Terminal Evaluation of the UNEP/GEF Project

"Continuing Regional Support for the POPs Global Monitoring Plan under the Stockholm Convention in the Africa Region (GEF ID 4886)"

(2015-2024)

Evaluation Office of the United Nations Environment Programme

Distributed: March 2026

Photos Credit:
Front cover: The photo was taken during the Final Meeting of the UNEP/GEF project ´Continuing Regional Support for the POPs Global Monitoring Plan under the Stockholm Convention in the Africa Region', held in Casablanca, Morocco, from 28-30 November 2023.

©UNEP/ National Laboratory of Studies and Pollution Monitoring, United Nations Environment Programme, Final Meeting of the UNEP/GEF project ´Continuing Regional Support for the POPs Global Monitoring Plan under the Stockholm Convention in the Africa Region', 2023

This report has been prepared by an external consultant evaluator and is a product of the Evaluation Office of UNEP. The findings and conclusions expressed herein do not necessarily reflect the views of Member States or the UN Environment Programme Senior Management.

During the evaluation, I, Elinor Bajraktari, have informed UNEP of any use of Artificial Intelligence tools (Anthropic's Claude) in line with the UNEG Ethical Principles for Harnessing AI in United Nations Evaluations, specifically in the areas of meeting/interview transcription, literature reviews, and synthesis of documents. After using this tool/service, I reviewed and verified the content as needed and take full responsibility for the final content of the report.

For further information on this report, please contact:

Evaluation Office of UNEP
P. O. Box 30552-00100 GPO
Nairobi Kenya
Email: unep-evaluation-director@un.org
Website: https://www.unep.org/evaluation-office

Project Title: Continuing Regional Support for the POPs Global Monitoring Plan under the Stockholm Convention in the Africa Region
GEF ID: 4886
Date: 02/26

Acknowledgements

This Terminal Evaluation was prepared for UNEP by Elinor Bajraktari as an external consultant. The evaluator would like to express his gratitude to all persons who contributed to this evaluation, as listed in Annex II. The evaluator would like to thank the project team and, in particular, the UNEP Evaluation Manager, Mr. Kazuyoshi Hirohata, Task Manager, Mr. Jitendra Sharma, and Project Manager, Ms. Haosong Jiao, for their contribution and collaboration throughout the process. Sincere appreciation is also extended to the project team, who took the time to provide comments to the draft report. The evaluator hopes that the findings, conclusions, and recommendations of this evaluation will contribute to the successful finalization of the project, formulation of any future phases, and to the continuous improvement of similar projects in other countries and regions.

Evaluation Consultant
Elinor Bajraktari – Principal Evaluator

Evaluation Office of UNEP
Kazuyoshi Hirohata – Evaluation Manager
Dipti Jethwa - Evaluation Programme Assistant

Brief consultant biography

Elinor Bajraktari, the evaluator who conducted this evaluation, is an experienced public policy professional with over 20 years of diverse international experience. He has an extensive background in programme management and evaluations, impact studies, policy assessments, program design and formulation, results-based management, data analysis, and reporting. His experience spans over 50 countries in Europe, Central Asia, the Middle East, Africa, Southeast Asia, and North America. He has worked for several governments and international organizations like UNDP, The World Bank, UNICEF, UNDESA, UNCDF, etc. He holds a Master's degree in Public Administration in International Development from Harvard University's John F. Kennedy School of Government.

About the Evaluation

Joint Evaluation: No

Report Language: English

Evaluation Type: Terminal Evaluation

ABSTRACT: This report is a Terminal Evaluation of the UNEP/GEF project, "Continuing Regional Support for the POPs Global Monitoring Plan under the Stockholm Convention in the Africa Region (GEF ID 4886)", implemented between 2015 and 2024. The project's overall goal was to strengthen the capacity to implement the updated POPs Global Monitoring Plan (GMP) and to create the conditions for sustainable monitoring of POPs in the African Region. The evaluation sought to assess project performance (in terms of relevance, effectiveness, and efficiency) and determine the sustainability of its results. The evaluation has two primary purposes: accountability and learning. Data collection methods included: in-depth interviews, Focus Group Discussions, and document reviews. Data analysis was based on applying triangulated data to assess performance against a reconstructed Theory of Change and its causal pathways. With an overall performance rating of Moderately Satisfactory, the 4th point on a six-point scale, the main findings include: i) The project demonstrated strong performance in strategic relevance and technical data quality. It was well aligned with UNEP and GEF strategic frameworks, the Stockholm Convention's Global Monitoring Plan under Article 16, and WHO biomonitoring protocols, ensuring that outputs fed directly into Conference of Parties deliberations and global effectiveness evaluations, ii) The project delivered tangible capacity-building results, with several countries integrating project outputs into national monitoring frameworks and policy processes, and iii) The project faced serious implementation bottlenecks that affected its efficiency and impact. The shift from a planned five-year to an actual nine-year implementation represents a serious challenge. The main recommendations to UNEP include, but are not limited to,: i) establish a formal and standing knowledge management and communication strategies for national GMP coordinators and experts, anchored by Regional Centres, to institutionalize peer support, technical exchange, and rapid problem-solving beyond the project's lifetime and ii) consider that the project design integrates links between POPs monitoring and policymaking at the national level to support the project's sustainability.

