements and tools "could include" certain issues to improve the management of chemical substances, such as the incineration of hazardous solid waste and its final disposal[[4]](#footnote-5). Mentions of POPs and Hg regulation can be found in some annexes to the prodoc[[5]](#footnote-6), but it would have been advisable to have a summary outlining the specific regulatory reforms that the project wished to introduce, as well as indicating the gaps found and making express mention in the Prodoc of national and regional policies on artisanal mining and POPs, specifying the actions that are being carried out and the entities responsible for their implementation.

Therefore, although the issues addressed by the project are highly sensitive, it would have been necessary to have made an analysis of the strengths and weaknesses of the country's programs, policies and regulations and to clarify the gaps to be closed in regulatory and normative issues, beyond the analysis of economic incentives to address this issue, especially in the case of ASGM.

### Gender Approach

The project has gender marker GEN1 (activities that will contribute in some way to gender equality, but not significantly) and presents an approach to this issue, which also includes a specialist within the PMU and the task of carrying out a gender strategy during project implementation. The project's outcome matrix also establishes some indicators for measuring this dimension, but it would have been desirable to include some indicators referring to improvements in the lives of the jancheras (e.g., higher income, access to decision-making in the organizations). In any case, the project has a gender strategy where other specific indicators could be included and the gender marker could be updated[[6]](#footnote-7).

### Sustainability and viability

Prodoc is confident that the implementation of the project measures (institutional strengthening, POPs and Hg elimination, regulatory reforms and technical standards, implementation of financial mechanisms and pilot projects, lessons learned reports) will be sufficient to maintain the inertia and also achieve replication.

The project does not have a specific outcome for knowledge management, sustainability, replication and scaling, but these elements can be seen scattered in the different outcomes (training, lessons learned, etc.) and there is no obligation to develop a strategy exit from the project and exchange of experiences between key stakeholders, whether regional, national or international. Component 4 is focused on project M&E, awareness-raising activities and the production of a series of case reports - most likely carried out by external consultants - to extract lessons learned, but in no case is there a requirement for an exit strategy involving active participation and exchange of experiences among peers, in addition to achieving institutional commitments to sustain project outcomes.

### Repetition approach

The project document does not present a repetition approach, but rather expects replication to occur because of the outputs to be obtained from the project. Loans to ASGMs will make it possible for miners to formalize and adopt mercury-free gold production practices, for example. Prodoc also assumes that documenting the lessons learned from the pilot projects will contribute to the replication of experiences and participation in the regional UNDP-PlanetGold project and in exchange activities between UNEP ASGM projects.

As with sustainability, repetition (and scalability) of experience is based on assumptions, and does not include a requirement to develop an approach or strategy for managing the knowledge learned beyond reporting. It would be necessary in the future for the project executing unit to develop an exit strategy for the project that outlines future activities, agreements and roles for each key stakeholder involved. In addition, an ad-hoc knowledge management component makes the main dissemination activities much more visible, sharing experiences among peers at the national, regional and Latin American levels.

### Incorporation of experience from other relevant projects

This aspect is well documented in the prodoc. The project components take advantage of the experience and information generated by climate change adaptation projects and the use of financial mechanisms in protected areas, where the competitive fund strategy was used to benefit local communities[[7]](#footnote-8), as well as the project benefited from previous activities to develop inventories of POPs and mercury in the country, mainly in agriculture[[8]](#footnote-9) and mining.

### UNDP Comparative Advantage

The execution modality chosen for this project was national execution (NIM), with UNDP providing support for financial services, procurement expertise and specific advisory services - when required - (identification of national and international experts). In addition, the Program Officer of the UNDP Ecuador Office and the Regional Technical Advisor (RTA) monitor the progress of the project, provide advice on its implementation and suggest changes when appropriate.

With respect to the relative advantage of UNDP, the most relevant would be that since it is physically installed in the country and, in addition, since part of its professional staff is of local origin, it has an advantageous understanding of the culture, the system of functioning of local institutions, its economy and projections as a country.

On the other hand, by carrying out activities in other projects in the country, coupled with international experience in the design and execution of projects in other countries, you can properly understand the reasons why certain procedures, approaches and practices work in one place, but not necessarily in another.

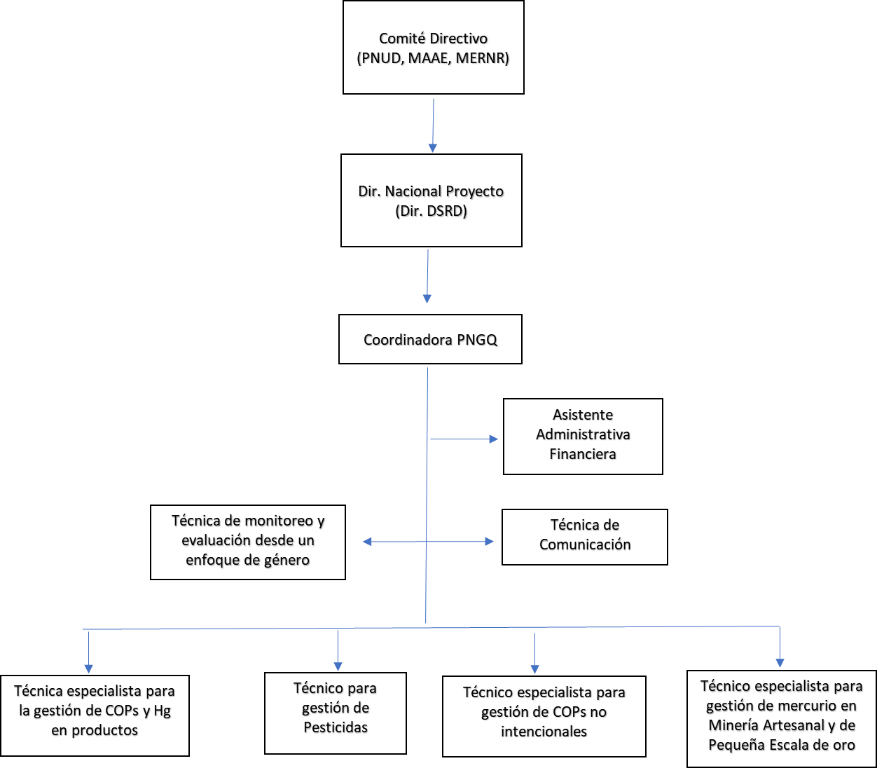
* 2. Progress towards Outcome Achievement

Organization Executing Team

To achieve its objectives, the executing team is located in the Directorate of Chemical Substances, Hazardous and Non-Hazardous Wastes (DSRD), under the Undersecretariat of Environmental Quality of the MAATEC. The direct leadership of the implementation team is the National Chemicals Management Program. The team consists of 8 specialized professionals organized according to Fig. No. 3 The national director of the Project and institutional responsible is the director of the DSRD of the MAATEC.

It is worth mentioning that 4 working groups were also implemented according to each topic addressed (POPs and Hg in products, POPs pesticides, Hospital waste and Dioxins and Furans, Artisanal and small-scale gold mining).

*Fig. No. 3: Structure of the project implementation team*



Steering Committee (UNDP, MAATEC, MERNNR)

National Project Director (Dir. DSRD)

PNGQ Coordinator

Administrative-Financial Assistant

Communications Expert

Monitoring and Evaluation with a gender approach Expert

POPs and Hg product management Expert

Pesticide management Expert

UPOPs management Expert

Mercury management in Artisanal Small-Scale Gold Mining Expert

Progress towards project objectives

In general terms, it should be mentioned that the project has designed a series of documents and regulatory proposals to integrate the management of chemical substances in a coordinated manner among the members of the country's environmental management system. There have been important achievements, mainly the anticipated elimination of POPs pesticide residues and a large amount of Hg residues, as well as the implementation of the CFM (6 projects in execution) and the financial mechanism for ASGM elaborated in 2019, where the BCE and BanEcuador would be the implementers of the same, counting on the sponsorship of the MAATEC. In addition, the ICM proposal has also been finalized and is awaiting a meeting of the National Environmental Quality Committee to formally approve the operation of the ICM.

With respect to the prospects for the achievement of project outcomes during the second half of implementation, there are some important challenges that the project will have to face, such as the approval and implementation of the institutional coordination mechanism, the ASGM credit system, and the proposed regulations prepared so far. The realization of all these initiatives will depend in part on the promotional efforts of the project's executing team and mostly on the willingness of the institutions involved to implement them (mainly MAATEC, MERNR, BanEcuador and the BCE).

In addition to the above, products containing POPs and Hg should be integrated and controlled with differentiated tariff items, which will also require more participatory work with Customs.

The elimination of Hg in ASGM and the implementation of credits for this type of workers will require greater coordination than that carried out so far with MERNNR, because it would be necessary to increase the effort in activities to encourage the legalization of informal miners, since to date the credit mechanisms designed by the project are focused on formal miners and registered in the national cadastre, which has been closed since 2015, but there are prospects that it could be reopened during the second half of the project's implementation. On the other hand, since the recognition and formalization of the jancheras as a mining activity requires a law initiative, the focus of this activity has been to reconvert their economic activity, which is also a challenge due to the cultural roots involved in the activity of these women, which would require greater coordination with specialized institutions.

Although what has been collected so far reached 3.9 kg of the target of 10 kg of Hg for the middle of the period, the final disposal target of 175 kg of Hg in sectors other than ASGM could be met by focusing on amalgams (between 470 and 528 kg considering an approximate Hg content between 30%-40%)[[9]](#footnote-10) or with greater effort if medical equipment is prioritized (approximately 42 tons of waste). Currently, an Extended Producer Responsibility (EPR) model for disused luminaires is being worked on, as well as the necessary arrangements with Customs for the prohibition/restriction of Hg-added products.

The progress presentation below is a summary of the main achievements and challenges based on prodoc indicators used in the PIRs. To deepen the analysis, Annex No. 3 shows the complete matrix of achievements of the project, each one with its qualification.

Objective: 2 new partnership mechanisms with funding

Rating: MS

Progress based on the indicators for the project objectives can be summarized as follows.

A financial instrument was developed - jointly with the BCE and BanEcuador - to grant loans to formalized or legal ASGM. This instrument is intended as an incentive for informal ASGMs to associate and formalize. The project identified an existing type of credit for enterprises granted by BanEcuador, which was considered suitable specifically for the "jancheras" (women who retrieve gold from the mineral residues left by ASGM) to reconvert their productive activity, with credit amounts between USD 50 -USD 59.1K, after a financial check.

The second mechanism is a proposal for a ministerial agreement to grant environmental incentives (Ecuadorian Environmental Recognition Green Point of the MAATEC) for processes that include POPs and Hg, while the mechanism of competitive funds for innovative projects in environmental and social issues has also been developed.

Of all these proposals, the only one in operation are the competitive funds, while the remaining initiatives are expected to be approved during 2021.

This goal is reported as 55% achieved, since the two financial mechanisms established in the prodoc must be functional (mechanism for improved access to financing), where in fact the competitive fund is the only one available and with ongoing projects. Therefore, the mid-term goal can be considered achieved (1 financial mechanism established to support 5 projects), but the implementation of the ASGM credit system has been delayed as a result of the change in priorities due to the pandemic, although there is a commitment from the authorities of the ASGM, BCE and BanEcuador to implement it. In addition, this mechanism was created in the prodoc as an incentive for formalized ASGMs to associate and for informal ASGMs to see the benefits of the formalization process. As mentioned above, close coordination with MERNNR will be needed to support the opening of the mining registry to allow informal miners who wish to regularize their status to access the credits developed by the project.

Objective: New jobs created for men and women

Rating: S

This goal is reported as exceeded (116 new hires). The prodoc states that "new jobs will be created" and to this end specifies that consulting jobs created by the project, as well as recipients of grants from the competitive fund mechanism, count towards this indicator. However, at the evaluator's discretion, it is not possible to attribute consultancies and other project contracts as "new employment," since consultants are not companies created ad-hoc for the project, nor can individual consultants be considered unemployed or having changed employment. On the other hand, it is also unreasonable to assign the CFM as a source of new jobs, since these projects are of short duration (18 months) and do not constitute jobs or permanent activity, although they could have the potential to create them in the medium term if it is proven that they generate self-sustaining activities.

As a result of the above analysis and according to the indicators established in the Prodoc, this indicator can be considered as "fulfilled," but with the caveat that the indicator established is not adequate to measure this achievement, as explained in the previous paragraph.

Objective: Number of direct project beneficiaries for whom the risk of hazardous chemicals and wastes is reduced.

Rating: MS

The project reports this goal as exceeded, since 145,840 people have benefited from the training, the publicity campaign, the removal of 146 tons of agrochemicals and Hg residues, which is in line with what is established in the Prodoc project document as valid sources of beneficiaries, which would have exceeded the project goal (9,356 beneficiaries). However, in the evaluator's opinion, it is not possible to prove that the risk is reduced by the mere fact of carrying out campaigns and training. The elimination of pesticide and Hg residues could be better related to risk reduction, since the removal of hazardous substances eliminates the possibility of human contact and contamination of soil, water and air, but there are no reports or field surveys available to substantiate the number of people for whom the risk was reduced. In this regard, the project reports approximately 471 people benefiting from the removal of pesticides and Hg residues, who are workers of pesticide companies and IIGE[[10]](#footnote-11). It is recommended that the accounting of direct beneficiaries be done by calculating the number of people and their family groups living in the vicinity of the pesticide and Hg residue warehouses removed by the project.

As a result of the above analysis and according to the indicators established in the Prodoc, this indicator can be considered as "fulfilled," but with the caveat that the indicator established is not adequate to measure this achievement, as explained in the previous paragraph.

Advance by Outcome

Outcome 1: 2 plans, one financial and one capacity building plan developed and implemented

Rating: S

Two training plans were developed with their respective budgets, one for the public sector and GAD, and the other for chemical-related business organizations (APROQUE). Seventeen entities were trained through online courses during 2020 and the project is currently negotiating to upload the training programs to the MAATEC platform.

