2020

TERMINAL EVALUATION REPORT

GEF Project ID: 5067
UNDP/GEF ID: 00091381
UNDP Project ID: 5154
Evaluation Period: May-July 2020
Date of Evaluation Report: 14 July 2020
Country and Region: Vietnam, South Asia
GEF Operational Programme: POPs
GEF Agency: UNDP
Executing Partner: VEA/MONRE

VIET NAM POPS AND SOUND HARMFUL CHEMICALS MANAGEMENT PROJECT

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The team would also like to express appreciation and special thanks for the excellent support provided by the personnel of the Project Management Unit, Project Steering Committee, the UNDP Country Office in Vietnam, and the UNDP Regional Office.

Cover photo by Le Phuong Hoa. The TE national consultant

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Project Summary Table

Project Title: Viet Nam POPs and Sound Harmful Chemicals Management		
GEF Project ID:	PIMS 5067	
UNDP Project ID	PIMS 5154	
ATLAS Business Unit, Award #, Project ID:	Award ID 82491 Project ID 91381	
Country(ies):	Vietnam	
Region:	Asia	
Focal Area:	Persistent Organic Pollutants	
GEF Focal Area Strategic Objective:	CHEM -1: Phase out POPs and reduce POPs releases CHEM -3: Pilot sound chemicals management and mercury reduction	
Trust Fund (GEF)	GEF TF	
Executing Agency/ Implementing Partner	VEA/MONRE	
Project Financing	at CEO endorsement (US$)	at TE – June 2020 (US$)
[1] GEF financing:	2,550,000	2,309,272
[2] UNDP contribution:	-	-
[3] Government:	8,050,000	7,750,471
[4] Other partners:	3,000,000	3,200,000
[5] Total co-financing [2+3+4]:	11,050,000	10,950,471
PROJECT TOTAL COST [1+5]	13,600,000	13,259,743
Project Document Signature Date	January 29, 2016	
Closing Date	Proposed Dec. 2018	Actual July 29, 2020

Project Description

The Project **aims** at the creation of an integrated national sound chemicals management framework that provides the necessary national institutional, regulatory, and human resource capacity to address POPs and PTS issues generally and specifically to initiate systematic consideration of POPs contaminated sites and mercury. Therefore, the project provides Vietnam with tools to achieve effective compliance concerning its obligations against the Stockholm Convention and to substantively minimize the environmental and health risks of POPs/PTS, both locally and globally. By this token, the project is in alignment with the country's priorities associated with sound chemicals management as reflected in the other priority environmental management initiatives related to addressing national priorities associated with other POPs issues, hazardous waste management and Strategic Approach to International Chemicals Management (SAICM).

The Project **objective** is to continue the reduction of environmental and health risks through POPs and harmful chemicals release reduction. The project intended to achieve this objective by the provision of an integrated institutional and regulatory framework for better enforcement of the Stockholm Convention provisions and covering the development of pilot Pollutant Release and Transfer Register (PRTR) system covering at least 20% of the industrial sources in an industrial province, for the management and reporting of POPs and Mercury.

The project intended also to work toward the creation of a national sound chemicals management framework and targeted development of POPs contaminated sites management capacity that builds on experience from GEF-4 project[1].

To achieve the project's aim and objective, **four project Components** and **eight outcomes** were envisaged:

Component 1. Policy framework for sound chemicals management, including POPs/PTS, developed, and implemented.

Outcome1.1. Overall policy framework and specific regulatory measures covering environmentally sound management of POPs and PTS through life cycle management developed and implemented

Outcome 1.2. Key institutions have knowledge and skills to formulate and implement necessary chemicals and environment policies, consistent with sound chemicals management principles and international convention requirements

Component 2. Monitoring and reporting of POPs and PTS:

Outcome 2.1. National institutions provide comprehensive and coordinated ambient environment and receptor POPs /PTS monitoring that is consolidated into a national database and utilized for high quality reporting to the GoV/National Assembly and the Convention. This will cover 3 POPs categories (U-POPs, agricultural chemicals, and chemical of industrial use) plus mercury

Outcome 2.2 National network of certified/ accredited POPs/PTS laboratory is established that support monitor of ambient environment and receptors.

Component 3. Management of POPs contaminated sites.

Outcome 3.1 Key policies, regulations, and technical guidelines for the management of POPs contaminated sites are in place

Outcome 3.2 Detailed Provincial Management Plan for the pilot Provinces completed that contribute better to the contaminated site management at large scale and the reduction of POPs/PTS release and emission in the pilot provinces.

Component 4. National mercury baseline inventory and release reduction.

Outcome 4.1. Mercury inventory results contribute to the development of awareness-raising materials and the identification of national activities to implement the Minamata Convention.

Outcome 4.2. Knowledge of Gov staff and public awareness of mercury sources and mercury releases/emission

According to the Project Document (ProDoc), the Project specified the expected project results – project outputs - for each project component and outcome that relates to the immediate objectives.

Evaluation Rating Table

The project has been able to achieve its objective, outcomes, and planned activities and targets. Specifically, i) integrate environmental management of POP/PTS into the draft Law on Environmental Protection and the Law on Chemicals, and amended and supplemented several legal documents (such as Circulars, Decrees, Decisions, QCVN, Technical Guidelines, etc.) for the sound management of POPs/PTS, ii) develop and pilot the Pollutant Release and Transfer Register System (PRTR) and apply to 20% of industrial waste sources in Binh Duong,

[1] Introduction of BAT and BEP methodology to demonstrate reduction or elimination of unintentionally produced POPs releases from the industry in Vietnam https://www.thegef.org/project/introduction-bat-and-bep-methodology-demonstrate-reduction-or-elimination-unintentionally

iii) develop guidelines for environmental safety management of POPs/PTS and strengthen the management capacity of POPs contaminated areas for relevant officials of the Department of Natural Resources and Environment of Binh Duong and Nghe An Provinces. Table 1 provides the rating of the project performance.

Table 1: Rating the Project Performance

Criteria	Rating
Monitoring and Evaluation: Highly Satisfactory (HS), Satisfactory (S) Moderately Satisfactory (MS), Moderately Unsatisfactory (MU), Unsatisfactory (U), Highly Unsatisfactory (HU)	
The overall quality of M&E	**MS**
M&E design at project startup	**S**
M&E Plan Implementation	**MS**
IA & EA Execution: Highly Satisfactory (HS), Satisfactory (S) Moderately Satisfactory (MS), Moderately Unsatisfactory (MU), Unsatisfactory (U), Highly Unsatisfactory (HU)	
The overall quality of Implementation / Execution	**MS**
Implementing Agency Execution	**S**
Executing Agency Execution	**MS**
Outcomes: Highly Satisfactory (HS), Satisfactory (S) Moderately Satisfactory (MS), Moderately Unsatisfactory (MU), Unsatisfactory (U), Highly Unsatisfactory (HU)	
Overall Quality of Project Outcomes	**S**
Relevance: relevant (R) or not relevant (NR)	**R**
Effectiveness	**S**
Efficiency	**MS**
Sustainability: Likely (L); Moderately Likely (ML); Moderately Unlikely (MU); Unlikely (U).	
The overall likelihood of risks to sustainability	**L**
Financial resources	**L**
Socio-economic	**L**
Institutional framework and governance	**L**
Environmental	**L**
Impact: Significant (3=S), Minimal (2=M), Negligible (1=N)	
Environmental Status Improvement	**3**
Environmental Stress Reduction (rate 3 pt. scale)	**3**
Progress towards stress/status change (rate 3 pt. scale)	**3**
Overall Project Results	**S**

Summary of Conclusions, Recommendations, and Lessons learned

Summary of Conclusions

The project has had a sustainable and considerable effect on reducing environmental and health risks through POPs and harmful chemicals. It achieved its specific objectives by strengthening national capacity on safety management of POPs and harmful chemicals; controlling and reducing the release of POPs to environment from POPs contaminated site; performing a preliminary inventory of mercury sources and developed a roadmap on mercury reduction that has been integrated into the newly developed and approved GEF-7 project on *Reduce the impact and release of mercury and POPs in Vietnam through lifecycle approach and Ecolabel*. The project was also successful in leveraging co-financing.

The level of satisfaction with the Project expressed by community stakeholders consulted during the Terminal Evaluation (TE) was high. Stakeholders reported that the level of effectiveness of this Project is acceptable.

The project was able to complete many of the planned activities within four operational years (the project was approved by GEF SEC in September 2014, but the actual implementation started in January 2016 (the ProDoc got signed by UNDP and the Government of Vietnam). 18-month extension with no cost was requested to finalize the remaining project's activities).

The key questions for this evaluation concerning relevance, effectiveness, efficiency, monitoring and evaluation, replicability, and factors affecting project performance. The overall rating for this project based on the evaluation findings is ***Moderately satisfactory***.

The project reports indicated that the Project was able to achieve the Project's objective and outcome but with a substantial delay. Based on the review and assessment and taking into consideration the complex nature of the Project and the difficulties the Project's team had faced during the project launching phase, the overall rating on the achievement of results is ***Satisfactory***.

Recommendations:

- **Recommendation 1:** Develop a well-written lesson learned report that will be useful for other projects and technical staff working on similar projects in Vietnam and other countries. The report should illustrate the whole story of the projects; risks, issues, obstacles, success stories, flaws in design and implementation, long-term impact, sustainability, etc. and make linkages to development work like poverty alleviation, community empowerment, enhancing climate resilience and gender mainstreaming **(UNDP CO with support from UNDP Regional Office).**
- **Recommendation 2:** The project holds a workshop of stakeholders to adopt a comprehensive exit strategy to ensure the Project's results sustainability. The vision should provide a clear statement that reducing environmental and health risks through POPs and harmful chemicals should continue with the support of all stakeholders **(UNDP, MONRE, and MOIT).**
- **Recommendation 3:** The Project has managed to produce a set of valuable Project's documentation including guidelines, frameworks, awareness-raising materials, etc. It is recommended to develop a dissemination plan for those materials to ensure that future initiatives would build on the Project activities and results and will incorporate the project's products in its work **(UNDP, MONRE).**
- **Recommendation 4:** To ensure the sustainability of the Project's outcomes it is necessary to institutionalize the Project's main results. The project should investigate embedding the PRTR system at the provinces level through existing planning mechanisms and links to national government programmes and plans. The PRTR system has been integrated with the environmental management software of the Binh Duong Province, but this is not enough. Work should also be expanded to other provinces. Provinces should commit to using the software **(MONRE and MOIT, and provinces government to implement, UNDP to assist).**
- **Recommendation 5:** Reducing environmental and health risks through POPs and harmful chemicals capacity has limitations to meet the actual needs at the Country level. Other initiatives supported by UNDP and other development partners should continue working on enhancing national and provinces level capacity to meet the needed demand created under the project. For example, the work done to enhance laboratory capacity under this project is very valuable, however, a lot of effort will still be needed to improve the reliability of laboratory analysis, in terms of accuracy and repeatability **(MONRE, MOIT, UNDP, development partners).**
- **Recommendation 6:** Involve and empower youth and women organizations, to raise their awareness for positive change towards the sound management of contaminated sites and encourage NGOs to actively use the project's outcomes. For

example, the use of the procedure for risk assessment in different locations, the use of the developed awareness materials on contaminated sites and POPs stockpiles management and mercury, and to use the material of training on contaminated sites management, etc. **(MONRE).**

- **Recommendation 7:** Key documents should be finalized and nationally endorsed even after the project closure. For example, the circular on PRTR is under revisions as of July 2020, this should be finalized and endorsed at the national level (MONRE and UNDP).
- **Recommendation 8:** Increase public awareness through intensive mass media promotion and publicity using different materials developed by the Project. The project has raised awareness for people in Lam Hoa, Quang Binh on management and prevention of environmental pollution due to pesticides residue. A Technical Guideline on environmental pollution management of pesticides residue contaminated sites and instruction for communities residing in the vicinity of contaminated sites has been developed, these materials can be used in other places as appropriate **(MONRE).**

Lessons Learned

i. Project's inception phase is very critical to ensure successful implementation of the project. The absence of timely and well-developed adaptive management measures during project inception phase had not helped the project coordination team to avoid project delay and wasted some of the existing opportunities that would have helped to offer solutions to some problems.

ii. Enhancing the enabling environment and building national and provincial capacities complementing each other and are considered critical for achieving the project outcomes and to ensure its sustainability.

iii. Project's monitoring and evaluation tools are critical to ensure the successful implementation of any project. This project benefited from the use of some of the MTR recommendations. It helped, among other factors, in moving the project's performance from moderately unsatisfactory to satisfactory. Timely adaptive management measures are undertaken after the MTR has avoided further implementation delay.

iv. Strong technical inputs and relevant experience is a contributing factor to successful project design and implementation. International and national technical experts should work collaboratively to provide sound technical guidance and inputs, conducted technical workshops and training sessions.

v. Good quality planning is essential to ensure timely project inputs to achieve project outcomes. The project experienced a long delay in project operational completion. Better planning and anticipation of the difficulties, issues and risks during project development, inception and implementation would have minimized the length of the delay.

vi. To ensure the smooth implementation of new projects, the lengthy appraisal process within VEA and MONRE in terms of the procurement process, planning and reporting needs to be reviewed and streamlined. In many cases, these processes were constrained created several pauses of weeks or months.

ii. Acronyms and abbreviations

APRs	Annual Progress Reports
AWP	Annual Work Plan
BAT/BEP	Best Available Techniques/ Best Environmental Practices
CDRs	Combined delivery reports
CIP	Co-Implementing Partner
COVID-19	Coronavirus Disease 2019
DDT	Dichlorodiphenyltrichloroethane
DONRE	Provincial Department of Natural Resources and the Environment
EA	Executing Agency
FAO	Food and Agriculture Organization
GEF	Global Environment Facility
GEF CEO	Global Environment Facility – Chief Executive Officer
GHS	Globally Harmonized System of Classification and Labelling of Chemicals
GIS	Geographic Information System
GoV	The government of Vietnam
IA	Implementing Agency
IR	Inception Report
IW	Inception Workshop
LF	Logical Framework
MEAs	Multilateral Environmental Agreements
MDGs	Millennium Development Goals
MARD	Ministry of Agriculture and Rural Development
MoH	Ministry of Health
MOU	Memorandum of Understanding
MONRE	Ministry of Natural Resources and Environment
MOIT	Ministry of Industry and Trade
MTR	Midterm Review
NIP	National Implementing Plan
PCBs	Polychlorinated Biphenyl
PIF	Project Identification Form
PIRs	Project Implementation Reports
PMU	Project Management Unit
POPs	Persistent Organic Pollutants
PPG	Project Preparatory Grant
PTS	Persistent Toxic Substance
REACH	A European Union regulation. *The sole purpose of REACH is to address the production and use of chemical substances and their potential impacts on both human health and the environment.*
ROHs	Restriction of Hazardous Substances
SAICM	Strategic Approach to International Chemicals Management
SC	Stockholm Convention
SCM	Sound Chemicals Management
TE	Terminal Evaluation
UNDP	United Nations Development Programme
UNDP CO	United Nations Development Programme Country Office
UNDP-GEF	United Nations Development Programme- Global Environment Facility
VEA	Vietnam Environment Administration
VINACHEMIA	Vietnam Chemicals Agency
WENID	Waste Management and Environment Improvement Department

1. Introduction

As per the Terms of Reference (ToR), this Terminal Evaluation (TE) is a mandatory requirement for the UNDP-supported and GEF-financed project full-sized project titled ***Viet Nam POPs and Sound Harmful Chemicals Management***, implemented through the Vietnam Environment Administration (VEA)/Ministry of Natural Resources and Environment (MONRE) as the UNDP's National Implementing Partner (NIP) and the Vietnam Chemicals Agency (VINACHEMIA)/ Ministry of Industry and Trade (MOIT) as the UNDP's Co-Implementing Partner (CIP), which has been implemented between 2016 and 2020.

As a requirement for all projects financed by UNDP/GEF, this TE has been initiated by a group of one international consultant and one national consultant. The TE was implemented in four stages: i) data collection, analysis; ii) desk reviews and preparation of inception report; iii) virtual and in-person meetings with the project team, implementing and executing partners, and other stakeholders. This phase included a site visit to Binh Duong, Nghe An, and Quang Binh provinces; and vi) finalizing the preparation of the TE Report, integrating comments and feedback, and submitting the final version of the TE report.

1.1 Purpose of the Evaluation

This TE is set to take place during the last six months of completion of project's activities, according to the guidance, rules, and procedures established by UNDP and GEF that are reflected in the UNDP Evaluation Guidance for GEF Financed Projects. According to the Guidance, the TE has two main objectives: *to assess the achievement of project results and to draw lessons that can both improve the sustainability of benefits from this project, and aid in the overall enhancement of UNDP programming*.

The TE is intended to provide evidence-based credible, useful, and reliable information. The evaluation used the criteria of relevance, effectiveness, efficiency, sustainability, and impact, as defined, and explained in the UNDP Guidance for Conducting Terminal Evaluations of UNDP-supported, GEF-financed Projects. The TE synthesizes lessons to help guide future design and implementation of GEF-funded and UNDP- supported projects.

The Project's TE is based on a performance assessment approach guided by the principles of results-based management. The evaluation tracks impact per the project's Logical Framework (LF). The contribution of this project outputs and project management is evaluated concerning the achievement of the project outcomes and overall objective. This TE reviews the implementation experience and achievement of the project results against the ProDoc endorsed by the GEF CEO, including any changes made during implementation.

1.2 Scope and Methodology

This TE has been conducted according to the guidance, rules, and procedures established by UNDP and GEF as reflected in the UNDP Evaluation Guidance for GEF Financed Projects. It is founded on evidence-based information that is credible, reliable, and useful. The evaluation has followed a participatory and consultative approach and wanted to ensure close engagement with key government counterparts, UNDP Country Office, project team, the UNDP regional office, and key project beneficiaries and stakeholders. The evaluation covered all activities undertaken in the framework of the project. The time scope of the evaluation is the implementation period of the project from January 2016 up to July 2020.

The geographic scope of the evaluation is the whole country (Vietnam). The evaluation included a field mission to the project's intervention sites. The TE was carried out in strict adherence to the Terms of Reference received (**Annex 1**), and included the following four stages:

- ***Stage 1: Data collection.***

All relevant documents, data, and information were collected by the TE team either accessed online or shared by the project team. This helped in getting the perspective of both women and men beneficiaries and stakeholders. To the extent possible, data collection and analysis were disaggregated by sex.

- ***Stage 2: Desk Review and Inception Phase:***

This initial stage of the TE involved desk reviews of project-related documentation (Project Identification Form (PIF), project document (ProDoc), annual progress reports (APRs), project implementation reports (PIRs), project files, national strategic and policy documents, mid-term review report, response to management response, project's technical reports, project terminal report, project monitoring and evaluation plan, the project combined delivery reports (CDRs), and any other materials (**Annex 2**) that the evaluator considered useful for an evidence-based evaluation assessment. The documents were mainly provided by the Project Management Unit (PMU).

As part of the inception phase, an Inception Report (IR) was prepared and submitted to UNDP for approval. It included:

- A preliminary itinerary for the field mission (**Annex 3)**,
- A tentative list of interviewees **(Annex 4)** selected to provide a broad sample of the achievements and influence of the project, and
- An evaluation matrix was developed during this phase and used during the virtual interviews and field mission to guide the interviews with the project's stakeholders **(Annex 5).**

- ***Stage 3: Intensive consultations, interviews, and meetings with the Project's team, stakeholders, and beneficiaries.***

Meetings (in-person and virtual) were held with several key project stakeholders to brief on the purpose and methodology of the TE and to obtain more details and update on the project's progress, achievements, and objectives. Key participants included PMU, UNDP, Implementing Agency (IA), Implementing Partner, Executing Agency (EA). In-person interviews were held with key stakeholders only due to the social distancing policy implemented in Vietnam because of COVID-19 outbreak. A group of virtual meetings/ interviews were organized to allow the evaluation team to interview a wide range of stakeholders using a pre-prepared set of questions (**Annex 6**).

This stage included three main groups of activities:

- **Semi-structured interviews and consultations** with key stakeholders, using a set of questions in an informal format. The questions aimed to provide answers to the points described in the following section. Findings were crosschecked during different interviews, site visits, and with available evidence and project documentation.
- **Observations based on the interviews and site visits:** all data and the information collected, including documentary evidence, observations, and interviews, were compiled, summarized, and organized according to the questions asked in the evaluation.
- **Field visit to Project implementation sites–** Binh Duong, Nghe An, and Quang Binh provinces**:** the meeting with the local community provided a good source of information about stakeholders' involvement, project's piloting and the project's activities efficiency and effectiveness (minutes of the site visits are summarized in **Annex 7**).

- ***Stage 4: Terminal Evaluation Report Preparation***

Due to the current safety and security issues concerning COVID-19, the TE tasks were going in-parallel including documentation review, interviewing stakeholders and TE report preparation. The data collected, updates from stakeholders on project progress, and materials received during the mission were examined, carefully reviewed, and analyzed following the UNDP Project Evaluation Methodology. All data were then consolidated and based on accountable information and opinions of the stakeholders with all sources and assumptions given, a draft TE Report was prepared and submitted to UNDP CO for review and feedback.

Using the UNDP/GEF Performance criteria table, below (provided in the TOR and the UNDP-GEF Terminal Evaluation Guidance), the detailed assessment of project performance helps in providing a rating of the main areas. The assessment is carried out against the pre-identified targets as stated in the Project's LF:

Evaluation Ratings:			
1. Monitoring and Evaluation	rating	2. IA& EA Execution	rating
M&E design at entry		Quality of UNDP Implementation	
M&E Plan Implementation		Quality of Execution - Executing Agency	
The overall quality of M&E		The overall quality of Implementation / Execution	
3. Assessment of Outcomes	rating	4. Sustainability	rating
Relevance		Financial resources:	
Effectiveness		Socio-political:	
Efficiency		Institutional framework and governance:	
Overall Project Outcome Rating		Environmental:	
		The overall likelihood of sustainability:	

UNDP Vietnam Country Office shall circulate the TE report to key project partners for review, consolidate questions and comments on the draft TE Report and share back with the TE team. An **"audit trail"** is included in the final version of the TE report to indicate how the comments received were (or were not) addressed in the final TE Report.

1.3 Structure of the Evaluation Report

The structure of this TE Report corresponds to the Evaluation Report outline as documented within the TOR for the assignment as well as the GEF and UNDP Terminal Evaluation Guidelines.

TE report includes a section setting out the TE's evidence-based conclusions, considering the findings according to the TOR and the UNDP/GEF Evaluation Guidance. A list of specific recommendation is provided in the report's executive summary.

TE report provides a rating for the project's results as well as a brief description of the associated achievements in a table called TE Ratings & Achievement Summary. This table is part of the Executive Summary of the TE report.

2. Project Description and Development Context

2.1 Project start and duration

Vietnam signed the Stockholm Convention on May 23, 2001, and ratified it on July 22, 2002. The National Implementation Plan (NIP) for the Stockholm Convention was adopted (Decision No. 1598/2017/QD-TTg dated 17 October 2017 replaces Decision 184/2006/QD-TTg) and submitted to the Stockholm Convention in 2017. The NIP has established the basis for the implementation of several programs related to POPs undertaken nationally, including GEF-4 Projects addressing POPs (Persistent Organic Pollutants) stockpiles and wastes (POPs pesticides, Polychlorinated biphenyls (PCBs), and highly dioxin contaminated hotspots) and Unintentional POPs (U- POPs), as well as participation in a global project on medical waste management. Fourteen projects/programs were listed as a priority for Vietnam in meeting its obligations (under Annex 2 of the Decision). PCB management was listed in Program No. 4 (safety management, pollution control, and reduce the impacts of PCB to human and the environment).

The Government also adopted an overall strategy of integrating NIP implementation into a national framework for the sound management of chemicals throughout their life cycle, such that the effectiveness of international and national efforts is optimized. A central part of this strategy is working with the GEF on the development of an overall GEF-5 program aimed at addressing outstanding and emerging POPs and Persistent Toxic Substance (PTS) issues, as well as ensuring that the NIP is undertaken within the developing Supply Chain Management (SCM) framework. Moreover, the 2011 National Target Program on Pollution Remedies and Environmental Improvement adopted by the Government of Vietnam provides a direct implementation framework to which the current project can be linked, particularly concerning POPs contaminated sites.

Consequently, this Project request was submitted to GEF on 10 August 2012. A Project Preparatory Grant (PPG) was approved on 19 February 2013. The project has been endorsed by the CEO of the GEF on September 18, 2014. The GEF project grant amounts to USD 2,550,000, against a total co-financing of 10,900,000 USD. The expected project duration was 3 years. The official starting date of the project was 29/01/2016 and the expected closure date of the project was 31/12/2018. The Project's main milestone dates are given in Table 2.

Table 2 Project main milestones

Milestone	Date
PIF developed/ was submitted to GEF	10 August 2012
PIF approved by the GEF	19 February 2013
Request for CEO Endorsement Approved	11 March 2013
ProDoc Approved by the GEF	18 September 2014
ProDoc Approved by the Government- Prime Minister ProDoc Approved by the Government- MONRE	20 August 2015 18 December 2015
UNDP Signed Prodoc	29 Jan 2016
MONRE signed ProDoc	29 Jan 2016
Inception Workshop	14 April 2016
PMU established	29 April 2016
PSC established	14 June 2016
PMU staff hired	1 October 2016
The contract was signed between Project EAs (VEA/MoNRE and MOIT)	17 October 2016
First Project annual work plan approved	16 November 2016
Project Closure Date	Original: mid-2018 Actual: 29 July 2020
MTR date	May 2018
TE date	May-July 2020

By the end of April 2016, a Project Management Board was established, however, the Project Management Board members are only part-time staff, they have heavy schedules and can spend maximum 30% of their time on the project. Only in October 2016, the Project Management Board signed a contract with the staffs to implement the project. It was not an easy process to find a suitable team due to the project complex nature and design. The project first annual work plan was approved in November 2016.

2.2 Problems that the project sought to address

There have been legal documents relating to the environmental management of hazardous chemicals, especially regulations relating to POP and mercury, but the documents are inconsistent and scattered. Therefore, the project is aimed to provide technical support to develop and implement regulations Policy framework for environmental safety management of chemicals, especially POP, PTS and systematically integrate requirements of international conventions to Vietnam's legal system.

National Monitoring capacity of POPs/PTS

In Vietnam, according to the baseline report of the project, only a few laboratories have been certified to be capable of POP analysis. At the national level, monitoring of POP pesticides in soils, PCDD / F in soils, sediments, exhaust from chimneys and PCBs in transformer oil is well conducted, however, in the current conditions of industrial development, it is necessary to build the capacity of monitoring new POPs. The establishment of accredited laboratories to analyze new POPs in the environment, industrial emissions and in waste is necessary, especially to meet the requirements of the Stockholm Convention. The project is aimed to promote certification activities for laboratories, build a network of POP monitoring, to train and improve the monitoring capacity of POP and PTS substances according to international standards, to set up a system for registration of transfer and release of hazardous waste relating to monitoring POP and PTS and pollution sources in selected provinces as a pilot.

Management of POP Pesticides contaminated areas

In Vietnam, there are many areas contaminated with hazardous chemicals such as organic pesticides, POP pesticides, PCBs and substances used by the US military during the war from 1954 - 1975. Some areas of dioxin contamination have been monitored such as Bien Hoa, Da Nang and Phu Cat airports, but other areas have not been officially confirmed due to the lack of monitoring surveys. There is also a lack of information about pollution in industrial zones, which can be contaminated by many chemicals at the same time. Based on the results of previous projects, the project is aimed to develop and apply a practical approach to the overall management of pilot pollution areas in the two provinces. The project also supports the integration of risk assessment methods for contaminated areas and the requirements of the Stockholm Convention into its by-laws.