Sources of Funding by Country: DR Congo, Egypt, Ethiopia, Ghana, Kenya, Mali, Marrocco, Mauritius, Nigeria, Senegal, Tanzania, Togo, Tunisia, Uganda, Zambia

Sources of Funding by Institution Type:

Foundation/NGO	No
Private Sector	No
UN Body	Yes
Multilateral Fund	Yes
Environment Fund	No

Key words: Chemicals and Pollution; Persistent Organic Pollutants; Human Health and Environment; Stockholm Convention; Effectiveness Evaluation

Primary data collection period: July – September 2025

Field mission dates: N/A

Table of Contents

List of Tables

List of Figures

LIST OF ACRONYMS AND ABBREVIATIONS

BCCC-SCRC-LATU	Basel Convention Coordinating Centre, Stockholm Convention Regional Centre, for Capacity Building and Transfer of Technology hosted by Uruguay
BRS Secretariat	Basel, Rotterdam, and Stockholm Conventions Secretariat
CSIC	Spanish National Research Council
CVUA	Chemisches und Veterinäruntersuchungsamt
EA	Executing Agency
ESS	Environmental and Social Safeguards
ETQCL	Environmental Testing and Quality Control Laboratory
GEF	Global Environment Facility
GMP	Global Monitoring Plan
IA	Implementing Agency
IED	Industry and Economy Division
IVM VU	Institute for Environmental Studies, Vrije Universiteit
MTM	Man-Technology-Environment Research Centre, Örebro University
MTR	Mid-Term Review
PBDE	Polybrominated Diphenyl Ethers
PCB	Polychlorinated Biphenyls
PFAS	Per- and Polyfluoroalkyl Substances
PFOS	Perfluorooctanesulfonic Acid
PIR	Project Implementation Report
PM	Project Manager
POPs	Persistent Organic Pollutants
PSC	Project Steering Committee
PSG	Project Steering Group
QA	Quality Assurance
QC	Quality Control
RECETOX	Research Center for Toxic Compounds in the Environment
ROG-Africa	Regional Organization Group - Africa
SC	Stockholm Convention
SDGs	Sustainable Development Goals
SOPs	Standard Operating Procedures
SSFA	Standard Sub-Grant Agreement
TM	Task Manager
ToC	Theory of Change
UNEP	United Nations Environment Programme
WHO	World Health Organization

Project Identification Table

Table 1: Project Identification Table

<table>
<tr><td>GEF Project ID/SMA ID[1]:</td><td colspan="3">GEF ID: 4886 / SMA ID: 127863</td></tr>
<tr><td rowspan="2">Type of GEF Project:</td><td>Child: N</td><td>Global Coordinating Project:</td><td>N</td></tr>
<tr><td>If yes, provide GEF Programme[2] ID:</td><td>Medium-Size Project or Full-Size Project:</td><td>FSP</td></tr>
<tr><td>UNEP Management (Division/Branch/Unit):</td><td>UNEP, Industry and Economy Division, Chemicals and Health Branch, GEF Chemicals and Waste Unit</td><td>Executing Agency: (indicate if internally executed):</td><td>UNEP, Industry and Economy Division, Chemicals and Health Branch, Knowledge and Risk Unit</td></tr>
<tr><td>Sources of Funding (Co-finance):</td><td colspan="2">Country[3](ies):
DR Congo; Egypt; Ethiopia; Ghana; Kenya; Mali; Morocco; Mauritius; Nigeria; Senegal; Tanzania; Togo; Tunisia; Uganda; Zambia</td><td>Institution[4] Name/Type:
UNEP (UN Body), Secretariat of the Basel, Rotterdam and Stockholm conventions (IGOs), Chemisches und Veterinäruntersuchungsamt (CVUA) Freiburg, MTM Oerebro, Recetox (Academic institutions)</td></tr>
<tr><td>Relevant SDG(s):</td><td colspan="3">SDG Goal 3; SDG Goal 6; SDG Goal 12; SDG Goal 17</td></tr>
<tr><td>MTS (at approval):</td><td colspan="3">2014–2017</td></tr>
<tr><td rowspan="2">POW Direct Outcome(s) number/reference[5] (applicable for projects approved from 2022):