Although the mid-term goal for the 2 training plans and their implementation was met, the budgets prepared are of project cost and no inclusion of these plans in the MAATEC budget lines that could give them sustainability has been found. In the second half of the project, it should be clarified whether the "financial allocations" refer to permanent "allocations" in the MAATEC budget to improve national reporting or whether they are only project financial allocations and whether there has been "an improvement in national reporting on statistics/indicators for POPs, Hg and other chemicals of concern[[11]](#footnote-12)."

Therefore, it can be concluded that the mid-term goal has been met, but efforts should be made to include specific budget lines to improve national reporting during the second phase of the project.

Outcome 1: Institutional Coordination Mechanism

Rating: MS

During 2019, the project designed a proposed regulation for the "National Environmental Quality Committee," establishing a national coordination mechanism and 4 working groups for the topic of chemical substances. The members of this committee should have met officially to approve this mechanism, a situation that has not happened to date, and there is no estimated timeframe for this, mainly due to the high turnover at the MAATEC ministerial level. With the change of government that will take place in May 2021, the project will present the proposal developed to the new authorities and will facilitate its implementation.

Outcome 1: Policies and regulations

Rating: S

6 policies and regulations have been proposed to the MAATEC: i) Ministerial agreement 140 of the MAATEC to integrate the UPOPs user sector in "Green Point" recognition; ii) green initiative for separation at source of products with UPOPs and Hg; iii) incentives for companies in the national registry of hazardous substances and import quotas for products containing UPOPs and Hg; iv) Green Point certification for production processes and services; v) reduction of consumption tax on products without UPOPs and Hg; vi) integration of the ICM articulated RCOA; vii) prepared Technical Guides for products with Hg and others for pesticides.

In preparation: i) Proposed Ministerial Agreement on Green Point Incentive for POP; ii) Proposed Ministerial Agreement on Incineration (for UPOP); iii) Proposed Ministerial Agreement on Safety Cells.

The mid-term goal can be considered to have been exceeded in terms of the number of regulatory proposals, the most important being the ICM with its working groups, and the incineration and safety cell proposals. During the second stage of the project, the remaining 7 regulatory or technical instruments should be identified and prioritized.

Outcome 2: Elimination of obsolete pesticides POPs

Rating: HS

To date, 146 tons of expired POPs pesticides have been reported to have been eliminated. Only 27 tons were exported for disposal in Europe, as it contributed to the establishment of local capacity to treat obsolete pesticides, thus exceeding the final project target for this output.

However, there are other activities that should be strengthened in the second stage, such as increasing the collection and disposal of an additional 90 tons of empty containers (currently approximately 59 additional tons have been disposed of with respect to 2019 as reported by INNOVAGRO) and the cleanup of the contaminated site, since there has been only one attempt with the PRAS, so an effort should be made with one or two additional sites before concluding this activity.

Outcome 2: Reduction of UCOPs

Rating: MS

This goal is reported as exceeded. Reductions are calculated at 7 g-TEQ/year using the UNEP toolkit. x The 7 g-TEQ/year reduction in UCOPs corresponds to the subcategory "Waste burning and accidental fires" because the comparison of the 2016 baseline with the diagnostic conducted by the project (for 2018) shows a reduction to zero, where it is assumed that the beneficiaries adopted the practices taught during the trainings. In this subcategory, the PNGQ intervenes directly through the implementation of fire management schools, in coordination with the "Amazon without Fire" Program of the MAATEC, which has been carried out since July 2020 and will end in July 2021. However, the interviews conducted with the latter program indicate that it does not have indicators on the reduction of areas that use fire for crops, but only for the number of families trained, so in the second half of the project the executing unit will have to implement some indicator to monitor the areas intervened by the "Amazon without Fire" program, in order to make estimates and attribution of UCOP release in a more objective manner.

Additionally, the ministerial agreements on incineration, safety cell and environmental incentives mentioned in "Outcome 2 Policies and regulations," once approved, are expected to have a direct impact on the reduction towards the project's final goal. This reduction will be measurable by means of the records of each company applying for incentives contained in the toolkit. Additionally, the BAT/BEP guide developed for UCOPs was socialized and is published along with videos of the proper management of UCOPs in social networks in Ecuador and on the website of the Basel Convention Coordinating Center, the Stockholm Convention regional center for Latin America and the Caribbean. Additionally, it is worth mentioning that the activities in the La Libertad GAD have not yet materialized and will be carried out in the second half of the project.

Outcome 2: Reduction of new POPs releases (in tons)

Rating: MS

Studies and inventories have been carried out on the type of products containing POPs and a sampling and testing process is currently underway for 118 potential products, of which 2 products with new POPs should be prioritized. Although there are no reduction requirements for the mid-term, it turns out that there is a complex technical problem to solve, since the new POPs would be present in an immeasurable number of product types and commercial brands. Flame retardant foam has been identified as one of the products with the highest concentration of POPs; therefore, the project will prioritize actions on this type of product for restriction and/or elimination. On the other hand, most of these imported products do not include information in their technical specifications to discriminate them during the process of entry into the country, so the project will conduct a study in coordination with SENAE for the identification and creation of a tariff heading to facilitate their identification and restrict the entry of this product. The testing of 118 products will help to reduce the universe of products suspected of containing POPs, as well as to establish the concentration they may have, in order to define the two substances that will be subject to elimination and/or restriction, and in coordination with Customs, the next phase will be applied, which is the elimination and/or reduction of the consumption of these products in the country. Finally, as discussed in the project design section, the indicator is not correctly defined, since the reduction of "30 tons of emissions" of new POPs is understood to correspond to pure substances, which are found in minimal quantities in the products (for example, for flame retardant foams it would be 0.5%-1.5%)[[12]](#footnote-13). This means that there would be an extremely high amount of waste containing new POPs to be disposed of (approx. 6,000 tons if the new POPs content is 0.5%), if this indicator is maintained as defined.

Outcome 3: Reduction of Hg in ASGM

Rating: MS

A reduction of 561 kg of Hg is reported at the time of the MTE (target was 500 kg), thanks to the beginning of the implementation of the gold supply chain and commercialization strategy carried out by the program with mineral processing plants, mineral laboratories and artisanal miners, which is complemented by the support provided to "jancheras" women.

The issue is that there is no reliable way to measure this indicator, due to the refusal of the beneficiaries to acknowledge the use of Hg (which has been prohibited since 2015 by the Mining Law), so there are no real usage figures. Estimates for Hg reductions have been made assuming that trained people adopt the new practices, a situation that is unrealistic, as beneficiaries need to be followed up first to determine who is implementing the good practices before making estimates for Hg reductions. Unfortunately, due to the effect of the pandemic, it is not possible to corroborate that the new practices were adopted by women and trained miners. Estimates will also be unreliable for processing plant upgrades, for the same reasons given above.

On the other hand, progress was made in the evaluation of the baseline for Hg uses defined for ASGM in Camilo Ponce Enríquez, Portovelo and Chinapintza, and it was decided to change the implementation of the mobile training plant for a strategy to improve the supply of gold to the retail marketing chain, consisting of supporting 2 gold ore analysis laboratories to be sold to 5 processing plants strengthened by the project, which are already selected in coordination with the MAATEC and MERNNR. In this regard, work is being done with laboratories and processing plants, but there are important barriers to solve: i) mistrust between miners and plants; ii) the jancheras are not recognized by law, so the plants cannot process mineral coming from them, therefore the actions that are being carried out with them promote a change in economic activity; iii) according to the interviews carried out, it has been found that if ASGMs are regularized, the obligations they take on are very strong in terms of taxation and ways of billing, declaring and recovering their taxes (by computation), which not all can meet, what this situation is going to have to be validated in practice during the second half of the project; iv) the registry for miners has been closed since 2016, but there are expectations that it will open again in the course of 2021.

Outcome 3: Mercury reduction in priority non-ASGM sectors

Rating: MS

The prodoc estimates a reduction in Hg of 35 kg/year, which would result in an estimated 175 kg at the end of the project. The goal at mid-term is 10 kg, of which 3.92 kg of Hg integrated in 14 tons of luminaire waste have been eliminated. The final elimination goal of 175 kg of Hg in sectors other than ASGM could be met by focusing on amalgams (between 470 and 528 kg considering a 30% - 40% Hg content) or with greater effort if medical equipment is prioritized (approximately 42 tons of waste). Currently, an Extended Producer Responsibility (EPR) model for disused luminaires is being worked on, as well as the necessary arrangements with Customs for the prohibition/restriction of Hg-added products. To solve the problem, the project has prioritized the prohibition and use of this type of products in the country, and has therefore identified the most representative Hg-containing products (lamps and amalgams) and also those already identified by the Minamata Convention, in order to present to the foreign trade authority a study of economic scenarios and a proposal for regulations to control imports of Hg-containing products into the country, which has already been developed. Additionally, the project developed an energy efficiency study for the province of Galapagos that identified a weakness in the management of household lighting fixtures, which is why in 2021 the project proposes to develop instructions to improve the integrated management of this waste throughout its life-cycle and to implement a pilot management model in Galapagos, which will also contribute to the elimination of Hg in products.

Outcome 3: Improved access to financing for the ASGM sector through the development/improvement of 2 financial products.

Rating: MS

The following financial mechanisms were developed: i) credit for ASGM and ii) 1 competitive fund. Although the financial mechanisms are elaborated and accepted by the authorities since 2019, the main one (ASGM credits) is not operational and has no start date. The project executing team and the UNDP country office are giving priority to this mechanism in the negotiations with the country's authorities so that it can be implemented as soon as possible.

The project also identified the "Entrepreneurship Credit" aimed at the general public and implemented by BanEcuador prior to the start of the project as suitable for the "jancheras", because its requirements are attainable for them. This type of credit - although available - has not yet been used by the "jancheras" and it is expected that after the financial training conducted within the framework of the CFMs, it can be requested by the "jancheras" during the course of the second half of the project.

The other mechanism that is operational is the competitive funds mechanism (CFM), which awarded 5 projects, three of which are being implemented since the last quarter of 2020, two started in the first quarter of 2021 due to the summer weather conditions and one is at least 6 months behind schedule due to administrative issues attributable to the implementing partner entity (EMGIRS).

It is worth mentioning that the La Libertad GAD and Amazon without Fire projects were assigned directly by the project, but the CFM procedure and review commission were used.

Regardless of the mechanism used for resource allocation, CFM beneficiaries indicated that the administrative process could be improved, as there is a considerable time lag between the awarding of projects and the signing of contracts, which has an impact on future implementation.

It is worth mentioning that the ASGM loan is for miners who have been legalized before, so the possibility of accessing this type of loan is considered by the project as an incentive for the regularization of "informal" miners. However, interviews conducted with ASGMs, processing plants and jancheras seem to indicate that there are other additional barriers to formalization, with the taxation system, issuance of electronic invoices, low schooling and access to technology being continuously mentioned as determining factors when starting the formalization process, not to mention that the mining registry has been closed since 2016, although it would apparently be reopening during 2021 to stimulate the country's economy.

As for the jancheras, the interviews show satisfaction with the CFM, but there is no intention to completely change their economic activity, but rather they see it as a complement to their main mining activity, so their greatest aspiration is to achieve legal recognition of their activity as miners.

In conclusion, the mid-term goal has been met thanks to the operation of the competitive funds, but there are problems in operationalizing the main tools, such as loans for ASGM and for processing plants to acquire technology and be able to buy gold from ASGM. The credit for the "jancheras" is available but has not yet been requested by any of them, which should occur during the second half of the project.

With respect to the payment of a reward for responsibly produced gold (additional value per kilogram of gold produced), to date there has been no progress due to the fact that the plants must first be strengthened to enable them to begin the evaluation process prior to certification, which is precisely what the project is working on now, aligned with the criteria that PlanetGold global generated for this activity.

Outcome 4: Number of people made aware

Rating: HS

It is reported that 126,600 people were made aware of chemical management through institutional strengthening activities for government agencies and public and private companies, and the execution of the "Allies for the Environment" campaign. Therefore, it is reported that the target for this outcome is exceeded.

Outcome 4: compliance with M&E requirements met

Rating: HS

Reported as exceeded, as 16 M&E requirements were applied (target was 13). A series of project execution milestones are cited, such as the kick-off workshop, annual reports, PSC meetings and especially an unfinished visit by a mission of the Independent Evaluation Office (IEO) of the GEF on the design and execution of the Mining component of the project, which had to be cancelled due to the onset of the health emergency and the evaluator was called to return to his country, for this reason and unfortunately, the report is not available. It is worth mentioning that this type of indicator for M&E would not be appropriate, as the GEF mid-term and final evaluations are mandated to analyze this aspect of the project, both in its design and implementation.

As a result of the above analysis and according to the indicators established in the Prodoc, this indicator can be considered as "fulfilled," but with the caveat that the indicator established is not adequate to measure this achievement.

Outcome 4: Preparation of reports, case studies, etc. summarizing lessons learned, best practices and experience for dissemination purposes.

Rating: HS

The mid-term goal was exceeded, with 37 publications (project achievements) and 3 case studies (development of a financial mechanism for artisanal mining, innovative solutions with gender integration, formalization of miners). In addition, videos were made and a space was opened on Flickr to upload photos.

Also, worth mentioning is the visit of Colombia and Peru to the country to share experiences in ASGM, as well as the visit of the project's executing unit to the POPs project in Bogota and Cali (Colombia), which constituted important activities for the exchange of experiences at the regional level.

During the second stage, it should be ensured that the material produced is used by the stakeholders and at the same time, design an exit strategy for the project, so that this component of the project effectively becomes a knowledge management component.



## Financial Issues

### Execution of funds

The project has a total financing of USD 49 million, of which USD 8.49 million comes from the GEF, while USD 40.57 million comes from co-financing, mainly from the MAATEC, MERNR, MSP and private entities, as shown in Table No. 9. The prodoc does not include a breakdown of co-financing by project outcome, so it is difficult to estimate the contribution for each of them, except for Agrocalidad and the private ones, where it is specified that the contributions come from the inventories of pesticides and disposal of empty containers (Outcome 2).