Development of National preliminary mercury inventory database and reduction of mercury emissions

Although there have been several legal documents and guidelines on the management and treatment of mercury waste it is still difficult to implement without specific regulations.

According to the baseline report, Vietnam's capacity of for mercury inventory and monitoring in the environment is limited, therefore, through the provision of technical assistance, the project is aimed to develop a roadmap for the management of raw materials and goods containing mercury, supporting the government in implementing the requirements of the Minamata Convention on mercury that the government has signed.

2.3 Immediate and development objectives of the project

The project **aimed** at

"*creation of an integrated national sound chemicals management framework that provides the necessary national institutional, regulatory and human resource capacity to address POPs and PTS issues generally and specifically to initiate systematic consideration of POPs contaminated sites and mercury*."

The Project **objective** is to

"*continue the reduction of environmental and health risks through POPs and harmful chemicals release reduction*." The project intended to achieve this objective by the *provision of an integrated institutional and regulatory framework for better enforcement of the Stockholm Convention provisions, and covering the development of pilot PRTR system covering at least 20% of the industrial sources in an industrial province, for the management and reporting of POPs and Mercury.*

The project intended to work toward the creation of a national sound chemicals management framework and targeted development of POPs contaminated sites management capacity that builds on experience from GEF-4 projects.

2.4 Baseline Indicators Established

In the baseline scenario, there were the following indicators:

- SC requirements are not yet completely integrated into the existing regulation on chemicals/POP management.
- Lacking a comprehensive POPs/PTS Management Information System following a PRTR Scheme which prevents good planning and reporting
- Limited national capacity and knowledge of industrial contaminated site management.
- Substantial experience has been achieved from bilateral and GEF POP/chemical related projects. However, the results are still project-based, not well integrated to support the GoV having a comprehensive regulation system on POPs/PTS management.
- The existing national regulations on chemicals are based on the GHS and include provisions of international conventions. However, the existing regulations are not fully compliant with the SC requirement still fragmented and not fully harmonized due to issue by different Ministries. Provisions of new POPs as required by the SC are also not yet included in the chemical and environment policy framework.
- Environmental protection and chemical safety policies are not well linked. Risk assessment criteria are absent in the POP/PTS legislation and guidelines
- Some provisions of Chemical Law and its secondary regulations are not fully compliant with the SC.
- The new Law on Emissions Protection (LEP) mentions in general toxic, persistent and accumulative chemicals but not specifically POPs.
- Regulations from different sectors are not integrated each other and there is the need to upgrade and harmonize the regulatory system (chemical, agrochemicals, environment, waste, occupational health, consumer exposure) not only to include provisions of the SC convention on POPs but also to better integrate SAICM and the risk management approach into the environmental-related legislation
- POPs Guidelines which only cover limited sectors are under preparation and have not been officially adopted yet.
- Environmental protection requirements are not well integrated under the overall chemicals' management framework; poor sound management of chemicals including scheduled wastes containing toxic chemicals
- Poor data on chemicals and POPs/PTS that disturbs their management planning and

reporting. Yet existing data of chemicals, POPs/PTS are not consistent among state management agencies

- A database system for POPs/PTS management is very poor or not exist at both the national and local level.
- A certain number of POPs training initiatives have been carried out and is being carried out in the framework of previous GEF4 projects
- There is the need to build on the experience of these training activities and to establish a training system which consistently increases capacity on POPs, management of hazardous chemicals and hazardous waste in the perspective of ensuring consistency and coordination of environmental-related regulation with SC.
- GoV has limited opportunities to participate in the ICCM conference
- Limited capacity on chemical classification and labelling following international approaches
- Very limited and uncoordinated training on POPs regulatory issue, and in the interconnection of Viet Nam chemical management with international regulation performed.
- Risk assessment criteria are not consistently adopted in decision making and law-making processes. A procedure for considering risk assessment criteria on chemical management is missing.
- So far training on risk assessment limited to specific issues (e.g. contaminated sites)
- Weak compliance and enforcement of legislation on environmentally sound chemical and hazardous waste management leading to increasing in chemical incidents and environmental pollution.
- Market-based mechanisms are not sufficient and attractive enough for private sectors to involve in SCM and/or environmentally friendly management of hazardous waste
- POPs Monitoring capability increased in the last years thanks to governmental initiatives, support of international donors, and GEF projects related to Dioxin contaminated sites, POP pesticide stockpiles, PCBs. However, the monitoring capability on U-POPs emitted from industrial sources and other POPs is still very limited.
- Existing POPs laboratories are mainly dedicated to sampling and analysis of POP pesticide, PCBs. Some labs can sample and analyze Dioxin.
- A target level for PCDD/F has been established during the ongoing GEF project on Dioxin contaminated hotspot.
- The absence of environmental quality standards in many sectors limits monitoring effectiveness and relevance.
- There exist baselines for some POPs (POP pesticide, dioxin in contaminated sites, PCB, uPOP in some industries, etc.) and PTS
- A detailed survey of POPs laboratory is missing.
- Existing POPs laboratories are mainly dedicated to sampling and analysis of Dioxin contaminated sites, POP pesticides and sampling/analysis of PCBs
- No POPs monitoring program existing.
- Monitoring data of PCDD/F and for some pesticides made available under current GEF or bilateral projects
- There are no national official analytical methods on the determination of POPs.
- Also, a national plan for accreditation and certification of these labs to international

standards is missing. A national official scheme for the accreditation of laboratories does not exist – international accreditation and inter-calibration mostly voluntary

- Limited training provided to laboratory staff on POPs sampling and monitoring, and most of the training is within ongoing bilateral / GEF projects
- A POPs monitoring database is missing. Data related to industrial sources is generally obsolete and does not allow for effective control and authorization of industrial emissions
- In the country, several separate initiatives on the management of contaminated sites are being carried out by governmental institutions, international donors, or under GEF projects. These efforts are however still fragmented (project-based) and not yet capitalized into a harmonized system of laws and guidelines.
- The National Target Programme on Pollution Remedies and Environmental Improvement (approved in 2011) sets an objective by 2015 to recover environment at 100 sites seriously contaminated by POP pesticide stockpile
- Technical regulations have been adopted by the GOV for soil contaminated by dioxin and POP pesticide under GEF4 projects' support
- No standardized reporting system existed in the country for POP contaminated sites
- The guidelines for the management of contaminated sites (EMP) are developed by on-going POP pesticide project for specific POP pesticides contaminated sites.
- Risk management procedures have been developed for POPs pesticide storage site. Building on this experience there is the need to develop and adopt similar procedures for POPs contaminated sites
- Currently, an inventory database of POP pesticide-contaminated sites (for about 1,300 sites) has been established with support from UNDP/GEF4 POP pesticide project.
- Inventories of POP dioxin, PCB and U-POPs are parties done by GEF and other bilateral supporting projects.
- Inventories of contaminated sites from industries and craft villages are not yet done.
- Limited training of staff trained on disposal technology and site assessment during previous Dioxin hotspot and Pesticidal POPs GEF/UNDP projects. Further training is needed for comprehensive contaminated site assessment, remediation, technology testing and selection
- POPs contaminated sites management plan are missing either at the national or provincial level.
- Limited training provided to government staff on contaminated site management including site assessment, disposal technology under the course of previous UNDP/GEF POP Dioxin hotspot and POP Pesticide stockpile projects. Further training is needed for comprehensive contaminated site assessment, remediation, technology testing and selection
- Awareness of people and local authorities on the issues of POPs contaminated sites is still very low.
- Local communities, in general, do not involve in management of the contaminated site, especially dispersed small contaminated sites, empty containers management, monitoring and reporting, etc.
- Limited demonstration of alternatives to mercury carried out under a GEF global project on healthcare waste.
- Only demonstration activity carried out limited to mercury-containing healthcare device

- Very few data on mercury sources and release existed. No questionnaire survey on mercury previously carried out. Database on mercury-added products is missing.
- Legislation on the replacement of mercury-containing lamps
- A road map for the reduction of mercury emission and replacement of mercury-containing products is missing
- Inventory of mercury-added products in Viet Nam is missing. Strategy on Mercury related product is missing and legislation on mercury product limited to replacement of Hg containing light bulbs.
- Under the GoV's legislation on chemical management, mercury is managed like all other heavy metals. No special requirement has existed.
- Low awareness and knowledge on mercury and its related risks, disposal technologies
- Awareness campaign on mercury issue is limited to a few pilot healthcare facilities carried out under the UNDP/GEF global project on healthcare waste management which focused on mercury-containing waste, healthcare mercury devices and their alternatives.

2.5 Main Stakeholders

The Project's main stakeholders were identified in the ProDoc (Page 29). The two main government stakeholders of the project are MONRE, which is in charge of the state management of the environmental protection, as well as setting environmental quality standards, environmental monitoring, remediation and prevention and MOIT which is the focal point for the legislation on chemicals, including the implementation of GHS and the coordination with international legislation like REACH and ROHs.

In addition to MOIT and MONRE, Ministry of Agriculture and Rural Development (MARD), Ministry of Health (MOH), 2 Provincial Departments of Natural Resources and Environment (DONRE) in Nghe An, Binh Duong and Lam Hoa Commune under the Tuyen Hoa District are key stakeholders.

Main project stakeholders identified in the project design (Stakeholder analysis sub-section. ProDoc, page 29-33) to be actively involved in project implementation included:

	Government Agencies
Stakeholders who are directly involved in the project	Ministry of Natural Resources and Environment (MONRE)
	Vietnam Environment Administration (VEA/MONRE)
	Ministry of Industry and Trade (MOIT)
	Provincial People's Committee (PPC/CPC)
	Vietnam Chemicals Agency (VINACHEMIA/ MOIT)
Stakeholders who are indirectly involved in the project	Ministry of Agriculture and Rural Development (MARD)
	Department of Plant Protection (DPP)/MARD
	Ministry of Health (MOH)
	Health Environment Management Agency (VIHEMA)/MOH
	Provincial Departments of Natural Resources and Environment (DONRE)
Stakeholders who are indirect beneficiaries.	Department of Labor Safety (DLS)/MOLISA
	Department of Occupational Safety (MOLISA)
	Ministry of Science and Technology (MOST)
	Ministry of Transport (MOT)
	Industrial Safety Technique and Environment Agency (ISEA)/MOIT
	Ministry of Industry and Trade (DOIT)
	Department of Agriculture and Rural Development (DARD)
	Department of Health (DOH)
	Department of labour, Invalids and Social Affairs (DOLISA)
	Department of Natural Resources and Environment (DONRE) in Nghe An

	and Binh Duong
	Lam Hoa Commune under the Tuyen Hoa District

Project relations with the key stakeholders have not been as strong as would have been required to implement the project as per its design. A detailed discussion is provided under section 3.1.4.

2.6 Expected Results

This project was designed to create an integrated national sound chemicals management framework that provides the necessary national institutional, regulatory, and human resource capacity to address POPs and PTS issues generally and specifically to initiate systematic consideration of POPs contaminated sites and mercury. Therefore, the project was expected to provide Vietnam with tools to achieve effective compliance concerning its obligations against the Stockholm Convention and to substantively minimize the environmental and health risks of POPs/PTS, both locally and globally.

More specifically, the Project intended to support Vietnam's effort in the reduction of environmental and health risks through POPs and harmful chemicals release reduction by the provision of an integrated institutional and regulatory framework for better enforcement of the Stockholm Convention provisions and covering the development of pilot PRTR system covering at least 20% of the industrial sources in an industrial province, for the management and reporting of POPs and Mercury.

The project intended to work toward the creation of a national sound chemicals management framework and targeted development of POPs contaminated sites management capacity that builds on experience from GEF-4 projects.

2.7 Constraints and Limitations

The findings, recommendations, and conclusions discussed in this report are based principally on a systematic and detailed desk review of Project's documents that were made available to the TE team, virtual meetings and interviews by the international consultant, and one-week mission to project's sites by the national consultant in addition to intensive follow up by emails, skype discussions, and virtual interviews.

Many of the interviews were conducted virtually and by emails. The TE team interviewed more than 20 stakeholders. Due to COVID-19 outbreak, the TE team leader – who oversees preparing the TE report - was unable to field a mission to Vietnam to meet with key stakeholders and to visit the project's pilot sites. Also, the national consultant could not visit all project sites due to COVID-19 outbreak and the role-out of social distancing. Due to COID-19 situation along with the difficulties in getting access to all project documents and deliverables, on-time, represent main challenges to the TE. Furthermore, many of the project's reports (PSC minutes of meetings) and technical deliverables were in the local language, which makes it difficult for the TE international consultant to thoroughly analyze the content and assess the quality of all project's technical deliverables.

3. Findings

3.1 Project Design/ Formulation

The TE team analyzed the design of the project as outlined in the ProDoc. The team also assessed the extent to which the project addresses country priorities and is country-driven. Project design is very relevant to the GEF objectives and Vietnam's global environmental obligations and development objectives. The team also evaluated the extent to which the project objectives are consistent with the priorities and objectives of the UNDP, and the GEF.

The Project was designed to contribute to the UN One Plan III Focus area: ***Inclusive, Equitable and Sustainable Growth***. Mainly to ***Outcome 1.4:*** By 2016, key national and sub-national agencies, in partnership with the private sector and communities, implement and monitor laws, policies and programmes for more efficient use of natural resources and environmental management, and implement commitments under international conventions. And more specifically to ***Output 1.4.3:*** Policies, plans and technical skills are strengthened for the sound management of hazardous chemicals and persistent organic pollutants (POPs), following international conventions[2].

The Project was developed and financed under GEF-5, yet, its objective is highly relevant for the GEF-6 and GEF-7. For GEF-6 Chemicals and Waste Strategy: *to prevent the exposure of humans and the environment to harmful chemicals and waste of global importance, including POPs, mercury and ozone-depleting substances, through a significant reduction in the production, use, consumption and emissions/releases of those chemicals and waste*. It responds to GEF-7 which focused on supporting:

> *[… the reduction of persistent organic pollutants (POPs) that are controlled by the Stockholm Convention on Persistent Organic pollutants, mercury and mercury compounds that are controlled by the Minamata Convention on Mercury, Ozone Depleting Substances (ODS) and other chemicals controlled by the Montreal Protocol on Substances that deplete the Ozone Layer, lead in paints, chemicals of global concern in the supply chain of commercial and domestic products and highly hazardous pesticides (HHPs) that enter the global food supply].*

The Project is responding to GEF-7 Chemicals and Waste Programs 1. *Industrial Chemicals Program which seeks to eliminate or significantly reduce chemicals subject to better management*, and 2. *Agriculture Chemicals Program*, *which addresses the agricultural chemicals that are listed as persistent organic pollutants under the Stockholm Convention and agricultural chemicals that contain mercury or its compounds*.

The project contributes to the objectives of the National Strategy on Environment Protection to 2020 that specifies the following requirements: *i) prioritize pollution prevention and control; ii) improve the environment in polluted and deteriorated areas to better-living conditions for people; iii) strictly apply the registration of toxic chemicals; and iv) plan and gradually conduct environment improvement and recovery, prioritizing land areas within or near residential areas and water resources, or those that can directly influence people's health*.

The Project contributes to the achievement of 3 out of 15 national priority programmes on POPs as is identified in the NIP: NIP priorities 1, 7 and 12[3]. It is in full compliance with the national priorities and legislation that govern environmental issues. More specifically, the Project is consistent with the following national policies and strategic documents:

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[2] Project Document. Cover Page.

[3] *NIP priority 1:* Development and finalization of policies, legislation and institutions for POP management- *NIP priority 7*: Development of technical capacity for POP monitoring and analysis; establishment of the network of standardized laboratories for assessing pollution and impacts of POPs on human health and the environment - *NIP priority 12:* Strengthening capacity for managing and controlling the production, import-export, use and transport of prohibited chemicals including POPs in Viet Nam.

- Vietnam signed the Stockholm Convention on May 23, 2001, and ratified it on July 22, 2002. The National Implementation Plan (NIP) for the Stockholm Convention was adopted (Decision No. 1598/2017/QD-TTg dated 17 October 2017 replaces Decision 184/2006/QD-TTg) and submitted to the Stockholm Convention in 2017.
- The NIP has established the basis for the implementation of several programs related to POPs undertaken nationally, including GEF-4 Projects addressing POPs stockpiles and wastes (POPs pesticides, PCBs, and highly dioxin contaminated hotspots) and U-POPs, as well as participation in a global project on medical waste management. Fourteen projects/programs were listed as a priority for Vietnam in meeting its obligations (under Annex 2 of the Decision).
- PCB management was listed in Program No. 4 (safety management, pollution control, and reduce the impacts of PCB to human and the environment).
- The overall strategy of integrating NIP implementation into a national framework for the sound management of chemicals throughout their life cycle.

Vietnam has implemented several activities planned in NIP, including implementation of obligations related to the development of policies and regulations on POPs management, capacity building in POPs management, the introduction of BAT/BEP for reduction of unintentional POPs, safe treatment of POPs stockpiles etc. Primarily, twelve POPs have been recognized by the Stockholm Convention as causing adverse effects on humans and the ecosystem and placed in 3 categories: pesticides, industrial chemicals, and by-products. Since its fourth meeting in 2009, The Conference of Parties to the SC (COP) has decided to amend Annexes A, B and C to the Convention by adding sixteen news POPs. Simultaneously, the Parties to the Stockholm Convention are required to periodically review, update, and adopt NIP where POPs under amendments to the Stockholm Convention as well as update the situation of the initial POPs are considered.

Concerning Vietnam's obligations as Party to the Stockholm Convention, Vietnam's NIP under the Stockholm Convention establishes that *the core approach shall be "pollution prevention" with recognition of POPs as posing long-term potential hazards to human health and the environment.* By adopting and updating the NIP, the Government of Vietnam has shown a strong commitment to reducing and phase-out POPs to mitigate environmental degradation caused by POPs and resulting in adverse consequences to human health.

The ProDoc thoroughly analyzed the POPs and harmful chemicals related issues, associated risks and problems, and barriers that prevent Viet Nam to consistently implement sound management of chemicals in the country. It included the main elements of any UNDP GEF project, defined objectives, outputs, activities, and targets. Many of the intended outputs were designed to be goal-oriented, however, many targets are difficult to achieve within the short time proposed for achieving all targets (three-year implementation timeframe).

The Project is also aligned with nine of the thirteen Priority Programmes phased into the first period 2006-2010 (out of three periods) of the NIP implementation road map[4], and also aligned with five out of the six NIP Priority Programmes phased for the second period (2010-2015)[5].

[4] *Develop and finalize the legal framework, policies, laws, and standards for POPs; Raise stakeholders' and public awareness of POPs issues and the NIP implementation; Survey, inventory, and assess POPs current status and POP-contaminated sites; Manage, treat, and phase out POPs pesticide stockpiles; Treat sites contaminated with POPs pesticides and PCBs - Build a national information system on POPs; Build capacity for POPs monitoring and analysis, initially develop and implement a monitoring program on POPs pollution, including unintentionally produced POPs; Research on technologies for POPs control and treatment; and Carry out communication activities, encourage and guide manufacture and trading enterprises, as well as communities to take measures to minimize unintentional production of POPs from production and everyday activities.*

[5] *Continue the treatment of sites contaminated with PCBs and POPs pesticides; Continue to enhance the control and monitoring system for import, use, and transportation of prohibited pesticides; Continue communication activities, encourage and guide manufacture and trading enterprises, as well as communities to take measures to minimize unintentional production of POPs; Continue raising awareness and setting up a cooperation mechanism for stakeholders and the public to increase their participation in the sound management of POPs and the mitigation of their impacts; and Strengthen POPs monitoring activities and research on the impacts of POPs and pesticides on human health, so as to promote effective prevention and treatmen.t*

Although the Project development phase extended from 2013 (PIF was approved in 2013) to 2016 (ProDoc was signed on 29 January 2016), there was no mention at all to the contribution of the project to achieve any of the Millennium Development Goals (MDGs) and/or any of the Sustainable Development Goals (SDGs)! Yet, the Project directly contributes to several SDGs such as SDG 3, indicator 3.9 By 2030, substantially reduce the number of deaths and illnesses from hazardous chemicals and air, water and soil pollution and contamination, and SDG 15, indicator 15.5 Take urgent and significant action to reduce the degradation of natural habitats, halt the loss of biodiversity and, by 2020, protect and prevent the extinction of threatened species.

The Project provided, under the baseline analysis, gaps in four different areas, namely policy frameworks, capability for POPs monitoring, management of sites contaminated with POPs/PTS and establishment of a sound inventory of mercury. It also addressed satisfactorily thirteen main barriers that prevent Vietnam from consistently implementing sound management of chemicals and hence fulfil its obligations under the Stockholm Convention.

To the TE team, the Project is highly relevant and in line with the priorities and needs of Vietnam as the signatory party to the Stockholm and Minamata Conventions. The Project objective and outcomes are consistent with the need and priorities of the country.

3.1.1 Analysis of LFA/Results Framework (Project logic/ Strategy, Indicators)

The Project's main objective is "*continued reduction of environmental and health risks through POPs, mercury and harmful chemicals release and exposure reduction achieved by the provision of an integrated institutional and regulatory framework*". To achieve this objective, the ProDoc proposed a comprehensive log-frame (LF) composed of ***four components***, ***eight outcomes*** and ***twenty-six outputs/activities***. The Project objective, components, outcomes, and most of the outputs/activities as mentioned in the ProDoc are clear and practical. However, there was a big issue in the LF concerning outcome 4.2 as indicators, baseline, targets, and sources of verifications were not matching the outcome. These were revised and updated in the IR[6]. According to the Project's IR, the LF was reviewed but "only a few changes" were made to the original LF[7], however, these changes were significant, as showed in Table 3:

Table 3 Summary of changes in the Project's LF at the IW

Components	Original	Modifications in the IR
Component 1	Output/activity 1.1.3 Enacted legal instrument in the form of amended Laws or Decrees/regulations defining linkage between these laws and the regulatory instruments in place	Reformulated to better define the contents of the output to emphasize enforcement aspects of the amended laws: Strengthen enforcement of legal instrument in the Laws or Decrees/regulations in place, including amendment of Law and regulation as well as additional tools and sanctions if necessary, toward harmonization and simplification
	Output/activity 1.2.2: 30 representatives of VEA, VINACHEMIA, Department of Water Resources Management, national customs authorities and industrial stakeholders trained in the implementation of chemicals classification and labelling in global	Reformulated in response to the updated project baseline to: Conduct the initial survey of GHS implementation in Vietnam, 30 professionals from VEA, VINACHEMIA, Department of Water Resources Management, national customs authorities and industrial stakeholders trained in the implementation of chemicals classification

[6] Project Inception workshop was organized in April 2016.

[7] Project Inception Report. Page 8.

	harmonized system and adaptation of the EU REACH/ROSH approach for application in Vietnam	and labelling in global harmonized system and adaptation of the EU REACH/ROSH approach for application in Viet Nam
	Output/activity 1.2.3: Strengthened application of chemical risk assessment approach for environmental and health risk assessment and release reduction enforcement including training of 30 professionals from VEA, VINACHEMIA and Ministry of Health will be implemented	Changed to: Facilitate the implementation of a common national procedure for chemicals environmental and health risk assessment. Conduct a Pilot of processes for risk assessment of mercury in a priority sector.
Component 2	Output / Activity 2.1.3: Upgraded monitoring programs in key areas where strengthening is required, developed	was deleted and moved as part of Output/Activity 1.1.4 *Guidelines integrating environmental control of POPs and PTS* which was also replaced by a new text: Contribute to the State of Environment on Chemicals/Hazardous Chemical and POP/PTS
Component 3	Output / Activity 3.2.1: Detailed planning based on the existing and upgraded database on POPs contaminated sites in the two provinces.	The following was added to the target: "*Nghe An strategic plan replicated to another province to be selected based on the availability of data (candidate may be Quang Bing, Ha Tinh, Quang Tri*"
		Added: *Output / Activity 3.3.1 Environmental Assessment and Environmental Management plan.* *Output / Activity 3.3.2 Disposal of 50 t of POPs pesticide (DDT) and safeguarding/remediation of around 100 t of contaminated material.*
	Output/Activity 3.2.4 Not available	Add anew output/activity as a reaction to the discovery of the Lam Hoa site under another UNDP project on elimination of POPs pesticide stockpiles Clean up of the Lam Hoa site in Quang Binh
Component 4	The indicator, baseline, and target of outcome 4.2 and output 4.2.1 were revised.	New indicators, baseline, targets at the end of the project, source of verification and risks and assumptions were added for outcome 4.2.

The IR also contained a few changes, apart from the revised LF that was annexed to the IR. However, it is not clear to the TE team why these changes were not reflected in the LF. The proposed amendment to activities 3.3.1 and 3.3.2 is:

- Output / Activity 3.3.1 Environmental Assessment and Environmental Management plan.
- Output / Activity 3.3.2 Disposal of 50t of POPs pesticide (DDT) and safeguarding/remediation of around 100 t of contaminated material.

Essentially the LF followed the GEF format. The ProDoc satisfactorily included the essential level of details concerning the project log-frame (LF), components, outcomes, and outputs, targets, and indicators. Yet, it failed -in some cases- to provide SMART indicators that allow for proper adaptive management and monitoring of progress. This resulted in some weaknesses in the LF mainly in defining targets and indicators at the mid-term level. Given the fact that the project is complex, includes many outputs that need to be achieved in relatively a short period, the project designers (development stage) and the project team

(implementation stage) should have identified priorities in implementation of some outputs. It is evident that some outputs with completion targets earlier than the end of the Project should have given the priority to be implemented so that other project outputs/activities could benefit from the produced deliverables. This is crucial when it comes to formulating /updating policies, guidelines and regulations as proposed in Outputs/activities 1.2.4: *development of market-based policy for promotion of POPs release and disposal reduction,* and 3.1.2: *development of risk management procedures for contaminated sites*. The MTR team correctly pointed out this shortage in the project design and implementation. The Project made use of these recommendations to prioritize the remaining outputs and started with the outputs/activities that were supposed to be implemented in the fast track.

Table 4 provides an overview of the TE assessment of the project's LF and how "SMART: Specific, Measurable, Achievable, Relevant, Time-bound" the achievements are compared to the defined end-of-project targets.

Table 4: Overview of the Terminal Evaluation of the Project's Log frame

Criteria	TE comments
Specific	- Indicators are mostly specific and target-oriented, with a few exceptions. - Some indicators have not targeted identified in LA. For example, for output/activity 3.2.1: indicators: *volume of UPOPs release reduction estimated*, and *Number of local people safeguarded and benefited*.
Measurable	- The indicators are to some extent linked to measurable targets. However, no quantifiable targets are listed for output/activity 3.2.1. Some targets are very broad and difficult to measure, as the end of project targets for Outcome 3.1, target: *A broad policy and guidelines, established to support the implementation of a legal and regulatory framework developed in component 1 for contaminated sites management*.
Achievable	- Most of the indicators seem realistic to be achievable. However, some targets depend on other output/outcomes to be achieved. For example, the target for Outcome 3.1 depends on component 1. So, any delay in achieving component 1 targets caused the delay in achieving Outcome 3.1 targets.
Relevant	- The majority of the indicators are relevant since they address national development priorities and linked to the project's outcomes and outputs. - One target was irrelevant as it is already achieved without the project. For output/activity 2.1.3. End of project targets is written as: *Since 2018, the report on the Status of Environment in Vietnam will always include a section on Chemicals in the Environment*. So, with and without the project, it seems this target is achieved. - One indicator was irrelevant to the target. Target: at least 50 staff trained on the management of POPs contaminated sites. Indicator: Number of people benefited from reduced exposure to POPs.
Time-bound	- Most indicators are linked to targets that are linked to specific timeframes (end of the project). No mid-term targets. Some outputs have their completion targets in the project logframe earlier than the end of the project end date (like output/activity 3.2.1) however no plans to be implemented in the fast track mode. - The project faced a one-year delay during its inception; however, the proposed timetable was not updated accordingly.