OR

POW Output(s) number/reference [5] (applicable for projects approved pre-2022)</td><td>POW Direct Outcome:
N/A</td><td rowspan="2">MTS 2025 Outcome(s) number/reference[5] (applicable for projects approved from 2022):

OR

POW Expected Accomplishment(s) number/reference [5] (applicable for projects approved pre-2022):</td><td>MTS 2025 Outcome:
N/A</td></tr>
<tr><td>POW Output:
Output 522</td><td>POW Expected Accomplishment:
Expected Accomplishment 5(b)
Direct Outcomes 3.5; 3.10; 3.11; 3.13</td></tr>
<tr><td>Sub-programme:</td><td>Chemicals and Pollution Action</td><td>Programme Coordination Project (if relevant):</td><td>N/A</td></tr>
<tr><td>UNEP approval date:</td><td>18 March 2015</td><td>GEF approval date:</td><td>15 January 2015</td></tr>
<tr><td>GEF Operational Programme/Cycle # (e.g. GEF-7):</td><td>GEF-5</td><td>GEF Strategic Priority (e.g. BD4):</td><td>CHEM-1</td></tr>
<tr><td>Focal Area(s):</td><td colspan="3">Chemicals and Waste</td></tr>
<tr><td>Expected start date:[6]</td><td>14 December 2014</td><td>Actual start date:[7]</td><td>18 March 2015</td></tr>
</table>

[1] SMA refers to the ID provided by the Integrated Planning, Management and Reporting Solution (IPMR) system, which was introduced by UNEP in July 2023. Previously, it was referred to as a PIMS ID number.
[2] GEF Programme refers to 'Parent' project.
[3] Where applicable, list countries who have provided project funds and/or co-finance.
[4] Indicate where funding institutions are any/all of the following: Foundation/NGO; Private Sector; UN Body; Multilateral Fund; Environment Fund.
[5] For these items do not include full text; only enter the number or reference.
[6] Expected/planned dates are listed in the Project Document (ProDoc).
[7] Actual start date is the date of the last signature on the PCA or ICA.

<table>
<tr><td>GEF Project ID/SMA ID[1]:</td><td colspan="3">GEF ID: 4886 / SMA ID: 127863</td></tr>
<tr><td>Planned completion date:[6]</td><td>31 December 2021</td><td>Actual operational completion date:</td><td>30 June 2024</td></tr>
<tr><td rowspan="3">Planned project budget at approval:</td><td colspan="3">GEF grant allocation: USD 4,208,000</td></tr>
<tr><td colspan="3">Expected co-financing: USD 10,190,200
Cash: USD 25,000
In-kind: USD 10,165,200</td></tr>
<tr><td colspan="3">Total planned budget: USD 14,398,200</td></tr>
<tr><td rowspan="3">Actual expenditures reported (cash only):</td><td colspan="3">GEF grant expenditures reported as of 30 June 2024: USD 4,044,370 (cumulative)</td></tr>
<tr><td colspan="3">Actual co-financing 30 June 2024: USD 25,000 (cash only)</td></tr>
<tr><td colspan="3">Total actual expenditures reported as of 30 June 2024: USD 4,069,370</td></tr>
<tr><td>No. of formal project revisions:</td><td>4
(no-cost extensions)</td><td>Date of last approved project revision:</td><td>31 December 2023</td></tr>
<tr><td>No. of Steering Committee meetings:</td><td>16</td><td>Date of Last Steering Committee meeting:</td><td>30 November 2023</td></tr>
<tr><td rowspan="2">Mid-term Review/ Evaluation[8] (required or not required):</td><td>UNEP requirement:</td><td>Y</td><td rowspan="2">Mid-term Review/ Evaluation actual date:</td><td rowspan="2">31 December 2018</td></tr>
<tr><td>GEF requirement:</td><td>N</td></tr>
<tr><td>Terminal Evaluation (planned date):</td><td>31 December 2024</td><td>Terminal Evaluation actual date:</td><td>7 February 2025</td></tr>
<tr><td>Coverage - Country(ies):</td><td>DR Congo, Egypt, Ethiopia, Ghana, Kenya, Mali, Marrocco, Mauritius, Nigeria, Senegal, Tanzania, Togo, Tunisia, Uganda, Zambia</td><td>Coverage - Region(s):</td><td>Africa</td></tr>
<tr><td>Dates of previous project phases:</td><td>Phase I (2009-12):