Table No. 9: Total project resources according to Prodoc (in USD)

|  |  |  |  |
| --- | --- | --- | --- |
| Institution/Type of Financing | Cash | In-kind | Total |
| GEF | 8,490,000 | - | 8,490,000 |
| Government |  |  |  |
| MAATEC | 3,102,082 | 12,902,459 | 16,004,541 |
| MERNR | 3,540,834 | 9,431,442 | 12,972,276 |
| MSP | - | 4,797,818 | 4,797,818 |
| Agrocalidad | - | 1,453,220 | 1,453,220 |
| other government agencies |  | 1,412,325 | 1,412,325 |
| Sub-total Government | 6,642,916 | 29,997,264 | 36,640,180 |
| Private | 2,498,373 | 1,432,875 | 3,931,248 |
| Project total | 17,631,289 | 31,430,139 | 49,061,428 |

Table No. 10: Distribution of GEF resources and estimated annual expenditures according to Prodoc.

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Outcome/year | 2018 | 2019 | 2020 | 2021 | 2022 | 2023 | Total per outcome (USD) |
| ***1:*** *Strengthen institutional capacity and the legal and regulatory framework* | 112,018 | 364,803 | 196,486 | 88,897 | 37,796 |  | 800,000 |
| **2:** Eliminate POPs stockpiles and reduce the use and release of initial and newly listed POPs. | 240,963 | 549,110 | 841,109 | 1,497,194 | 339,624 |  | 3,468,000 |
| **3:** Reducing the use and release of mercury from priority sectors | 465516 | 1,016,759 | 1,010,716 | 566,832 | 238,177 |  | 3,298,000 |
| **4:** KM and M&E | 91500 | 74,565 | 125,165 | 89,564 | 139,206 |  | 520,000 |
| **5:** Management | 64,171 | 80,800 | 97,429 | 80,800 | 80,800 |  | 404,000 |
| Total (USD) | 974,168 | 2,086,037 | 2,270,905 | 2,323,287 | 835,603 |  | 8,490,000 |

*Table No. 11: Actual expenditures as of March 15, 2021 (in USD)[[13]](#footnote-14)*

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| ***Outcome/year*** | ***2018*** | ***2019*** | ***2020*** | ***2021*** | ***Total per outcome*** | ***Prodoc (\*)*** |
| R1 | 30,196 | 198,889 | 152,419 | 20,891 | 402,397 | 673,307 |
| R2 | 46,009 | 1,038,320 | 750,310 | 51,246 | 1,885,886 | 1,631,182 |
| R3 | 54,589 | 550,546 | 462,090 | 56,174 | 1,123,398 | 2,492,991 |
| R4 | 433 | 45,349 | 49,451 | 18,296 | 113,529 | 291,230 |
| R5 | 24,516 | 71,081 | 22,952 | 3,603 | 122,153 | 242,400 |
| ***Annual Total*** | ***150,877*** | ***1,844,689*** | ***1,392,316*** | ***150,210*** | ***3,538,092*** | ***5,331,110*** |

(\*) Estimated level of expenditures by Prodoc at 3 years of implementation

Table No. 11 shows the evolution of project expenditures, where to date approximately USD 3.54 million (about 42% of GEF resources) have been disbursed, which is approximately 33% below what was planned in the prodoc for the first 3 years of project execution (63% in prodoc versus 42% executed), where it is worth mentioning that the effective start of the project was on 20/8/2018, that is, 5 months after the signing of the project document. There is a small difference of 2% between the March 2021 reconciliation provided by the project and the UNDP ATLAS figures, so this difference does not affect this analysis of project expenditures.

In addition to the overall expenditure under plan, the expenditure projection for all outcomes is below expectations for each of them, and there is a downward trend in all expenditures by outcome, as can be seen in Fig. No. 4. At the moment, the evaluator has not had information available on the resources committed for 2021, but the project estimates that it could reach an expenditure of approximately USD 1.8 million by the end of this year if everything goes according to plan. In this regard, it should be mentioned that the annual project budgets for 2018, 2019 and 2020 have all been adjusted downwards (2018 with much lower expenditures, 10% in 2019 and 30% in 2020), due to the fact that the planned resources could not be executed. This situation is due in part to the country's institutional instability problems, as well as to the major impact of the pandemic, which delayed activities that required field work and presence in the territories.

Outcome 2 (elimination of POPs stockpiles, reduction of UPOPs at 2 waste treatment sites, remediation of a site contaminated with UPOPs and pesticides, elimination of products containing new POPs and Hg) is the one that has been implemented the most, even having a slight over-execution during 2019. As reported in the 2020 PIR, the inventory of expired pesticides conducted in 2017 by Agrocalidad/APCSA/INNOVAGRO had to be conducted again from scratch by the project and identified the main locations where these residues were stored which included new and old POPs as well as UPOPs. As a result of this effort and coordination with key stakeholders, the elimination goal established for the entire project was exceeded in 2020.

For year 4 (as of March 2021[[14]](#footnote-15)), the prodoc anticipated an approximate expenditure of USD 1.5 million for outcome 2, a difficult situation to achieve, since as of March 2021 only USD 51 thousand of the USD 448 thousand budgeted for 2021 for this outcome had been disbursed, in addition to the fact that the entire program budget would amount to USD 1.6 million, which if executed to 100%, would leave a remainder to be executed in year 5 (2022-March 2023) close to 40% of the project's total GEF resources, as shown in Table No. 12.

With respect to outcome 3 (reduction of mercury in ASGM, processing plants and access to financing for ASGM), only 45% of what was foreseen in the prodoc has been disbursed. There are several reasons for this situation (apart from the COVID-19 pandemic), the main ones being the impracticality of setting up a mobile processing plant to demonstrate mercury-free gold mining practices to miners, together with the delay in implementing a financial mechanism to support ASGM and upgrade five mineral processing plants. This situation should be carefully analyzed, since the budget for outcomes 2 and 3 constitute 80% of all project resources.

Therefore, it can be concluded that, *at the current rate of expenditure, at the end of the fifth year of the project it is likely that there will be a significant remainder* of GEF resources, since the pandemic will continue perhaps well into 2022 and there will also be a change of government in May 2021, a situation that is known to generate additional delays because the new authorities will have to learn about the scope and outcomes of the project.

*Table No. 12: Annual project budgets, approved by UNDP and PDC (in USD)[[15]](#footnote-16)*

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Outcome/year | 2018 | 2019 | 2020 | 2021 | Total per outcome |
| R1 |  | 222,430 | 190,917 | 155,204 | 568,552 |
| R2 |  | 1,024,950 | 744,847 | 448,358 | 2,218,155 |
| R3 |  | 513,065 | 466,214 | 806,646 | 1,785,925 |
| R4 |  | 57,322 | 54,166 | 170,877 | 282,365 |
| R5 |  | 74,544 | 41,207 | 25,100 | 140,851 |
| Total | - | 1,892,312 | 1,497,351 | 1,606,186 | 4,995,849 |

Finally, with respect to the composition of the expenditure, it is worth mentioning that 53% of the total expenditure executed to date corresponds to 11 companies with contracts in excess of USD 80 thousand, amounting to approximately USD 1.88 million, and is concentrated in outcomes 2 (37%) and 3 (10%), as shown in Table No. 13.

Table No. 13: Distribution of the main contracts of the project (USD).

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| ***Supplier Name*** | ***R1*** | ***R2*** | ***R3*** | ***R4*** | ***R5 (management)*** | ***Total*** |
| (blank) | 76,304 | 358,127 | 298,121 | 61,298 | 29,520 | 714,100 |
| VEOLIA ES FIELD SERVICES LTD |  | 300,074 |  |  | 399 | 300,472 |
| YETIFILMS CIA. LTDA. | 3,483 | 242,891 | 441 | 3,338 | 416 | 250,569 |
| G M TRATAMIENTO INTEGRAL DE DESECHOS |  | 224,113 |  |  | 297 | 224,410 |
| ADHOC CONSULTORES ASOCIADOS SC |  | 209,085 |  |  | 232 | 209,316 |
| SERCONSITMA CIA. LTDA. | 103,975 | 279 | 71,792 |  | 715 | 176,761 |
| ECUAMBIENTE CONSULTING GROUP CIA. LTDA. |  | 1,154 | 149,612 |  | 416 | 151,181 |
| OROZCO AVILA MARIA CAROLINA |  |  | 132,160 |  | 240 | 132,400 |
| ALTIOR CIA. LTDA. |  | 129,327 |  |  | 120 | 129,447 |
| HIDROGEOCOL ECUADOR CIA LTDA |  | 118,048 |  |  | 238 | 118,286 |
| COMINANEX CONSULTORIA MINERALES Y ANEXOS |  | 87,606 |  |  | 180 | 87,786 |
| VILLACIS LOPEZ VERONICA PAOLA | 85,277 |  |  |  | 715 | 85,991 |
| ***Sub-total contracts > USD 80K*** | ***269,038*** | ***1,670,703*** | ***652,126*** | ***64,635*** | ***33,486*** | ***2,580,719*** |
| ***Sub-total Other contracts < USD 80K*** | ***133,358*** | ***215,183*** | ***471,272*** | ***48,894*** | ***88,666*** | ***957,372*** |
| ***Total project expenses*** | ***402,397*** | ***1,885,886*** | ***1,123,398*** | ***113,529*** | ***122,153*** | ***3,538,092*** |

Fig. No. 4: Comparison of actual expenses by outcome and total vs. what was planned in the prodoc

|  |  |
| --- | --- |
|  |  |
|  |  |
|  | Total Effective |

Co-financing

As shown in Table No. 9 above, total in-kind and cash co-financing amounted to US$49 million from the GoE and US$3.93 million from private initiatives, especially those linked to agrochemical imports and sales.

As shown in Table No. 14 below, so far the co-financing goals committed by the GoE have been exceeded by 17%, while private contributions have only exceeded the original commitment by 23%. A total of 42% of GEF cash resources have been disbursed.

The Project Executing Unit collects information from project participants through a universal format in which stakeholders self-report their contributions in a detailed manner. In general, government institutions report their budgets and activities related to chemical substance programs and activities (MAATEC), other the hours of their personnel that have received training (MSP), inspections and programs for ASGM (MERNNR) and actions related to the identification and disposal of obsolete pesticides and empty containers (Agrocalidad and pesticide companies).

Table No. 14: Project co-financing table as of March 2021 (in USD)[[16]](#footnote-17)

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| ***Co-financing source*** | ***Name of co-financing entity*** | ***Co-financing type*** | ***Amount confirmed as of CEO authorization date (US$)*** | ***Amount actually contributed as of the Mid-Term Evaluation date (US$)*** | ***Real percentage with respect to expected co-financing*** |
| Multilateral | GEF | Grant | 8,490,000 | 3,538,092 | 42% |
| Government | MAATEC | In-kind | 16,004,541 | 7,021,894 | 44% |
| Government | MERNNR | In-kind | 12,972,276 | 32,175,997 | 248% |
| Government | MSP | In-kind | 4,797,818 | 2,658,467 | 55% |
| Government | Agrocalidad | In-kind | 1,453,220 | 871,932 | 60% |
| Government | Others Agencies | In-kind | 1,412,325 | - | 0% |
| ***Total Private Companies*** | ***Several*** | ***In-kind*** | ***3,931,248*** | ***891,135*** | ***23%*** |
| ***Sub-total Government*** | | | ***36,640,180*** | ***42,728,290*** | ***117%*** |
| ***Total co-financing*** | | | ***49,061,428*** | ***47,157,516*** | ***96%*** |

## Monitoring and Evaluation Systems (M&E)

### The Project's Steering Committee (PSC)

This body is chaired by the MAATEC and is also made up of representatives of the UNDP and MERNNR. The project coordinator organizes the meetings and participates in this instance with the right to speak, as does the GEF focal point (MAATEC) in Ecuador.

The PSC has met 9 times between November 2018 and March 2021. In 2018 it had a meeting in November, while in 2019 and 2020 it met every 3 months, so far in 2021 it has not met.

The Committee has fulfilled its strategic role, since it has discussed key issues of the project such as the change of strategy in the construction and start-up of the mobile training plant for ASGM (Outcome 3), in favor of supporting a strategy of strengthening of 5 gold mineral processing plants and 2 laboratories that carry out analyses that build trust in ASGMs. It also made the important decision to support 6 municipal hospitals, authorizing the purchase of 6 hospital waste incinerators in the framework of the COVID-19 pandemic, which were not finally procured because the equipment offered by the tenderers was not suitable to carry out the treatment of these wastes.

Additionally, the PSC has approved reallocation of funds to implement project activities, along with adjusting annual budgets.

Regarding its composition, the prodoc establishes that the MAATEC, UNDP and the MERNNR will be part of this instance, but a certain imbalance is observed in the diversity of those attending these meetings (guests plus members of the PSC) being markedly in favor of the MAATEC. The PSC also lacks key stakeholders for the project, such as, for example, for the issue of POPs pesticides (Ministry of Agriculture) and associations from the business world to address the issue of empty containers. Regarding the creation of financial mechanisms for ASGM, the participation of the BCE and BanEcuador, for example, would also be desirable. For products with Hg, a more active participation of the MSP would have been desirable, while in the discussion of products with new POPs, Customs would have been more actively included.

Incorporating a reasonable number of stakeholders into the PSC could have an effect of greater ownership of the project's outcomes, since they would be involved in key decisions and the strategies designed, a situation that is not equivalent for the working groups, which, as currently constituted, have no voice in the PSC.

### The Technical Advisory Committee and Working Groups

The structure of the PSC includes a Technical Advisory Committee, whose president would be nominated by the MAATEC and would be made up of delegates from the MAATEC, MERNNR and UNDP, as shown in Fig. No. 2 of the implementation arrangements section of this report. The project team would be the secretary of this committee.

According to the Prodoc, 4 working groups would be established, which would be supervised by the Technical Committee and convened by the project executing team, who would coordinate and prepare the minutes of each meeting.

The executing team changed this conformation of the project and formed working groups where representatives of different institutions participate (POPs and Hg in products, POPs pesticides, Medical waste and Dioxins and Furans, artisanal and small-scale gold mining).

According to the information provided by the project executing team, this Technical Committee has been chaired on a rotating basis between the Coordinator of the Hazardous Area of the MAATEC and the Undersecretary of ASGM and the director of Artisanal Mining of the MERNNR. This Committee has not been able to be officially established due to the constant changes of authorities, but it has functioned uninterruptedly since the beginning of the project and on several occasions, its members have been invited to the PSC.