3.1.2 Assumptions and Risks

According to the project document, the project was designed to remove thirteen barriers preventing Viet Nam to consistently implement sound management of chemicals in the country. The project has effectively managed to address each of these barriers. However, risks and assumptions were not fully analyzed during the project inception and implementation phases. Furthermore, the management of risks and assumptions during project implementation was not up to the expected level as risks logs were not quarterly/regularly updated and mitigation measures were not identified as per the UNDP guidelines[8]. PIRs for years 2018 and 2019 identified two risks and the management measures undertaking during the reporting period.

The project identified **sixteen risks** during the formulation stage (Project Document. Annex I: Risk Analysis, Page 92-98 and Project Results Framework, Pages 60-74). To the TE team, these risks are considered sufficient and cover all possible risks the project might have faced. They included institutional, management, financial, and technical risks. Only one technical risk "*Non-availability of data, or difficulties in data validation due to different sampling and analytical methodologies and lack of information on monitoring condition*" was rated with high impact and medium probability (H/M). While the rest were ranking between Low to Medium or Medium to Low. These risks were revised during the inception workshop in 2016 however this revision did not help in providing clear management of risks but rather a very long list of risks compiled. The new list contained **twenty-six risks** without any rating and description. Furthermore, the new list of risks did not explain any assumption but instead considered mitigation measures for each risk as assumptions.

The risks' log has not been updated quarterly as the TE team did not find any evidence of risk assessment and follow up on mitigation measures in the Project's quarterly progress reports (QPRs). However, critical risk management sections were filled in Project Implementation Reports (PIRs), thought no mitigation measures were listed but rather an explanation of the nature and causes of the risks.

The TE team considers the management of the project's risks needed major improvement and the lack of follow up on the project's risks and potential risks might have affected the success of the project. This is in line with the MTR team findings: "*lack of follow up assessment in the other project-related risk areas as a potential threat to the project success*"[9].

3.1.3 Lessons from other relevant projects incorporated into the project design.

The Project was designed to complement what other projects are intended to achieve to reduce environmental and health risks through POPs, mercury and harmful chemicals release and exposure reduction achieved by the provision of an integrated institutional and regulatory framework.

So far, no clear signs for lessons learned from other relevant projects incorporated into the Project design even though Activity 3.2.2 was designed intentionally to consider lessons learnt from GEF4 POPs Project "*50 technical and regulatory professionals from the national level and 10 provinces will be trained on contaminated sites management, site assessment, risk reduction and remediation practice taking into account lessons learnt from GEF4 POPs projects*." Although, the ProDoc listed and analyzed several projects in the field of chemicals and waste management, however, no lessons learned from these projects were incorporated in this project design.

[8] Screenshots of risks logs in UNDP ATALS should low level of risks and issues monitoring and management.
[9] Project MTR. Page 35.

3.1.4 Planned stakeholder participation

The project has managed to develop a few partnerships with stakeholders at the national and at the provincial level with communities in piloting sites where relationships appear to be pleasant and there is considerable support. However, considering the strategic aim to develop and implement policy framework and specific regulatory measures covering environmentally sound management of POPs and PTS through life cycle management, the TE would have expected to see more evidence of partnerships with organizations involved in POPs and harmful chemicals management at the national level and in different provinces.

The Project established good cooperation with the Departments of Natural Resources and Environment (DONRE) and the Departments of Industry and Trade (MOIT) in targeted provinces that help the project to achieve Outcomes 2 and 4[10].

The Project Document required the project to design and implement mechanisms to make sure that stakeholders are effectively engaged in the Project implementation using different tools and means such as "*conducting regular stakeholder meetings"* (ProDoc, Section IV. Management Arrangements, Paragraph 6, Page 85). The TE team reviewed a few pieces of evidence on this regard and recognizes that the project was successful in engaging continuously the Project's stakeholders.

The project has managed to develop partnerships with the indigenous people called *Van Kieu in Lam Hoa, and Quang Binh* who are the direct beneficiaries of the project as their area was clean from DDT. They participated in consultation meetings during the project formulation phase to select optimum treatment options for the contaminated land in their village.

The Project has also established critical partnerships with the private sector. The Project worked with 469 companies and Center for Environment Monitoring[11] which has been assessed through project's questionnaire and survey.[12] A market-based policy - on waste and chemicals management and public/private partnership - was developed and endorsed by the end of the Project.

The project was designed to be implemented by two-key national institutions. The idea was to divide the work based on the area of specialization to facilitate the work, however, it was noticed that this arrangement has complicated the work of the project team as each agency has its internal procedures and the communication between the two agencies, and between the project team was not as smooth as expected. The coordination and synergies among agencies presented challenges to the project team as each activity under each agency has a clear line of authority for approval and this has delayed the implementation of several project activities. This is a risk to project implementation that should have been identified during the early stages of project implementation.

Overall conclusion, the project has achieved some appropriate partnerships with relevant stakeholders. However, during the inception phase of the project, the project failed to develop an appropriate level of cooperation between the two implementation partners. This was solved after the inception phase as VEA and VINACHEMIA signed an agreement on the responsibility of the two parties in the implementation of the project on 17 October 2016, which was a landmark of their partnership in the project.

3.1.5 Replication approach

The development of environmental standards, guidance document, national and local level

[10] Project PIRs 2018 and 2017.
[11] PMU provided updated data, however, the new figures were not supported by evidence*: 747, enterprises participated in project activities, including 400 in Binh Duong took part in the survey on pops emission (samples from 20 of which were taken for analysis of pops); 73 took part in Hg emission survey (samples from 15 of which were taken for analysis of Hg); 39 took part in survey on Hg in products;230 in GHS survey and 5 in piloting new policies developed by the project*
[12] Project PIR 2019.

capacities and public awareness would ensure the sustainability of global environmental benefits and outcomes replicability of the key principles.

The implemented approach for replicability included the following main elements:

- The project has been designed to develop a consistent and standardized framework to be used in all sites in the future. This framework is designed to ensure that all activities on-site clean-up, soil treatment, chemical management are carried out in a scientifically sound and standardized way.
- The Project focused on developing several environmental quality standards, a guidance document on risk assessment and site assessment, a guidance document on technology selection criteria that will ensure replicability and standardization of activities in the country. Thus, the replication value is very high.
- The piloting in different sites, in cooperation with national and provinces government, provided learning-by-doing opportunities and helped in building the capacity at national and provincial levels.

3.1.6 UNDP comparative advantage

As UNDP is the GEF Implementing Agency for this project, UNDP CO is responsible for transparent practices, appropriate conduct, and professional auditing. The Project was implemented in line with established GoV and UNDP procedures.

The Project was designed to contribute to ***Vietnam UN One Plan III*** Focus area**: Inclusive, Equitable and Sustainable Growth** that is being led by UNDP. Mainly to **Outcome 1.4:** By 2016, key national and sub-national agencies, in partnership with the private sector and communities, implement and monitor laws, policies and programmes for more efficient use of natural resources and environmental management, and implement commitments under international conventions[13].

UNDP comparative advantages lie in its global and regional experience and local presence in integrating policy development, developing capacities, and providing technical support. UNDP supported the GoV in designing this Project, accessing the GEF funding, and implementing activities in line with the UNDP, GEF and the Government plans. Beneficiaries at provinces levels appraised UNDP for its role in developing and implementing the Project. A senior official stated that "*our staff learned from the project, and we appreciate UNDP efforts in supporting the Government in implementing this project, without UNDP support and the training they have provided mainly the public awareness, it would be impossible to enhance the team's capacity and raise awareness to the level they have reached with the support of this Project.*"

UNDP CO in Vietnam is leading the implementation of several projects related to Climate change, Resilience and Energy; hence, UNDP has the capacity at the national and provinces levels to provide the Government with political, technical, and operational support.

3.1.7 Linkages between the project and other interventions within the sector

This Project was able to create linkages with several national and regional projects and activities funded by different UN agencies, international donors, and development partners. Those include UNDP/GEF, FAO, UN Environment, UNIDO, JICA, and the Government of Vietnam. Besides, the project was implemented under the UNDP Environment, Climate Change, and Disaster Unit which is also directly responsible for implementing other ongoing UNDP-supported projects.

The project cooperated with the following projects:

[13] Project Document. Cover Page.

UNDP Green Growth Project: The *Application of Green Chemistry in Viet Nam to support green growth and reduction in the use and release of POPs and hazardous chemicals* project, implemented by UNDP with the support from the GEF aims to create the enabling environment for the introduction of Green chemistry in Viet Nam and introduce Green Chemistry applications in productive sectors to reduce the use and release of chemicals controlled under MEAs. The project also expected to result in a reduction in the use and release of chemicals of concern not covered under MEAs, as well as improve energy and natural resource efficiency and generate greenhouse gas release reduction co-benefits in the sectors and industries supported by the project. The project is nationally executed by the MoIT since April 2018. The total project GEF budget is around 2 million USD. This project is considered as a very important contribution of the POPs Project and the sustainability of the project's outcomes after the project's timeline.

UNDP Building Capacity to Eliminate POPs Pesticides Stockpiles in Vietnam Project. A UNDP/FAO implemented GEF supported Project aimed at removing capacity barriers in the process of eliminating POP chemicals in Vietnam. The initiative was nationally executed from 2016 to 2017. The project helped Vietnam to eliminate POPs pesticides stockpiles and carry out pilot treatment of sites contaminated with POPs pesticides. It developed standards for safeguarding and disposal of obsolete pesticides; built capacity for the remediation of additional contaminated sites and enabled the issuance of disposal certificates under Basel Convention and GoV requirements.

MOIT- JICA Strengthening Chemical Management Project: the project main purpose was to get *an* industrial chemical management system, which adopted risk-based assessment and reflects the status of the industry, endorsed by Vietnamese authorities. The project was implemented by the Vietnam Chemicals Agency (VINACHEMIA), Ministry of Industry and Trade from April 2015 to March 2019 with support from the Japan International Cooperation Agency. The Project benefited from the MOIT-JICA project by reviewing its experiences, results, and shared operational information.

UN-Environment Regional Project: Implementation of the POPs Monitoring Plan in the Asian Region. A UN Environment-GEF initiative that was implemented from 2015 to 2019. It aimed at strengthening the capacity for implementation of the updated POPs Global Monitoring Plan and to create the conditions for sustainable monitoring of POPs in the Asian Region. Viet Nam was part of this regional project, which included – in addition to Viet Nam- Cambodia, Indonesia, Mongolia, and the Philippines.

UNIDO Project: Demonstration of BAT and BEP in open burning activities in response to the Stockholm Convention on POPs. The project is being implemented at the national level by UNIDO. It aims at reducing UPOP emission in open burning efficiently and sustainably. The project creates resource-efficient waste management systems to reduce UPOPs emissions in open burning sources.

3.1.8 Management arrangement

The project was implemented under the NIM (National Implementation Modality), with UNDP was the GEF Implementing Agency for the project, responsible for transparent practices and appropriate conduct. The MONRE acts as the main beneficiary and executing partner. All project's activities are developed in close cooperation with the MONRE/WENID, MONRE PCD and MOIT. These organizations together with UNDP formulate the Project Steering Committee (PSC). The project was managed by the PSC and the Project Management Unit (PMU).

The Project was executed according to the Harmonized Programme and Project Management Guidelines (HPPMG) that were developed by the Government Aid Coordinating Agencies jointly with three UN agencies reside in Vietnam; UNDP, UNFPA, and UNICEF for management and implementation of UN-supported projects/ programmes under the National

Implementation Modality (NIM) and have been effective since 2010. The purpose of HPPMG adoption was to ensure greater government involvement and ownership of the development results by the Government.

The PSC has been established by MONRE's decision No. 1323, on 14 June 2016. It has 11 members from MONRE, MOIT, MARD, MOH and DONRE from two provinces (Nghe An and Binh Duong). According to the ProDoc and UNDP project implementation guidelines, the Project's PSC has been responsible for supervision and monitoring of the project implementation to ensure the objectives, progress, quality and use of project financial resources.

A *PSC* was to provide strategic decisions and management guidance to the Project management Unit (PMU). The PSC was to be made up of a Chairperson (MONRE Vice Minister); with PSC members from MOIT, UNDP Viet Nam, MARD, MOH (Pro.Doc. Page 84, Paragraph 3). The ProDoc did not specify how many times the PSC should meet per year.

The Project's PMU has been established by decision No. 468 of the Director-General of Vietnam Environment Administration on 29 April 2016. The decision specifies the membership of PMU in addition to its main tasks, including project implementation, supervision of quality and use of resources. The Decision designated the Vietnam Environment Administration (VEA/MONRE) as the Lead Agency for PMU and designated membership of PMU.

The Project management arrangement was slightly modified during the Project inception workshop. Initially, the Vietnam Chemicals Agency (VINACHEMIA/MOIT) was proposed to oversee all the mercury-related activities (Component 4 of the project). However, this was adjusted during the IW as some of the mercury-related activities (the ones more relevant to environmental protection) were placed under the responsibility of VEA/MONRE, whereas some of the non/mercury activities related to chemical management (more specifically, the activities associated with GHS implementation) were placed under the control of VINACHEMIA. This new arrangement was formalized in a detailed agreement signed between VEA/MONRE and VINACHEMI/MOIT on 2 April 2015. This agreement outlined the following:

- VEA/MONRE is designated as the Lead Agency for the project,
- VINACHEMIA/MOIT is designated as the main Cooperating Agency, and
- VINACHEMIA/MOIT is designated to lead the implementation of some project activities (namely Outputs/Activities 1.2.2, 1.2.3. and 4.1.3).

UNDP hired a Project Manager (PM), a project-accountant, and a secretary and provided technical support through its staff to support the project management unit.

The PSC has been established by the decision of MONRE in June 2016. It has 11 members from MONRE, MOIT, MARD, MOH, and DONRE from two provinces (Nghe An and Binh Duong). PSC has been responsible for the supervision and monitoring of the project implementation to ensure the objectives, progress, quality and use of project resources as specified in the approved Project Document.

MONRE designated a senior official as the National Project Director (NPD) for the project. The NPD is responsible for overall guidance to project management, including adherence to the Annual Work Plan (AWP) and achievement of planned results as outlined in the ProDoc, and for the use of UNDP funds through effective management and well-established project review and oversight mechanisms. The NPD ensures coordination with various ministries and agencies guide the project team to coordinate with UNDP, review reports and look after administrative arrangements as required by the Government of Viet Nam and UNDP. The project is being executed according to UNDP's NIM, as per the NIM project management implementation guidelines agreed by UNDP and the Government of Viet Nam.

Two Deputy NPD were assigned for this Project: one from MONRE/WENID, and one from MONRE/PCD. Both Deputy NPDs were cooperating with MOIT VINCHEMIA Representative and provide guidance and support to the PMU.

A PMU has been established by the decision of the Director-General of Vietnam Environment Administration in April 2016. The decision specifies the task of management of the project implementation according to the objectives, progress, quality, and sources as well as membership of PMU. The project team consisted of the following members: a full-time project manager was assigned to oversight the overall management of the project implementation; a full-time project assistant/interpreter; a full-time project accountant; and a group of national and international consultant as well as implementing agencies and institution. The Decision also designates VEA/MONRE as the Lead Agency for PMU. Some changes were made to the original project management during the inception workshop, as explained in earlier sections.

The Project Manager and the Project Assistant cooperate with the team of experts. The UNDP Officer is reasonably practising the project assurance role. A project visiting international technical specialist was hired for around a year and had provided technical backstopping and support to the PMU. UNDP provided training sessions on UNDP/GEF M&E guidelines.

The project management arrangement can be summarized as follows:

- The Project Implementation Agency is UNDP.
- The project is following the NIM modality; jointly implemented by the MONRE, in cooperation with VINACHEMIA/MOIT who are supported by international consultants.
- A Project Manager is responsible for daily management and actual implementation and monitoring of the project and is accountable to the UNDP Programme Officer.
- The overall responsibility for the project is with a PSC where ministries are represented.

A team of national and international experts was established to ensure proper implementation of the project activities and delivery of the expected outputs. The expert team was mobilized to implement project activities in line with Project LF. Based on the virtual interviews and in-person meetings, as well as the review and analysis of the Project's PIRs and QPRs, the Project has faced several issues and external factors that hindered its smooth implementation and could have harmed the implementation of the project[14], these issues can be summarized as follows:

- ***Complex project management arrangement inside MONRE***: the interviewed stakeholders indicated that all decisions related to the project have to go through a complex and long approval process as identified by MONRE. Three main actors need to be involved in approving the project's related decision: The Department, the General Department, and the Minister.
- ***Coordination between two implementing partners***. Interviewed stakeholders indicated that coordinating activities and work between two implementing partners was an issue. Each organization has its procedure to follow. This made it complex for the project team as intensive coordination was needed to ensure timely implementation of different activities. It is to be noted that the situation got much better at later stages of implementation and this is to be used as a lesson learned on how to successfully implement a project by two agencies.
- ***The re-structuring of one implementing partner.*** The restructuring process delayed the implementation of some of the project's activities.
- ***Procurement complexity issues***: the procurement cases mainly the recruitment of national consultants conducted by PMU were hindered by two main factors[15] i) the need to comply with the provisions of the National Law on Bidding[16] and ii) the lack of or the limited number of qualified and interested national experts responding to the calls which

[14] The TE team acknowledges that a few factors were out of control of the project team.
[15] Project APR 2017.
[16] National Assembly on Bidding. Law No. 43/2013/QH13: 26 November 2013.

forced the team to repeat the recruitment advertisements few times before awarding the contract to suitable candidates.

- ***High-level decision-making support:*** delays in the approvals of the project work plans and procurement plans indicate that the project might have suffered from high-level decision-making.
- ***Changes in senior management***. The Government has changed followed by the parliamentary elections in May 2016, in addition to changes of the UNDP staff in charge of the project.
- ***Significant incident:*** a serious incident of industrial pollution that occurred in Ha Tinh Province during the project inception phase.

Based on the above findings and observation, the need for careful and timely use of HPPMG implementation modality is crucial. The HPPMG ensures flexibility in the delegation of implementation between the Government and UN agencies as implementing partners, however, it seems that this flexibility was not correctly utilized as some of the delays in implementation could have been avoided.

The evaluators consider that while the management arrangements used for the project in theory support effective and efficient implementation of the project. There were delays caused by some elements of the project management arrangement that required immediate attention and corrective action.

3.2 Project Implementation

The TE team has reviewed the project implementation and its adaptive management. The following aspects of project implementation have been assessed: adaptive management (changes to the project design and project outputs during implementation); partnership arrangements (with relevant stakeholders involved in the country); feedback from M&E activities used for adaptive management; project finance; monitoring and evaluation; design at entry and implementation and UNDP and Implementation Partner Implementation/ execution coordination, and operational issues.

Achievements of project implementation and adaptive management have been rated in terms of the criteria above at a six-level scale as per UNDP/GEF TE guidance[17]. The following paragraphs provide a comprehensive review and justification for the rating. The selected rating and a description/explanation of that rating are included in the TE Ratings & Achievements Summary table 1.

3.2.1 Adaptive Management

Adaptive management means that the project team must constantly keep referring to the goal and objectives and critically assessing how the activities are contributing to the outputs and how those outputs are leading to the objective. The Project started later than the expected date. The first approved AWP was in November 2016 while the Project was approved in April 2016. This delay was mainly because the project needed to establish a PMU and the PSC to commence its activities which got delayed due to the parliamentary elections (May 2016) and the changes in the Government after the election. These processes at the national level have delayed the hiring process of the Project team who had joined the beginning of October 2016.

The TE did not witness any major adaptive management measures proposed to remedy the situation. Only a few suggestions for adaptatively management measures were proposed in the Project's APRs, however, these were not correctly implemented or followed-up on as there was no clear evidence in the Project's reports.

[17] *Highly satisfactory (HS) - the project has no shortcomings; Satisfactory (S) - minor shortcomings; Moderately satisfactory (MS) - moderate shortcomings; Moderately unsatisfactory (MU) - significant shortcomings; Unsatisfactory (U)- major shortcomings; and Highly unsatisfactory (HU) - severe shortcomings.*

3.2.2 Partnership arrangements

The project provided a platform to promote partnership, coordination, and collaboration amongst key stakeholders, more prominently, VEA/MONRE, VINACHEMIA/MOIT, MARD and DONRE but not up to the desired level. At the district and local community levels, effective coordination was good but is still a challenge. As previously mentioned in section 3.1.7, the project has conducted extensive consultation with key stakeholders during the project development phase and has listed all related projects and initiatives in the ProDoc. During project implementation, the PSC that consisted of main representation from Government ministries and entities took active actions and met annually to review implementation progress, endorse work plans, provide guidance and assist in the resolution of any issues experienced during implementation. The cooperation with the private sector varies but can be considered as good and could have been enhanced. The private sector accepted to share data with the project, provided samples- even if they were not always good, and to release the results of the testing. The partnerships with industries appear to be weak and could have been strengthened.

3.2.3 Feedback from M&E activities used for adaptive management

The TE has reviewed the M&E activities and noticed that the Project team did not have any sufficiently developed adaptive management framework. However, the PMU had a desire to get on with the job and get some of the project's activities in place. Monitoring of the project by the Implementing Agency has been satisfactory with assisting in the preparation of the APR/PIR Review and subsequent Board Review, coordination of the CDRs and reviewing and following up the project's QPRs, financial reports, and work plans. However, there have been several weaknesses in the monitoring of the project cycle.

The official starting date of the project was 29/01/2016 (around 16 months after the CEO endorsement) and was expected to close by 31/12/2018. The Project IW was held on the 14th April 2016. The inception report was prepared and submitted immediately after the IW. The IW was well written and captured the necessary information it should include mainly the changes proposed by the stakeholders and approved by all participants including the changes introduced to the log-frame. No justification or adaptive management measures were included in the IR to overcome the 16 months delay in launching the Project. Furthermore, the parliamentary elections and the changes in the Government that took place in May have also delayed the implementation of the Project activities until the end of 2016. Although the IR captured the changes in the baseline, log frame, proposed changes to the project management structure, the establishment of the PMU and the development of the first annual work plan, it did not provide any tool to cope with the delay in the project implementation. To the TE team, the Inception Phase and corresponding Report represent a weakness in the project cycle. Furthermore, this flaw in the inception phase (IW and IR) should have been detected by the UNDP CO and the UNDP Regional Office as these monitoring tools are part of all UNDP supported projects. However, the TE considers that the UNDP project assurance role has been correctly applied to this project.

It was also evident that the Project did not regularly use feedback from M&E to address appropriately and adequately any new challenges and thereby ensure the achievement of established targets. Risks and issues were not quarterly updated.

In addition to that, annually, quarterly and day-to-day M&E instruments such as the Annual and Quarterly Progress Reports were reviewed, discussed, and acted upon at the PSC meetings. The prepared PIRs, APRs and QPRs follow the UNDP/GEF reporting format. The PIRs provided a comprehensive overview and the details about the project progress toward achieving results. However, the reviewed APRs do not contain a critical assessment of the annual targets' achievement, the progress toward achieving results, but rather focused on listing the achieved activities which were linked to the project' expenditure.

The ProDoc did not specify when the PSC should meet to provide strategic guidance to the Project. The Project PSC was convening once or twice a year; however, 5 PSC meetings took place so far, one in 2017, 2 in 2018, one in 2019 and 1 in 2020.

Adaptive management in response to the Recommendations of MTR. The MTR provided 13 major recommendations. The main focuses of the MTR are i) assessment of progress towards results, ii) monitoring of implementation and adaptive management to improve outcomes, iii) early identification of risks to sustainability, and vi) emphasis on supportive recommendations. So, it is expected that the project team used the MTR's recommendations to improve implementation, introduce new adaptative management measures, and benefit from the proposed recommendations to make the needed progress towards results. It was noticed that out of the 13 MTR's recommendations, 27 key actions were proposed. The project team disagreed with 3 recommendations and provided clarifications for not agreeing with them[18].

It is to the TE team, the project could have used MTR recommendation more effectively to improve outcomes and enhance progress towards results.

3.2.4 Project Finance

According to the TE guidance, the TE team has assessed the differences between the actual expenditure and the leveraged financing and co-financing during the TE work as presented in Table 5. It provides an overview of the budgeted expenditures of the GEF Project of US$ 2.55 million. As of June 2020, **US$ 2,309,272** about **(90.6%)** of the project total budget, has been disbursed. However, around US$ 268 thousand (9.4%) remain in the Project budget, an encumbrance, for finalizing the project related activities.

The third project component has the largest share of the budget that has been spent. The least share is for component 5. Reallocations between the project components did not exceed the allowable percentage of 10% of the total project budget. Accordingly, the spending of the budget is not much in plan and is not in line with the period of implementation.

The project budget included US$ 7,900,000 from MONRE, and 150,000 from MOIT as an in-kind and in-cash contribution and US$ 3,000,000 from JICA (in-kind), which makes the whole planned co-financing contribution – according to the project document- US$ 11,050,000 over the project period. As of June 2020, the confirmed Project co-financing has amounted to an estimated **US$10,950,571** or **99.1%** following the actual project implementation status, with details provided in Table 6.

One annual audit report, 2018-2019 has been shared with the evaluation team. No significant issues noted by the audit team as stated in their report for the period from 1 October 2018 to 30 September 2019.

[18]At the time of the TE and based on the management response document shared with the TE team, only ***4 actions were completed, 11 were partially completed, 12 were pending***. Upon further discussions and clarifications, UNDP CO clarifies that all actions were completed but the MR table shared by the project team was not updated.

Table 5: Project Budget and Expenditures (US$)

Project Component	Budget Approved (US$)	Disbursed as of June 2020							Committed budget (2020)	Total (US$) (Spent and committed)	Difference between planned and actual (US$)
		2016	2017	2018	2019	2020	Total spent	% of budget spent			
Component 1	**455,000**	13,095.	9,649	324,757	66,287	7,763	461,553	101.4%	236	**461,789**	(6,789.8)
Component 2	**600,000**	-	10,646	144,493	457,137	7,283	689,560	114.9%	93,016	**782,576**	(182,576.6)
Component 3	**1,000,000**	-	134,697	194,927	403,159	3,958	776,742	77.7%	153,589	**930,331**	69,668.7
Component 4	**300,000**	4,833.5	4,855	145,715	92,836	-	248,241	82.7%	12,200	**260,44**	39,558.5
Component 5	**70,000**	16,810.	321	15,293	-	2,832	35,257	50.4%	9,368	**44,625**	25,374.9
Project	**125,000**	11,087.	46,038	70,277	(17,158)	(16,566)	93,679	74.9%	-	**93,679**	31,321.2
Unrealized	**-**	10.3	(168.3)	4,610	(381)	167	4,239	-	-	**4,239**	(4,239.1)
TOTAL GEF	**2,550,000**	45,837.	246,039	900,076	1,001,880	115,437	2,309,272	90.6%	268,410	**2,577,682**	(27,682.1)

Table 6: Co-financing of Project Partner (US$)

Source of co-financing	Name of Co-financer	Type of co-financing	Investment Mobilized	Amount
Recipient Country Government	MONRE	Grant	Investment Mobilized	65,539
Recipient Country Government	MONRE	In-kind	Recurrent Expenditure	5,766,723
Recipient Country Government	DONRE	In-kind	Recurrent Expenditure	1,768,209
Recipient Country Government	MOIT	In-kind	Recurrent Expenditure	150,100
Other	JICA	-	-	3,200,000
				10,950,571

3.2.5 Monitoring and evaluation: design at entry and implementation (*)

M&E Design at Entry

The ProDoc described the monitoring framework as per the UNDP/GEF requirement. It included a budgeted Monitoring and Evaluation (M&E) plan with identified responsible parties for M&E activities, allocated indicative budget, and specified time frame for each M&E activity. According to the M&E plan, M&E should be conducted following established UNDP and GEF procedures. Monitoring Framework and Evaluation was further elaborated in the ProDoc.