Supporting the Implementation of the Global Monitoring Plan of POPs in West Africa (GEF ID 3674)

Supporting the Implementation of the Global Monitoring Plan of POPs in Eastern and Southern African Countries (GEF ID 3673)</td><td>Status of future project phases:</td><td>PFD approved in June 2024

Name of Future Project Phase: Global Chemicals Monitoring Programme to support implementation of Stockholm and Minamata Conventions (GCMP) (GEF ID 11534)</td></tr>
</table>

[8] UNEP projects of four or more years duration require an MTR unless there is an exceptional circumstance. See the *Evaluation in the Project Cycle* section in the Evaluation Office's operational manual. Donor requirements may vary and should be considered in conjunction with UNEP's requirements.

Executive Summary

Project Background

1. The *Global Monitoring Plan (GMP) for Persistent Organic Pollutants (POPs) Monitoring Project in Africa* was implemented across 15 countries in Africa with funding from the Global Environment Facility (GEF) through the United Nations Environment Programme (UNEP) acting as the Implementing Agency. The project was originally planned for five years, but was extended to nine years, spanning from 13 March 2015 to 31 December 2023 (operational completion took place in mid 2024). The project was designed to address Africa's critical data gap in the Stockholm Convention's Global Monitoring Plan, which evaluates the effectiveness of measures to reduce POPs. Without African data, global POPs trend analysis lacked geographic representativeness, undermining the credibility of effectiveness evaluations. The project's objectives were to: (i) generate high-quality, globally comparable POPs monitoring data from human milk, air, and water matrices across Africa; (ii) strengthen national and regional laboratory capacities for POPs monitoring; (iii) produce knowledge products that inform policy decisions at national, regional, and global levels; and (iv) support participating countries in meeting their Stockholm Convention obligations under Article 16 (Effectiveness Evaluation).

Evaluation Approach

2. This evaluation sought to assess the project's performance, evaluating its relevance, effectiveness, efficiency, and sustainability of outcomes, as well as cross-cutting dimensions. Data collection methods included the extensive review of project documents and monitoring data; in-depth semi-structured interviews with UNEP and project staff, national coordinators, laboratory personnel, partner organizations, and other country stakeholders; and analysis of monitoring datasets and knowledge products. Data analysis was based on applying triangulated evidence from multiple sources to assess performance against a reconstructed Theory of Change, examining causal pathways from inputs through activities and outputs to outcomes and intended impacts, while identifying enabling and constraining factors. Evaluation limitations, which primarily included staff turnover in participating national governments affecting institutional memory, varying interview coverage across the 15 countries, and reliance on retrospective document analysis for early project phases, were mitigated through triangulation of multiple data sources, comprehensive stakeholder consultations, and systematic review of project documentation.

Key Findings and Performance Ratings

3. The project demonstrated strong performance in strategic relevance and technical data quality. It was well aligned with UNEP and GEF strategic frameworks, the Stockholm Convention's Global Monitoring Plan under Article 16, and WHO biomonitoring protocols, ensuring that outputs fed directly into Conference of Parties deliberations and global effectiveness evaluations. The project was essential to closing Africa's GMP data gap, with evaluation interviews confirming that all African human milk data and the majority of air and water monitoring data for this GMP period were generated through this project. Without these datasets, Africa would have been largely absent from global POPs assessments.

4. Technical quality was ensured through strict adherence to GMP protocols and WHO standards, supported by comprehensive Quality Assurance and Quality Control (QA/QC) systems and expert reference laboratories. These measures ensured data integrity,

international acceptance, and compliance with Stockholm Convention reporting requirements. Despite COVID-19 disruptions, multi-level coordination across implementing partners remained effective through adaptive management.

5. The project delivered tangible capacity-building results, with several countries integrating project outputs into national monitoring frameworks and policy processes. Training across environment and health sectors strengthened cross-sectoral competencies, and long-standing collaboration with national coordinators supported institutional continuity, although this remained vulnerable to staff turnover.

6. The project produced a range of knowledge products aimed at policy use, including regional reports, sustainability roadmaps, standardized methodologies, and data visualization tools. These outputs achieved strong visibility and informed Stockholm Convention processes, contributing directly to effectiveness evaluation and global reporting. However, national capacity remains uneven, reflecting the long-term nature of institutionalizing autonomous monitoring systems.