For the working groups the situation is similar, these groups have been formed unofficially, but focal points have been requested in the competent ministries and institutions to work on the issues involved. Unfortunately, this informality has made it impossible to keep official minutes/acts, since the officials do not sign anything for which they do not have an official and definitive delegation from their authorities.

### Reports

The project executing team reports periodically to UNDP and the MAATEC, through semi-annual and annual reports (progress reports, PIR, quarterly reports). Furthermore, it also reports to the PSC before and after the meetings and updated the core indicators for the MTE.

After the interviews and analysis of the different project implementation reports, the general observation of these reports is that they focus on the fulfillment of indicators as established in the logical framework of the project, which were already discussed in Section No. 2 and which are not SMART and do not reflect a measure of outcomes, but rather the achievement of specific outputs, such as number of trainings, people trained, number of proposals, etc. The only exception refers to the quantities of chemicals eliminated by the project, as this is a measure of environmental and health risk exposure.

The reports also do not reflect the real progress of the project, since these indicators are mostly exceeded, and are therefore considered a measure of the overall success of the project, a situation that does not reflect reality as there are a series of implementation problems - apart from those caused by the pandemic - that are not shown in their entirety. Examples of the above are the replacement of the mobile training plant, where the reason for this change is not explained in the PIRs (feasibility, administrative and ownership problems, costs, lack of interest of stakeholders), or the delays in the execution of projects awarded by the CFM and La Libertad GAD, for example (delays in signing contracts) or the current status of the procurement of incinerators for the disposal of hospital waste for municipal hospitals. The project reported that these situations in the contracts occurred after July 2020, so they will be reported in the 2021 PIR.

Neither do the reports record the reallocations of resources approved by the PSC, as well as the adjustments to the budget made year after year to balance the disbursements with the budgeted, giving the impression that budget execution is normal.

### Planning

The project team uses different types of tools to plan and monitor its activities. First, there are the AOPs where the activities to be carried out and their corresponding budgets are found. Spreadsheets are also used to verify compliance with contracts and services. Although the type of AOP in Excel spreadsheets is standard in UNDP projects, it is not possible to verify a defined strategy that supports these AOPs, such as an explanation of why certain activities are carried out, which are key, which depend on other stakeholders and which are parallel or if they depend on a previous activity.

Adding a short explanatory document to the AOPs would give you a better idea about the strategy you are trying to implement and discover the reasons for any deviations in terms of implementation and their impacts on budgets.

### Adaptive Management

It is worth mentioning that the institutional and political context of the country, together with the global health crisis, have been critical factors that have strongly impacted the implementation of the project. From 2014 to date, the country's income has dropped substantially, which has meant strong budget cuts in all public agencies and the merger of some of them to lower costs (the case of MAATEC and MERNNR). It has also resulted in institutional crises that have meant a continuous rotation of ministerial authorities, which in the case of the MAATEC has had 5 ministers in a period of 4 years, with the corresponding changes at mid-levels of the institution.

To this, the impact of the COVID-19 pandemic in the country should be added, which has resulted in a series of restrictions on the mobility of people, cutbacks in public servants and the redirection of financial resources to the health sector to address this serious health crisis.

Faced with this scenario, the project team has had to execute activities focusing mainly on the creation of technical inputs and POPs elimination experiences in order to move forward within a very uncertain and changing institutional context, expressed in a high turnover of authorities and public officials, which has brought a workload and responsibility beyond what is desirable, This has left the perception among its partners that even though there is a good relationship, there is a need to improve the participation spaces for MERNNR and MSP, as well as in some internal instances of the MAATEC, especially those related to the legal and regulatory aspects of the project, in order to improve the ownership of the project's outcomes.

On the other hand, important changes have been made to one outcome of the project: the elimination of the mobile training plant for the strengthening of mineral analysis laboratories and processing plants in order to achieve better processing and commercialization conditions for ASGM miners.

### Risk Management

As mentioned above, both the prodoc and the SESP see political and institutional risks as the main risks[[17]](#footnote-18), a situation that has occurred in practice with mergers of ministries (MAATEC with SENAGUA and the Ministry of Hydrocarbons with Mines and Electricity in 2018) and changes of authorities at the level of ministers in the MAATEC (5 between 2018 and March 2021) and the MERNNR, who are the main partners of the project.

The risk of lack of coordination among the stakeholders of governmental entities was underestimated and has had an impact on the implementation of the project, mainly due to the reduction of personnel in the MAATEC (some estimate it at around 60%), in the MERNNR and MSP, so the interest or capacity of the institutions to coordinate has decreased significantly in the country.

The project executing team has responded with an execution strategy focused on technical stakeholders, which has somewhat mitigated the negative effects of the country's institutional instability. For its part, UNDP has made all its efforts supporting the project with each change of authorities and promoting the participation of the stakeholders in the project.

The previous explanation is necessary because these risks are not reported in the PIRs, but rather the project delays are explained as normal situations at the beginning of any project.

In May 2021, a new government with a different direction from the previous one will assume the presidency, which means an opportunity for the project in terms of positioning, but at the same time, it has a high uncertainty, since all economic and institutional efforts are focused on overcoming the pandemic that is sweeping the country.

## Stakeholder Engagement

The project has carried out important dissemination and training activities on the subject of chemicals, POPs and Hg management among public officials, involved companies and the general public.

Interviews with project partners indicate that the implementation strategy followed by the project (centralized in the executing unit) had a cost in terms of participation and communication with institutional stakeholders, which led to a perception of frustration among some of them, generally related to the lack of continuity in the information and implementation of project actions involving them.

It is worth mentioning that most of the partners have given positive feedback on the project activities, but it is also considered that there is room for improvement in terms of participation in some specific processes. An example of the above would be to participate more actively in the preparation of the ToR, improve coordination with the contracted consultants and show greater flexibility with the observations made on the reports issued by these consultants. In general, the perception of some important partners is that before carrying out the activities that involve them, the project team should plan from the beginning - together with them - the scope of these activities and not leave this stage when they are already in execution. It is worth mentioning that the perception of some of these stakeholders is also a consequence of the continuous changes of authorities and heads of public agencies, where continuity is also lost in terms of knowledge of the project's objectives, its implementation modality and what was agreed with the previous authorities.

On the other hand, some private partners had high expectations regarding the project's contribution to improving the management of empty pesticide containers, which has led to dissatisfaction with the support received, as well as reluctance to make commitments and transfer information on this issue.

Regardless of whether the situations mentioned above are real or not, the perception of how some of the partners view the project execution is that of little participation and consultation on fundamental issues, which would have to be reversed in the second stage of project implementation. If this perception is maintained, it could lead to the danger of carrying out activities that do not find acceptance or ownership among the stakeholders involved, which could mean limited cooperation and an excessive burden of responsibility for the project executing team. It should be mentioned that the executing team is not entirely responsible for the situation of limited contact with the stakeholders, since it has had serious difficulties to carry out work in the field due to the restrictions caused by the pandemic, especially with the miners and mineral processing plants, for whom direct contact is key to build up trust.

## Gender Policy

The project has a gender policy developed during the project design (2016) and which has been updated since 2019. In general terms, it makes a social, cultural, labor and economic diagnosis of the role of women in the project's areas of intervention and identifies actions to mainstream this dimension in project activities. This strategy is clearly implemented in specific projects for “jancheras” women where the executor and manager is the jancheras women's organization. It is also defined in the goldsmithing project in Portovelo, where women will learn the trade as an alternative to generate greater income for their families.

A "Case Report" format has been developed, which includes a gender mainstreaming approach in the context in which all the project's consultancies were developed, some of them are broader analyses on the differentiated impact of hazardous chemicals in their life-cycle, and others do respond to specific practices identified during their development. The objective of this format is to incorporate a gender analysis and approach in all project activities and to promote the gender approach also in the Program's providers portfolio. Finally, actions have been deployed to promote gender equality in the sector by incorporating the topic in training sessions, compiling life stories and communication pieces of national, regional and international scope, in order to raise the visibility of women's participation in historically masculinized sectors.

The project also includes some gender indicators, such as the participation of women among the beneficiaries, but it would be important to include some specific indicators for the initiatives implemented, for example, in the case of the jancheras and goldsmithing, to collect information on new sources of permanent work established, behavioral changes in the beneficiary families, increase in income levels and self-esteem, for example.



## Remaining barriers

### Management

During the second stage of the project, some institutional mechanisms will have to be improved, such as improving the speed of the project for awarding and signing contracts, since one of the most common complaints was how slow these processes were.

Also, a point to improve is the response of the MAATEC regarding the requirements of the project in order to improve the implementation of its activities, such as, for example, the authorizations to the UNDP to transfer equipment to the project partners.

It is also necessary to improve communication with internal stakeholders of the MAATEC, such as the legal advisory department, in terms of allowing more participation in the review of ToR and partial reports of consultancies whose purpose is to propose legal reforms and new regulations.

An important aspect to improve is the project's communications with its partners, allowing greater participation from the very beginning of the activities to be carried out, in order to avoid pitfalls during implementation and improve cooperation and ownership of the outcomes by the partners.

It will also be necessary to improve the involvement of partners such as the MERNNR, MSP and Customs, without which it will be difficult to continue eliminating waste in the health sector, to make progress with artisanal miners and to identify and control products containing Hg and POPs.

## Sustainability

### Financial

Rating: ML

The current economic situation of the country, due to the drop in permanent oil revenues, is a potential risk to sustainability. This is because the budgets of the ministries, including the MAATEC and MERNNR, have consistently decreased over the last 5 years and there are no conditions to ensure stable financing to maintain the project's outcomes once the project is completed.

### Social and Political

Rating: ML

The current political and health instability in the country is expected to continue at least until 2022, which could affect the project's execution timeframe.

### Institutional and Governance

Rating: ML

It is not yet known what actions the new government will take, but it will be a key task to keep the project with some visibility and priority in both the MAATEC and MERNNR, as the major priority will be to combat the pandemic and recover the economy.

### Environmental

Rating: L

In this area, no major changes are perceived compared to the current situation.

1. Rating of the Project

| Parameter | MTE rating | | Achievement description |
| --- | --- | --- | --- |
| Project's Strategy |  |  | Does not apply at this stage |
| Progress in achieving outcomes | *Extent of achievement of the global environmental objective:* To protect human health and the environment through the adoption of environmentally sound management and life-cycle management of chemical substances in Ecuador. | HS | The protection of the population's health has been improved by the elimination of pesticide and Hg residues, exceeding the elimination goal established by the project. The challenge for the second stage of implementation is for the project to ensure, through its proposals and regulatory measures, that the country can update the inventories of expired pesticides and Hg residues and the application of good practices for their storage and proper final disposal. |
| *Extent of achievement of the development objective:* Establishment of institutional association and coordination mechanisms for financing the sustainable management of chemicals | MS | Although the proposals for financial mechanisms and regulatory and institutional reforms have been submitted, there is still no timeframe for the Government of Ecuador to formally approve and subsequently implement them. The project has been very effective in training and raising awareness among public officials, private stakeholders, community organizations and the population in general about the harmful effects and proper management of products and waste containing POPs and Hg . Institutional instability has hindered this achievement, which is why the project and UNDP could intensify their efforts with the new authorities during the second half of the project's implementation. |
| *Extent of achievement of Outcome 1:* Strengthen the institutional capacity and the legal and regulatory framework for the Sound Management of Chemical Substances (SMC) based on a Life-Cycle Approach. | MS | Although training plans for public and private institutions were designed and implemented, including 2 POPs and Hg analysis laboratories, the predominant outcome of this component is the establishment of an institutional coordination mechanism to develop and implement medium and long-term policies for chemicals, which has not yet been achieved. To date, there has been a proposal since 2019 that has not been approved, and there are no deadlines or commitments from the MAATEC to convene the committee that should approve this important initiative. Institutional instability has undermined this achievement, which is why the project and UNDP could intensify their negotiations with the new authorities during the second half of the project's implementation. |
| *Extent of achievement of Outcome 2:* Elimination of POPs stocks and reduction of the use and release of initial POPs and those recently listed (including those contained in products). | S | Although elimination greater than the prodoc target for POPs and related pesticide residues was achieved, there is uncertainty in the elimination of new POPs in products. Furthermore, the estimation of the reduction of UPOPs emissions in trained companies and due to forest fires must be specified, since the training alone is not enough to automatically attribute the emission reduction/elimination. The decontamination of contaminated sites is also on hold, as the PRAS activity only consisted of analyzing the soils at one site, with the result that the site was not contaminated; therefore, analyses should be performed for one or two additional sites before concluding this activity. The project prepared proposals for standards and approved a project to improve a residential waste dump site in the La Libertad GAD, to be implemented during the second half of the project. As has happened with the other outcomes, the pandemic has undermined the achievement of project outcomes, by abruptly changing the government's priorities. A stabilization of the institutional situation and of the pandemic is expected during the second half of the project, so it is estimated that the desired outcomes can be achieved. |
| ***Extent of achievement of Outcome 3****:* Implementation of measures for the reduction and elimination of Hg from priority sectors. | MS | The prodoc estimates a reduction in Hg of 35 kg/year, which would result in an estimated 175 kg at the end of the project. The goal at mid-term is 10 kg, of which 3.92 kg of Hg integrated in 14 tons of luminaire waste have been eliminated. The final reduction goal of 175 kg of Hg in sectors other than ASGM could be met by focusing on amalgams (between 470 and 528 kg considering a 30% - 40% Hg content) or with greater effort if medical equipment is prioritized (approximately 42 tons of waste). There is a policy proposal for restricting the importation of products with Hg, which, if approved by COMEX, would allow the goal to be reached. Although a reduction of 561 kg is reported for the elimination of Hg in ASGM due to the adoption of good practices, its corroboration is not reliable and it cannot be assumed that all those trained have adopted the good practices. This calculation method based on assumptions stems from the fact that the legal prohibition on the use of Hg does not allow for the collection of information in the field. On the other hand, the credit mechanism for the formalized ASGMs is not yet operational. To encourage informal ASGMs, the mining registry -which has been closed since 2015- is expected to be reopened during 2021, which would allow the project to have a greater incentive for this type of miners. |
| *Extent of achievement of Outcome 4:* Raise awareness, ensure project follow-up, and disseminate project outcomes and experiences. | HS | This outcome has exceeded the prodoc's expectations in that it has generated a public awareness campaign and produced a large number of studies, guides and dissemination material. However, the challenge ahead is to turn this component into one of real knowledge management, where project beneficiaries and stakeholders can exchange experiences, draw lessons learned and promote scaling up of outcomes. Furthermore, a project exit strategy should be developed. |
| Project execution and adaptive management |  | S | The executing team has managed to navigate difficult political and institutional circumstances, compounded by the pandemic, which has forced a change in the way of interacting with partners and beneficiaries. However, the risk assessment reported in the PIRs could be improved during the second half of the project, so as not to minimize the impacts of these risks (institutional and stakeholder) on project execution caused by the political and institutional crisis that has been dragging on in the country for more than 4 years. |
| Sustainability |  | ML | There is a high probability that it will not be possible to allocate sufficient resources to sustain some of the project's achievements, due to the economic, institutional and health problems the country is facing. |

5. Conclusions

## Design

The analysis of the prodoc and the interviews carried out show that the project design has several flaws that will need to be reviewed during the second stage of implementation. Indeed, several of the indicators are not SMART, since some are difficult to measure and corroborate (such as Hg decreases in ASGM), while others refer to products or deliverables, but do not measure a change with respect to the baseline (for example, number of people sensitized can be an indicator of activity, but the indicator that would measure a change would be, for example, the number of practices adopted thanks to training or awareness raising).