The indicative M&E budget was USD 70,000 or 2.74% of the total GEF grant, that was enough to conduct the planned M&E activities including the two major M&E events; the MTR which was conducted in 2018 and the TE. The M&E budget in the ProDoc was within the required 5% of total GEF funding allocation for the Project, which is adequate to allow proper M&E without diverting disproportionate funding resources away from implementation of technical activities. The project spent around USD 51,930, around 2% of the total GEF allocation.

The M&E plan also included a requirement for financial audits following UNDP financial rules, regulations, and policies.

The M&E plan included using the UNDP ATLAS system to regularly update the Project risk analysis and to identify, report and act on any increased risks, including financial risks. It contained a detailed description of all UNDP/GEF M&E standard activities including. The Project's LF, indicators and targets, reports required to be prepared by the project like the QPR, APR, PIR, the IW and IR, the MTR and the TE reports. Some baseline values and analysis for indicators were updated during the project IW for indicators.

Overall, the TE consultants consider that the M&E design as contained in the ProDoc is adequate, subject to some improvements at the indicator levels as outlined in section 3.1.1 of this report.

Based on the above, the Monitoring & Evaluation design at project startup is rated:

Highly Satisfactory (HS)	Satisfactory (S)	Moderately Satisfactory (MS)	Moderately Unsatisfactory (MU)	Unsatisfactory (U)	Highly Unsatisfactory (HU)
	S				

Implementation of M&E

The TE considers that the UNDP project assurance role has been correctly applied, to this project, with some flaw, due to the following evidence:

- The UNDP CO has been active in reviewing and following up on the project's quarterly progress reports, financial reports, and project work plans.
- There have been a good number of monitoring and review exercises conducted by the UNDP CO including participation in the PSC meetings, preparation of the project APRs, PIRs, and production of the CDRs.
- The UNDP Regional Office and UNDP CO's provisions of financial resources have also been following project norms and in a timeframe, that is supportive of covering the costs of project activities.
- The Project's staff and consultants were contracted according to the established Rules and Regulations of the United Nations and the financial transactions and procurement activities similarly followed due process and the same Rules and Regulations.
- The project's M&E activities were conducted following established UNDP and GEF procedures.

Some key M&E measurements were not properly implemented such as:

- *The role of the Project's steering committee*: the number of PSC meeting were limited. The limitation of the meetings to one or two per year – mainly at the beginning of the year- does not provide PSC with enough chance to provide desirable support for the project implementation by discussion and approval of corrective measures.
- *The use of the MTR recommendation*: the MTR provided a well-structured set of recommendation to help the project team in advancing the work towards achieving the results. Yet, less than half of the recommendations were achieved by the project's end (at the time of the TE).
- *The QPRs and PIRs reporting*. It was noticed that the project LF was updated in the IW as indicated in the IR. However, it was further modified in 2019 as reflected in 2019 PIR, with no details on why these modifications were introduced and how. Furthermore, these modifications were not officially discussed in any PSC meetings. The Project currently has more than one LF; the original one as described in the ProDoc, the modified one after the IR which was also used in 2017 and 2018 PIRs, and a third version which was modified in 2019 and have been used in 2019 PIR and the project terminal report. Changes were made to the LF at the outcome level, which is usually not acceptable by the GEF. New targets and indicators were introduced to the LF in the 2019 PIR and the project terminal report. This is considered as a critical weakness in the project monitoring from all responsible parties, the project management, UNDP CO, UNDP regional office, and the PSC.

To the TE team, there have been several critical weaknesses in the monitoring of the project cycle. While it has been demonstrated that there were several explanatory circumstances caused by events external to the project[19](see section 3.1.8 for details), it is not difficult for the UNDP, to have taken initiative in addressing these issues at some point in the project. Instead, the Project has implemented some components of the project very well and on-time, but not all the necessary strategic components. The MTR also highlighted the reasons behind that, which the TE would echo, including the absence of a clear adaptive management framework, the project's slow start and the complex design of the Project.

The following elements are identified in the project document as the principal components of monitoring and evaluation:

A project inception workshop to introduce an understanding and ownership of the project's goals and objectives among the project stakeholder groups. The IW was organized on the 14th of April 2016, the final draft of the Inception Report was submitted a few months after the workshop (July 2016). During the IW, the management structure was updated as well as the baseline, project log-frame, components, and some of the indicators. The first project AWP was discussed and approved. However, it did not provide any tool to cope with the delay in the project implementation (16 months). It lacked any specific adaptation management measures. It did not provide the updated version of the ProDoc with the changes in the logframe, this resulted in having 3 versions of the project's LF. Therefore, the TE considers that the Inception Phase represents a substantial weakness in the project cycle.

Annual Project Review /Project Implementation Reports (APR/PIR): are key reports prepared to monitor progress since the project start and for the previous reporting period (30 June to 1 July). Usually, these two reports are combined in one report. However, this Project delivered two sets of annual reports (APRs and PIRs). So far, the Project prepared 4 APRs (2016 to 2020 on annual bases) and 3 PIRs (2017–2020). Both annual project reports have followed the standard UNDP and UNDP/GEF structure.

Annual Project Steering Committee (PSC) meeting. The project was subject to PSC meetings once a year. Five PSC meetings were organized (February 2017, January and August 2018,

[19] Events over which none of the partners had control.

January 2019, and January 2020) and meeting minutes including discussion points were developed.

Quarterly Progress Monitoring (QPRs); progress made is monitored in the UNDP Enhanced Results-Based Management Platform. It includes an updated risk log in ATLAS. Risks become critical when the impact and probability are high. The project has managed to submit all needed QPRs. However, the focus was on describing the activities to a great extent. So far, the Project prepared 9 QPRs with the first one was prepared in Quarter 4 for 2017.

Periodic monitoring through site visits: UNDP CO and the UNDP regional office staff conducted visits to project sites based on the agreed schedule with the Project team to assess firsthand project progress. A Field Visit Report/ Back-To-Office-Report should be prepared by the CO and UNDP regional office team and submit to concerned officials and UNDP team within a month of the visit. The TE reviewed a sample of back-to-office-reports that was prepared by UNDP programme officer responsible for the project about site visits.

Mid-term evaluation of the project cycle: the project has undergone an independent Mid-Term Evaluation at the mid-point of project implementation (2018). The Mid-Term Evaluation determined progress being made toward the achievement of outcomes and identified course correction if needed. It focused on the effectiveness, efficiency, and timeliness of project implementation; highlighted issues requiring decisions and actions; and presented initial lessons learned about project design, implementation, and management. Findings of this review were incorporated as recommendations for enhanced implementation during the final half of the project's term. The management response was prepared after the MTR. A copy of the MR and status of implementation was shared with the TE team for review and assessment.

Independent Final/Terminal Evaluation: the TE was organized to take place during the last three months of the project's operation following UNDP and GEF requirements.

Project Terminal Report (PTR). the project team should prepare the Project Terminal Report during the last three months. This comprehensive report should summarize the results achieved (objectives, outcomes, outputs), lessons learned, problems met and areas where results may not have been achieved. It also lays out recommendations for any further steps that may need to be taken to ensure sustainability and replicability of the project's results. The PTR was made ready mid of July.

Terminal review meeting. The terminal reviewing meeting should be organized before the project closure with the participation of PSC. The terminal review meeting should refer to the terminal report. A project closing workshop is planned to take place during the last week of July, it is not clear if this closing workshop is to replace the terminal review meeting.

TE consultant feels that the project had contributed to the GEF objectives and contributed positively to the process of building the needed capacity at the national level in Vietnam. Many M&E elements were implemented properly but there were some key deficiencies with M&E plan implementation, including:

- Key indicators were not tracked.
- Even though the MTR provided a comprehensive set of recommendation, the project team did not follow up closely on the needed action to respond to the recommendations.
- The MTR found that the project team was not properly tracking co-financing contributions and made recommendations to address this. However, letters confirming co-financing from different partners were shared with the TE team after the submission of the draft report.
- Although the M&E plan required UNDP to use the ATLAS system to regularly update the project risk analysis and to identify, report and act on any increased risks, UNDP failed to correctly track the significant risks the project was facing. The risk log in

ATLAS was very limited with no clear follow up a plan on risks mitigation measures. UNDP did not successfully update the risk mitigation measures mainly that the risks log has not been updated quarterly.

- The TE team found that the Project team used different versions of the project's LA. The original logframe as stated in the ProDoc, the modified LA after the IW and was used for PIRs in 2018 and 2017) and the modified LA in 2019 (was not discussed in the PSC and no evidence to show why and how the LA has been changed) and used for PIR 2019.
- The Project was subject to financial audits as per UNDP requirement. A copy of the 2018-2019 financial audit report was made available for the TE team. As per the report, the project was facing 2-low, 3-medium, and one-high risks. The high risk was related to the bidding process and the main cause was defined as Compliance. It was recommended that the *project should pay attention to complying with regulations on conducting the subsequent bidding packages*[20].

Hence, the TE considers the M&E at implementation has been **moderately satisfactory**.

Based on the above, the implementation of the Monitoring & Evaluation plan is rated:

Highly Satisfactory (HS)	Satisfactory (S)	Moderately Satisfactory (MS)	Moderately Unsatisfactory (MU)	Unsatisfactory (U)	Highly Unsatisfactory (HU)
		MS			

3.2.6 UNDP and Implementing Partner implementation/execution coordination, and operational issues (*)

UNDP (Implementing Agency) implementation

The role of UNDP in this project is the Implementing Agency (IA) for GEF with the PMU being housed in the Government premises. Standard UNDP policies and procedures were used for all recruitment, procurement, project management and financial management.

The key positive aspects of the UNDP's implementation of the project as reported by stakeholders consulted during the TE, and from the review of the project's M&E elements, these are as follows:

- UNDP CO followed up on the Project and continuously examined if it is being implemented based on Results-Based Management with an appropriate focus on established targets.
- UNDP Office was highly active in driving and supporting the PSC and was fully engaged in all aspects of the project from design and inception onwards, providing strong levels of support ranging from high-level strategic issues to detailed technical and administrative issues.
- The UNDP CO support to the PMU is regarded as very satisfactory and, in many cases, timely:
  - ✓ Facilitate the recruitment and engagement of several international consultants in the implementation.
  - ✓ UNDP CO in Vietnam is offering full support to project implementation, including administrative support as well as high-level support by the participation of the UNDP DRR in the PSC.
  - ✓ Providing necessary guidance for and approval of AWPs and their revisions.
- Satisfaction was also expressed with the level and quality of technical support provided by the UNDP Regional Office.

[20] Audit Report for the period from 1 October 2018 to 30 September 2019.

However, there are some key dissatisfactions and deficiencies with UNDP implementation reported, including the following:

- There was a full sixteen months delay from project-start to project inception workshop convening – which is a huge setback for a project with an original timeframe of only 3 years. UNDP should endeavour to have all project team fully engaged within 3 months of project start and organize the IW within the same period.
- For some Provinces, beneficiary communities reported poor engagement, communication, and support from both the UNDP and project team.

The Project was originally planned to last for three years and is to be closed mid-2018. Nevertheless, a no-cost time extension was granted on December 4th, 2018. The new closure was set as 29 July 2020.

The Project is considered as **satisfactory** managed according to the UNDP and the GEF guidelines. UNDP team used to apply necessary procedures to ensure that the project implementation is operationally effective.

Rating for UNDP implementation:

Highly Satisfactory (HS)	Satisfactory (S)	Moderately Satisfactory (MS)	Moderately Unsatisfactory (MU)	Unsatisfactory (U)	Highly Unsatisfactory (HU)
	S				

MONRE and MOIT (Executing Agencies) execution

The project followed the NIM modality; jointly implemented by MONRE, in cooperation with MONRE/ WMEID, PCD and MOIT who are supported by visiting an international technical specialist.

The Project was managed by two main bodies: the PSC and the PMU.

The *Project Steering Committee (PSC)* was established by decision of MONRE. PSC has 11 members from MONRE and other line ministries (MOIT, MARD, MOH) and DONRE from two provinces (Nghe An and Binh Duong). PSC was responsible for the supervision and monitoring of the project implementation to ensure the objectives, progress, quality and use of project resources as specified in the approved ProDoc.

The VEA/MONRE was appointed to serve as Executing Agency (Vice Minister). UNDP was appointed as supplier and MONRE, MOIT, MOH, and MARD are the senior beneficiaries. The Project National Director (appointed from MONRE) was supported by a Deputy NPD from MONRE/WMEID, a deputy NPD from MONRE PCD and VINACHEMIA/ MOIT. A team of Project Manager, project accountant and a translator/secretary were appointed to set at the Project management unit at MONRE. The Project manager was responsible for daily management and actual implementation and monitoring of the project and is accountable to the PMU and UNDP Programme Officer.

The *Project PMU* was established by the decision of the Director-General of VEA. The decision specified the task of management of the project implementation according to the objectives, progress, quality, and sources as well as membership of PMU. In particular, the Decision designates the VEA/MONRE as the Lead Agency for PMU and designates membership of PMU.

All members of PMU are officials of VEA. However, since Component 4 of the project relates to mercury, the initial arrangement at project preparation stage was that the Vietnam Chemicals Agency (VINACHEMIA/MOIT) should oversee all the mercury-related activities.[21] This was adjusted during the project inception activities when an agreement was reached in such a way that some of the mercury-related activities (the ones more relevant to

[21] Vinachemia is responsible for Hg in product, while Hg in emission is responsibility of VEA.

environmental protection) were placed under the responsibility of VEA/MONRE, whilst some of the non/mercury activities related to chemical management (more specifically, the activities associated with GHS implementation) were placed under the control of VINACHEMIA. The above arrangement was formalized through a detailed Agreement of Cooperation signed on 2 April 2015. The Agreement outlined main cooperation lines in the project activities and designated VEA/MONRE as the Lead Agency for the project while the VINACHEMIA/MOIT as the main Cooperating Agency. At the same time, the Agreement stipulates that VINACHEMIA/MOIT is designated to lead the implementation of some project activities (namely Outputs/Activities 1.2.2, 1.2.3. and 4.1.3).

The project is being executed according to the HPPMG. As explained earlier, although the ProDoc was signed on 29 January 2016 as a formal sign of the start of the implementation, the first AWP marking the actual start of the implementation was approved by the Government only in November 2016. According to the Project's PIRs, PMU has been facing several issues and obstacles since the inception of the project, that affected the effectiveness of the project implementation. Key issues related to the executing agency include:

- One major issue reported in the project's M&E tools, and further confirmed during the different interviews with key stakeholders, the approval process within MONRE. Many decisions concerning the project must be approved at three different levels at MONRE (the Development, the General Department, and the Minister).
- Procurement and recruitment issues: the project's report highlighted the causes after the long delay in recruiting national consultants. Stakeholders interviewed suggested that the recruitment process was hindered by the lack of interested qualified national consultants so the government had to repeat the advertisements for a few times before getting a suitable candidate, and the need to comply with the provisions of the National Law on bidding.

The evaluators consider that there were delays caused by some elements of the project management arrangement that required immediate attention and corrective actions. Several actions were undertaken after the MTR which have helped the project to move forward. Consequently, the rating for the management arrangement component is **Moderately satisfactory (MS).**

Rating for MONRE execution:

Highly Satisfactory (HS)	Satisfactory (S)	Moderately Satisfactory (MS)	Moderately Unsatisfactory (MU)	Unsatisfactory (U)	Highly Unsatisfactory (HU)
		MS			

3.3 Project Results

3.3.1 Overall Results (attainment of objectives) (*)

According to the UNDP/GEF evaluation guidelines, the achievements of expected results were evaluated in terms of attainment of the overall objective as well as identified outcomes and outputs. For this the performance by components is analyzed by looking at:

(i) general progress towards the established baseline level of the indicators,
(ii) actual values of indicators by the end of the Project vs. designed ones, and
(iii) evidence of relevance, effectiveness, and efficiency of the results as well as how this evidence was documented.

Based on observations, findings of the field visits, data collection and analyses, virtual land in-person meetings with key stakeholders including the beneficiaries, and review of the Project's technical reports and progress reports, a detailed assessment at the outcome level is

presented below (Table 7). Many of the project's targets were achieved during the last year of the Project implementation. The Project has made noticeable progress during its last year of implementation. Annex 9 presents the updated capacity development tool. The updated GEF tracking tool was reviewed and validated during the TE, attached in Annex 10.

Overall results of the Project are rated as

Highly Satisfactory (HS)	Satisfactory (S)	Moderately Satisfactory (MS)	Moderately Unsatisfactory (MU)	Unsatisfactory (U)	Highly Unsatisfactory (HU)
	S				

The assessment of progress is based on data provided in the annual reports, technical reports reviewed, the findings and observations of the TE mission and virtual meetings organized with key stakeholders, and interviews with the project stakeholders.

Table 7: Matrix for rating the Achievement of Outcomes

The key is used for indicator assessment (Color Coding):

Green = completed, the indicator shows achievement
Yellow = On target to be achieved by the end of the project
Red = Not on target to be achieved by project closure

Goal/ Objective/ Outcome	Performance Indicator	Baseline	Targets End of Project July 2020	July 2020 End of Project status (based on 2019 PIR)	Terminal Evaluation comments	Rating
Project Objective Continued reduction of environmental and health risks through POPs, mercury and harmful chemicals release and exposure reduction achieved by the provision of an integrated institutional and regulatory framework	Progress of POP/PTS regulations developed and integrated into the newly established legal framework in Viet Nam, and in compliance with the requirement of the Stockholm and other relevant international conventions	Stockholm Convention requirements are not yet completely integrated into the existing regulation on chemicals/POP management. Lacking a comprehensive POPs/PTS Management Information System following a PRTR Scheme which prevents good planning and reporting	Policy framework for chemicals/ POPs management improved meeting with the Stockholm Convention and other related international conventions and expressing close links between environmental protection policy with chemical management policy.	• A draft policy framework for chemicals/POPs management was developed, it expresses the linkages between environmental protection policy and chemical management policy. • 3 National technical regulations were developed/revised. • 4 technical guidelines were developed. • 1 national procedure was developed.	Indicators show that targets were achieved.	**S**
	- Level of institutional capacity strengthened to manage, monitor, and remediate	Limited national capacity and knowledge of industrial contaminated site management.	National Monitoring capacity improved to track POPs/PTS including mercury	Institutional monitoring capacity was strengthened to manage, monitor, and remediate POPs and Hg, through completion of the following activities:	Indicators show that targets were achieved.	**S**

	POP/PTS, including Mercury			1) Completion of 3 advanced pieces of training on POPs/PTS monitoring and analysis in Hanoi with 82 participants in which 50% is female from 17 selected laboratories. 2) Completion of the second round of the inter-laboratory crosscheck program; this activity also confirmed that there are large differences in the performance of different laboratories, and further assistance would be needed in future; 3) Preliminary establishment of the network of laboratories working on POPs/PTS monitoring for continuous learning and sharing. 4) Completion of the procurement of expert services to provide the technical support to at least two Labs to achieve ISO17025 certification on POPs/PTS monitoring and analysis. 5) 2 training curriculums were developed and 2 training course was conducted with around 50 officials, in which 20 are female Two laboratories were accredited based on the ISO17025 standard on		

				POPs/PTS monitoring and analysis.		
	Level of environmental and health risks reduction.	Substantial experience has been achieved from bilateral and GEF POP/chemical related projects. However, the results are still project-based, not well integrated to support the GoV having a comprehensive regulation system on POPs/PTS management.	A POPs tracking tool, database and PRTR system established and demonstrated in at least one province. Establishment of provincial-level planning for the clean-up of POPs contaminated sites in two provinces.	1) An Inventory and collection of data on POP/PTS in industrial sites in Binh Duong province was achieved, including 125 sampling and analysis of POPs, new POPs and metals in industrial effluents (flue gas 25 samples, wastewater 50 samples, solid waste 25 samples), and a questionnaire survey covering almost 400 facilities was completed; 2) PRTR software has been developed. 3) The piloting of the PRTR system in Binh Duong province has been launched. 4) The environmental protection plan of Binh Duong province was developed; 5) Piloting of the Provincial Environmental Management Plan for POP Pesticides contaminated areas at Nghe An province completed.	Indicators show that targets were achieved.	**S**
	Volume of POPs contaminated soil treated and safeguarded. -Number of local people benefited from reduced		Establishment of provincial-level planning for the clean-up of POPs contaminated sites in two provinces. At least 40 tons of pure DDT in Quang	- 11 hotspots have been zoned, more than 50 tons of POP waste have been collected and treated, more than 280 tons of contaminated soil have been isolated in 2 spots and managed sustainably.	These targets were introduced in the IW and document in the IR. However, the project did not include these in	**MS**

	exposure to POPs. -Ratio of women/men benefited		Binh are treated properly follow the international environmental standard.	- 1176 people of 96 households living near contaminated sites in Lam Hoa commune, Quang Binh district benefited from contaminated sites being treated.	the updated log-frame. They are a duplication (See outcome 3.2). This shows how the LF is considered a critical weakness in the project M&E cycle.	
Outcome 1.1. Overall policy framework and specific regulatory measures covering environmentally sound management of POPs and PTS through life cycle management developed and implemented.	Availability of regulations in Viet Nam integrated to take into account consistently the requirements of the Stockholm Convention on POPs	The existing national regulations on chemicals are based on the GHS and include provisions of international conventions. However, the existing regulations are not fully compliant with the SC requirement still fragmented and not fully harmonized due to issue by different Ministries.	The key regulations in Viet Nam are integrated to consider consistently the requirements of the Stockholm Convention on POPs.	- The Law on Environment Protection and Law on Chemicals including related regulations were reviewed. - The amended Law on Environmental Protection and the Law on Chemicals included the content on environmental management for chemicals. - The regulatory improvement plan on POP/PTS management has been developed. - A chapter on hazard chemical management including POPs was developed and proposed in the Draft Decree on amending the Decree on Implementation of Environment Protection Law. - The Regulation on response to waste incidents was issued under the Prime Minister's	Indicators show that targets were achieved.	**S**

				Decision 09/2020/QD-TTg dated March 18, 2020.		
	Availability of a regulatory framework to ensure monitoring and reporting of POPs is established.	Provisions of new POPs as required by the SC are also not yet included in the chemical and environment policy framework	A regulatory framework to ensure monitoring and reporting of POPs is established	- Two draft National technical regulations[22] for steel industry on emission and wastewater were revised with more POP/PTS indicators, then issued under Circular No. 78/2017/TT-BTNMT dated December 29, 2017, by the Minister of Natural Resources and Environment. - A circular on pollutant release and transfer registration system (PRTR) was developed. - 6 PRTR technical guidelines for managing POPs and PTS have been developed for the chrome plating industry, the thermal power generation industry, metallurgy industry, rubber industry, waste, and wastewater treatment industry. - 2 technical guidelines on an environmental protection plan for the plating industry, the thermal power generation industry was developed. - The environmental protection plan of Uong Bi Thermal Power Plant was	Indicators show that targets were achieved.	**S**

- [22] The name of two regulations are QCVN 51:2017/BTNMT on steel production gas emissions and QCVN 52: 2017/BTNMT on steel production wastewater.

				developed based on the technical guideline above.		
Outcome 1.2 **Key institutions have knowledge and skills to formulate and implement necessary chemicals and environment policies, consistent with sound chemicals management principles and international convention requirements**	Achievement of active participation of Viet Nam in the ICCM / SAICM.	A certain number of POPs training initiatives have been carried out and is being carried out in the framework of previous GEF4 projects	By the end of the project, Viet Nam has consolidated its participation to ICCM / SAICM to benefit for international knowledge and have its issues and arguments on chemical management brought at the international level.	- 6 leaders and officials of VINACHEMIA (MOIT) and VEA (MONRE) paid a working visit to the United States Environmental Protection Agency (US EPA) and the American Responsible Care – American Chemistry Council and Chemical Industries Association to discuss and exchange experiences on chemical management policy between the US and Vietnam, then visits to some American chemical companies/ factories were undertaken to increase knowledge and learn experiences on international chemical management standard and the development of relevant national policies. - A few officials of MOIT and MONRE who is in the management board of the project participated in some regional and international conferences related to chemical management.	Although the project has made some progress, but not directly related to the proposed targets. The project will not achieve the end of the Project target.	**MUS**
	Evidence of increased adoption of chemical risk assessment	There is the need to build on the experience of these training activities and to establish a training system which	A procedure for risk assessment is adopted in law-making and decision-making processes	- A report presented by the project proposes the content of chemical risk assessment in the Chemical Law and the incident prevention and	Indicators show that targets were achieved.	**S**

	criteria in law-making and decision making.	consistently increases capacity on POPs, management of hazardous chemicals and hazardous waste in the perspective of ensuring consistency and coordination of environmental-related regulation with SC.	related to chemicals and hazardous waste.	response plan. Currently, the draft Chemical Law has included this content. - A detailed procedure for risk assessment on chemicals and hazardous waste was developed. - The processes for risk assessment of mercury was piloted in the Rang Dong lamp company.		
	Number of institutions/staffs successfully trained.	*(not set or not applicable)*	Relevant institution skills on POPs management, risk assessment, international regulation on chemicals and their relationship with the Vietnamese situation increased using certified training.	An initial survey on GHS was conducted. 230 enterprises participated in the survey, of which 100 enterprises in the North, 100 enterprises in the South and 30 enterprises in the Central region. There were 2 training events for more than 50 people (in which 20 are female) as national and provincial government's management official was conducted: one on GHS in September 2018, and one on risk assessment in December 2018.	Indicators show that targets were achieved.	**S**
	Availability of market-based policy in one or two sectors relevant to POPs.	*(not set)*	A market-based policy on waste and chemicals management and public/private partnership established.	The feasibility study on the market-based policy initiative was conducted. The Vietnam Green Label Criteria for clothing product as a market-based policy initiative was developed to promote a reduction in POPs releases and disposal.	A market-based policy was developed for one sector.	**S**

				Piloted the application of the draft criteria at 01 enterprises to assess the feasibility of the draft criteria before issuance		
Outcome 2.1. National institutions provide comprehensive and coordinated ambient environment and receptor POPs /PTS monitoring that is consolidated into a national database and utilized for high quality reporting to the GoV/National Assembly and the Convention.	National POPs/PTS monitoring capacity assessed, and POPs/PTS monitoring program upgraded to ensure POPs/PTS tracking	POPs Monitoring capability increased in the last years, thanks to governmental initiatives, support of international donors, and GEF projects related to Dioxin contaminated sites, POP pesticide stockpiles, PCBs. However, the monitoring capability on U-POPs emitted from industrial sources and other POPs is still very limited.	POPs/PTS baseline established for the ambient environment (air, water, soil) and receptors (human, biota, food)	The POPs/PTS data categories to be reported on through the POPs/PTS tracking tool were selected. A needs assessment for the laboratories (in which 14 laboratories/monitoring centres under MONRE and 55 laboratories/monitoring centres under DONREs) was conducted and a gap analysis was identified, and a strengthening program was developed as well. 4 articles produced on the environmentally sound management of chemicals and chemical-containing waste; the situation of POP and Hg management in Vietnam; the situation of Hg emissions from some major industries; and the status of POP emissions and management.	Indicators show that targets were achieved.	**S**
		Existing POPs laboratories are mainly dedicated to sampling and analysis of POP pesticide, PCBs. Some labs can sample and analyze Dioxin.	At least two laboratories accredited for monitoring of new POPs and PTS and integrated into an inter-calibration network of laboratories			
		A target level for PCDD/F has been established during the ongoing GEF project on Dioxin contaminated hotspot.	An upgraded POPs/PTS monitoring programme submitted for GoV approval			