7. The project faced serious implementation bottlenecks that affected its efficiency and impact. The shift from a planned five-year to an actual nine-year implementation represents a serious challenge. While country-level legal processes, ethical clearances, administrative procedures for Small-Scale Funding Agreements (SSFAs), and partners' acquittal pace presented real challenges, these were not unknown obstacles, unlike the COVID-19 disruptions. The first round of the Global Monitoring Plan had already revealed that such processes would be time-consuming, yet the project did not adequately account for these foreseeable challenges in its design and timeline. At the same time, the approved project extension allowed for additional monitoring campaigns, thereby strengthening the project's contribution to the effectiveness evaluation under the Stockholm Convention.

8. Under the implementation challenges, there was a structural tension that the project could not resolve, which challenged long-term sustainability. Countries participating in the GMP are expected to maintain monitoring activities that serve global trend analysis for the Stockholm Convention rather than identifying pollution hotspots for immediate national policy action. This distinction between global scientific objectives and national decision-making priorities can, in practice, create a structural barrier to ownership. The project attempted to address this through "samples of national interest" that allowed country-specific analyses, but this remained supplementary. Interviews revealed persistent difficulty securing domestic budget lines for routine monitoring, leaving continuity contingent on external financing. Without clearer national value propositions or better integration of national decision-support functions, securing sustained domestic budgets and political commitment remains difficult, regardless of the technical capacity built.

9. The project considered the human rights and gender dimensions, particularly within the human milk monitoring protocol. Inclusion criteria requiring first-time mothers with residency in sampling areas, supported by questionnaires to avoid discriminatory selection, ensured representativeness while respecting rights-based principles. However, beyond human milk, systematic gender-disaggregated monitoring was not evidenced in interviews. At project design and approval, GEF rules did not explicitly require measures for marginalized groups or persons with disabilities across activities, nor the differential exposure pathways or health equity implications. Therefore, data on POPs in air, water, and soils were not analyzed or reported with gender- or vulnerability-sensitive lenses.

10. Areas that would have benefited from further attention include: (i) stricter implementing agency oversight with enforceable accountability mechanisms to prevent excessive delays; (ii) knowledge management systems to address staff turnover and institutional

memory gaps; (iii) project design that explicitly aligns global monitoring objectives with national policy priorities to create sustainable country ownership; (iv) accelerated publication and dissemination timelines to preserve policy relevance of findings; (v) systematic mainstreaming of gender and vulnerability analysis across all monitoring matrices beyond human milk; (vi) streamlined administrative procedures with adequate contingency time for country-level legal processes and SSFAs; and, (vii) long-term sustainability strategies with diversified financing mechanisms that reduce dependence on external donor cycles.

Table 2: Summary of Project Ratings[9][10]

Criterion	Rating
Strategic Relevance	**HS**
Quality of Project Design	**S**
Nature of External Context	**MU**
Effectiveness	**S**
Financial Management	**S**
Efficiency	**MU**
Monitoring and Reporting	**S**
Sustainability	**MU**
Factors Affecting Performance	**S**
Overall Project Performance Rating	**MS**

Conclusions

11. Overall, the project performed at the Moderately Satisfactory level, acknowledging its solid contribution to strengthening POPs monitoring capacity across the region despite implementation delays and varying institutional sustainability across participating countries. The project's legacy will depend less on the quality of data generated (which is indisputably high) than on whether the capacity built, institutional relationships established, and knowledge infrastructure created can be sustained and expanded without external financing. Where outputs were integrated into national protocols and registers, sustainability prospects are stronger. The planned shift to regional centers as executing agencies acknowledges the ownership challenge and represents an important institutional innovation that may improve long-term viability. Whether this will succeed in resolving the structural misalignment between what global monitoring delivers and what motivates sustained national engagement will determine if the project's technical achievements will be translated into lasting transformation.

Responses to Strategic Questions

12. Across the six strategic questions, the evaluation found that the project incorporated several lessons from the previous GMP phase and partially applied recommendations from its Mid Term Review, particularly through strengthened quality assurance systems, harmonized protocols, and enhanced sustainability planning. Cross-regional learning with the other GMP projects occurred mainly through global coordination structures and expert laboratory networks, which provided shared methodologies and Quality Assurance (QA)