The statements for the outcomes established by the prodoc also require further elaboration, especially outcome 4, which should clearly be the knowledge management component to scale, disseminate and share the experience learned at the local, regional and global levels, together with extracting the lessons learned and formulate an exit strategy for the project.

It should also be mentioned that both the indicators and the outcome statements have a very modest ambition -with the exception of the eliminations- as well as being ambiguously worded, allowing several interpretations for the same outcome or indicator, which translates into the project generally reporting as met or exceeded its goals, which generated high expectations in its ratings during the evaluation process.

## Execution

The first point to be highlighted is that the country's institutional instability, dragged since 2017, affected the implementation of project activities, mainly due to the high turnover of authorities and the discontinuity in institutional contacts and agreements reached by the project executing unit with the various institutional partners.

Subsequently, the crisis unleashed by the pandemic put on hold the field activities where personal contact is relevant to build trust, especially the relationship with ASGMs. The combined effect of these factors was that the different regulatory proposals had not been approved or could not be implemented (ICM, ASGM credits and other initiatives), as well as a delay on the field activities with the miners.

Despite the above, the project has made great progress, especially in the elimination of POPs pesticide residues (Component 2) and Hg in luminaires (Component 3), where the final goals were exceeded in advance.

Additionally, the project has prepared 9 policy and regulation proposals and submitted them to the authority, among which the following can be highlighted: (1) Articulated Organic Environment Code (COA, for its Spanish acronym); (2) Ministerial agreement proposal for the update of instructions for the registration of chemicals and chemical substances; (3) Proposal for the Regulation of the National Committee on Environmental Quality; (4) Proposal for the modification of Ministerial Agreement 140; (5) Technical guide for pesticides; (6) Technical guide for products with Hg; (7) Ministerial Agreement proposal for the POPs Green Point incentive (under development); (8) Incineration Ministerial Agreement proposal (under development) and (9) Safety Cells Ministerial Agreement proposal (under development).

Proposals for credit mechanisms for ASGM miners were also developed and an existing credit type with potential application to finance janchera entrepreneurships was identified, among the most important ones. A competitive funds financial mechanism is also being implemented to enable community organizations such as jancheras, municipalities and universities to implement innovative projects to seek new trade alternatives and new income for women's organizations, improve waste disposal infrastructure, and explore bioremediation and heavy metal recovery techniques on riverbanks contaminated by gold mining activities.

During the second stage of its implementation, the project faces challenges, some beyond its control, such as the political, economic, social and health instability that the country is going through for several years, which has meant the dismissal of numerous public sector employees, affecting the MAATEC and MERNNR, the project's main implementing partners, and that will continue to affect the implementation and achievements of the project.

The remaining challenges refer to the fact that most of the regulatory, financial and coordination proposals have not been approved and the most relevant ones, such as the ICM and the credit mechanism for ASGMs, have not been approved and there is no foreseeable timeframe for this to take place. Furthermore, credit for jancheras' entrepreneurships is available, but with no applications at the moment.

On the other hand, the strategy for implementing Hg-free technologies for mineral processing plants and related laboratories is defined, pending implementation during the second half of the project.

The strategy to address the control and elimination of new POPs and Hg in products is encountering difficulties, since these compounds are found in minimal quantities in an immeasurable variety of product types and brands, coupled with the fact that the tariff headings do not discriminate between products with or without these chemicals and that their technical specifications do not include information that allows knowing the type of POPs associated with the product.

Regarding the reduction of Hg in sectors other than ASGM, what has been collected so far reached 3.9 kg of the target of 10 kg of Hg for the mid-period. The final elimination goal of 175 kg of Hg could be met by targeting products with some Hg content, such as amalgams and medical equipment.

There are regulatory aspects such as, for example, the proposal for the discharge of mining effluents to surface waters and river banks that will require further involvement of the implementing partner MERNNR, since this entity has the authority in this area, as well as greater knowledge of ASGM mining.

## Planning, M&E

The results of the 73 interviews carried out show that most of the project partners positively value their activities and have provided important institutional support to strengthen the management of waste and products with POPs and Hg. There is also a clear perception on the part of some of the project partners, such as the MSP, MERNNR, the beneficiary private companies and some MAATEC instances, that greater communication with them is needed, as well as their more active inclusion in the design and implementation of project activities. If this perception is not improved, there could be a situation in which there is no real cooperation, let alone ownership of the project outcomes.

There was also concern among some of the project's beneficiaries and partners that the time required to award and sign contracts for the projects awarded through the Competitive Funds Mechanism (La Libertad GAD, the two EPN projects, goldsmithing and the EMGIRS Educational Eco-center) could be improved, as their execution is at least six months behind schedule.

The project has complied with all reporting and M&E formalities required of GEF projects, but the way of reporting based on indicators that are not appropriate to measure the project's progress towards its outcomes in most cases (e.g., output rather than outcome indicators, low ambition, some difficult to measure) means that most of the targets are shown as met and/or exceeded, minimizing the challenges that the project must face. This situation occurs regardless of the reporting format and scheme established by UNDP, which has been applied in its entirety by the project.

The risk analyses performed so far also do not show an adequate level of analysis to explain the delays in some project activities.

Regarding stakeholder participation, most of the actions are concentrated in the project executing team, resulting in a weak involvement and limited mainly to training and review of progress reports of the consultancies, so that stakeholders such as MERNNR and its directorates, the MSP and instances within the MAATEC itself do not show greater ownership of the project activities.

Regarding the PSC, it has fulfilled its strategic role and has approved important modifications to the project, such as the elimination of the mobile pilot plant and the authorization for the purchase of six incinerators for municipal hospitals, whose purchase process was not carried out because the equipment subject to this contracting process did not comply with the objective of the purchase, which is to contribute to the environmentally sound management of the sanitary waste generated in the context of the health emergency due to the COVID-19 pandemic without the generation of uncontrolled hazardous substances in this process.

Financial

Regarding budget execution, the disbursements of GEF resources reach to 44% of the total (approx. USD 3.5 million), while the reported co-financing amounts to 96% of what was committed in the prodoc, reaching USD 47 million as of March 2021. However, co-financing by private companies only reaches 23% of what was initially committed.

The analysis indicates that expenses have been 33% below what was planned in the prodoc for a 3 year implementation period, where the level of disbursements by outcome has never reached the initial estimate, observing a worrying downward trend in 2020, mainly influenced by the institutional problem of the country and the pandemic that has affected all the project's field activities, but also by some slow administrative processes already mentioned above.

Finally, ***it can be concluded that, at the current rate of expenditure, at the end of the fifth year of the project it is likely that there will be a significant remainder of GEF resources***, since the pandemic will continue perhaps well into 2022 and there will also be a change of government in May 2021, a situation that is known to generate additional delays because the new authorities will have to learn about the scope and outcomes of the project.

Gender

The project has implemented a gender strategy that has been reflected mainly in the competitive fund projects, which are prepared and implemented by women's organizations, as is the case of goldsmithing and agriculture for jancheras.

Sustainability

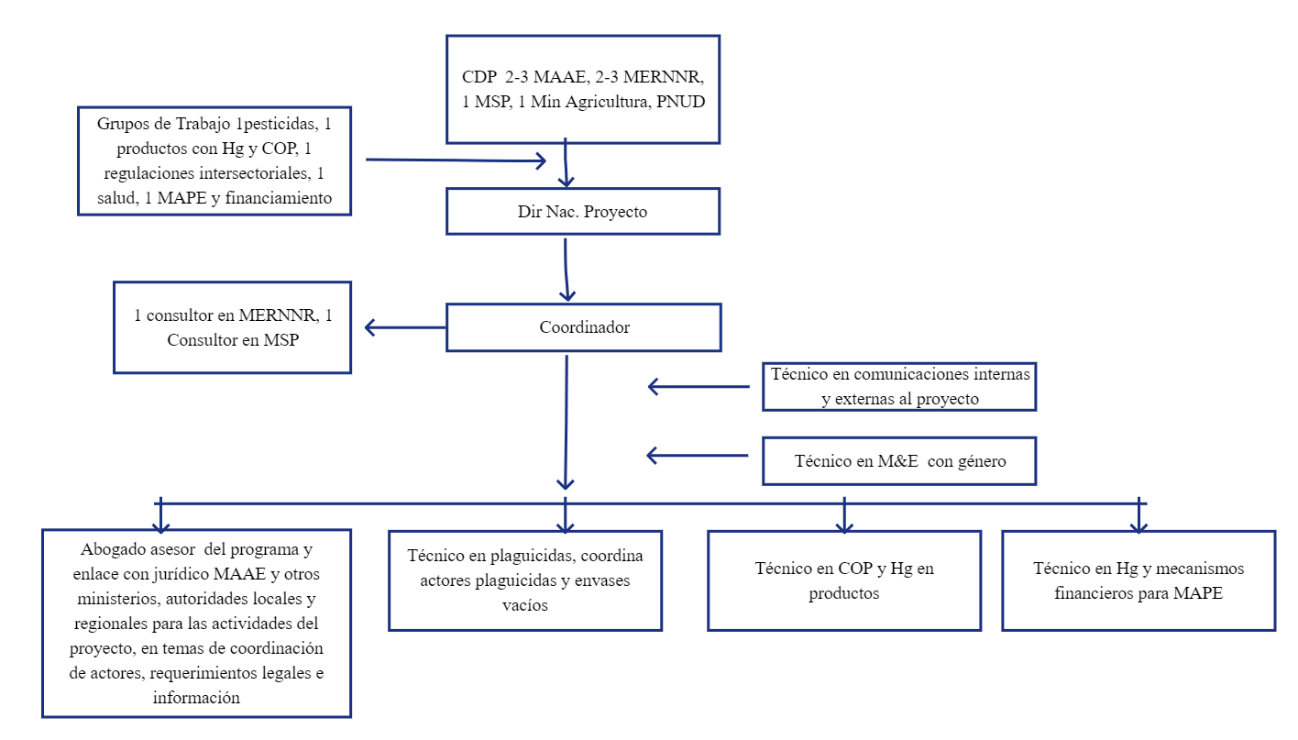
The sustainability of the project is moderately probable, since institutional, economic and sanitary instability will continue for a few more years, so the probability of having resources to maintain and scale the outcomes of the project is limited.