Outcome 2.2 National POPs/PTS laboratory network for support of the ambient environment and receptor monitoring certified/accredited	Availability of accredited laboratories on new POPs integrated into a POP/PTS laboratory calibration network.	A certain number of private or public laboratories having the capability to perform sampling and analysis of POPs (Dioxin, PCB, POP pesticides, etc.) is working. Some of the above have participated in round-robin tests. However, there are no national official analytical methods on the determination of POPs. Also, a national plan for accreditation and certification of these labs to international standards is missing	Two key laboratories on POPs analysis accredited following ISO 17025 and associated accreditation schemes. Up to 80 laboratories technicians and government staff trained on POPs monitoring related activities following international standards and requirement. A POPs/PTS database established to contain data related to industrial sources, and POPs contaminated sites in 2 provinces, and all the country-wide available data on POPs environmental monitoring.	- 3 basis training on POPs/PTS monitoring and analysis was conducted with the participation of 149 managers and technical staff (71 female) from 43 Labs of 39 provinces in Vietnam. - 3 advanced training events on monitoring and analysis of PBDE, Hg, PAH for 82 managers and technical staff in which 50% is female from 17 selected laboratories. - Two rounds of inter-laboratories crosscheck programs were completed. - A network of laboratories for continuous learning and sharing of information on POPs/PTS monitoring has been preliminarily established. - 19 technical staff of Hai Duong Environmental Monitoring Center and 11 officers of the Southern Environmental Monitoring Center knew ISO/IEC 17025:2017 and its requirements - 2 laboratories accredited for ISO/IEC 17025:2017, including the Southern Environmental Monitoring Center and the Hai Duong Environmental Monitoring Center.	Indicators show that targets were achieved.	**HS**

	Level of piloting PRTR at the provincial level.			- Completed a survey report on POPs and PTS emissions in Binh Duong, based on the sampling and analysis of industrial plants, questionnaire and surveys covering 400 plants. - A POPs/PTS database has been established to contain data related to industrial sources and POPs contaminated sites in Binh Duong province. - Developed software supporting the implementation of PRTR and piloting in 2 sectors (waste and wastewater treatment) in Binh Duong province. The software consists of a web platform. - PRTR reporting system has been developed and piloted in Binh Duong province	Indicators show that targets were achieved.	**S**
Outcome 3.1 Key policies, regulations and technical guidelines for the management of POPs contaminated sites are in place	Availability of policies and guidelines on POPs contaminated sites management developed and enforced.	Several separate initiatives on the management of contaminated sites are being carried out by governmental institutions, international donors, or under GEF projects. These efforts are however still fragmented (project-based) and not	A broad policy and guidelines established to support the implementation of the legal and regulatory framework developed in component 1 for contaminated sites management.	- 2 national technical regulations on i) the pesticide residues in the soil and ii) remediation target values of persistent organic pesticides, according to land use, were reviewed and a new national technical regulation was recommended to supersede those regulations which are non- harmonized and fragmented	Indicators show that targets were achieved.	**S**

		yet capitalized into a harmonized system of laws and guidelines. The National Target Programme on Pollution Remedies and Environmental Improvement (approved in 2011) sets an objective by 2015 to recover the environment at 100 sites seriously contaminated by POP pesticide stockpile.		- Conducted inventories on POPs contaminated sites in Ho Chi Minh trail (6 contaminated sites were detected and 6 preliminary risk reports were developed), Viet Tri industrial plant (DDT was detected in the floor of the chemical factory and a preliminary risk report was developed) and Binh Duong industrial area (3 potential contaminated areas were detected) - The guidelines for implementation of the Circular 30/2016 was made public. - A baseline report proposed a new financial mechanism to implement Decision 1946/QD-TTg dated October 21, 2010, and the plan to manage the potentially contaminated sites was developed.		
Outcome 3.2 Detailed Provincial Management Plan for the pilot Provinces completed that contribute to the contaminated site management at large scale and the reduction of POPs/PTS release and	The capacity of national and local staff measurable by the outcome of training and the number of staff increased. Awareness of the local communities	Limited training of staff trained on disposal technology and site assessment during previous Dioxin hotspot and Pesticidal POPs GEF/UNDP projects. Further training is needed for comprehensive	A site management plan for the provinces of Nghe An and Binh Duong developed, addressing an estimated amount of 300 POPs pesticide sites and 50 industrial contaminated sites,	- Technical guidance for sustainable management of residual polluted areas was developed. - A Guide for communities living around the polluted areas was prepared. - The material of training on contaminated sites management was developed.	Indicators show that targets were achieved.	**MS**

emission in the pilot provinces.	on POPs contaminated sites increased through the result of interviews and questionnaires survey. Plan for POPs contaminated sites management in 2 provinces are completed	contaminated site assessment, remediation, technology testing and selection	representing an amount of several thousand tons of POPs contaminated soil (to be quantified) of POPs / PTS contaminated soil and waste, which includes: risk-based site prioritization; estimation of POPs amount and cleanup/disposal cost; logistic planning; GIS database; criteria for technology selection; financial plan;	- 100 delegates, of which 61 were officials from departments and 39 and officials from enterprises and consulting units nationwide were trained on technical guidance for sustainable management of residual polluted areas.		
	Amount of POPs release to the environment which will be prevented by the implementation of the provincial-level plan.	Experience on contaminated sites gathered from the 2 GEF/UNDP projects: The Dioxin hotspots (3 large military sites at airbases) and several pesticide POPs sites.	POPs released to the environment significantly reduced because of plan implementation after project completion.	- The provincial environmental management plan of Nghe An province was approved in March 2019. It has addressed 954 contaminated sites, of which 268 sites under National Plan and 686 newly identified sites. - Under the plan, Nghe An has been implementing 34 projects remediating 62 sites with the amount of more than a thousand tons of POP wastes safeguarded and treated. - The Provincial Environmental Protection Plan for Binh Duong was just drafted.		

				- Review all relevant information for drafting the provincial environmental management plan for POPs pesticides contaminated areas at three provinces namely Ha Tinh, Quang Binh and Quang Tri provinces. - Roadmap for management and reduction of U-POP was drafted.		
	Number of people benefited from reduced exposure to POPs	*(not set)*	At least 50 staff trained on the management of POPs contaminated Sites	- 100% of households living in polluted areas in Nghe An have received leaflets and Q&A brochures on sustainable management of residual polluted areas. - 80% of the population living around polluted areas in Nghe An are knowledgeable about issues related to residual POPs pollution and have participated in developing a sustainable management plan for polluted areas. - 1176 people of 96 households living near contaminated sites in Lam Hoa commune, Quang Binh district benefited from contaminated sites being treated	The indicator does not match the target. The project team should have revised this indicator during the IW.	
Outcome 3.3 Clean-up of the Lam Hoa site in Quang Bing.	Amount of POPs stockpile destroyed.	The Lâm Hoá site is currently contaminated by a large amount of DDT. No safeguarding	50t of pure DDT destroyed plus 100t of highly DDT contaminated soil	- Activities of evaluating and formulating an environmental management plan for polluted areas in Lam Hoa	Indicators show that targets were achieved.	**S**

		or risk prevention measures in place.	treated on site. (150,000USD including site investigation, repackaging, disposal, site management).	and Quang Binh have been implemented - A report on assessment and environmental management plan for polluted areas in Lam Hoa, Quang Binh was produced - 11 hotspots have been zoned, more than 50 tons of POP waste have been collected and treated, more than 280 tons of contaminated soil have been isolated in 2 spots and managed sustainably. - More than 1,000 people living around the contaminated area are safe		
Outcome 4.1. Mercury inventory results contribute to the development of awareness-raising materials and the identification of national activities to ratify and implement the Minamata Convention.	Availability of a national baseline mercury source and release inventory, and national mercury release reduction strategy adopted.	Viet Nam is a signatory of the Minamata Convention on mercury. Limited demonstration of alternatives to mercury carried out under a GEF global project on healthcare waste. Only a demonstration activity carried out limited to mercury-containing healthcare device.	- A preliminary mercury inventory and its database developed and implemented	- A preliminary mercury inventory and its database developed. Inventory activities under this project were run in detail (using toolkit level 2) while after the national Minamata Initial Assessment on Mercury (MIA) already done with general data and using toolkit level 1. - A report on the inventory of sources and the amount of mercury released from major industries has been produced	Indicators show that targets were achieved.	**S**
	Number of communication activities carried out and communication	Demonstration activities on replacement of mercury carried out in 2 hospitals in the framework of the GEF	At least 03 activities on mercury-related issues conducted to increase awareness	-Plan for awareness-raising activities on mercury was drafted. -Awareness-raising material on mercury including 1 kind of	Indicators show that targets were achieved.	**S**

	products disseminated.	global project on healthcare waste.	and knowledge of mercury	notebook, 4 kinds of leaflets and 2 kinds of posters with related Hg information was developed. -Three communication workshops were held in Hanoi, Nghe An and Binh Duong		
Outcome 4.2 Increased knowledge and awareness of mercury source and releases. Output 4.2.1. Information outreach workshops (2 nos) conducted to provide information on the source and release of inventory...	Database of mercury-containing products developed.	Inventory of mercury-added products in Viet Nam is missing.	A database of products containing mercury available in the Vietnamese market or produced by Vietnamese industries.	A database of products containing mercury was made available with the following category of products: Mercury thermometers and Sphigmo-manometers; Mercury Amalgam; Mercury-containing lamps; and Mercury-containing cosmetic.	Indicators show that targets were achieved.	**HS**
	Preliminary roadmap for the replacement of mercury-containing product drafted.	Strategy on Mercury related product is missing Legislation on mercury product limited to replacement of Hg containing light bulbs.	A roadmap for the management of products and good containing mercury will be the development	A strategy/plan on Hg emission reduction and elimination of products containing Hg has been developed. Based on this strategy/plan, a standard for developing a new project to reduce the impact and release of Hg and POPs in Vietnam was developed and submitted to GEF and already get approved.	The indicator shows that the target was achieved but with a delay.	**S**

3.3.2 Relevance (*)

All evidence showed that the project is highly relevant to the government and addressed a highly important topic. The stakeholders interviewed during the TE expressed the added value of the project and emphasized that a new phase to build on the project's impact and cover other provinces is crucial. The main proof of the relevance of the project is high interest and tangible support of the development community and donor agencies to address challenges related to management and reduction of POPs and pesticides in Vietnam.

To the TE's opinion, one of the major achievements attributed to the Project was government interest to continue the work started by this Project which resulted in developing a new PIF for a full-sized project that is in the process to be submitted to the GEF SEC. The new project proposal has a total GEF budget of US$4.6 million, a total co-financing of US$28.55 million to be implemented over 48 months by MONRE. The objective is:

> *"to protect human health, environment and promote sustainable production and consumption through the reduction of the use of POPs, new POPs and mercury and the release of POPs, U-POPs and mercury throughout the entire lifecycle in key industrial sectors supported by Ecolabel system, Green Financing and Procurement mechanisms"*

This Project has also been highly relevant to UNDP activities in Vietnam. It was designed to contribute to the UN One Plan III Focus area: ***Inclusive, Equitable and Sustainable Growth***. Mainly to ***Outcome 1.4:*** By 2016, key national and sub-national agencies, in partnership with the private sector and communities, implement and monitor laws, policies and programmes for more efficient use of natural resources and environmental management, and implement commitments under international conventions[23].

The Project was developed and financed under GEF-5; however, it is highly relevant for the GEF-6 and GEF-7. For GEF-6 Chemicals and Waste Strategy: *to prevent the exposure of humans and the environment to harmful chemicals and waste of global importance, including POPs, mercury and ozone-depleting substances, through a significant reduction in the production, use, consumption and emissions/releases of those chemicals and waste*. It responds to GEF-7 which focused on supporting: *[… the reduction of persistent organic pollutants (POPs) that are controlled by the Stockholm Convention on Persistent Organic pollutants, mercury and mercury compounds that are controlled by the Minamata Convention on Mercury, Ozone Depleting Substances (ODS) and other chemicals controlled by the Montreal Protocol on Substances that deplete the Ozone Layer, lead in paints, chemicals of global concern in the supply chain of commercial and domestic products and highly hazardous pesticides (HHPs) that enter the global food supply].*

The Project is responding to GEF-7 Chemicals and Waste Programs 1. *Industrial Chemicals Program which seeks to eliminate or significantly reduce chemicals subject to better management*, and 2. *Agriculture Chemicals Program, which addresses the agricultural chemicals that are listed as persistent organic pollutants under the Stockholm Convention and agricultural chemicals that contain mercury or its compounds*.

Based on the abovementioned the Relevance is rated as Relevant (R).

Relevant (R)	Not Relevant (NR)
R	

3.3.3 Effectiveness and efficiency (*)

Effectiveness

[23] Project Document. Cover Page.

The Project has been effective in achieving its specific objectives to strengthen national capacity on safety management of POPs and harmful chemicals; control and reduce the release of POPs/PTS to the environment from POPs/PTS contaminated site; perform a preliminary inventory of mercury sources, and draft a roadmap on mercury reduction.

The effectiveness of the project strategy is evidenced by:

- The level of satisfaction with the Project expressed by the community stakeholders consulted during the TE is high. Stakeholders reported that the level of effectiveness of this Project is high in comparison to other projects they been involved with.
- The government approved strategic documents, frameworks, tools, and guidelines. Those include a draft policy framework for chemicals/POPs management, 3 national technical regulations, 4 technical guidelines, and a national procured related to chemicals and POPs management, etc.

However, some significant in-effectiveness were noted, examples:

- The project was not effective during its first years of implementation. According to 2019 PIR, around 50% of the outcomes were not achieved yet. The majority of the project's achievements happened during the last year of implementation.

Considering the above-mentioned facts, Effectiveness was rated **Satisfactory**.

Efficiency

The Project has been relatively efficient in some respects, including:

- Proposed co-financing resources were mobilized according to a table shared by the Project management team.
- Engaging relevant government agencies through the Project's management unit and steering committee.
- Good level of transparency and cooperation from the private sector.

However, some significant in-efficiencies were noted, examples:

- Long delay at the begin of the project (up to 9 months) with recruitment and procurement processes.
- The slow progress at the beginning due to the complexity of the project and the inability of the project team to deal with that.
- The long delay in recruiting consultants/experts due to the need to comply with the provisions of the National Law on Bidding (which is a long process as each process has to be approved at three levels) and the lack of response to announced tenders by qualified consultants.
- Stakeholders expressed concerns over the weak coordination between UNDP and the PMU at the project inception phase[24]. This resulted in the slow implementation during the inception phase until the MTR.
- Long process and delay in approving any procurement/recruitment process; development and approval of TOR, bidding documents, advertisement, screening, contracting, etc.
- The coordination between the implementing partners was not as smooth as it should be, and this has caused difficulties in project implementation.

Overall, it emerges that the Project has been **Moderately Satisfactory** when it comes to efficiency.

[24] More than 3 interviewed stakeholders expressed concerns.

3.3.4 Country Ownership

The Project is being executed according to HPPMG that was jointly developed and endorsed by the Government Aid Coordinating Agencies and three resident UN agencies in Vietnam, namely UNDP, UNICEF and UNFPA. The purpose of the guidelines is to provide a comprehensive overview of the management and implementation of UN-supported projects under the NIM. This document has been effective since 2010.

As per the project document, the Government of Vietnam has adopted and updated the NIP, which has demonstrated a strong commitment to reducing and phase-out POPs to mitigation environmental problems cause by POPs and resulting adverse consequences to human health.

The Government has been very active in developing/implementing several projects about Stockholm and Minamata Conventions. It has also been involved in a few regional projects related to the Stockholm Convention. More than 9 national projects have been developed and implemented, with the support of the GEF, since 2008. This shows the need and priorities of the country and the compliance of this Project with the key national priorities.

The original country ownership was evident and demonstrated by the request and approval of the project for implementation according to NIM. There were a strong interest and participation of government stakeholders at the time of the Project development. The project was considered strategic as it strategically built on experience from GEF-4 projects and specially built a management plan at the provincial level to assess risk and implement release reduction measure at all the POPs contaminated sites in two provinces. Furthermore, the project has strategic value as it is directly aligned with Vietnam's National Implementation Plan, Agenda 21, Law on Environmental Protection, 2014, Law on Chemical, The National Strategy on exports and imports for 2011-2020, The National Strategy on Environment Protection to 2020, The National strategy on cleaner industrial production to 2020, the National socio-economic development strategy for 201-2015, among other.

3.3.5 Mainstreaming

UNDP-supported and GEF-financed projects are key components in UNDP Country Programming, as well as regional and global programmes. The TE thus assesses the extent to which the Project was successfully mainstreamed with other UNDP priorities, including eradicating poverty, accelerating structural transformations for sustainable development, developing nature-based solutions for development, and gender. The Project objectives conform to agreed priorities in the Government's Plans.

Below is a review of each of these key areas:

The Project was able to successfully mainstream several UNDP priorities. In particular:

- *Poverty alleviation:* While the Project is not explicitly designed to address poverty alleviation, clean and safe environment are fundamental signs to poverty alleviation. Integration of the environmental, health, economical and industry-related issues increases economic productivity, decreases spending on improving health, and contributes to the well-being of the public. For example, in the case of contaminated sites, the economic resource is represented by the increased value of the land after decontamination. The Project has also contributed directly to poverty alleviation by utilizing waste and recycle them.
- *Accelerating structural transformations for sustainable development*: The Project has supported some improvements in governance relating to environmental management and health. Some policy frameworks, guidelines, and tools have been improved or developed. Also, the project has supported the government by building its capacity on reducing environmental and health risks from POPs and harmful chemicals like PTS.

- *Developing nature-based solutions for development*: the project has been able to improve national capacity for the management of POPs contaminated sites. The Project developed provincial management plans to assess the risks and implement POPs release reduction measures at all POPs contaminated sites in two provinces. The Project has been instrumental in producing a draft policy framework for chemicals/POPs management, 3 National technical regulations, 4 technical guidelines and 1 national procedure.
- *Gender:* The Project targeted both women and men in their capacity building and public awareness activities. It appears that gender involvement in all project activities has been well balanced. International and national consultants included both women and men. Females experts hired by the Project represented 37% of the total number of experts (26 out of 70). Around 43% of the participants in all events (training, workshops, conferences) were female. However, the TE team noticed that data were not always aggregated by sex, but rather, the TE team had to work on analyzing data to get the needed figures.
- Women consulted during the TE expressed high satisfaction and appreciation for this outcome.
- The disposal of obsolete POPs chemicals, the clean-up of contaminated sites, and the introduction of different strategies all contribute to improving the environment and human health. The introduction of site management plans in the pilot villages, and eventually through the national replication programme, will benefit the women, children, local communities, indigenous people and the marginalized group the most.
- Overall, the TE assesses that the Project is well mainstreamed with several UNDP priorities and is supporting the Government of Vietnam to achieve the UN sustainable development goals as many SDGs are relevant to highly relevant and have been effectively mainstreamed in the Project.

3.3.6 Sustainability (*)

Sustainability is generally considered to be the likelihood of continued benefits after the project ends. Consequently, the assessment of sustainability considers the risks that are likely to affect the continuation of project outcomes.

Below is the detailed assessment of the four main risks categories:

Financial risks

The TE team could find no evidence that National and Provincial Governments have committed sufficient financial resources to ensure ongoing, long-term operation and maintenance of rehabilitated sites under the Project. Nevertheless, the TE considers Decisions 58[25] and 38[26] as evidence of the Government evident intention and a strong commitment to supporting the management of sites contaminated by POPs/PTS through land rehabilitation and treatment in the foreseeable future. Furthermore, the development of a new PIF under the GEF7 will provide the Government with the needed tools to continue the work it started under this project.

Based on the above discussion, the financial risks are relatively tangible but manageable, and sustainability is rated as Likely (ML):

[25] ***Decision 58*** stipulates the commitment of the Government to provide financial support for projects on treatment and restoration of soil environment, treatment of pollution caused by residual chemical toxins used during the war times and control of dumping-site pollution.

[26] ***Decision No. 38*** of year 2011 was issued to amend several articles of Decision 58 on the state budget's targeted support funds for some seriously polluting public-utility establishments to implement projects to thoroughly remedy pollution.

Likely (L)	Moderately Likely (ML)	Moderately Unlikely (MS)	Unlikely (U)
L			

Socio-economic risks

Certainly, stakeholders at national and provinces levels are interested in continuing the reduction of environmental and health risks through POPs, mercury and harmful chemicals release and exposure reduction by the provision of an integrated institutional and regulatory framework.

The interviewed stakeholders and local communities confirmed their interest to support the project and showed a good level of the project's outcomes ownership. Outcomes 3.1 and 3.2 will have a positive socio-economic impact on local communities living around the pesticide-contaminated sites. Local communities feel this positive impact on improving the quality of life of the population at large due to reduced exposure to POPs/PTS, which is going to enhance the socio-economic situation. Enhancing the quality of land will reduce out-migration from these contaminated areas. Also, local communities will benefit in terms of improved quality of drinking water and increased food security which will transfer into positive economic benefits in terms of the reduced number of workday lost due to sickness. There will be also other clear economic impacts about returning the land in the contaminated areas back to agricultural use (Outcome 3.2), so access to productive land will increase and hence will contribute to enhancing local population financial resources.

Based on the above-mentioned Socio-economic Risk, risks are negligible and thus the sustainability is rated as Likely (L)

Likely (L)	Moderately Likely (ML)	Moderately Unlikely (MS)	Unlikely (U)
L			

Institutional framework and governance risks

The project has taken the necessary measures to ensure institutional sustainability. Under outcomes 1 and 2, the institutional frameworks were created and/or improved, which is likely to last for some years. The work under Outcome 2, which is still ongoing at the time of the TE, is another aspect to ensure institutional sustainability as it is crucial concerning the certification process for provincial laboratories.

The project's outcomes have already established/ reviewed and/or drafted the needed institution frameworks that would ensure the project's outcomes on sustainability. The Government is interested to continue the work of the project and has developed in cooperation and with the support of UNDP another Project[27] to continue the work that has been started to ensure its sustainability. For example, the Binh Duong province has integrated the PRTR software into their environmental management software, and is therefore supportive to facilitate the further improvement and scaling up of PRTR activities; a circular on PRTR is under revision to be endorsed at the national level. Furthermore, cooperation with US-EPA and UNITAR on the further development of the PRTR system to ensure its

[27] *Reduce the impact and release of mercury and POPs in Vietnam through lifecycle approach and Ecolabel (PIF, GEF 7)*: the objective of the project is to protect human health, environment and promote sustainable production and consumption through the reduction of the use of POPs, new POPs and mercury and the release of POPs, U-POPs and mercury throughout the entire lifecycle in key industrial sectors supported by Ecolabel system, Green Financing and Procurement mechanisms.

compliance with international standards (i.e the UNECE Protocol on PRTR) has been launched[28].

The Institutional framework and governance risks are low, and sustainability is Likely (L):

Likely (L)	Moderately Likely (ML)	Moderately Unlikely (MS)	Unlikely (U)
L			

Environmental risks to sustainability

There are no activities that may pose any environmental threats to the sustainability of the project's outcomes. On the contrary, the project's intervention helped in protecting and cleaning the environment, mainly in the rehabilitated sites. Furthermore, detailed guidance on the implementation of the "*Chemical risk assessment process*" has been integrated into the draft Chemical Law and in the Prevention and Control Plan on chemical incident response. This will help in sites remediation.

The Environmental risks are negligible, and sustainability is Likely (L):

Likely (L)	Moderately Likely (ML)	Moderately Unlikely (MS)	Unlikely (U)
L			

Based on the above analysis of risks are mainly low or negligible. The Government and UNDP have already invested time and efforts to mobilize more resources to build on the project's outcomes. Hence, the TE team considers that there is an only minor risk to sustainability as there is many targets have been achieved and the government is committed to continuing the work started by the project. Therefore, the TE team rates project sustainability Likely (L).

Overall rating: All the associated risks are negligible and thus, the overall rating for Sustainability is Likely (L):

Likely (L)	Moderately Likely (ML)	Moderately Unlikely (MS)	Unlikely (U)
L			

3.3.7 Impact

The Project has made major advances in improving the management of chemical substances throughout different part of the life cycle; from production, to use, to end of life. The project helps to do a lot of revisions for different regulations. The project has been implemented to improve the management of chemicals – mainly POPs substances and mercury, but also other chemicals like PAHs and heavy metals. The impact of the project is evident through:

- Reduced and prevented environmental pollution, the project established safer procedures for the management of chemicals through the development of a detailed chemical risk assessment procedures, and the piloting and implementation of a system for reporting and registering the release and transfer of pollutants (PRTR). The project established a roadmap for the reduction of the release of mercury and dioxins in the environment, Moreover, the project enhanced the monitoring capacity of the environmental laboratories through training, assistance on certification, development of a network of laboratories.

[28] Project's terminal report. July 2020.

- Ensured safety for consumers: the project established a roadmap for the accelerated phasing out of mercury-containing products, like fluorescent lamps and mercury thermometers.
- Cleaned POPs contaminated areas (DDT) in the vicinity of the Ho Chi Minh trail, by destroying around 50t of pure DDT and 280t of DDT contaminated soils.
- Systematized the Vietnamese regulation on contaminated sites and PRTR to ensure that the legislation takes into full account the Stockholm and Minamata conventions and that the overlapping and inconsistencies among regulations are reduced.

Key figures characterizing the outcomes of the project:

- 200 m^3 of highly DDT contaminated soil was treated on site. 1000 local people safeguarded.
- Around 140 industrial sites have been directly assessed, through sampling and analysis activities, in term of their release of mercury, PCDD/F, heavy metals, PBDEs, PFOS, PFOAs.
- In Nghe An, 34 projects remediated 62 sites with the amount of more than a thousand tons of POP wastes safeguarded and treated.
- Around 400 industrial sites have been indirectly assessed through a questionnaire survey.
- 69 laboratories have been assessed in term of their analytical capacity.
- 3 basis training courses on POP/PTS monitoring and analysis were carried out with the participation of 149 people (78 were men and 71 were women).
- 3 advance training courses were conducted, one on PAH with 34 participants, one on PBDEs with 21 participants: 1on Hg with 27 participants.
- 3 extensive inter-laboratory cross-checks of standard samples of POPs and mercury was conducted with 14 laboratories have been participated in the Inter-laboratory crosscheck program on PAH; 12 laboratories have participated in the Inter-laboratory crosscheck program on Hg.
- 157 officials (32% were females) participated in raising awareness events on the National Plan for the implementation of the Stockholm Convention on POPs by 2025 with a vision to 2030 and information related to POP/PTS
- 46 local people (37% were females) participated in raising awareness events on managing, improving, and restoring the environment in the contaminated sites.
- 272 people (44% were females) from businesses were raised awareness on the policies related to POP management and the Stockholm Convention.
- 70 people (47% in women) were visited the area where succeed in waste treatment.
- The project worked with 469 private sectors including:
    - 400 industrial companies in Binh Duong have been indirectly assessed through a questionnaire survey.
    - 69 Center for Environment Monitoring has been assessed in term of their analytical capacity.