[9] The six-point scale is as follows: Highly Satisfactory (HS); Satisfactory (S); Moderately Satisfactory (MS); Moderately Unsatisfactory (MU); Unsatisfactory (U); Highly Unsatisfactory (HU). Sustainability and Likelihood of Impact are rated from Highly Likely (HL) down to Highly Unlikely (HU) and Nature of External Context is rated from Highly Favourable (HF) to Highly Unfavourable (HU). The ratings against each criterion are 'weighted' to derive the Overall Project Performance Rating. The greatest weight is placed on the achievement of outcomes, followed by dimensions of sustainability.
[10] Detailed ratings, including ratings of evaluation sub-criteria, are described in Table 17 under the *'5.1. Conclusions'* section.

guidance, although formal inter-regional exchanges were limited. The project successfully linked scientific monitoring data to global and regional decision-making through contributions to the Global POPs Data Warehouse and the global effectiveness evaluation, while national-level policy uptake remained modest. National monitoring mechanisms were well aligned with GMP requirements through standardized sampling and QA procedures, reinforcing the role of national coordinators and laboratories as the operational interface with the global framework. All project data were integrated into the global warehouse and contributed substantively to the effectiveness evaluation, particularly the human milk dataset. Interlaboratory assessments significantly improved QA and analytical performance among national laboratories, strengthening their capacity to generate reliable data for global reporting.

Lessons Learned

13. ***Lesson 1:*** Overly optimistic timelines and loose accountability enable chronic extensions.

14. ***Lesson 2:*** Early ethical clearances are essential for biological monitoring projects.

15. ***Lesson 3:*** Global visibility requires balancing UNEP's publication protocols with timeliness.

16. ***Lesson 4:*** Establishment of a milestone-based early-warning and escalation system helps eliminate avoidable delays in SSFAs, ethical clearances, and publication gates.

17. ***Lesson 5:*** Fast-track publications by redesigning clearance workflows, introducing parallel technical/editorial reviews, and pre-booking publication slots should be tied to hard deadlines.

18. ***Lesson 6:*** It is important to secure financial sustainability through a costed multi-year financing plan that combines domestic budget lines, pooled regional resources, and donor co-financing for consumables and maintenance.

19. ***Lesson 7:*** Standardization of ethics and bio sample flows, using pre-approved protocol packs and a regional ethics support hub, may expedite human-milk work.

Recommendations

20. ***Recommendation 1:*** Recommendation for the future phase of the project to establish a formal and standing knowledge management and communication strategies for national GMP coordinators and experts, anchored by Regional Centres, to institutionalize peer support, technical exchange, and rapid problem-solving beyond the project's lifetime.

21. ***Recommendation 2:*** Recommendation for the future phase of the project to shift the execution body to Regional Centres (or qualified consortia), with UNEP as the Implementing Agency, and constitute an independent oversight board with authority to enforce corrective actions.

22. ***Recommendation 3:*** Recommendation for the future phase of the project to consider that the project design integrates links between POPs monitoring and policymaking at the national level to support the project's sustainability.

23. ***Recommendation 4:*** Recommendation for the future phase of the project to develop a clear communication strategy to strengthen the dissemination of results to a wider audience outside the scientific sphere, and to broaden awareness, visibility, and support for POPs-related policies and monitoring.

24. ***Recommendation 5:*** Recommendation for the future phase of the project to plan to conduct detailed baseline studies in each participating region, including risk analysis and mitigation strategies, in cooperation with national governments and institutions at the design stage.

25. ***Recommendation 6:*** Recommendation for the future phase of the project to develop a set of quality indicators for robust results measurement at the design stage (or at the inception stage if the design is not found adequate).

26. ***Recommendation 7:*** Recommendation for the future phase of the project to provide necessary support to the countries/partners for a better understanding of co-financing and its reporting.

27. ***Recommendation 8:*** Recommendation for the future phase of the project to develop and promote specific gender mainstreaming project metrics based on analysis of gender equality and women's empowerment issues in the respective regions and countries.

1 THE PROJECT

1.1 Context

1.1.1 Intervention Context

28. Persistent Organic Pollutants (POPs) are highly toxic chemicals, which generally resist degradation, accumulate in food chains, and pose serious risks to human health and the environment. Addressing these pollutants is a core mandate of the Stockholm Convention on POPs, which obliges Parties under Article 16 to periodically assess the Convention's effectiveness through a Global Monitoring Plan (GMP). This monitoring necessitates comparable data on POPs levels on a global scale in core environmental and human matrices – in particular, air, water, and human milk.

29. In Africa, baseline POPs data have been scarce due to limited laboratory capacity, inadequate equipment, and lack of harmonized monitoring systems. These gaps have hindered the continent's ability to contribute to the global GMP, undermining both regional policy responses and international assessments. Only a handful of laboratories in the region can perform accredited POPs analysis, and many countries lack the institutional or technical resources to collect, process, and interpret monitoring data.