# ***Recommendations***

| Rec # | Mid-term evaluation recommendation | Responsible Entity | Implementation timeframe |
| --- | --- | --- | --- |
| 1 | Institutional problems and restrictions imposed by the pandemic have affected the implementation of the project, resulting in lower disbursements than initially estimated and in the delay of some key outcomes and the need to reformulate some of them, which may not be achieved by the end of the project (March 2023). Therefore, it is suggested to evaluate by the end of 2021 whether the project will be able to achieve its objectives within the deadlines stipulated in the Prodoc in order to -if applicable- introduce the necessary corrections. | UNDP | Dec 2021-February 2022 |
| 2 | There are indicators that are not suitable for measuring project progress, but cannot be changed due to the lengthy review process by the GEF. It is suggested to clarify some of these and adjust their goals if necessary, such as, for example, the 35 kg/year Hg reduction, the 30 tons of "new POPs releases" or whether the financial strengthening plans for national reports should have permanent budget lines and a follow-up on how the new knowledge acquired is used. | MAATEC, MERNNR, UNDP | July 2021 |
| 3 | The progress reports do not clearly disclose the challenges faced by the project nor the level of implementation of some key outcomes, e.g., elimination of Hg in luminaires and other products, remediation of sites contaminated with PRAS, elimination of new POPs, adoption of ICM, ASGM credits, support to the 5 processing plants and associated laboratories. It is suggested to report in terms of progress towards outcomes based on established associations, responsibilities of each partner and of course specific indicators associated with outputs and intermediate outcomes to be defined in a work program. | MAATEC, MERNNR, UNDP | July 2021 |
| 4 | For the second stage of implementation, the project should have a strategy to approach its partners in terms of involving those officials with possibilities of institutional continuity in the design, planning and review of consultancy reports relevant to them. This approach should be based on a mutually agreed work agenda, with specific activities, responsibilities and outcomes, so that officials are committed to and take ownership of the project's outcomes. | MAATEC, MERNNR, UNDP, MSP. | July 2021 |
| 5 | Establish a new approach based on priorities, focused on outputs and services that have a clear relationship with the expected outcomes, not dispersing efforts in more proposals, but ensuring the adoption of the current ones, eliminating non-core outputs and activities. It is suggested to focus on approving the regulatory instruments already proposed, elimination strategy of Hg and new POPs in products, identify and analyze two additional contaminated sites before terminating this activity, increase in the collection of empty pesticide containers, ASGM credits, exit strategy, see regulation of surface water contamination in ASGM. | MAATEC, MERNNR, UNDP |  |
| 6 | The aforementioned approach should be associated with a new work team structure, aimed at advising and supporting the partners rather than directly executing the actions. It is suggested to reformulate the way of working with the project partners and decentralize the execution of certain key outcomes, based on an analysis of the partners' needs to meet the established goals. Specifically, it is proposed to integrate a consultant in the MERNNR and another in the MSP that responds to the executing team and the institution that hosts them, so that it can have a direct impact on them. | MAATEC, MERNNR, UNDP | July 2021 |
| 7 | It is suggested to analyze how to integrate other institutions that are considered relevant for the second stage of project implementation, such as the MSP, Customs or COMEX, into the PSC and/or other participatory instances of the project, and to improve the balance between the MAATEC and MERNNR, either as permanent members or as guests. | UNDP, MAATEC, MERNNR | July 2021 |
| 8 | It is suggested that the working groups be formalized and that they have their own representatives who can accompany the project team in the PSC meetings or other instances to be defined. In this regard, the functioning of the current working groups and the creation of ad-hoc groups (at least until the ICM is approved) should be evaluated to define the credit mechanisms for ASGM and jancheras (BCE, BanEcuador, Ministry of Production, for example) and the legal and administrative mechanisms necessary to implement them. The members of these groups should be designated by the institutions as technical working groups with a limited mandate to agree on a work agenda with specific outcomes, deadlines and responsibilities. | MAATEC, MERNNR, UNDP | July-August 2021 |
| 9 | For the annual financial reports, it is suggested to incorporate comparisons with what was planned in the prodoc and with the originals approved in January of each year, rather than presenting expenditures compared to the adjusted budgets, which are always in line. The purpose is to identify gaps and modalities of adjustments in the strategies. | MAATEC, UNDP | 2021-2023 |
| 10 | It is also suggested to carry out annual audits or at least two during the execution of the project for the purpose of controlling its operations: one in the middle of the project's execution period to make adjustments, if necessary, and another at the end. | UNDP | 2021-2023 |
| 11 | In the case of AOPs, it is suggested that they be supported by an implementation strategy document, that is concise, for the corresponding period, which explains the reasons why the activities are being carried out, their dependencies with others and which are parallel or if others can be carried out. | MAATEC  UNDP  MERNNR | 2021-2023 |
| 12 | For the administrative department, a review of the awarding and implementation processes of CFM projects and other procurements is suggested, in order to verify the bottlenecks and information gaps that beneficiaries may have. | MAATEC, UNDP | May-July 2021 |
| 13 | It is very likely that the priorities of the country's new authorities are related to the recovery of the economy and the fight against the pandemic, so activities such as waste and chemical management could be secondary. It is recommended that the project team make an analysis of the new stakeholders and implement a communication strategy with a specific discourse according to the primary interests of each one of them, where -for example- the discourse has greater emphasis on the fact that the project facilitates and orders economic recovery, beyond the merely environmental. In the case of artisanal gold mining, it will help with regulatory and financial instruments that encourage legal production and also establish clear rules for investments in the sector, ensuring an orderly and transparent work for the stakeholders involved. In the case of Health, it should be emphasized that regulatory activities for the management of hospital waste (including Hg) are in line with cutting the transmission of diseases and the emergence of diseases among health workers.  This communication strategy should also include continuity in contacts, work schedule and information with the progress of the project activities. | Project executing unit, UNDP. | July 2021 |

The following is the proposed structure for the second stage of the project, which could lead to greater participation and more consistent and fluid processes among the stakeholders.



PSC 2-3 MAATEC, 2-3 MERNNR, 1 MSP, 1 Min. Agriculture, UNDP

National Project Director

Working Groups: 1 pesticides, 1 products with Hg and POPs, 1 intersectoral regulations, 1 health, 1 ASGM and financing

1 consultant in MERNNR, 1 consultant in MSP

Coordinator

Project’s internal and external communications expert

M&E and gender expert

Lawyer, advisor of the program and legal liaison to the MAATEC and other ministries, local and regional officials for the project activities on issues regarding stakeholder coordination, legal requirements and information

Pesticide expert, coordinates pesticide stakeholders and empty containers

POPs and Hg products expert

Hg and ASGM financial mechanisms expert

7. Lessons Learned

The project was developed in a very short time (6 months), compared to others of a similar size and topic. As a consequence, the prodoc presents some deficiencies in the design of its indicators, outcomes and in the knowledge management component. This situation should be considered in the design of new projects, so that it has a more robust review system and that saves problems in interpreting terms and in measuring outcomes.

In line with the above, the development of indicators should consider that their level of ambition is achievable and measurable, but that it implies an achievement and not a goal that is so easily achieved. On the other hand, an outcome statement should state a change in a baseline situation, and its indicator should be a metric that reflects this change and not express it in terms of an output or an activity.

Institutional and pandemic crises bring with them the anxiety to implement outputs and activities, so the path of centralized implementation in the executing team is the most helpful recipe, but it brings a cost that is the lack of interest and ownership by the partners.

For future projects, when implementing them in critical institutional and health contexts, an effort should be made to isolate the situations that can be handled by the project from those that do not depend on it, in order to take measures regarding what can be handled, which would be achieved with a more detailed risk analysis.

Project teams must be careful in the way they report their achievements, since the use of high-level indicators - which are also not adequate - is not recommended. In this regard, it should be balanced with the challenges that they are having and in the identification of more adequate indicators to measure progress, even if they are for internal use of the projects.

# ***Annexes***

## Annex 1: ToR for the mid-term evaluation

## Annex 2: Project Outcome Framework

|  |
| --- |
| **This project will contribute to the following Sustainable Development Goals: SDG 1, 2, 3, 6, 7, 8, 9, 11, 12, 13, 14 and 15.** |
| **This project will contribute to the following country outcome included in the UNDAF / Country Programme Document:**  Outcome 4: by 2018, support was provided to strengthening institutional and citizen capacities to promote the rights of nature, create conditions for a sustainable low-emission development, and improve the resilience and risk management facing the impacts. |
| **This project will be linked to the following output of the UNDP Strategic Plan:** Output 1.3: Solutions developed at national and sub-national levels for the sustainable management of natural resources, ecosystem services, chemicals and waste. |