4. Conclusions, Recommendations & Lessons

The project has had a sustainable and considerable effect on reducing environmental and health risks through POPs and harmful chemicals. It achieved its specific objectives by strengthening national capacity on safety management of POPs and harmful chemicals; controlling and reducing the release of POPs to environment from POPs contaminated site; performing a preliminary inventory of mercury sources and drafting a roadmap on mercury reduction. It was successful in leveraging co-financing.

The level of satisfaction with the Project expressed by community stakeholders consulted during the Terminal Evaluation (TE) was high. Stakeholders reported that the level of effectiveness of this Project is acceptable.

The project was able to complete many of the planned activities within four operational years (the project was approved by GEF SEC in September 2014, but the actual implementation started in January 2016 (the ProDoc got signed by UNDP and the Government of Vietnam). 18-month extension with no cost was requested to finalize the remaining project's activities).

The key questions for this evaluation concerning relevance, effectiveness, efficiency, monitoring and evaluation, replicability, and factors affecting project performance. The overall rating for this project based on the evaluation findings is ***Moderately satisfactory***.

The project reports indicated that the Project was able to achieve the Project's objective and outcome but with a substantial delay. Based on the review and assessment and taking into consideration the complex nature of the Project and the difficulties the Project's team had faced during the project launching phase, the overall rating on the achievement of results is ***Satisfactory***.

4.1 Corrective actions for the design, implementation, monitoring, and evaluation of the project

The project design was relevant to the national development priorities and continues to be of relevance to the current national development strategy. However, the design did not take into consideration the following key facts: (i) long time needed to undertake some activities mainly the mobilization of international and national experts, the operational work, and the endorsement of any guidelines by the Government, and (ii) the complexity of the project components.

As this is the TE for the project, the following actions could be shared:

For the Design

> ***Corrective Action 1***: Project implementing and executing agencies should pay attention to the Projects' log frame during the design stage. It is apparent that key indicators are missing, and some of the listed indicators are not SMART.
>
> ***Corrective Action 2***: Management arrangement and project governance structure should be carefully developed in cooperation with the project's implementing and executing agencies. Defining who is critical to avoid any delays during project implementation.

For the Implementation

> ***Corrective Action 3:*** Revise the project management and define clear adaptive management measures to effectively implement the project's activities to avoid the delay. The project coordination team should have utilized effectively the HPPMG to accelerate project implementation.

Corrective Action 4: Implementing and executing agencies should benefit from the projects' inception phase and inception workshop. Any update to the baseline should be reflected, discussed, and documented. Project document should be updated to reflect the changes in the baseline.

For the Monitoring and Evaluation

Correction Action 5: UNDP and the implementing partners should continuously review the projects' M&E plans, adaptive management measures, risks and issues status and their mitigation measures, and provide needed support to the project team. For example, the role of the PSC could have been enhanced, the proper use of MTR recommendations could have supported the project's activities.

4.2 Actions to follow up or reinforce initial benefits from the project

The TE team recognizes the valuable achievements of the Project and would like to make the following recommendations:

- **Recommendation 1:** Develop a well-written lesson learned report that will be useful for other projects and technical staff working on similar projects in Vietnam and other countries. The report should illustrate the whole story of the projects; risks, issues, obstacles, success stories, flaws in design and implementation, long-term impact, sustainability, etc. and make linkages to development work like poverty alleviation, community empowerment, enhancing climate resilience and gender mainstreaming **(UNDP CO with support from UNDP Regional Office).**

- **Recommendation 2:** The project holds a workshop of stakeholders to adopt a comprehensive exit strategy to ensure the Project's results sustainability. The vision should provide a clear statement that reducing environmental and health risks through POPs and harmful chemicals should continue with the support of all stakeholders **(UNDP, MONRE, and MOIT).**

- **Recommendation 3:** The Project has managed to produce a set of valuable Project's documentation including guidelines, frameworks, awareness-raising materials, etc. It is recommended to develop a dissemination plan for those materials to ensure that future initiatives would build on the Project activities and results and will incorporate the project's products in its work **(UNDP, MONRE).**

- **Recommendation 4:** To ensure the sustainability of the Project's outcomes it is necessary to institutionalize the Project's main results. The project should investigate embedding the PRTR system at the provinces level through existing planning mechanisms and links to national government programmes and plans. The PRTR system has been integrated with the environmental management software of the Binh Duong Province, but this is not enough. Work should also be expanded to other provinces. Provinces should commit to using the software **(MONRE and MOIT, and provinces government to implement, UNDP to assist).**

- **Recommendation 5:** Reducing environmental and health risks through POPs and harmful chemicals capacity has limitations to meet the actual needs at the Country level. Other initiatives supported by UNDP and other development partners should continue working on enhancing national and provinces level capacity to meet the needed demand created under the project. For example, the work done to enhance laboratory capacity under this project is very valuable, however, a lot of effort will still

be needed to improve the reliability of laboratory analysis, in terms of accuracy and repeatability **(MONRE, MOIT, UNDP, development partners).**

- **Recommendation 6:** Involve and empower youth and women organizations, to raise their awareness for positive change towards the sound management of contaminated sites and encourage NGOs to actively use the project's outcomes. For example, the use of the procedure for risk assessment in different locations, the use of the developed awareness materials on contaminated sites and POPs stockpiles management and mercury, and to use the material of training on contaminated sites management, etc. **(MONRE).**

- **Recommendation 7:** Key documents should be finalized and nationally endorsed even after the project closure. For example, the circular on PRTR is under revisions as of July 2020, this should be finalized and endorsed at the national level (MONRE and UNDP).

- **Recommendation 8:** Increase public awareness through intensive mass media promotion and publicity using different materials developed by the Project. The project has raised awareness for people in Lam Hoa, Quang Binh on management and prevention of environmental pollution due to pesticides residue. A Technical Guideline on environmental pollution management of pesticides residue contaminated sites and instruction for communities residing in the vicinity of contaminated sites has been developed, these materials can be used in other places as appropriate **(MONRE).**

4.3 Proposals for future directions underlining main objectives

The development of a new PIF to be funded by the GEF under its current cycle (7) was a strategic decision to continue the work that has been started and to sustain the achievements of the Project. The use of different tools and guidelines developed under the current project is thus crucial to enhance efficiency and ensure the sustainability of the Project's impact.

4.4 Best and worst practices in addressing issues relating to relevance, performance, and success

The project demonstrated several practices that may be adopted for the formulation of other projects. Some of the best and worst practices are:

i. Project's inception phase is very critical to ensure successful implementation of the project. The absence of timely and well-developed adaptive management measures during project inception phase had not helped the project coordination team to avoid project delay and wasted some of the existing opportunities that would have helped to offer solutions to some problems.

ii. Enhancing the enabling environment and building national and provincial capacities complementing each other and are considered critical for achieving the project outcomes and to ensure its sustainability.

iii. Project's monitoring and evaluation tools are critical to ensure the successful implementation of any project. This project benefited from the use of some of the MTR recommendations. It helped, among other factors, in moving the project's performance from moderately unsatisfactory to satisfactory. Timely adaptive management measures are undertaken after the MTR has avoided further implementation delay.

iv. Strong technical inputs and relevant experience is a contributing factor to successful project design and implementation. International and national technical experts should work collaboratively to provide sound technical guidance and inputs, conducted technical workshops and training sessions.

v. Good quality planning is essential to ensure timely project inputs to achieve project outcomes. The project experienced a long delay in project operational completion. Better planning and anticipation of the difficulties, issues and risks during project development, inception and implementation would have minimized the length of the delay.

vi. To ensure the smooth implementation of new projects, the lengthy appraisal process within VEA and MONRE in terms of the procurement process, planning and reporting needs to be reviewed and streamlined. In many cases, these processes hindered the project's implementation and delayed it for months or weeks.

5. Annexes

Annex I. ToR

TERMS OF REFERENCE

Position: 01 international consultants and 01 national consultants to conduct a terminal evaluation of the Viet Nam POPs and Sound Harmful Chemicals Management Project Duty
Station: Hanoi and provinces (if travel is required)
Type of appointment: Individual contract
Duration: International consultant: 23 days (completed by 1 June 2020)
National consultant: 15 days (completed by 1 June 2020)
Reporting to UNDP Viet Nam & PMU
Application deadline: 10th February 2020

PROJECT SUMMARY TABLE

GEF Project ID:	PIMS5154		At endorsement (Million US$)	At completion (Million US$)
UNDP Project ID:	00091381	**GEF financing:**	USD 2,550,000	
Country:	Vietnam	**IA/EA own:**		
Region:		**Government:**	USD 8,050,000	
Focal Area:	Inclusive, Equitable and Sustainable Growth	**Other (JICA):**	USD 3,000,000	
FA Objectives, (OP/SP):		**Total co-financing:**	USD 11,050,000	
Executing Agency:	VEA/MONRE	**Total project cost:**	USD 13,600,000	
Other Partners involved:	VINACHEMIA/MOIT	**ProDoc Signature (date project began):**		January 29, 2016
		(Operational) Closing Date:	Proposed: Dec. 2018	Actual: July 29, 2020

1 INTRODUCTION

This is the Terms of Reference (ToR) for the UNDP-GEF Terminal Evaluation (TE) of the full-sized project titled Viet Nam POPs and Sound Harmful Chemicals Management Project, implemented through the Vietnam Environment Administration (VEA)/Ministry of Natural Resources and Environment (MONRE) as the UNDP's National Implementing Partner (NIP) and the Vietnam Chemicals Agency (VINACHEMIA)/Ministry of Industry and Trade (MOIT) as the UNDP's Co- Implementing Partner (CIP), which has been undertaken from 2016-2020.

This ToR sets out the expectations for this TE. The TE process must follow the guidance outlined in the document Guidance For Conducting Terminal Evaluation of UNDP-Supported, GEF-Financed Projects.

The project was designed to continue the reduction of environmental and health risks through the reduction of POPs and harmful chemicals being released, achieved by (1) provision of an integrated institutional and regulatory framework covering the management and reporting of POPs and harmful chemicals within a national sound chemicals management framework, and

(2) targeted development of POPs-contaminated site management capacity, building on experience from GEF-4 projects and specifically a management plan at the provincial level to assess risk and implement release reduction measures at all the POPs-contaminated sites in two provinces.

The specific project objectives are 1. Strengthen national capacity on the safe management of POPs and harmful chemicals; 2. Control and reduce the release of POPs/PTS into the environment from POPs/PTS-contaminated sites; and 3. Perform a preliminary inventory of mercury sources and draft a roadmap on mercury reduction.

To achieve the project objectives, four project components are envisaged: • Component 1. Policy framework for sound chemicals management, including POPs/PTS, developed and implemented. • Component 2. Monitoring and reporting of POPs and PTS. • Component 3. Management of POPs-contaminated sites • Component 4. National mercury baseline inventory and release reduction.

1.1 PROJECT ARRANGEMENT

- The project is financed with funding from the GEF and UNDP acts as the GEF Implementing Agency. In the context of the UNDP, the project will be executed by MONRE, which will assume the overall responsibility for the achievement of project results as the UNDP's National Implementing Partner (NIP). This NIP will be subject to the micro-assessment and subsequent quality assurance activities as per the Harmonized Approach to Cash Transfers to Implementing Partners (HACT) framework. UNDP will provide overall management and guidance from its Country Office in Hanoi and the Bangkok Regional Hub (BRH) and will be responsible for monitoring and evaluation of the project as per normal GEF and UNDP requirements.
- MONRE will designate a senior official as the National Project Director (NPD) for the project. The NPD will be responsible for overall guidance to project management, including adherence to the Annual Work Plan (AWP) and achievement of planned results as outlined in the ProDoc, and for the use of UNDP funds through effective management and well-established project review and oversight mechanisms. The NPD also will ensure coordination with various ministries and agencies guide the project team to coordinate with UNDP, review reports and look after administrative arrangements as required by the Government of Viet Nam and UNDP. The project will be executed according to UNDP's National Implementation Modality (NIM), as per the NIM project management implementation guidelines agreed by UNDP and the Government of Viet Nam.
- The Project Steering Committee (PSC) will have oversight of the Project Management Unit (PMU). The PSC will consist of a Chairperson (MONRE Vice Minister) with PSC members from MOIT, UNDP Viet Nam, MARD, MOH. The primary functions of the PSC will be to provide the necessary direction that allows the Project to function and achieve its policy and technical objectives, and to approve the annual Project plans and M&E reports.
- The PMU staff will report to the National Project Director (NPD). The NPD assigned by the National Implementing Partner (MONRE) will be responsible to MONRE, MOIT, the PSC, and UNDP for implementing the Project, planning activities and budgets, recruiting specialists, conducting training workshops, and other activities to ensure the project is executed as per approved work plans.
- As a senior supplier, UNDP also has a role of project assurance. This role will be exercised by the UNDP Programme Officer responsible for the project, based in the UNDP Country Office (CO), and a Visiting International Technical Advisor (VSTA), funded by the project.

- PMU will implement mechanisms to ensure ongoing stakeholder participation and effectiveness with the commencement of the Project by conducting regular stakeholder meetings, issuing a regular project electronic newsletter, conducting feedback surveys, implementing strong project management practices, and having close involvement with UNDP Viet Nam as the GEF Implementing Agency.

2 TE OBJECTIVES AND SCOPE

The objectives of the evaluation are (1) to assess the achievement of project results, and (2) to draw lessons that can both improve the sustainability of benefits from this project and aid in the overall enhancement of UNDP programming.

The TE will be conducted according to the guidance, rules, and procedures established by UNDP and GEF as reflected in the UNDP Guidance for Conducting Terminal Evaluations of UNDP-Supported, GEF-Financed Projects.

3 TE APPROACH & METHOD

An overall approach and method2 for conducting project terminal evaluations for UNDP-supported, GEF-financed projects have developed over time. The evaluator is expected to frame the evaluation effort using the criteria of relevance, effectiveness, efficiency, sustainability, and impact, as defined and explained in the UNDP Guidance for Conducting Terminal Evaluations of UNDP-Supported, GEF-Financed Projects. A set of questions covering each of these criteria has been drafted and is included with this TOR (see Annex C). The evaluator is expected to amend, complete, and submit this matrix as part of an evaluation inception report, and shall include it as an annexe to the final report.

The evaluation must provide evidence-based information that is credible, reliable, and useful. The evaluator is expected to follow a participatory and consultative approach ensuring close engagement with government counterparts, in particular the GEF operational focal point, UNDP Country Office, project team, UNDP GEF Technical Adviser based in the region, and key stakeholders. The evaluator is expected to conduct a field mission in Viet Nam, including the following project sites: Binh Duong province, Nghe An province, and Quang Binh province.

Interviews will be held with the following organizations and individuals at a minimum:

- Department of Environmental Quality Management (DoEQM)/Vietnam Environment Administration (VEA)/ Ministry of Natural Resources and Environment (MONRE);
- Vietnam Chemicals Agency (VINACHEMIA)/Ministry of Industry and Trade (MOIT);
- Senior officials, key experts and consultants in the subject area, Project Steering Committee (PSC), and Project Management Unit (PMU);
- DoNREs in Binh Duong and Nghe An provinces.
- Local people in Quang Binh province; and
- Industries in Binh Duong province.

The evaluator will review all relevant sources of information, such as the project document, project reports (including Annual APR/PIR, project budget revisions, midterm review, progress reports, GEF focal area tracking tools, project files, and national strategic and legal documents), and any other materials that the evaluator considers useful for this evidence-based assessment. A list of documents that the project team will provide to the evaluator for review is included in Annex B of this Terms of Reference.

3.1 EVALUATION CRITERIA & RATINGS

An assessment of project performance will be carried out, based against expectations set out in the Project Logical Framework/Results Framework (see Annex A), which provides performance and impact indicators for project implementation along with their corresponding means of verification. The evaluation will at a minimum cover the criteria of relevance, effectiveness, efficiency, sustainability, and impact. Ratings must be provided on the following performance criteria. The completed table must be included in the evaluation executive summary. The obligatory rating scales are included in Annex D.

Evaluation Ratings:

Evaluation Ratings:			
1. Monitoring and Evaluation	rating	**2. IA& EA Execution**	**rating**
M&E design at entry		Quality of UNDP Implementation	
M&E Plan Implementation		Quality of Execution - Executing Agency	
The overall quality of M&E		The overall quality of Implementation / Execution	
3. Assessment of Outcomes	rating	**4. Sustainability**	**rating**
Relevance		Financial resources:	
Effectiveness		Socio-political:	
Efficiency		Institutional framework and governance:	
Overall Project Outcome Rating		Environmental:	
		The overall likelihood of sustainability:	

4 PROJECT FINANCE / COFINANCE

The Evaluation will assess the key financial aspects of the project, including the extent of co-financing planned and realized. Project cost and funding data will be required, including annual expenditures. Variances between planned and actual expenditures will need to be assessed and explained. Results from recent financial audits, as available, should be taken into consideration. The evaluator(s) will receive assistance from the Country Office (CO) and Project Team to obtain financial data to complete the co-financing table below, which will be included in the terminal evaluation report.

Co-financing (type/source)	**UNDP's financing (mil. US$)**		**Government (mil. US$)**		**Partner Agency (mil. US$)**		**Total (mil. US$)**	
	Planned	**Actual**	**Planned**	**Actual**	**Planned**	**Actual**	**Planned**	**Actual**
Grants	2.55		8.05		3.0		13.6	
Loans/Concessions • In-kind support								
• other								
Total								

5 MAINSTREAMING

UNDP-supported GEF financed projects are key components in UNDP country programming, as well as regional and global programmes. The evaluation will assess the extent to which the project was successfully mainstreamed with other UNDP priorities, including poverty alleviation, improved governance, the prevention and recovery from natural disasters, and gender.

6 IMPACT

The evaluators will assess the extent to which the project is achieving impacts or progressing towards the achievement of impacts. Key findings that should be brought out in the evaluations include whether the project has demonstrated:

a) verifiable improvements in ecological status.

b) verifiable reductions in stress on ecological systems; and/or

c) demonstrated progress towards these impact achievements.3

7 CONCLUSIONS, RECOMMENDATIONS & LESSONS

The evaluation report must include a chapter providing a set of conclusions, recommendations and lessons.

8 IMPLEMENTATION ARRANGEMENTS

The principal responsibility for managing this evaluation resides with the UNDP CO in Vietnam. The UNDP CO will contract the evaluators and ensure the timely provision of per diems and travel arrangements within the country for the evaluation team. The Project Team will be responsible for liaising with the Evaluators team to set up stakeholder interviews, arrange field visits, coordinate with the Government, etc.

The selected consultants will work closely with the UNDP Programme Officer and Project Management Unit (PMU) under the guidance of the Head of Climate Change and Environment Unit at UNDP Viet Nam.

Except for an 8-day field mission including Hanoi, Binh Duong, Nghe An, and Quang Binh province, the members of the Evaluators team are expected to work mostly from their home-based offices and communicate among themselves and with UNDP, PMU and other stakeholders electronically. The Evaluators team can seek out both UNDP and PMU for reasonable assistance and support that they may require to fulfil their responsibilities.

9 EVALUATION TIMEFRAMES

The total duration of the evaluation will be 38 days, divided according to the following plan:

Activity	Timing	Completion Date
Preparation	4 days: International consultant: 2 days National consultant: 2 days	1 April 2020
Evaluation Mission	16 days: International consultant: 8 days National consultant: 8 days	1 May 2020
Draft Final Report	15 days: International consultant: 10 days National consultant: 5 days	20 May 2020
Final Report	3 days (International consultant)	1 June 2020

10 DELIVERABLES

The evaluation team is expected to deliver the following:

Deliverable	Content	Timing	Responsibilities
Inception Report	Evaluator provides clarifications on timing and method	No later than 2 weeks before the evaluation mission.	Evaluator submits to UNDP CO
Presentation	Initial findings	End of the evaluation mission	To project management and UNDP CO
Draft Final Report	Full report (per annexed template) with annexes	Within 3 weeks of the evaluation mission	Sent to CO, reviewed by RTA, PCU, GEF OFPs
Final Report*	Revised report	Within 1 week of receiving UNDP comments on the draft	Sent to CO for uploading to UNDP ERC

*When submitting the final evaluation report, the evaluator is required also to provide an 'audit trail', detailing how all received comments have (and have not) been addressed in the final evaluation report.

11 TEAM COMPOSITION, QUALIFICATIONS & RESPONSIBILITIES

The evaluation team will be composed of 1 international evaluator and 1 national evaluator (the international evaluator will be the team leader and will be responsible for finalizing the report). The consultants shall have prior experience in evaluating similar projects. Experience with GEF-financed projects is an advantage. The evaluators selected should not have participated in the project preparation and/or implementation and should not have a conflict of interest with project-related activities.

11.1 INTERNATIONAL CONSULTANT

QUALIFICATIONS

- Recent experience with result-based management evaluation methodologies;
- Experience applying SMART indicators and reconstructing or validating baseline scenarios;
- Competence in adaptive management, as applied to POPs and chemical management;
- Experience working with the GEF or GEF-evaluations;
- Experience working in Asia is an advantage; • Work experience in relevant technical areas for at least 10 years;
- Demonstrated understanding of issues related to gender and POPs and chemical management; experience in gender sensitive evaluation and analysis;
- Excellent communication skills;
- Demonstrable analytical and report-writing skills;
- Project evaluation/review experiences within the United Nations system will be considered an asset;
- A Master’s degree in chemical engineering, environment, or another closely related field.

RESPONSIBILITIES

- Lead and manage the evaluation mission;
- Design the detailed evaluation scope and methodology (including the methods for data collection and analysis);
- Decide the division of labour within the evaluation team;
- Analyze the outcome, outputs and partnership strategy (as per the scope of the evaluation described above);
- Draft related parts of the evaluation report; and
- Finalize the entire evaluation report.

INTERNATIONAL CONSULTANT EVALUATION

Consultant's experiences/qualification related to the service Points

1 Recent experience with result-based management evaluation methodologies 150

2 Experience applying SMART indicators and reconstructing or validating baseline scenarios 100

3 Competence in adaptive management, as applied to POPs and chemical management 100

4 Experience working with the GEF or GEF-evaluations is an advantage 50

5 Experience working in Asia is an advantage 100

6 Work experience in relevant technical areas for at least 10 years 100

7 Demonstrated understanding of issues related to gender and POPs and chemical management; experience in gender-sensitive evaluation and analysis.

8 Demonstrable analytical and report-writing skills 100

9 Project evaluation/review experiences within the United Nations system will be considered an asset

10 A Master's degree in chemical engineering, environment, or another closely related field 100

TOTAL 1,000

11.2 NATIONAL CONSULTANT

QUALIFICATIONS

• Recent experience with result-based management evaluation methodologies;

• Experience applying SMART indicators and reconstructing or validating baseline scenarios;

• Competence in adaptive management, as applied to POPs and chemical management;

• Experience working with the GEF or GEF evaluations;

• Work experience in relevant technical areas for at least 10 years;

• Demonstrated understanding of issues related to gender and POPs and chemical management; experience in gender-sensitive evaluation and analysis;

• Excellent communication skills;

• Excellent English language abilities, written and spoken;

• Demonstrable analytical skills;

• Project evaluation/review experiences within the United Nations system will be considered an asset;

• A Master's degree in chemical engineering, environment, or another closely related field.

RESPONSIBILITIES

• Documentation of evaluation and data gathering and consultation meetings;

• Contributing to the development of evaluation plan and methodology;

• Conducting specific elements of the evaluation determined by the International Lead Consultant;

• Contributing to the presentation of the evaluation findings and recommendations at the evaluation wrap-up meeting;

• Contributing to the drafting and finalization of the MTR reports, notes of the meetings and other related documents prepared by the international consultant; and

• Performing translation for the international consultants during meetings with various stakeholders and necessary documents discussed during the international consultant's mission.

NATIONAL CONSULTANT EVALUATION

Consultant's experiences/qualification related to the service Points

1 Recent experience with result-based management evaluation methodologies 150

2 Experience applying SMART indicators and reconstructing or validating baseline scenarios 100

3 Competence in adaptive management, as applied to POPs and chemical management 100

4 Experience working with the GEF or GEF evaluations as an asset 50

5 Excellent English language abilities, written with two writing samples submitted 100

6 Work experience in relevant technical areas for at least 10 years 100

7 Demonstrated understanding of issues related to gender and POPs and chemical management; experience in gender-sensitive evaluation and analysis.

9 Demonstrable analytical skills 100

10 Project evaluation/review experiences within the United Nations system will be considered an asset

11 A Master's degree in chemical engineering, environment, or another closely related field 100

TOTAL 1,000

12 EVALUATOR ETHICS

Evaluation consultants will be held to the highest ethical standards and are required to sign a Code of Conduct (Annex E) upon acceptance of the assignment. UNDP evaluations are conducted following the principles outlined in the UNEG Ethical Guidelines for Evaluations.4

13 PAYMENT MODALITIES AND SPECIFICATIONS

%	Milestone
10%	Final TE Inception report

40%	Following submission and approval of the 1st draft terminal evaluation report
50%	Following submission and approval (UNDP-CO and UNDP RTA) of the final terminal evaluation report

13.1 RECOMMENDED PRESENTATION OF PROPOSAL

a) Letter of Confirmation of Interest and Availability using the template5 provided by UNDP;

b) Current and complete CV in English

c) Brief description of the approach to work/technical proposal of why the individual considers him/herself as the most suitable for the assignment, and a proposed methodology on how they will approach and complete the assignment; (max 1 page)

d) Two writing samples (for National consultant only).