30. The project was designed to address these systemic deficiencies. It built on an earlier phase (2009-2012) and sought to consolidate and expand regional capacity by providing standardized sampling equipment, harmonized protocols, and expert laboratory backstopping. The project targeted 15 African countries (DR Congo, Egypt, Ethiopia, Ghana, Kenya, Mali, Mauritius, Morocco, Nigeria, Senegal, Tanzania, Togo, Tunisia, Uganda, and Zambia), with activities focused on generating reliable POPs data, strengthening institutional networks, and ensuring that African datasets were systematically integrated into the Stockholm Convention's global reporting processes.

31. Against this backdrop, the project was conceived as both a scientific and a capacity-building intervention to fill critical data gaps for sounder institutional and technical foundations for POPs monitoring in Africa.

1.1.2 Institutional Context

32. The project was implemented under the UNEP Chemicals and Health Branch, part of the Industry and Economy Division, which managed UNEP's Chemicals and Pollution Action sub-programme. This sub-programme supports countries in preventing, reducing, and managing harmful chemicals and waste, aligning with UNEP's Medium-Term Strategy (MTS) for 2014–2017, 2018–2021, and 2022–2025 and Programme of Work (POW) Direct Outcome 5. The project directly contributed to Expected Accomplishment outcomes on improved sound management of chemicals and waste, as well as to the Sustainable Development Goals (SDGs) (notably Goals 3, 6, 12, 17).

33. The Global Environment Facility (GEF) provided a Grant of USD 4,208,000 for the project. UNEP acted as both Implementing Agency (IA) and Executing Agency (EA). This dual role required internal safeguards, including firewalls between fund management and technical execution, to ensure accountability. To this end, the EA was the UNEP Knowledge and Risk Unit, Chemicals and Health Branch, Industry and Economy Division (IED). UNEP GEF Chemicals and Waste Unit, Chemicals and Health Branch, IED, in its role as IA, was responsible for overseeing the work of the Executing Agency in the day-to-day operation of the project.

34. The 15 African countries that participated in the project were represented by officials from environment and health ministries, national reference laboratories, and universities. Regional institutional support was anchored in the Stockholm Convention Regional Centres (SCRCs), with the BCCC-SCRC in Uruguay supporting cross-regional capacity-building and experience-sharing activities across the four regional GMP projects (Africa, Asia, Latin America, and Pacific), rather than exercising a formal coordination role. The Secretariat of the Basel, Rotterdam and Stockholm Conventions (BRS Secretariat) provided policy guidance and ensured that project outputs fed into the Convention's effectiveness evaluation process.

35. Key partners included expert laboratories and academic institutions, as well as implementing countries, notably:

- Man-Technology-Environment Research Centre (MTM), Örebro University,
- Department of Environment and Health, Vrije Universiteit (Netherlands),
- Chemisches und Veterinaeruntersuchungsamt Freiburg (CVUA),
- Research Centre for Toxic Compounds in the Environment (RECETOX, Czech Republic),
- Spanish National Research Council (CSIC),
- Basel Convention Coordinating Centre, Stockholm Convention Regional Centre, for Capacity Building and Transfer of Technology hosted by Uruguay (BCCC-SCRC-LATU),
- World Health Organization (WHO),
- Secretariat of the Basel, Rotterdam and Stockholm Conventions.

36. The project received GEF approval on 15 January 2015 and UNEP approval on 18 March 2015. It operated from March 2015 to December 2023, with technical completion occurring in June 2024. Originally designed as a four-year intervention (2015–2019), the project underwent four extensions due to early administrative delays as well as the COVID-19 pandemic, ultimately completing in December 2023 (with technical completion in mid-2024). During this period, the project was subject to annual UNEP Project Implementation Reports (PIRs), a Mid-Term Review in 2018, and the present Terminal Evaluation.

37. This institutional architecture, combining UNEP's internal execution with global expert labs and national focal points, served as the backbone for delivering capacity development, monitoring, and data generation, while also linking national activities with global treaty reporting obligations.

1.2 Results Framework

38. The project's results framework (shown in Table 3 below) was structured from capacity and systems strengthening (outputs) to improved sampling, analysis, and data quality (outcomes), culminating in sustained, region-wide POPs monitoring and contributions to Stockholm Convention effectiveness evaluation (intermediate/impact level). The project's overall objective was to strengthen the capacity for the implementation of the updated POPs Global Monitoring Plan (GMP) and to create the conditions for sustainable monitoring of POPs in the African Region.