|  | **Objective and Outcome Indicators** | **Baselines** | **Mid-term goals** | **Objectives at the end of the project** | | | **Premises** |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **Project objective**: To protect human health and the environment through the adoption of environmentally sound management and life-cycle management of chemical substances in Ecuador. | 2 new partnership mechanisms with funding for sustainable management solutions of natural resources, ecosystem services, chemicals and waste at national level. | New partnerships with funding for sustainable chemicals and waste management solutions have not yet been established. | 2 new partnership mechanisms with funding, for sustainable management solutions of chemicals and waste established at national and/or sub-national level. | 2 new partnership mechanisms with funding, for sustainable management solutions of chemicals and waste established at national and/or sub-national level. | | | 1 financial institution and 1 legal gold buyer are interested in signing an agreement with the project*.* |
| 80 new jobs created (24 jobs for women and 56 jobs for men), through management solutions of natural resources, ecosystem services, chemicals and waste. | 0 new jobs created through chemical and waste management solutions. | 32 new jobs were created (9 for women and 23 for men) through management solutions of chemicals and waste. | 80 new jobs (24 for women and 56 for men) were created through chemical and waste management solutions. | | | In addition to the jobs created by the project (for example, project consultancies, CFM), project partners finance jobs for ASGM pilot plant operators and trainers. |
| 31,187 direct beneficiaries of the project (9,356 women and 21,831 men) for whom the risk of chemicals and hazardous waste is reduced. | 0 direct beneficiaries of the project. | 9,356 direct beneficiaries of the project (2,807 women and 6,549 men) for whom the risk of chemicals and hazardous waste is reduced. | 31,187 direct beneficiaries of the project *(9,356 women and 21,831 men) for whom the risk of chemicals and hazardous waste is reduced*. | | | People trained by the project, communities living within a 1 km radius of a clean, formerly contaminated, site and project stakeholders subjected to awareness campaigns are protected, as an outcome of the project, from exposure to chemicals and/or are adequately informed to safeguard themselves and their immediate family (of 4). |
| Component/Outcome 1  **Component 1:** Strengthen the institutional capacity and the legal and regulatory framework for the Sound Management of Chemical Substances (SMC) based on a Life-Cycle Approach. | Four (4) financial development and capacity building plans were developed and implemented, and the capacity of 12 private or public entities was increased to be able to handle chemicals of concern. | National reports are made on POPs and Hg statistics/indicators, but they need to be improved.  Entities with roles/responsibilities related to LCM of chemical substances are coordinated to some extent, but not with all entities that have such roles/responsibilities. | 2 plans, one financial and one for capacity building, developed and implemented to benefit private or public entities and allow them to handle the chemicals of concern. | Four (4) plans, two (2) financial and two (2) for capacity building were developed and implemented, and the capacity of 12 private or public entities was increased to be able to handle chemicals of concern. | | | An interministerial agreement is approved for the establishment of the ICM and its working groups for the duration of the project. |
| 1.1.1 Creation of 2 capacity building plans and 2 financial plans to improve national reports on statistics/indicators for POPs, Hg and other chemicals of concern.  1.1.2 Established Interinstitutional Coordination Mechanism (ICM) and its working groups to improve coordination, collaboration and decision-making on issues related to SMC.  1.1.3 Capacity building in 10 institutions to improve the supervision of chemicals of concern, Hg, POPs and products containing POPs and Hg, through personalized training workshops[[18]](#footnote-19).  1.1.4 Increase in the capacity of two (2) analytical laboratories, which allows them to comply with the requirements of the National Accreditation Service. | | | |
| Developed and/or revised sixteen (16) policies, regulations and standards to achieve the LCM of chemicals. | The Government of Ecuador has a fairly sound policy and regulatory framework in place to ensure the LCM of chemicals of concern. However, Ministerial Agreements/Plans and guidelines need to be improved for the management and phase-out of POPs/Hg in products; management of UPOPs, Obsolete Pesticides, contaminated sites, hospital/sanitary waste management, ASGM mine closure, ASGM waste management, among others. | 5 policies, regulations, guidelines and standards revised and/or developed, to achieve the LCM of chemicals. | 16 policies, regulations, guidelines and standards revised and/or developed, to achieve the LCM of chemicals. | | | The project can create sufficient momentum with its partners so that Ministerial Agreements, guidelines, standards, national plans and industry incentives that are not approved during the lifespan of the project, will be approved after the project has closed. |
| 1.2.1 Three (3) Ministerial Agreements (MAs) and their application guides, to address the LCM of Chemicals revised and/or developed and submitted for approval.  1.2.2 Nine (9) tools (guidelines, standards, methodologies, etc.) for the management of chemicals of concern revised/developed.  1.2.3 Two (2) national plans developed for the replacement of POPs or Hg-containing products and the management of wastes containing POPs or Hg.  1.2.4 Two (2) industrial incentives developed and are proposed for implementation, which support the conversion to processes that present fewer risks and result in less harmful products. | | | |
| Component / Outcome 2  **Component 2:** Elimination of POPs stocks and reduction of the use and release of initial POPs and those recently listed (including those contained in products). | 120 tons of obsolete pesticides, POPs and UPOPs, and related residues were eliminated. | AGROCALIDAD / APSCA and INNOVAGRO inventoried in 2016 ~ 600 sites and identified 5 tons of obsolete pesticides.  No pesticide-contaminated sites have been identified.  APCSA and INNOVAGRO collect 40% of empty pesticide containers, leaving a cumulative total of 2,135 tons (for 2019) improperly disposed of. | 0 tons of obsolete pesticides POPs and UPOPs and related residues eliminated. | 120 tons of obsolete pesticides, POPs and UPOPs, and related residues eliminated. | | | AGRCALIDAD / APSCA / INNOVAGRO will launch/complete the OP inventory in 2017.  APSCA / INNOVAGRO will cover the additional costs for treating the largest number of pesticide containers collected.  APCSA / INNOVAGRO can increase the number of centralized storage facilities and cover associated personnel costs.  A state institution signs an agreement to make a temporary storage facility available for OPs. |
| 2.1.1 One (1) detailed inventory completed, (including affected population (labor) characteristics and gender dimensions) of "old" and "new" POPs pesticides, UPOPs pesticides, pesticide contaminated sites and storage facilities, in partnership with AGROCALIDAD / INNOVAGRO and APCSA.  2.1.2 At least 30 tons of obsolete pesticides repackaged, transported and disposed of in a licensed treatment/disposal facility.  2.1.3 Cleanup or remediation of at least one (1) pesticide-contaminated site, completed.  2.1.4 Collection, transportation, recycling and disposal of empty pesticide containers increase by 90 tons | | | |
| 25 toxic equivalent (TEQ) grams of UPOPs releases were reduced. | Most relevant sources of UPOPs in Ecuador (PPG baseline assessment of November 2016): incineration of medical waste (48.19 g-TEQ / year); Landfills, dump sites and landfill mining (16.74 g-TEQ / year); Household heating and cooking - Biomass (13.36 g-TEQ / year); Waste burning and accidental fires (7.14 g-TEQ / year); Iron and steel plants (6.25 g-TEQ / year); Biomass burning (5.35 g-TEQ / year); and, biomass power plants (1.15 g-TEQ / year). | UPOPs release reduction of 5 g-TEQ/year. | | | 25 g-TEQ of UPOPs release have been reduced. | Facilities willing to partner with the project and grant access to allow detailed baseline assessments.  2 facilities / companies interested in improving practices (BEP) and introducing technologies (BAT) through the use of tax and industry incentives, to finance the introduction of best practices, supported by the project. |
| 2.2.1 Complete evaluation of UPOPs generation processes/practices at seven (7) facilities (including 5,500 hectares of agricultural land).  2.2.2 Recommendations prepared for BEP/BAT interventions in seven (7) facilities.  2.2.3 Introduction of BEP/BAT to reduce the emissions of UPOPs at two (2) project sites/facilities.  2.1.3 Cleanup or remediation of at least one (1) UPOPs-contaminated site, completed. | | | |
| 30 tons of new POPs releases, reduced. | The new priority POPs are considered to be PFOs and C-octaBDE (November 2016 PPG baseline assessment) and are contained in products such as ABS, high impact polystyrene with ABS, treated leather, etching agents, ferric chloride, aviation hydraulic fluids, insecticides and flame retardants. | The use and release of new POPs was reduced by 0 tons. | The use and release of new POPs was reduced by 30 tons. | | | The UNIDO Stockholm NIP update, which will be released in 2017, provides data on new POPs in products, which can be used by the GEF/UNDP project.  Cost effective alternatives can be identified and are available to replace the 2 main products containing POPs. |
| 2.3.1 Ten (10) imported products[[19]](#footnote-20) suspected of containing new POPs (PFOs/c-octaBDE) analyzed, to verify their existence.  2.3.2 Cost-benefit analysis and evaluation of the inaction cost (including the identification and quantification of benefits and social costs, differentiated between women and men), to inform the selection of alternatives and waste management/treatment options, to the 2 priority products, containing POPs.  2.3.3 Gradual elimination (with SENAE) and waste management of the two (2) main products containing POPs, demonstrated in selected sectors/areas. | | | |
| Component / Outcome 3  **Component 3:** Implementation of measures for the reduction and elimination of Hg from priority sectors. | Reduced 2 tons of mercury use/release in ASGM to a non-industrial level | Mercury releases in the 3 areas prioritized by the project (source: Dec. 2016 PPG ASGM - Hg Baseline):   * Portovelo (Aproplasmin) - 1,638 kg Hg / year * Ponce Enríquez (Bella Rica) - 2,318 kg Hg / year * Chinapintza - 1,184 kg of Hg / year | Reduction of mercury use/release in ASGM by 500 kg/year to a non-industrial level[[20]](#footnote-21). | Total reduction of 2 tons of mercury use/release in ASGM, to a non-industrial level. | | | Gold processing institutions or plants are willing to host the mobile training plant.  Permit requirements and processes do not significantly slow down the installation or mobility of the mobile training plant.  Despite perverse incentives to keep mineral extraction yields low, processing plants are interested in working with the project to increase yields.  Project support is sufficiently tailored to the needs of women miners to make a difference in their livelihoods.  The Minamata NAP (UNIDO) Ecuador project provides data on Hg use in ASGM which can be used by the GEF/UNDP project. |
| 3.1.1 Comprehensive Hg Baseline Assessment (including sex-disaggregated and gender-specific data[[21]](#footnote-22)) completed for all ASGM project sites (Camilo Ponce Enríquez, Portovelo and Chinapintza) to a non-industrial level.  3.1.2 Mobile training plant installed and operating at the "base" location.  3.1.3 350 ASGM miners and mining communities trained (of which at least 30% are women and 5% are indigenous).  3.1.4 At least 5 processing plants (at least 2 occasionally used by women) supported in the improvement of their mineral processing.  3.1.5 At least 3 mining groups[[22]](#footnote-23) (of which 1 are women miners) supported in their formalization processes.  3.1.6 Demonstration pilot implemented, focusing on gravity recovery of Hg from contaminated tailings. | | | |
| 35 kg/year of mercury use/release avoided in priority sectors (other than ASGM). | In Ecuador, the priority products that contain Hg are (November 2016 PPG baseline assessment): medical devices (40 tons of medical products containing ~ 164 kg of Hg, used in 2016 (MSP)) and low consumption lamps (28 kg of mercury are contained in 144 tons of lamps currently in use and imported during the period (2013-2016)).  Two Hg baseline studies have been carried out, one during the preparation of the project (November 2016 PPG baseline assessment) and 1 in 2008 (National Mercury Emissions Inventory).  For public hospitals, MSP / MAATEC have signed an agreement and developed a plan for the replacement/elimination of Hg, contained in medical devices. For private hospitals and the general public, there is no plan/agreement yet.  There are no rational treatment/recycling options for products containing Hg. | Mercury releases from priority sectors (other than ASGM) reduced by 10 kg. | Avoided mercury releases from priority sectors (other than ASGM) by 35 kg/year. | | | Cost effective alternatives can be identified and are available to replace the 2 main products containing Hg. |
| 3.2.1 Comprehensive mercury baseline assessment for medical devices and lighting products and assessment conducted on the impact on women/men.  3.2.2 List of available alternatives for Hg-containing medical devices and Hg-containing lighting products (including evaluation of their costs and benefits).  3.2.3 Completed evaluation on existing options for the disposal and treatment (national/international level) of products containing mercury and their residues.  3.2.4 Cost-benefit analysis and evaluation of the inaction cost (including identification and quantification of benefits and social costs differentiated between women and men) performed to inform the selection of mercury-free alternatives and waste management/treatment options.  3.2.5 Progressive incorporation of mercury-free alternatives in 1 high-profile CS facility.  3.2.6 Pilot project in the electricity sector implemented to support the elimination and/or improved management of used mercury-containing lamps.  3.2.7 The environmentally sound treatment/elimination of 10 tons of mercury-containing waste is demonstrated. | | | |
| Improved access to financing for the ASGM sector through the development/improvement of 2 financial products. | In 2016, 136 million dollars in credits were granted to the mining sector in Ecuador, of which 23 million dollars were allocated to the priority areas of the project and, of these, ~ 8 million were for the extraction of precious metals.  92.61% of the credit volume was granted mainly by private banks, 6.98% by public financial institutions, 0.31% by mutual companies and 0.1% by finance companies.  The Central Bank of Ecuador (BCE) buys gold from ASGM miners, as long as the gold has a legal origin.  There are 2 tax incentives for the ASGM sector (LRTI - 10.7 and LRTI-37 '). | 1 financial product developed/improved to increase access to financing, for the ASGM sector | | 2 financial products developed/improved to increase access to finance, for the ASGM sector | | 1 financial institution and 1 legal gold buyer are interested in signing an agreement with the project.  1 industry and 1 gold processing plant are interested in applying tax incentives, to finance cleaner production. |
| 3.3.1 At least one (1) financial institution has developed/improved a product that serves the ASGM sector.  3.3.2 One (1) competitive fund mechanism (CFM)[[23]](#footnote-24) established to finance five (5) environmental and social entrepreneurships and technological innovations within ASGM.  3.3.3 At least 2 plants (1 ASGM processing plants and 1 industry) have used existing tax incentives to finance cleaner production systems.  3.3.4 Responsibly produced gold (10% produced by women) by a project beneficiary is purchased at a higher price by a legal public or private buyer. | | | |
| Component/Outcome 4:  **Component 4:** Raise awareness, ensure project follow-up and disseminate project outcomes and experiences. | 11,778 people (3,533 women and 8,245 men) were made aware of the sound management of chemicals. | The project has made 0 people aware of the sound management of chemicals. | 3,533 people (1,060 women and 2,473 men) were made aware of the sound management of chemicals. | | 11,778 people (3,533 women and 8,245 men) were made aware of the sound management of chemicals. | | The people trained by the project and the project stakeholders, who have attended workshops or been part of awareness campaigns, are aware of the impact of the chemicals of concern and, in turn, have informed their immediate relatives (families of 4). |
| 29 of the GEF UNDP M&E requirements were met, and adaptive management was applied in response to the needs and findings of the Mid-Term Evaluation (MTE). | 0 GEF M&E requirements met by the project. | 13 of the GEF M&E requirements were met, and adaptive management was applied in response to the needs and findings of the Mid-Term Evaluation (MTE). | | 29 of the GEF M&E requirements were met, and adaptive management was applied in response to the needs and findings of the Mid-Term Evaluation (MTE). | | The project team and the UNDP CO can meet all GEF M&E requirements and within the planned time. |
| 28 case study reports, publications, presentations, articles (web-based), etc., summarizing lessons learned, best practices and experiences are disseminated nationally, regionally and globally. | 0 publications, presentations, articles (web-based), etc. summarizing lessons learned, best practices and experiences have been disseminated nationally, regionally and globally. | 10 case study reports, publications, presentations, articles (web-based), etc. summarizing lessons learned, best practices and experiences have been disseminated nationally, regionally and globally. | | 28 case study reports, publications, presentations, articles (web-based), etc. summarizing lessons learned, best practices and experiences have been disseminated nationally, regionally and globally. | | The project will be able to use existing knowledge platforms (GEF-GOLD, Swiss ASG - IKH, former CASM site) to disseminate case study reports, publications, presentations, articles, etc. |