Annex 2. List of documents reviewed

The PMU and UNDP CO have shared several documents about the Project as shown in the below table:

	Document Title
1	Viet Nam POPS and Sound Harmful Chemicals Management Project, UNDP Vietnam Project Document, 2014
2	Back-to-office-report / UNDP CO 2019
3	Audit Report. UNDP. 2018-2019
4	Viet Nam POPS and Sound Harmful Chemicals Management Project, Inception Report, 2016
5	Annual Project Implementation Report for 2019, 2018, 2017, 2016
6	Project Implementation Review (PIR) 2019, 2018, 2017
7	Quarterly Project Progress Report for 4/2017, 1/2018, 2/2018,3/2018,4/2018, 1/2019, 2/2019,3/2019,4/2019
8	Annual Project Progress Report for 2019, 2018, 2017, 2016
9	Annual Combined delivery report by Activity for 2019, 2018, 2017, 2016
10	PHCM-tracking tool up to the end of 2019
11	Annual Work Plans for 2019, 2018, 2017, 2016
12	List of project activities
13	Detailed work plan, Package: “Provision of an integrated institutional and regulatory framework covering management and reporting of POPs and harmful chemicals in Binh Duong province
14	List of sampled industrial establishments and plan of sampling and analysis, Package: "Support to integrate institutional framework and regulations on management and reporting of persistent organic pollutants (POPs) and toxic chemicals in Binh Duong province"
15	The detailed plan for a training organization, Bidding Package: “Support the integration of institutional frameworks and regulations on management and reporting of persistent organic pollutants (POPs) and persistent toxic substances in Binh Duong Province”
16	Survey forms/ questionnaires, Package: "Support to integrate institutional framework and regulations on management and reporting of persistent organic pollutants (POPs) and toxic chemicals in Binh Duong province"
17	Design and construction of pops database software and prtr reporting system, Bidding Package: “Support the integration of institutional frameworks and regulations on management and reporting of persistent organic pollutants (POPs) and persistent toxic substances in Binh Duong Province”
18	List of industrial fields/sectors, areas at risk of pops/ptss contamination, Package: "Support to integrate institutional framework and regulations on management and reporting of persistent organic pollutants (POPs) and toxic chemicals in Binh Duong province"
19	Report of sampling and sample analysis, Package: “Support to integrate institutional framework and regulations on management and reporting of persistent organic substances (POPs) and toxic chemicals in Binh Duong province”

20	Training report, Package: “Provision of an integrated institutional and regulatory framework covering management and reporting of POPs and harmful chemicals in Binh Duong province”
21	Report on pops/pts database survey in Binh Duong province, Package: “Provision of an integrated institutional and regulatory framework covering management and reporting of POPs and harmful chemicals in Binh Duong province”
22	Software report, a database of the pilot PRTR filled in Binh Duong province, Package: " Provision of an integrated institutional and regulatory framework covering management and reporting of POPs and harmful chemicals in Binh Duong province”
23	PRTR piloting report in Binh Duong revised PRTR system, database & transfer, Package: "Provision of an integrated institutional and regulatory framework covering management and reporting of POPs and harmful chemicals in Binh Duong province”
24	Report on preliminary investigation and evaluation of industrial contamination potential in Binh Duong province, Package: "Support to integrate institutional framework and regulations on management and reporting of persistent organic pollutants (POPs) and toxic chemicals in Binh Duong province"
25	Detailed investigation and assessment report on industrial polluted sites in Binh Duong province, Package: "Support to integrate institutional framework and regulations on management and reporting of persistent organic pollutants (POPs) and toxic chemicals in Binh Duong province"
26	Report on inventory the industrial pollution in Binh Duong, Package: “Provision of an integrated institutional and regulatory framework covering management and reporting of POPs and harmful chemicals in Binh Duong province”
27	Digital map on a web-based gis of the industrial contaminated sites identified in Binh Duong, Bidding Package: “Support to integrate institutional framework and regulations on management and reporting of Persistent Organic Pollutants (POP) and toxic chemicals in Binh Duong province”
28	Environment management plan in the period of 2020 and orientation to 2025 in Binh Duong province, Package: “Provision of an integrated institutional and regulatory framework covering management and reporting of POPs and harmful chemicals in Binh Duong province”
29	Package, “Provision of an integrated institutional and regulatory framework covering management and reporting of POPs and harmful chemicals in Binh Duong province” summary report
30	The overall plan for bidding package implementation,11th Contract: Support to finalize the provincial strategy/plan for environmental management of POP pesticides contaminated sites in Nghe An province
31	Synthesis report of related agencies on the plan and orientation of completion, 11th Contract: Support to finalize the provincial strategy/plan for environmental management of POP pesticides contaminated sites in Nghe An province
32	Draft of finalizing the provincial plan on management of areas contaminated with plant protection chemicals integrated with land use planning in Nghe An province, 11th Contract: Support to finalize the provincial strategy/plan for environmental management of POP pesticides contaminated sites in Nghe An province
33	The provincial plan for environmental management of POP pesticides contaminated sites in Nghe An province, period of 2019-2020 and vision to 2020, People's Committee of Nghe An province, 2019

34	Report on reviewing and supplementing missing information of the Plan on the management of areas contaminated with plant protection chemicals integrated with land use planning in Nghe An province
35	Submission on The provincial plan for environmental management of POP pesticides contaminated sites in Nghe An province, DONRE Nghe An, 2018
36	Plan to deploy the package, 12th Contract: Pilot implementation of the provincial environmental management plan for POP Pesticides contaminated areas at Nghe An province
37	Report of environmental rehabilitation and restoration plan for some polluted areas due to pesticide residue, 12th Contract: Pilot implementation of the provincial environmental management plan for POP Pesticides contaminated areas at Nghe An province
38	Report on the implementation of training, communication and awareness-raising programs, 12th Contract: Pilot implementation of the provincial environmental management plan for POP Pesticides contaminated areas at Nghe An province
39	Reporting the design and construction plan of 1 concentrated management and treatment point of plant protection chemicals and hazardous chemicals in the province; 12th Contract: Pilot implementation of the provincial environmental management plan for POP Pesticides contaminated areas at Nghe An province
40	Summary report on the task, 12th Contract: Pilot implementation of the provincial environmental management plan for POP Pesticides contaminated areas at Nghe An province
41	The overall plan for bidding package implementation, 13th Contract: Detailed environmental assessment and environmental management plan for the site
42	Report on the investigation, a survey of contaminated areas and drafting of a plan for treatment of average polluted soil in Lam Hoa, Quang Binh, 13th Contract: Detailed environmental assessment and environmental management plan for the site
43	Inventory report of pure pesticide residues and contaminated soil with concentrations above 50 ppm, 13th Contract: Detailed environmental assessment and environmental management plan for the site
44	Survey Report, detailed evaluation, and pollution management plan for Lam Hoa, Quang Binh, 13th Contract: Detailed environmental assessment and environmental management plan for the site
45	The overall plan for bidding package implementation, 14th Contract: National consultant for monitoring of site clean-up and aftercare planning
46	Report on detailed evaluation and development of the plan for management and supervision of excavation, packaging and transportation of POP pesticides and heavily polluted soil in Lam Hoa, Quang Binh province, 14th Contract: National consultant for monitoring of site clean-up and aftercare planning
47	Report on supervision of excavation, collection, and packaging of POP chemicals, 14th Contract: National consultant for monitoring of site clean-up and aftercare planning
48	Summary report, 14th Contract: National consultant for monitoring of site clean-up and aftercare planning
49	Plan to deploy the package, 15th Contract: Excavating, packaging and disposal of POP pesticides waste and heavily contaminated soil
50	Report transportation and destruction results, 15th Contract: Excavating, packaging and disposal of POP pesticides waste and heavily contaminated soil

51	Report of results of excavation and collection of polluting chemicals and soil at the gathering place, 15th Contract: Excavating, packaging and disposal of POP pesticides waste and heavily contaminated soil
52	Plan to deploy the package, 16th Contract: Remediation of remaining contaminated soil by on-site treatment method
53	Plan to deploy the package, 16th Contract: Remediation of remaining contaminated soil by on-site treatment method
54	Completion report on community information dissemination program, 16th Contract: Remediation of remaining contaminated soil by on-site treatment method
55	Completion report on community information dissemination program, 16th Contract: Remediation of remaining contaminated soil by on-site treatment method
56	Review report on related information; draft plan outline, 25th Contract: Support to implementation of the Provincial Environmental Management Plan for POPs pesticides contaminated areas at 3 provinces namely Ha Tinh, Quang Binh and Quang Tri
57	Plan to deploy the package, 25th Contract: Support to implementation of the Provincial Environmental Management Plan for POPs pesticides contaminated areas at 3 provinces namely Ha Tinh, Quang Binh and Quang Tri
58	Report of advance training evaluation for can tho laboratory in Vietnam for the implementation of iso/IEC 17025:2017
59	Report of advance training evaluation for hai Duong laboratory in Vietnam for the implementation of iso/IEC 17025:2017
60	Agenda for 2nd training in Vietnam (25-26 November 2019) for laboratories accreditation to international standards iso/IEC 17025:2017
61	Method validation performance characteristics, explanation and implementation procedure, south centre for environmental monitoring laboratory – can tho
62	Uncertainty Measurement for Turbidity, South centre for environmental monitoring laboratory – Can Tho
63	Risk identification and proposed actions, south centre for environmental monitoring
64	The Quarterly Face Report for 4/2017, 1/2018, 2/2018,3/2018,4/2018, 1/2019, 2/2019,3/2019,4/2019
65	List of program and project cooperate with
66	Provincial Plan for the management of areas contaminated with plant protection chemicals integrated with land use regulations in Nghe An province (transferred to 1 general consultant)
67	the design and construction plan of 1 concentrated management and treatment point of plant protection chemicals and hazardous chemicals in the province; Summary report on the task (12th Contract: Pilot implementation of the provincial environmental management plan for POP Pesticides contaminated areas at Nghe An province (Activity 3.2.1.3))
68	Report on the investigation, a survey of contaminated areas and drafting of a plan for treatment of average polluted soil in Lam Hoa, Quang Binh
69	Report on detailed evaluation and development of a plan for management and supervision of excavation, packaging and transportation of POP pesticides and heavily polluted soil in Lam Hoa, Quang Binh province
70	Report on Excavating, packaging and disposal of POP pesticides waste and heavily contaminated soil.

71	Summary report on Provision of an integrated institutional and regulatory framework covering management and reporting of POPs and harmful chemicals in Binh Duong Province
72	Report of advance training evaluation for can tho laboratory in Vietnam for the implementation of iso/IEC 17025:2017
73	Viet Nam POPS and Sound Harmful Chemicals Management Project, Mid-term review report, 2018
74	Summary of contribution in kind of the Project
75	Confirmed sources of co-financing for the project by name and by type
76	List of participants for conference/training/working
77	The contract between VEA and VINACHEMIA
78	Midterm review Report
79	Minutes of the project steering committee meeting for 2017, 2018, 2019, 2020
80	The Draft of law on Environment Protection
81	The Draft of law on Chemical
82	Summary report on the review of Environmental Protection Law and Chemical Law
83	Government letter requesting project period extension
84	UNDP approval note on a no-cost extension

Annex 3. Itinerary

The MISSION ITINERARY
International Expert Dr Amal Aldababseh
National Expert Dr. Le Phuong Hòa

Terminal evaluation of the project "Viet Nam POPs and Sound Harmful Chemicals Management Project"

May-June 2020 (in-person interviews and virtual meetings).

Meetings with project partners: Vietnam

Date	Agenda	Time	Who to meet / Titles	Venue
4 May	Meeting with the Project Manager	2pm	Phạm Thị Bích Ngọc Project Manager	PMU/VEA/MONRE
	Meeting with the Director of the Department of Environmental Quality Management		Lê Hoài Nam Deputy NPD, Director of Department of Environmental Quality Management (DoEQM)	VEA/MONRE/Hanoi
18 May	Meeting with the Vice Director, Nghe An Environmental Protection Department	4-5 pm	Đinh Sỹ Khành Vinh Vice Director, Nghe An Environmental Protection Department, DONRE Nghe An	DONRE Nghe An
19 May	Meeting with the Lam Hoa PPC Chairman	1.30-2.30 pm	Cao Trung Kiên Lam Hoa PPC Chairman Representative of the Commune People's Committee	Lam Hoa commune, Quang Binh
19 May	Meeting with the Lam Hoa Environment official	2.40 – 3.10pm	Đinh Đức Linh Lam Hoa Environment official	Lam Hoa commune, Quang Binh
19 May	Meeting with the leader of Tien Phong village	3.20-3.50pm	Nguyễn Thị Thùy Dương leader of Tien Phong village, Lam Hoa commune	Lam Hoa commune, Quang Binh
19 May	Meeting with the Local people in Tien Phong village	3.50-4.20pm	Đinh Thị Khai Local people in Tien Phong village, Lam Hoa commune	Lam Hoa commune, Quang Binh
20 May	Meeting with the Director of Binh Duong Environmental Protection Sub-Department	2.30-3.30 pm	Trần Thanh Quang Director of Binh Duong Environmental Protection Sub-Department	DONRE Binh Duong
21 May	Meeting with the Officer of Binh Duong Environmental Protection Sub-Department	8.30 – 9.30 am	Ngô Thành Mua Officer of Binh Duong Environmental Protection Sub-Department	DONRE Binh Duong
21 May	Meeting with the Officer of Binh Duong Environmental Protection Sub-Department	8.30 – 9.30 am	Hoàng Văn Ái Officer of Binh Duong Environmental Protection Sub-Department	DONRE Binh Duong
21 May	Meeting with the Head of Binhduong Natural Resources And	8.30 – 9.30 am	Nguyễn Thế Tùng Lâm	DONRE Binh Duong

	Environmental Monitoring Center		Head of Binhduong Natural Resources And Environmental Monitoring Center	
21 May	Meeting with the Environmental and legal management of Binh Duong Environment Water Joint Stock Company	2 – 3 pm	Nguyễn Thị Hồng Diễm Environmental and legal management of Binh Duong Environment Water Joint Stock Company, Representative of Industries	Industries in Binh Duong province
22 May	Meeting with the The representative of the Southern Centre for Environmental Monitoring	8.30-9.30 am	Lê Hoài Nam The representative of the Southern Centre for Environmental Monitoring (SCEM)	Based in Contho
10 June	Meeting with the Vice Minister of MONRE	9-9.30am	Võ Tuấn Nhân Vice Minister, PSC Chairman, Project Steering Committee (PSC)	MONRE/Hanoi
10 June	Meeting with the Deputy Director of VINACHEMIA	2-2.30pm	Lưu Hoàng Ngọc Deputy Director of VINACHEMIA, Project Steering Committee (PSC)	VINACHEMIA MOIT/Hanoi
11 June	Meeting with the Deputy Director Plant Protection Department	9-9.30am	Huỳnh Tấn Đạt Plant Protection Department Project Steering Committee (PSC)	MARD/Hanoi
11 June	Meeting with the International Technical Advisor	3.15 pm	Carlo Lupi International Technical Advisor	Skype interview
1 June	Meeting with VINACHEMIA	2 – 3 pm	Lê Phương Thùy Technical Assistant, MOIT component, VINACHEMIA official	VINACHEMIA/MOIT/ Hanoi
18 June	Meeting with the UNDP Deputy Resident	3.15 pm	Sitara Syed UNDP Deputy Resident Representative in Vietnam, Project Steering Committee (PSC)	UNDP CO Vietnam
	Meeting with the UNDP Programme Analysis	3.15 pm	Hoàng Thành Vĩnh UNDP Programme Analysis, UNDP Country Office (CO)	UNDP CO Vietnam
	Meeting with the UNDP ARR	3.15	Mr Dao Xuan Lai, Assistant Resident Representative, Head of Climate Change and Environment Unit.	UNDP CO Vietnam
2 July	Meeting with UNDP regional office	2 pm	Manisha Sanghani Programme Specialist, Montreal Protocol Unit/Chemicals	Based in Thailand
			Anderson Alves Regional Technical Advisor, Montreal Protocol Unit/Chemicals	

Annex 4. List of persons interviewed

	Name	Title	Organization
1	Phạm Thị Bích Ngọc	Project Manager	PMU/VEA/MONRE
2	Lê Hoài Nam	Deputy NPD, Director-General	Department of Environmental Quality Management (DoEQM) VEA, MONRE
3	Võ Tuấn Nhân	Vice Minister	MONRE/Hanoi
4	Lưu Hoàng Ngọc	Deputy Director-General	VINACHEMIA, MOIT
5	Huỳnh Tấn Đạt	Director	Plant Protection Department MARD/Hanoi
6	Sitara Syed	Deputy Resident	UNDP Vietnam
7	Hoàng Thành Vĩnh	UNDP Programme Analysis	UNDP Vietnam
8	Carlo Lupi International Technical Advisor	International Technical Advisor	Skype interview
9	Lê Phương Thùy	Official	VINACHEMIA, MOIT
10	Đinh Sỹ Khành Vinh	Vice Director	Nghe An Environmental Protection Department, DONRE Nghe An
11	Cao Trung Kiên	Chairman	Lam Hoa People's Committee Quang Binh
12	Đinh Đức Linh Lam Hoa Environment official	Official	Lam Hoa commune, Quang Binh
13	Nguyễn Thị Thùy Dương , Lam Hoa commune	leader	Tien Phong village, Lam Hoa commune, Quang Binh
14	Đinh Thị Khai	Local people	Tien Phong village, Lam Hoa commune, Quang Binh
15	Trần Thanh Quang	Director	Binh Duong Environmental Protection Sub-Department DONRE Binh Duong
16	Ngô Thành Mua	Official	Binh Duong Environmental Protection Sub-Department DONRE Binh Duong
17	Manisha Sanghani	Programme Specialist	Montreal Protocol Unit/Chemicals. UNDP Regional Office
18	Anderson Alves	Regional Technical Advisor,	Montreal Protocol Unit/Chemicals. UNDP Regional Office
19	Hoàng Văn Ái	Official	Binh Duong Environmental Protection Sub-Department DONRE Binh Duong
20	Nguyễn Thế Tùng Lâm	Header	Binh Duong Natural Resources And Environmental Monitoring Center DONRE Binh Duong
21	Nguyễn Thị Hồng Diễm	Environmental and legal manager	of Binh Duong Environment Water Joint Stock Company,
22	Lê Hoài Nam	Director	Southern Centre for Environmental Monitoring (SCEM)

23	Mr Dao Xuan Lai,	Assistant Resident Representative, Head of Climate Change and Environment Unit.	UNDP CO Vietnam

Annex 5. Evaluative Question Matrix

EVALUATION CRITERIA QUESTIONS	Evaluation Indicators	Sources	Methodology
OVERALL PROJECT ASSESSMENT, LESSONS LEARNED AND RECOMMENDATIONS			
What do you perceive as the project's most significant achievements thus far?	Project achievements	Interviews Project documentation	Interviews Review of project documentation
Please comment on any lessons learned thus far through this project	Lessons learned	Project reports Interviews	Review of project documentation Interviews
What issues, if any, are impeding project progress and how might these be addressed?	Obstacles to progress	Interviews Project reports	Interviews Review of project documentation
Do you have any recommendations to strengthen project execution and delivery?	Recommendations	Interviews Project reports	Interviews Review of project documentation
Do you have any recommendations to maximize project impact and sustainability?	Recommendations	Interviews Project reports	Interviews Review of project documentation

EVALUATION CRITERIA QUESTIONS	EVALUATION INDICATORS	SOURCES	METHODOLOGY
RELEVANCE: HOW DOES THE PROJECT RELATE TO THE MAIN OBJECTIVES OF THE GEF FOCAL AREA, AND THE ENVIRONMENT AND DEVELOPMENT PRIORITIES AT THE LOCAL, REGIONAL, AND NATIONAL LEVELS?			
To what extent does the project correspond to local and national development priorities and organizational policies in the Country?	Level of consistency between project objectives and achievements and national priorities	ProDoc GEF strategy documents	Review of documentation Interviews
To what extent is the project in line with GEF Operational Programs or the strategic priorities under which the project was funded (is the project relevant to the GEF focal area(s))?	Level of consistency between project objectives and achievements and the strategic priorities and programs of GEF	ProDoc GEF strategy documents	Review of project and Redocumentation
Are the objectives of the project still appropriate given the changed circumstances since the project was designed?	Level of fit between project objectives and socioeconomic/ environmental and political context.	Interviews Project reports	Interviews Review of project documentation
What is the level of country ownership of the project?	Level of country ownership	Interviews Project reports	Interviews Review of project documentation
Have the relevant representatives from government and civil society been involved in project implementation, including as	Level of participation of key stakeholders in project implementation	Project documentation (e.g. PIRs, list of Board meetings)	Review of project documentation

part of the project board meetings?			
Has the government enacted legislation and/or developed policies and regulations in line with the project's objectives?	Draft or enacted legislation, policies or regulations that are consistent with the project	Project documentation (e.g. PIRs, list of board members)	Interviews Review of project documentation
Is the project relevant to Stockholm, Basel, Minamata, and other international convention objectives?	The alignment between the project and the relevant international conventions objectives.	Project documents	Project document. PIF

EVALUATION CRITERIA QUESTIONS	EVALUATION INDICATORS	SOURCES	METHODOLOGY
EFFECTIVENESS: TO WHAT EXTENT HAVE THE EXPECTED OUTCOMES AND OBJECTIVES OF THE PROJECT BEEN ACHIEVED			
To what extent were each of the project outcomes and project objectives achieved thus far?	Each of the project outcomes and project objective achieved thus far? Logframe indicators at the objective and outcome levels	PIRs, progress reports, consultancy reports Interviews	Interviews Review of project documentation
How is risk and risk mitigation being managed?	Risks are identified and a clear set of mitigation measures were identified and taken	Risks log	Review of project documentation
What lessons can be drawn regarding effectiveness for other similar projects in the future?	Lessons learned generated and shared	Lessons learned the report. Progress Reports	Review of project documentation Interviews

EVALUATION CRITERIA QUESTIONS	EVALUATION INDICATORS	SOURCES	METHODOLOGY
EFFICIENCY: WAS THE PROJECT IMPLEMENTED EFFICIENTLY, IN LINE WITH INTERNATIONAL AND NATIONAL NORMS AND STANDARDS?			
To what extent have the results been delivered with the least costly resources possible?	Total amount spent compared to budget Amount spent per output and outcome compared to budget The total amount of co-financing secured	PIRs (particularly summaries of project expenses) Interviews	Review of project documentation Interviews
How efficient are partnership arrangements for the project?	Several partnerships established.	Progress reports.	Review of project documentation Interviews
Did the project efficiently utilize local capacity in implementation?	Several local experts and staff engaged in the project's implementation.	Project HR documents	Review of project documentation Interview
What lessons can be drawn regarding efficiency for other similar projects in the future?		Project financial reports and progress reports	Review of project documentation Interviews

EVALUATION CRITERIA QUESTIONS	EVALUATION INDICATORS	SOURCES	METHODOLOGY
SUSTAINABILITY			
Are there financial risks that may jeopardize the sustainability of project outcomes?	Amount of funding available after project termination to support project objectives	Interviews	Interviews
Has a mechanism been installed to ensure financial and economic sustainability once GEF assistance ends?	Financial commitments or arrangements established to secure resources for post-project activities that are consistent with project objectives	Project reports Interviews	Review of project documentation Interviews
Is there enough stakeholder awareness and ownership of the project's long-term objectives?	Level of stakeholder support for project objectives	Project reports including surveys Interviews	Project reports including surveys Interviews
Do the legal frameworks, policies, and governance structures and processes within which the project operates pose risks that may jeopardize the sustainability of project benefits?	The existence of legal and policy frameworks and governance structures to enable the sustainability of project benefits	Project reports Interviews	Review of Project documentation Interviews
Are required systems for accountability and transparency, and required technical know-how, in place?	Level of capacity, accountability, and transparency to facilitate the sustainability of project achievements	Project reports Interviews	Review of Project documentation Interviews
Are there ongoing activities that may pose an environmental threat to the sustainability of project outcomes?	Presence of environmental threats to project sustainability	Project reports Interviews	Review of Project documentation Interviews

EVALUATION CRITERIA QUESTIONS	EVALUATION INDICATORS	SOURCES	METHODOLOGY
PROJECT DESIGN			
Are there any aspects of the project design that should be modified at this point to maximize project impact or to better reflect the project reality?	Design changes required	Interviews Project documentation	Interviews Review of project documentation
Were the project's objectives and components clear, practicable and feasible within its time frame?	Content of logframe	Logframe Interviews	Review of logframe interviews
Were the main project assumptions and risks identified?	Project assumptions and risks	Logframe Interviews	Review of logframe Interviews

Were the capacities and resources of the executing institution and counterparts properly considered when the project was designed?	Capacity and resources of EA and counterparts at project entry	Interviews ProDoc	Interviews Review of ProDoc
Were the management arrangements and roles and responsibilities properly identified before project approval?	Detail and clarity of management arrangements	ProDoc	Review of ProDoc
Were partnership arrangements negotiated before project approval?	Agreements with partners on project implementation at project entry	Interviews ProDoc	Interviews Review of ProDoc
To what extent did stakeholders participate in the project formulation process?	Level of stakeholder participation in project design	Interviews ProDoc	Interviews Review of ProDoc
Were lessons from other relevant projects properly incorporated in the project design?	Project design reflecting previous lessons learned	Interviews	Interviews

EVALUATION CRITERIA QUESTIONS	EVALUATION INDICATORS	SOURCES	METHODOLOGY
IMPACT			
What are the main positive and negative impacts of the project thus far?	Project impacts (capacity, enabling framework, etc.)	Project reports Interviews	Review of project documentation Interviews
Has the project led to global environmental benefits or reductions in stress to ecological systems, or is there evidence that the project has put in place processes that will lead to such an impact?	Levels of land degradation Systems, structures, and capacity expected to lead to changes in levels of land degradation	Project reports Interviews	Review of project documentation Interviews

EVALUATION CRITERIA QUESTIONS	EVALUATION INDICATORS	SOURCES	METHODOLOGY
PROJECT IMPLEMENTATION			
Has Implementing Agency & Executing Agency supervision and support been adequate so far?	EA and IA level of supervision and support	Interviews Project reports (PIRs, progress reports)	Interviews Review of project documentation
Has there been an appropriate focus on results by the IA and EA?	EA and IA monitoring results	Interviews Project reports (PIRs, progress reports)	Interviews Review of project documentation
Are managing parties responsive to significant implementation problems (if any) and project risks?	Response to implementation problems and risks	Project reports Interviews	Review of project documentation Interviews
Does the M&E plan include all necessary elements to permit the monitoring of results and	M&E Plan	Pro.Doc.	Review of Pro.Doc.

identify M&E roles and responsibilities?			
Was the M&E Plan sufficiently budgeted and funded during project preparation and implementation?	Amount of funding designated and utilized for M&E	Pro.Doc. Interviews Project reports detailing expenses	Review of Pro.Doc. Interviews Review of project expenses
Is the project log-frame effectively being used as a management tool to measure progress and performance?	Use of log-frame	Project reports including PIRs Interviews	Review of project reports Interviews
Are progress and financial reporting requirements/ schedules complied with, including the timely delivery of well-developed monitoring reports (PIRs)?	Content and submission dates of project reports	Interviews Project reports	Interviews Review of project documentation
Are follow-up actions, and/or adaptive management, taken in response to M&E activities (e.g., in response to PIRs, and steering committee meetings)?	Responses to M&E activities	Project reports Interviews	Interviews Review of project documentation
If changes in planned project outputs, activities or implementation methodology were made, were these adequately justified and approved by the project steering committee?	Explanations provided for changes during project implementation	Steering committee minutes Project reports	Review of steering committee minutes and project documentation

EVALUATION CRITERIA QUESTIONS	EVALUATION INDICATORS	SOURCES	METHODOLOGY
STAKEHOLDERS			
Is the project involving the relevant stakeholders through information sharing and consultation and by seeking their active participation in project implementation, and M&E?	Level of participation of stakeholders in project implementation	Project reports Interviews	Review of project documentation Interviews

EVALUATION CRITERIA QUESTIONS	EVALUATION INDICATORS	SOURCES	METHODOLOGY
PROJECT FINANCE			
Is there enough clarity in the reported co-financing and leveraged resources to substantiate in-kind and cash co-financing from all listed sources?	Table specifying co-financing and leveraged resources secured and sources thereof	Project reports Interviews	Review of project documentation Interviews
Have the reasons for differences in the level of expected and actual co-financing been made clear and are the reasons compelling?	Explanation of the difference between expected and actual co-financing	Project reports including 2012 PIR with co-financing figures	Review of project documentation Interviews
Are externally funded project components well integrated	Components funded by co-financing	Project reports Interviews	Review of project documentation Interviews

into the GEF supported components?			
Is the extent of materialization of co-financing influencing project outcomes and/or sustainability?	Total co-financing secured. Level of achievement of project outcomes Perceived project sustainability.	Project reports Interviews	Review of project documentation Interviews

EVALUATION CRITERIA QUESTIONS	EVALUATION INDICATORS	SOURCES	METHODOLOGY
MAINSTREAMING			
Is it possible to identify and define positive or negative effects of the project on local populations?	Employment generated as a result of the project Impact of the project on income levels, food security, etc.	PIRs, Interviews	Review of PIRs Interviews
Do the project objectives conform to agreed priorities in the UNDP country programme documents, UN One plan, etc?	The consistency of Project with CPD, CPAP, and UNDAF	Pro.Doc., CPD, CPAP UN One Plan	Review of Pro.Doc., and UN One Plan.
Have gender issues been considered in project implementation? If so, how and to what extent?	Level and nature of participation of women in project implementation	PIRs, interviews	Review of PIRs, interviews

Annex 6. The questionnaire used for the interviews

Many of the below questions were used in the virtual and in-person interviews. Not all questions were asked of each interviewee. The questions were used to make sure that all aspects are covered, and the needed information is requested to complete the review exercise and a guide to preparing the semi-structured interviews.