## Annex 3: Project Progress Matrix

## Annex 4: Interview agenda

## Annex 5: List of Interviewees

## Annex 6: Evaluation Questions Matrix

| **Assessment Criteria** | **Questions** | **Indicators** | **Sources** |
| --- | --- | --- | --- |
| ***Relevance*** The extent to which an activity fits with local and national development priorities and organizational policies, including changes over time.  The extent to which the project is in line with GEF operational programs or the strategic priorities on which the project was funded.  Note: In retrospect, the question of relevance often becomes a question of whether the objectives of an intervention or its design are still appropriate given changing circumstances. | How does the project fit into the priorities of the regions where it is being implemented? | 1. Budget allocated by the project partners for activities related to the project; ii) inclusion of the project in regional priorities; iii) improved data on POPs and Hg elimination, improvement in waste management plans among project beneficiaries. | Work plans GAD, MAATEC, MERNNR, and other project partners, budgets, interviews, documents and local policies, minutes of the Steering Committee meetings. |
| The project is aligned with the priorities of UNDP Ecuador and the GEF. | 1. GEF-6 Operational Plan Goals; ii) UNDP-Ecuador country program goals 2018-2021; iii) UNDAF Goals 2018-2021; iv) UNDP corporate goals 2018-2021. | UNDP and UNDAF Ecuador work plans, budgets, interviews, documents and national policies, meeting minutes and development reports. |
| Is the project important for the municipalities or provinces? | 1. No. of activities related to project management promoted by the project and supported by the GADs and public bodies. | Work plans, budgets, interviews, regional and local documents and policies, meeting minutes. |
| How does the project fit into the priorities and activities of the local beneficiaries? | 1. Waste management plans with Hg and POPs in mining and agricultural activities in companies, hospitals and fields; ii) investments by beneficiaries in sustainable agricultural and gold mining pesticide management systems; iii) No. of certified sustainable products. | Community work plans and budgets and interviews, documents and local policies, meeting minutes. |
| How did the beneficiaries and main stakeholders participate in the design and implementation stage of the project? Were local priorities included? | 1. No. of consultations made; ii) No. of adjustments to the project resulting from the consultations; iii) stakeholder ownership of the project objectives at the national, regional and local levels. | 1. Project preparation documents; ii) interviews; iii) Regional, territorial and local development policy documents. |
| Does the project take into account national realities (policy and institutional framework) both in its design and in its implementation? | 1. Extent to which the project supports the objective of sound management of pesticides and POPs residues, and of Hg in small-scale gold mining of the Government plans 2018-2022; 2. Plans and programs of the MAATEC, and its implementing partners; 3. Government policies and programs for the articulation of territorial support or the integration of instruments for this purpose; 4. Appreciation of key stakeholders regarding the level of adequacy of project design and implementation to national and local realities and existing capacities; 5. Consistency between the needs expressed by national stakeholders and the UNDP-GEF criteria; 6. Level of involvement of government officials, government entities, municipalities and other partners in the project design process. | 1. Government program 2018-2021; 2. Project Documents; 3. Interviews with key project partners and stakeholders; 4. Plans, goals and budgets MAATEC, Min. of Mining, MSP and partners |
| Are the objectives, outcomes, products and activities still valid, given the current implementation context of the project? | 1. Environmental policy documents of the MAATEC, MERNNR, MSP and beneficiaries, among others; ii) development of regulations related to the management and disposal of POPs pesticides, empty containers, use of Hg and its wastes; iii) the project is included in annual planning and goals of the MAATEC and other partners; iv) Number of ASGM communities or organizations that include Hg-free practices; vi) No. of local municipalities that have incorporated regulations on the use and disposal of POPs, Hg and its products; vii) No. of certifications/agreements made. | Work plans, budgets, interviews, local policy documents, meeting minutes. |
| ***Effectiveness:***  The extent to which an objective was achieved or the likelihood that it will be achieved. | Are there logical links between the expected outcomes of the project and the project design (in terms of project components, choice of partners, structure, implementation mechanisms, scope, budget, use of resources, etc.)? | 1. Level of coherence between the expected outcomes and the design of the internal logic of the project; 2. type of indicators to measure the success of the program; 3. key stakeholder analysis; 4. Level of coherence between the expected outcomes and the area covered by the selected stakeholders. | Project documents, key project stakeholders, annual reports and budgets, substantive review and/or mid-term evaluation (if applicable) |
| What would be the additional contribution of the project to the activities of elimination of POPs and their wastes, as well as in the elimination of Hg in small-scale gold mining and in lighting and health equipment in the regions where it is being implemented?  Are disposal practices for POPs pesticides and their residues and the use of Hg and its products a priority for stakeholders, especially in regions where disposal activities are implemented? | 1. Additional budget for field monitoring activities, technical support, capacity building; ii) inclusion of the project in local priorities of municipalities, companies and communities; iii) inclusion of techniques to verify improvements in the management of pesticide and Hg residues in mining in the regions covered by the project. | Work plans, budgets, interviews, local documents and policies, meeting minutes. |
| Is proper management of emission reductions and exposure to POPs and Hg a priority for key stakeholders, especially for pilot sites? | 1. Existence of state or municipal strategies on chemicals and/or wastes; ii) Level of participation in the project of the GADs and regional offices of MAATEC, MERNNR and MSP in the project intervention areas; iii) SENAE and inspection plans at the national level. |  |
| To what extent are the project objectives being met, nationally, regionally and locally? | 1. Regional/municipal strategies on POPs and Hg elimination; ii) national strategy for management and elimination of POPs pesticides and Hg use in gold mining and in luminaires and medical equipment; iii) No. of beneficiaries using sustainable management and waste practices; iv) number of hectares of contaminated soils improved thanks to the project; number of POPs and Hg analysis laboratories with improved analytical techniques and infrastructure; v) No. of POPs and Hg waste policies and regulations improved and in place; vi) number of Hg-free luminaires and medical equipment. | Annual reports, activities, interviews. |
| Was it possible to involve the relevant authorities and stakeholders, at the national, regional and local levels, to establish a pesticide and Hg management system?  Has training strengthened the control and policy, regulatory and technical standards development agencies? | 1. No. of contacts with national and local authorities; ii) No. of provincial/local plans on POPs and Hg pesticide use; iii) No. of resources allocated by stakeholders to Hg product disposal activities; v) No. of new policies and regulations for agricultural and mining activities concerning the use of POPs and Hg pesticides; vi) No. of trainings conducted for national and local stakeholders. | Reports, interviews, regional and local plans. |
| To what extent are the most cost-effective alternatives being identified to promote the management of pesticide residues with POPs and the destruction of stocks?  Are viable alternatives identified for Hg removal in mining, lighting and medical instruments? | 1. No. of financial support alternatives identified; ii) No. of financial instruments identified and in use; iii) No. of elimination of POPs and Hg experiences. | Reports, studies, interviews, regional, local and national plans |
| Is it being possible to identify the needs for change/introduction of new regulations to facilitate the elimination of barriers to the sustainable management and disposal of POPs and Hg waste in the affected territories? | 1. No. of studies on land tenure; ii) No. of agreements between authorities and relevant stakeholders; iii) No. of regulatory projects pending or identified to promote the elimination of POPs and Hg pesticides; iv) elimination of overlapping competencies/development of effective and permanent coordination mechanisms between governmental institutions. | Reports, studies, interviews, regional and national plans. |
| Women, youth and indigenous communities have been incorporated into activities specially designed for these groups. | 1. No. of workshops and consultations with specific groups to design activities; 2. Percentage of projects and activities that are led by women, youth and indigenous people, 3. Gender inclusion strategies with their respective indicators and expected outcomes. |  |
| ***Efficiency:*** Is the project being implemented efficiently in accordance with international and national norms and standards? | Annual work plans in line with resources and project objectives? | 1. Plans and budgets according to expected outcomes. | Annual plans, budgets, interviews. |
| Were the necessary adjustments made to deal with different situations (adaptive management)? | 1. Plans and budgets according to expected outcomes. | Annual plans, meeting minutes, reports, budgets, interviews, substantive review, risk analysis, PIR. |
| Was an activity monitoring and evaluation system implemented? | 1. No. of indicators, ii) goals; iii) No. of adjustments made; iv) No. of meetings and strategic decisions taken by the project's Steering Committee; v) prepared monitoring plans. | Annual plans, reports, interviews. |
| Were the activities, outputs and outcomes carried out according to plan? | 1. No. activities; ii) % progress; ii) No. of key stakeholders involved in the project. | Annual plans, reports, interviews. |
| How were the risks and assumptions of the project managed?; What has been the quality of the mitigation strategies developed? | 1. Integrity of the identification of risks and assumptions during project planning and design; 2. Quality of the information systems established to identify emerging risks. | Project documents; quarterly and annual progress reports; project team, UNDP and key stakeholders. |
| Was it possible to gather counterpart and/or additional resources for the project's objectives? | 1. Amount of resources allocated by the project partners; 2. Level of involvement of the project partners. | Annual project and partner plans incorporating project resources, budgets, cash and in-kind expenditure reports from project partners, interviews, annual audits. |
| What other projects with national and/or international financing are being executed in the same territories as the GEF-Chemicals project and how are they linked to it? | 1. Number and name of projects identified with national and/or international financing and; 2. Number of coordination actions established between the GEF-POP Waste project and the other identified projects. | Project progress reports, annual work plans, reported budgets and interviews with the project team and UNDP and stakeholders. |
| ***Outcomes:*** The positive and negative, intended and unintended changes and effects produced by a development intervention.  In terms of the GEF, outcomes include direct project performance, short to medium term, and longer term impact including global environmental benefits, repetition effects and other local effects. | Is the project triggering and/or influencing financing activities to improve practices in small-scale mining?;  Has it been possible to improve regulations on POPs and Hg pesticide residues in small-scale mining?  Has it been possible to eliminate POPs and Hg in Ecuador? | 1. No. of financial instruments in implementation; ii) No. of beneficiaries of financial instruments; iii) No. of regularized miners with improved practices; iii) No. of agreements for gold production without Hg; iv) amount of training for mining and agricultural communities and organizations. | Annual plans, budgets, reports, interviews. |
| To what extent are negative impacts on health and the environment being minimized through proper management of POPs and Hg waste in mining, lighting and health instruments? What factors have contributed to achieving or not achieving the planned outcomes? | 1. Number and effectiveness of activities that have promoted proper management of pesticide and Hg residues; 2. Number and effectiveness of activities that have allowed a reduction in POPs emissions; and 3. Number and effectiveness of activities that have decreased exposure to POPs and Hg. | Project progress reports, annual work plans, reported budgets and interviews with the project, UNDP team and project beneficiaries (e.g., trained national and regional authorities). |
| Have experience exchange networks been established between communities and organizations participating in the project?  Has it been possible to sensitize local stakeholders to the effect of global environmental problems on their direct environment? | 1. No. of communities of practice with stable operation; 2. No. of training workshops held; 3. No. of practices implemented thanks to this exchange. | Annual plans, budgets, reports, interviews, training reports, minutes of community meetings |
| Has there been any improvement in the capacity to conduct POPs and Hg inventories? | 1. No. of trainings conducted; 2. No. of laboratories with improved capabilities; 3. No. of public institutions with responsibilities for inventories and national reports strengthened. | Annual plans, budgets, reports, interviews, training reports |
| Has there been a response - albeit partial - to the specific needs and aspirations of women within their communities? | 1. No. of consultations with women during the process of preparing and executing community plans and programs; 2. No. of community management plans including aspirations of women and other vulnerable groups; 3. Change in the perception of the role of women before and after the program; 4. No. of studies carried out. | Project work plans, progress reports, consultancy reports, interviews with communities and specifically with women. |
| Has there been a response - albeit partial - to the specific needs and aspirations of indigenous communities? | 1. No. of indigenous consultations during the process of preparing and executing the project; 2. No. of plans including aspirations of indigenous communities and other vulnerable groups; 3. Change in the perception of the role of indigenous communities before and after the program; 4. No. of studies carried out. | Project work plans, progress reports, consultancy reports, interviews with the communities. |
| ***Sustainability:*** The likely ability for an intervention to continue to provide benefits for a period after its completion.  The project must be sustainable both environmentally, financially and socially. | Will the relevant authorities and stakeholders at the national and regional level be able to continue implementing activities when the project ends? | 1. No. of medium and long-term management plans for pesticides and POPs residues; 2. Amount of permanent human and financial resources for training activities, protection and control of POPs and Hg residues by GAD and national/regional government agencies and companies; 3. Budgets related to technical and financial support for small-scale gold miners; 4. Permanent budgets and practices of farmers to maintain acquired practices on the management and disposal of obsolete pesticides and empty containers; 5. National articulation/integration policy/laws to constitute a management and disposal system for POPs pesticides and their residues, as well as for Hg , based on the technical, financial and capacity building support instruments available to government agencies and other partners. | Policies/laws, annual plans, budgets, reports, interviews. |
| Are the relevant authorities and stakeholders at the national and regional levels acquiring the skills and knowledge to maintain and improve a national inventory and reporting system for POPs and Hg? | 1. No. of trainings carried out; 2. No. of medium and long-term plans; 3. Improved statistics for chemicals and waste. | Annual plans, budgets, reports, interviews. |
| Is there an impediment to the continuity of the participation of women and indigenous people in the management of POPs and Hg pesticides? | 1. No. of mining and agricultural organizations led by women; 2. No. of community organizations with permanent financing for their activities; 3. Number of community organizations regularized and carrying out good practices in POPs management. | Project progress reports, institutional support plans, projects presented by communities. |
| Are there social, political, economic or technical factors that hinder the formulation of plans, policies and regulations and the maintenance of financing instruments to reduce and eliminate POPs and Hg stocks? | 1. Number of agreements and/or cooperation with social stakeholders; ii) amount of resources assigned to the issue (human and financial); iii) No. of medium and long-term institutional plans; iv) long-term financing plans for farmers and miners. | Annual plans, budgets, reports, interviews. |
| Are national, regional and local authorities and stakeholders empowered and committed to the issue in the medium and long term? | 1. Number of agreements and/or cooperation between social stakeholders and governmental development entities; ii) number of resources allocated to the issue by the communities and related governmental entities (human and financial); iii) No. of medium and long-term institutional plans. | Annual plans, budgets, reports, interviews. |

## Annex 7: List of documents reviewed

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| --- | --- | --- | --- | --- | --- | --- |
| List of Documents requested by the Consultant | |  |  |  |  |  |
| Project | National Program for the Environmentally Sound Management and Life-Cycle Management of Chemical Substances | | | | | | |
| Country | Ecuador |  |  |  |  |  |
| Date | 17-02-2021 |  |  |  |  |  |
| Document | Type | Comment |  |  |  |  |
| Prodoc | prodoc | OK |  |  |  |  |
| PIR/APR | Reports | Ok |  |  |  |  |
| GEF tracking tools | Reports | All (initial, intermediate) |  |  |  |  |
| Core Indicators | Reports | OK |  |  |  |  |
| Annual project reports | Reports | Internal and external |  |  |  |  |
| AOPs | Reports | OK |  |  |  |  |
| Annual budgets | Financial | OK |  |  |  |  |
| UNDP ATLAS expenses in excel | Financial | From the beginning of the project until the current date |  |  |  |  |
| Co-financing reports | Financial | From the beginning of the project |  |  |  |  |
| Audit Reports | Financial | All |  |  |  |  |
| ToR | Strategy | i) For the main products or those that represent over 25-30% of the budget; ii) For the project executing team; iii) current implementation organization chart of the project execution team. |  |  |  |  |
| UNDP Country program | Strategy | 2018-2021? |  |  |  |  |
| UNDAF | Strategy | 2018-2021? |  |  |  |  |
| National Development Plan or development strategy of the country | Strategy | 2018-2021? |  |  |  |  |
| National strategy to deal with hazardous waste, including POPs and Hg? | Strategy | If available (adaptation, mitigation, disaster prevention, etc.) |  |  |  |  |
| Steering Committee Minutes | Strategy | Ok |  |  |  |  |
| Technical committee reports? | Strategy | All of them, are there meeting minutes? |  |  |  |  |
| "Peer reviews" reports or validation processes of the main outputs (if applicable) | Reports | All |  |  |  |  |
| Technical reports of all outputs | Reports | All |  |  |  |  |
| Minutes of meetings with partners and beneficiaries | Reports | All (if applicable) |  |  |  |  |
| Table with main milestones of the project | Reports | Table |  |  |  |  |
|  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |

## Annex 8: Itinerary of the evaluation

**Comments on the preliminary report of the project's Mid-Term Evaluation**



1. This amount includes SENAGUA's co-financing commitment, since this institution merged with MAATEC in 2020. [↑](#footnote-ref-2)
2. This amount includes the co-financing commitment of the Ministry of Electricity and Renewable Energy, since this institution was merged with the Ministry of Mining in 2020. [↑](#footnote-ref-3)
3. IDEM 2, p. 19 [↑](#footnote-ref-4)
4. Section III Prodoc p. 15. [↑](#footnote-ref-5)
5. Annexes L1, L2 and L6 [↑](#footnote-ref-6)
6. Prodoc, p. 46 and 47, “Responsibilities for supervision and monitoring.” [↑](#footnote-ref-7)
7. "Adaptation to Climate Change through Effective Water Empowerment" and "Sustainable Financing of Ecuador's National System of Protected Areas (SNAP) and Associated Private and Community Subsystems." [↑](#footnote-ref-8)
8. Inventory of obsolete pesticides carried out by AGROCALIDAD, APCSA and INNOVAGRO in 2016. [↑](#footnote-ref-9)
9. <https://www.medigraphic.com/pdfs/adm/od-1999/od993e.pdf> [↑](#footnote-ref-10)
10. 2020 PIR, p.14. [↑](#footnote-ref-11)
11. Prodoc, p.15, outcome 1.1.1 [↑](#footnote-ref-12)
12. "FINAL REPORT OF THE POPS INVENTORY AND MACRO PROPOSAL OF THE ACTION PLAN FOR THE MANAGEMENT OF POPS PRODUCTS AT NATIONAL LEVEL," Quito, October 31, 2019, p. 47. [↑](#footnote-ref-13)
13. Own elaboration based on the expenses of the UNDP ATLAS system for the period 2018-2021 [↑](#footnote-ref-14)
14. The reference for calculating GEF project deadlines is from the time the Prodoc is signed by the Government, and not when the project's executing unit is installed. [↑](#footnote-ref-15)
15. Estimates from the 2019, 2020 and 2021 AOP of the project [↑](#footnote-ref-16)
16. Own elaboration from the data provided by the project and the Prodoc [↑](#footnote-ref-17)
17. SESP identified risks such as pollution from the management and disposal of chemical waste, and the prodoc also identified political-institutional risks. [↑](#footnote-ref-18)
18. *(e.g., UPOPs, POPs and Hg in Products, Pesticides and institutions related to ASGM)* [↑](#footnote-ref-19)
19. ABS, high impact polystyrene with ABS, treated leather, etching agents, ferric chloride, aviation hydraulic fluids, insecticides and flame retardants. [↑](#footnote-ref-20)
20. Everything that is not processed in beneficiation plants, this means "Chanchas" or "at the domestic level" (the latter will not be possible) [↑](#footnote-ref-21)
21. Sex, age, ethnicity, level of education, disabilities, family income, population characteristics, heads of families, use of time, roles of family members, among other important information. [↑](#footnote-ref-22)
22. One at each prioritized project site. A mining group can be a mining company, a cooperative, a society group, an association (jancheras). [↑](#footnote-ref-23)
23. The CFM model is taken from the GEF Small Grants Programme (SGP). Methodologies, procedures and monitoring will be carried out according to the experiences of the SGP. [↑](#footnote-ref-24)