I. Relevance - How does the Project relate to the main objectives of the GEF and the environment and development priorities?

1. Is the Project relevant to the GEF objectives?
2. Is the Project relevant to UNDP objectives?
3. Is the Project relevant to Vietnam development objectives?
4. Does the Project address the needs of target beneficiaries?
5. Is the Project internally coherent in its design?
6. How is the Project relevant considering other donors?
7. What lessons have been learned and what changes could have been made to the Project to strengthen the alignment between the Project and the Partners' priorities and areas of focus?
8. How could the Project better target and address the priorities and development challenges of targeted beneficiaries?

II. Effectiveness – To what extent are the expected outcomes of the Project being achieved?

1. How is the Project effective in achieving its expected outcomes?
2. How is risk and risk mitigation being managed?

III. Efficiency - How efficiently is the Project implemented?

1. Was the adaptive management used or needed to ensure efficient resource use?
2. Did the Project logical framework and work plan and any changes made to them use as management tools during implementation?
3. Were the accounting and financial systems in place adequate for Project management and producing accurate and timely financial information?
4. Were progress reports produced accurately, timely and respond to reporting requirements including adaptive management changes?
5. Was Project implementation as cost-effective as originally proposed (planned vs. actual)? Was the leveraging of funds (co-financing) happening as planned? Were financial resources utilized efficiently?
6. Could financial resources have been used more efficiently?
7. Were there institutionalized or informal feedback or dissemination mechanism to ensure that findings, lessons learned and recommendations about Project design and implementation effectiveness were shared among Project stakeholders, UNDP and GEF Staff and other relevant organizations for ongoing Project adjustment and improvement? Did the Project mainstream gender considerations into its implementation?
8. To what extent were partnerships/ linkages between institutions/ organizations encouraged and supported?
9. Which partnerships/linkages were facilitated? Which one can be considered sustainable?
10. What was the level of efficiency of cooperation and collaboration arrangements? (between local actors, UNDP/GEF and relevant government entities)
11. Was an appropriate balance struck between utilization of international expertise as well as local capacity?

12. Did the Project consider local capacity in the design and implementation of the Project?

IV. **IMPACTS - What are the potential and realized the impacts of activities carried out in the context of the Project?**

1. Will the project achieve its objective that is to improve fiscal measures for collecting, managing, and allocating revenues for global environmental management?
2. How is the Project impacting the local environment such as impacts or likely impacts on the local environment; on poverty; and, on other socio-economic issues?

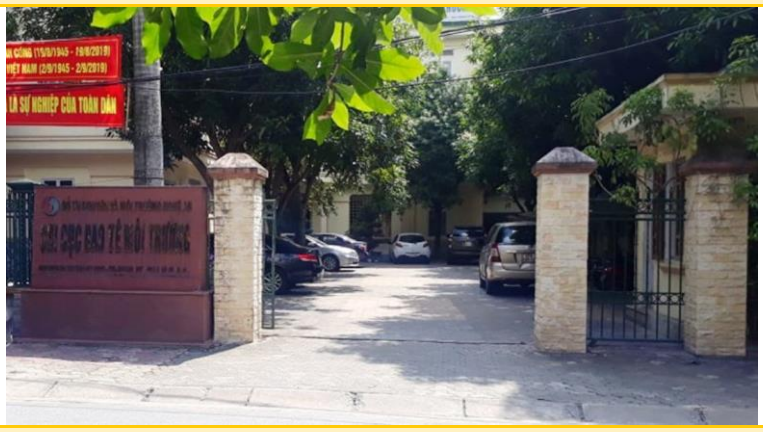
V. **Sustainability - Are the initiatives and results of the Project allowing for continued benefits?**

1. Are sustainability issues adequately integrated into Project design?
2. Did the Project adequately address financial and economic sustainability issues?
3. Is there evidence that Project partners will continue their activities beyond Project support?
4. Our laws, policies, and frameworks being addressed through the Project, to address the sustainability of key initiatives and reforms?
5. Is the capacity in place at the national and local levels adequate to ensure the sustainability of the results achieved to date?
6. Did the Project contribute to key building blocks for social and political sustainability?
7. Are Project activities and results being replicated elsewhere and/or scaled up?
8. What are the main challenges that may hinder the sustainability of efforts?

Annex 7. Summary of the Sites Visits

Location: Nghe An
Meeting person: Đinh Sỹ Khành Vinh – Vice Director, Nghe An Environmental Protection Department Date: 18 May 2020
main points discussed

- Activities in Nghe An:
  ○ Finalize draft plan of managing the areas pesticide chemical contaminated at the provincial level, integrated with the land use plan in Nghe An province.
  ○ Pilot implementation the pesticide management plan in pollution areas, integrated with the land use plan in Nghe An province
- Implementation process: implement according to the schedule committed by both sides
- Outputs/results of the project in Nghe An: Nghe An has been able to build a provincial plan for the pesticide contamination management, integrated with the land use plan in Nghe An province that was submitted to the province for approval in 2018; The project had some specific activities such as holding demonstration activities


Nghe An Environmental Protection Department

Location: Lam Hoa, Quang Binh
Meeting person: Cao Trung Kiên – Lam Hoa PPC Chairman Đinh Đức Linh, Environmental officer Lam Hoa Nguyễn Thị Thùy Dương, Head of Tien Phong village, Lam Hoa commune Đinh Thị Khai, Pioneer villagers, Lam Hoa commune Time: 19 May 2020
main points discussed

- Activities in Lam Hoa, Quang Binh
  ○ Detailed investigation, evaluation and develop a plan to manage polluted points in Lam Hoa, QB
  ○ Clearance of landmines / UXO in the contaminated area in Lam Hoa commune, Tuyen Hoa district, Quang Binh province. This area is still landmines, after surveying, it is necessary to clear mines before treating the contaminated soils
  ○ Detailed environmental assessment and plan development in managing and supervising for the cattle breeding, packaging and transportation of POP pesticides and heavily contaminated soil in Lam Hoa, Quang Binh
  ○ Excavating, packaging and disposal of POP pesticides waste and heavily contaminated soil in Lam Hoa, Quang Binh
  ○ Applying non-burning technology to treat lightly polluted land and executing risk reduction works in Lam Hoa, Quang Binh
  ○ Communicate with people about pesticide and POP

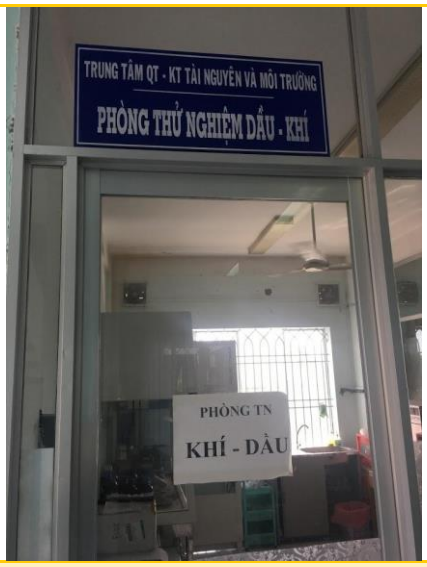
The area that Contaminated soil is buried and isolated

Location: Binh Duong

Meeting person:
Trần Thanh Quang – Director of Binh Duong Environmental Protection Sub-Department
Ngô Thành Mua, Officer of Binh Duong Environmental Protection Sub-Department
Hoàng Văn Ái, Officer of Binh Duong Environmental Protection Sub-Department
Nguyễn Thế Tùng Lâm, Head of Binhduong Natural Resources And Environmental Monitoring Center
Nguyễn Thị Hồng Diễm, Environmental and legal management of Binh Duong
Time: 20-21 May 2020

main points discussed

- Activities in Binh Duong
  - The project management unit and international experts trained and propagated to raise awareness of environmental officials and enterprises in the province on environmental risks of the POP and hazardous chemicals as well as mitigation activities.
  - Organizing investigation, conducting the survey, collecting information on production activities of 400 enterprises in Binh Duong province acting in many types of industries such as textile dyeing, paint production, plating, wood processing. .... collecting 50 wastewater samples, 25 exhaust gas samples, 50 solid waste samples to assess the existence and emissions of POP and PTS compounds from production facilities in the province.
  - Developing management software of POPs and persistent hazardous pollutants (PRTR) for Binh Duong management agencies and enterprises to use in statistics and reporting. This software has been handed over to Binh Duong DONRE for management and operation.
  - Implementation process: implement according to the schedule committed by both sides.
  - Outputs/results of the project in Binh Duong: helps to improve knowledge about POPs and hazardous chemicals of staff working in chemical and environmental management/ identified hazardous chemicals that need to be managed/building a database of chemical emissions/ Building PRTR software



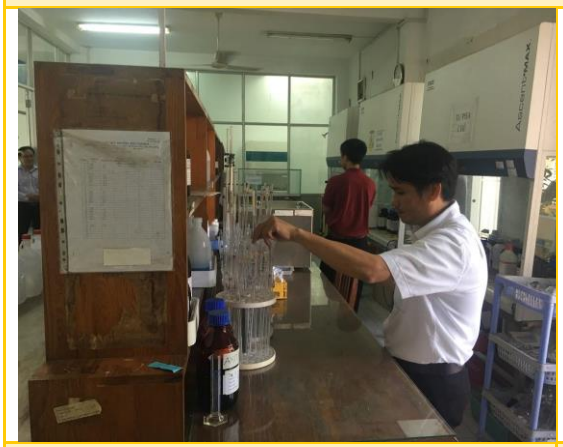
Binh Duong Natural Resources And Environmental Monitoring Center

Location: Can Tho

Meeting person:
Lê Hoài Nam – SCEM Director (Southern Centre for Environmental Monitoring)
Time: 22 May 2020

main points discussed

- Activities that SCEM took part in: capacity building for staff and standardization of processes to achieve ISO / IEC 17025 (ISO / IEC 17025 is an international standard specifying requirement to ensure preserving the capacity of testing and calibration laboratories)
- Result: The capacity of centres' staffs have been strengthened and met BOA standards. The centre has achieved ISO / IEC 17025, this is an important certificate for the operation of the centre



Southern Centre for Environmental Monitoring

Southern Centre for Environmental Monitoring

Annex 8. Capacity Building/ Tracking Tool

CAPACITY BUILDING			
Overarching note: this "capacity building" page applies only for stand-alone capacity building projects - or for capacity building activities not covered by any of the listed categories (pesticides, PCBs, UP-POPs, etc).			
Project title	**Vietnam POPS and Sound Harmful Chemicals Management Project**		
Country	**Vietnam**		
GEF Agency	**UNDP**		
GEF PMIS #	**5154**		
Indicators			**Number**
Number[1] of countries receiving GEF support to build capacity for the implementation of the Stockholm Convention [1.5.1.1]			**1**
Note 1. indicate "1" if this is a single-country project.			
Indicators	**Implementation Status**		**Qualitative comments[4] from the project team or the GEF Agency**
Coordination committee[2] in place [1.5.1.2]	Yes = 1 No = 0	1	
Legislative and regulatory measures[3] in place for environmentally sound management of POPs, and the sound management of chemicals in general [1.5.1]	0 = Not applicable: not an objective of the project 1 = Legislative/regulatory measures drafted or revised 2 = Legislative/regulatory measures adopted but not enforced 3 = Legislative/regulatory measures implemented/enforced with corresponding budget	2	• 2 National Technical Regulation adopted: One is the Technical Regulation on the wastewater of the steel industry, the other one is on emission for the steel industry. Both of those regulations have taken effect from July 1st, 2018. 4 Technical Regulations and 1 Technical Guideline were submitted, waiting for adoption. • Vinachemia submitted to promulgate Decree No. 71/2019 / ND-CP dated August 30, 2019, on penalties for administrative violations in the management of chemicals and industrial explosive materials. (replace Decree No. 163/2013 / ND-CP) In 2018, the project supported the review of the Environmental Protection Law and the Chemical Law. In 2019, these have been amended to better integrate POPs provisions, PRTR, and circular economy. New revisions of the LEP related to POPs are on the way, pending approval by mid-2020
Notes			
2. Include the composition of the project coordinating committee in the comment's column.			
3. Describe the type of legislative and regulatory measures, which can include laws, decrees, bylaws, standards, guidelines, etc, in the "comments" column.			
4. If the project addresses more than one country, please specify in the comment's column; and provide disaggregated data per country, if available.			

Indicators[6]	Number of people[5] trained	Qualitative comments[4] from the project team or the GEF Agency
Professional training [1.5.1.3]	target 190, achieved 86+61+39+50 long training, 70 short training.	533 people participated in the training, workshops, communication events conducted by the project, including: • WS on Environmental Chemicals Risk/Pollution and Challenge in Vietnam: 26 people including 16 were women. • WS on treatment and rehabilitation of the contaminated sites: 47 people including 16 women • WS on POPs/PTS monitoring and analysis: 40 people including 21 women • Basis training on ISO 17025:2017: 30 people including 20 women • Advance training on ISO 17025:2017: 30 people including 20 women • 3 WS on PRTR in Binh Duong: 196 people including 65 women • 3 pieces of training on contaminated sites management: 100 people including 42 women. • Communication on Hg: 64 people including 44 women
Notes		

5. Professional training is defined as corresponding to at least 3 days per person of training; if the training is shorter it does not qualify. If two people receive 2 days of training each, the score would be "0" under that category. One person receiving 3 days or more, for example, 8 days, of training would score "1" under that category.

6. Because of the methodological difficulties with assessing capacity-building outcomes, the decision was taken to focus on very few relevant indicators. The GEF POPs Task Force recognises that many more could have been chosen; by way of example, there are no indicators for awareness-raising activities.

Annex 9: PHCM Tracking Tool

DEVELOPMENT OF ALTERNATIVES TO DDT FOR VECTOR CONTROL	
Project title	**Vietnam POPS and Sound Harmful Chemicals Management Project**
Country	**Vietnam**
GEF Agency	**UNDP**
GEF PMIS #	**5154**

Indicators	**Number**
Number[1] of countries receiving GEF support for environmentally-sound management of DDT [1.2.1.1]	1
Number[1] of countries receiving GEF support for promoting DDT alternatives [1.2.1.2]	
Note 1. Indicate "1" if this is a single-country project.	

Indicators	**Quantity (tons)**	**Qualitative comments[2] from the project team or the GEF Agency**
Baseline average annual[3] use of DDT for vector control in the country [1.2.1.3]		
Notes		

2. If the project addresses more than one country, please specify, and provide disaggregated data per country, if available.

3. This is the total baseline use in the whole of the country before the start of the project. It might be a preliminary estimate such as possibly at the concept stage; or a more precise assessment such as is typically prepared during project development or as an early activity during project implementation. Updated more accurate information should replace the first estimates as it becomes available - in that case, please indicate that the information has been updated relative to a previous entry in the "comments" column.

Indicators	**Quantity (tons)**		**Qualitative comments[2] from the project team or the GEF Agency**
	Target reduction	Achieved to date	
Annual use of DDT targeted by the project [1.2.1.4]			

Indicators	**Implementation Status Yes = 1; No = 0**	**Qualitative comments[2] from the project team or GEF Agency[4]**
Intersectoral Coordination Committee for the promotion of alternatives to DDT in Vector Management established [1.2.1.5]		

Note 4. Indicate composition of the Committee in the comment's column.

Indicators	**Number**	**Cost ($ per person protected)**	**Qualitative comments[2] from the project team or GEF Agency**

Number of suitable chemical alternatives[5] to DDT demonstrated by the project [1.2.1.6]			
Number of suitable Non-Chemical Alternatives[6] to DDT demonstrated by the project [1.2.1.7]			
Notes. 5. Describe the chemical alternative(s) demonstrated in the "comments" column.			
6. Describe the non-chemical alternative(s) demonstrated in the "comments" column.			

Indicators	**Quantity *(in tons)***		**Cost[7,8] *($ per ton)***	**Qualitative comments[2,9] from the project team or GEF Agency**
	Project target	achieved to date		
DDT stocks disposed[10] of in an environmentally sound manner, and average cost [1.4.2.10]	50 DDT stock	0		Although the project initially did not envisage site remediation activities, at inception, due to the severity of the contamination and the amount of DDT found in one new contaminated site, it has been decided to include the remediation of this site as one of the activities of Component 3. That encompasses around 50 tons of DDT and around 100 tons of pesticide-contaminated soil. A14
DDT stocks safeguarded and average cost [1.4.2.11]	*150 DDT of contaminated soil*	*200 m3*		200m^3 (equivalent 280 tonnes) of contaminated soil have been contained in two concrete cells to mitigate the potential risks related to the DDT contaminated soil in Lam Hoa - Quang Binh Province

Notes. 7. Cost of disposal relates to the overall cost of achieved disposal: Cost = price per ton for collection and repackaging, transportation (land and sea), and destruction. Provide disaggregated data if available in the comment's column.
8. Cost of safeguarding relates to the overall cost of achieved safeguarding: Cost = price per ton for collection and repackaging, transport, and safe storage. Provide disaggregated data if available in the comment's column.
9. Describe the operations: name of the contractor, name of shipping line, name of disposal facility, etc.
10. Provide information on disposal technology and whether in-country or abroad in the "comments" column.

MANAGEMENT AND DISPOSAL OF OBSOLETE PESTICIDES, INCLUDING POPs			
Project title	**Vietnam POPS and Sound Harmful Chemicals Management Project**		
Country	**Vietnam**		
GEF Agency	**UNDP**		
GEF PMIS #	**5514**		
Indicators			**Number**
Number[1] of countries receiving GEF support for environmentally sound management of obsolete pesticides, including POPs [1.4.2.1]			**1**
Note 1. indicate "1" if this is a single-country project.			
Indicators	**Quantity *(in tons)***	**Qualitative comments from the project team or the GEF Agency[2]**	
Baseline inventory[3,4] of obsolete pesticides, including POPs pesticide. [1.4.2.2]	1350 + 5000	The current baseline does not provide an amount of obsolete pesticide. Instead, it lists POPs contaminated sites including the ones contaminated by POPs pesticides. Conservatively assuming there is an average of 5 tons of pesticide-contaminated material in each site, the project will establish a management plan encompassing around 1350 tons of pesticide-contaminated material (contaminated soil and stockpiles) in the Nghe An province, and of a further 5000t of POPs contaminated ashes in the Binh Duong province	
Notes. 2. Include information on inventory coverage and precision.			
3. This is the total baseline inventory in the country before disposal operations. It might be a preliminary inventory such as possibly at the concept stage or a more detailed inventory such as is typically prepared during project development or as an early activity during project implementation. Updated more accurate information should replace the first estimates as it becomes available - in that case, please indicate that the information has been updated relative to a previous entry in the "comments" column.			
4. If the project addresses more than one country, please specify in the comment's column; and also provide disaggregated data per country, if available.			
Indicators	**Implementation Status**		**Qualitative comments[4] from the project team or the GEF Agency**
Pesticides or POPs pesticides regulations[5] in place [1.4.2.3]	0 = Not applicable: not an objective of the project1 = legislation/ regulation drafted or revised2 = legislation/ regulation adopted but is not enforced3 = legislation/ regulation is enforced with corresponding budget	3	The environmental management plan for areas contaminated with pesticides residue in Nghe An province was completed.The environmental management plans for areas contaminated with pesticides residue in Ha Tinh, Quang Binh and Quang Tri were drafted.+D27
Indicators	**Implementation Status**		**Qualitative comments[4] from the project team or the GEF Agency**

Waste management plans to prevent[6,7] further accumulation of pesticide stockpiles and empty pesticide containers, in place [1.4.2.4]	0 = Not applicable: not an objective of the project 1 = management plans have been developed 2 = infrastructure and logistics in place to permit implementation 3 = management plans budgeted and implemented	1	There are no detailed waste management plans in Vietnam, being the decision 1946 /QĐ-TTg, mostly a strategy / financial document. The project will establish a detailed management plan for POPs contaminated sites in 2 provinces: Nghe An (POPs pesticides) and Binh Duong (industrial POPs contaminated sites including)

Notes. 5. Describe in the "comment" column the type of regulatory measures, which can include policies, decrees, bylaws, standards, guidelines such as broadly aligned with the objectives of the chemicals conventions and the International Code of Conduct on the Distribution and Use of Pesticides.

6. Describe specific prevention measures in the comments section.

7. Waste pesticides and containers will always be generated where pesticides are used. To prevent the accumulation of new stockpiles, a waste management plan must be in place.

Indicators	**Quantity *(in tons)***		**Cost *($ per ton)***	**Qualitative comments from the project Team or GEF Agency[4,8]**
	Project target	achieved to date		
Obsolete pesticides, including POPs pesticides, disposed of in an environmentally sound manner, and average cost[9] [1.4.2]				
Obsolete pesticides safeguarded[10] and average cost[11] [1.4.2.5]	at inception, a target of 50t of obsolete pesticide and 150 t of DDT contaminated material was set	200m3 (equivalent 280 tonnes) of contaminated soil have been contained in two concrete cells to mitigate the potential risks related to the DDT contaminated soil in Lam Hoa - Quang Binh Province	N/A	The project Initial target did not include disposal activities, but the establishment of detailed provincial cleanup plans will in Nghe An and Binh Duong. At project end, environmental management plan a draft POPs and Hazardous Chemicals Management Plan in Binh Duong province were drafted and a complete environmental management plan for areas contaminated with pesticides residue in Nghe An province developed. However, no POP contaminated sites were found in Binh Duong

Notes. 8. Provide information on disposal technology and whether in-country or abroad.

9. Cost relates to the overall cost of achieved disposal: Cost = price per ton for repackaging, transportation (land and sea), and destruction.

10. This should only be indicated as an item separate from disposal if safeguarding is carried out as a risk reduction measure where the disposal is not possible.

11 Cost relates to the overall cost of achieved safeguarding: Cost = price per ton for repackaging, transport, and safe storage.

REDUCTION OF UN-INTENTIONALLY PRODUCED POPs (UP-POPs)			
DIOXINS/FURANS			
Project title	**Vietnam POPS and Sound Harmful Chemicals Management Project**		
Country	**Vietnam**		
GEF Agency	**UNDP**		
GEF PMIS #	**5154**		
Indicators		**Number**	
Number[1] of countries receiving GEF support for dioxins/furans reduction [1.3.1.2]		**1**	
Number[1] of countries with Action Plans for UP-POPs under development and implementation [1.3.1.1]		**1**	
Notes. 1. indicate "1" if this is a single-country project.			
Indicators	**Quantity g TEQ**	**Qualitative comments[2,3] from project team or GEF Agency**	
UP-POPs baseline inventory[4] [1.3.1.3]		The U-POPs inventory under NIP update is complete. The project provided more detailed information through sampling and analysis of PCDD/F flue gas in several industrial facilities (incinerator, power plants, cement kilns, iron and steel, and others)	
Notes. 2. If the project addresses more than one country, please specify in the comment's column; and also provide disaggregated data per country, if available.			
3. Include information on the basis for the inventory (e.g. Stockholm Convention tool kit), and coverage and precision.			
4. This is the total baseline inventory in the country before the start of the project. It might be a preliminary inventory such as possibly at the concept stage or a more detailed inventory such as is typically prepared during project development or as an early activity during project implementation. Updated more accurate information should replace the first estimates as it becomes available - in that case, please indicate that the information has been updated relative to a previous entry in the "comments" column.			
Indicators	**Implementation Status**		**Qualitative comments[2] from project team or GEF Agency**
Regulatory measures[5] in place [1.3.1.4]	0 = Not applicable: not an objective of the project 1 = Regulatory measures drafted or revised 2 = Regulatory measures adopted but not enforced 3 = Regulatory measures implemented/enforced with the corresponding budget	1	A PRTR circular drafted. First provisions concerning PRTR included in the Law of Environmental Protection LEP. The final version of the PRTR circular and further upgraded LEP by end of July 2020
Note 5. Describe the type of regulatory measures, which can include laws, decrees, bylaws, standards, guidelines, etc, in the "comments" column.			

Indicators	Quantity g TEQ per year		Cost ($ per g TEQ)	Qualitative comments[2,10] from project team or GEF Agency
	Project target	Achieved to date		
UP-POPs reduced or avoided as a result of BAT/BEP applied[6] in industrial sectors and average cost – project directly [1.3.1.10]	The project will establish a PRTR in an industrial province to facilitate reporting of U-POP emission covering at least 20% of industrial facilities at the site. Besides a cleanup plan for POPs contaminated sites including the safe management of around 5000 tons/year of U-POPs contaminated ashes (representing from 5 to 75 g of PCDD/F) incineration of industrial waste will be drafted	1	N/A	All the industrial contaminated sites in the Binh Duong province were managed/treated by DONRE, therefore the project focused on the identification of PCDD/F emission through sampling and analysis. A PRTR software has been piloted in the province, and a database of 400 enterprises developed and implemented. The sampling and testing of flue gas in industrial facilities allowed for the identification of incinerators and iron and steel as the sector with a high emission level of U-POPs
UP-POPs reduced or avoided as a result of BAT/BEP applied[7] in industrial sectors and average cost – expected through replication [1.3.1.11]		0	N/A	
UP-POPs reduced or avoided as a result of BAT/BEP applied[8] in non-industrial sectors and average cost – project directly [1.3.1.12]				
UP-POPs reduced or avoided as a result of BAT/BEP applied[9] in non-industrial sectors and average cost - expected through replication [1.3.1.13]				
Notes				
6. should capture upstream, in-plant, and downstream measures taken.				
7. should capture upstream, in-plant, and downstream measures replicated.				
8. Should capture upstream and downstream measures taken at non-point sources.				
9. Should capture upstream and downstream measures replicated for non-point sources.				
10. Provide information on input alternatives, recycling, process changes, end of pipe measures, and/or preventive waste management systems implemented.				
Indicators[11]	**Tons per year**			

	Project target	Achieved to date	**Cost ($ per ton)**	**Qualitative comments[2,12] from project team or GEF Agency**
CO2 reduction co-benefits - project directly [1.3.1.20]				
CO2 reduction co-benefits - expected through replication [1.3.1.21]				
Notes				
11. These indicators are optional for GEF-5.				
12. Describe the basis for an estimate of co-benefits.				

Annex 10: Evaluation Consultant Agreement Form

Evaluators/Consultants:

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

Terminal Evaluation Consultant Agreement Form

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

Name of Consultant: AMAL ALDABABSEH

Name of Consultancy Organization (where relevant): INTERNATIONAL CONSULTANT

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

Signed at Jordan (Place) on 15 July 2020 (Date)

Signature: 

Annex 11: Evaluation Report Clearance Form

(to be completed by CO and UNDP GEF Technical Adviser based in the region and included in the final document)

Evaluation Report Reviewed and Cleared by
UNDP Country Office

Name: Nguyen Thi Ngoc Han_____

Signature: _____ Date: 9 October 2020_____

UNDP GEF RTA
Name: _____Manisha Sanghani_____

Signature: _____ Date: 12-October-2020

Annex 12: Annexed in a separate file - TE Audit Trail

Annex 11: Evaluation Report Clearance Form

(to be completed by CO and UNDP GEF Technical Adviser based in the region and included in the final document)

Evaluation Report Reviewed and Cleared by
UNDP Country Office

Name: Nguyen Thi Ngoc Han_____

Signature: _____ Date: 9 October 2020_____

UNDP GEF RTA
Name: _____Manisha Sanghani_____

Signature: _____ Date: 29-October-2020