Table 3: Summary of project's latest approved results framework (source: Annex A of the Project Document)

	Results Statement
Project objective	To strengthen the capacity for implementation of the updated POPs Global Monitoring Plan (GMP) and to create the conditions for sustainable monitoring of POPs in the African Region
Impact (defined as 'Overall Goal')	Protect human health and environment from toxic exposure to POPs
Intermediate state(s)	Not listed
Project outcome(s)	National capacities for implementing the updated POPs Global Monitoring Plan (GMP) are strengthened, high quality data on the presence and transport of POPs are generated, and conditions for sustainable monitoring of POPs are in place in the African region
Outputs	•Output 1: Technical and administrative support provided for the implementation of the project and organization of process established in the African region; •Output 2: Training reports and sectoral reports on POPs analysis undertaken on two abiotic core matrices (i.e., air and water) in the African region; •Output 3: Training reports and sectoral reports on POPs analysis undertaken on one biotic core matrix (6th round of human milk survey) in the African region; •Output 4: Assessment report of existing analytical capacities prepared and report on POPs analysis undertaken in samples of national priority (other than core matrices) in the African region; •Output 5: Assessment reports contributing to regional report for the GMP undertaken, and a roadmap for sustainable POPs monitoring developed for the African region.

39. The project consisted of five components:

- Securing conditions for successful project implementation;
- Capacity building and data generation on analysis of core abiotic matrices (air and water);
- Capacity building and data generation on analysis of core biotic matrices (human milk);
- Assessment of existing analytical capacities and reinforcement of national POPs monitoring;
- Securing conditions for sustainable POPs monitoring.

40. The project's results framework consisted of one overarching project objective supported by outcome-level and output-level indicators that aimed to track progress on POPs monitoring capacity across the 15 participating countries. The framework included indicators related to national sampling implementation, laboratory analysis, data quality assurance, and the generation of harmonized regional monitoring outputs. It also specified targets for national capacity development, coordination mechanisms, and contributions to the Global Monitoring Plan under the Stockholm Convention. The indicators collectively structured how progress was intended to be measured throughout

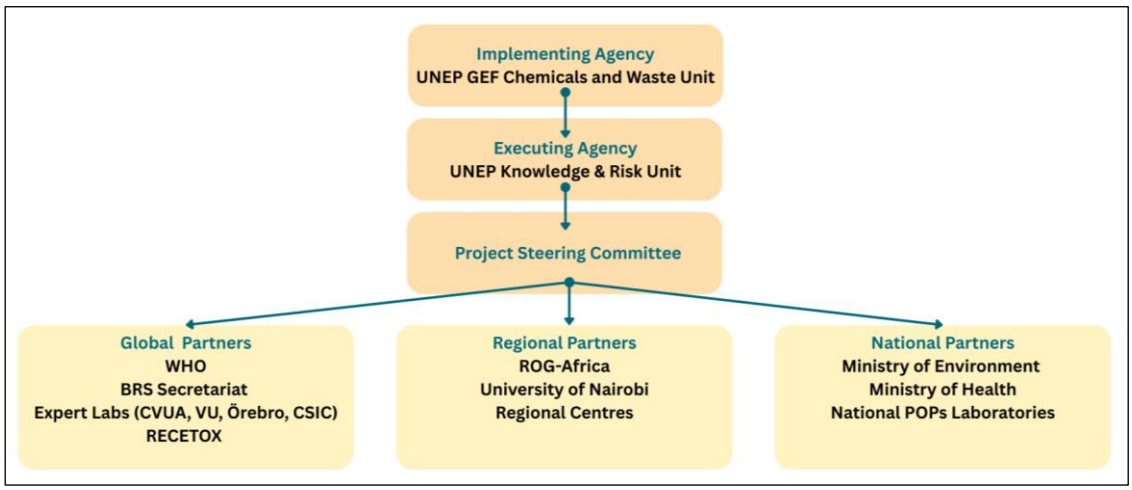
implementation and form the basis for assessing effectiveness in later sections of the report[11].

1.3 Project Implementation Structure and Partners

41. The project operated under an arrangement where UNEP served as both the Implementing Agency (providing oversight and fiduciary responsibility) and the Executing Agency (managing day-to-day operations and delivering outputs). Both functions were housed within the same Chemicals and Health Branch under the Industry and Economy Division (IED). Day-to-day project execution was carried out by UNEP's Knowledge and Risk Unit, (Chemicals and Health Branch, Industry and Economy Division), serving as the Executing Agency. GEF Chemicals and Waste Unit (Chemicals and Health Branch, Industry and Economy Division) served as the Implementing Agency, providing oversight to the project implementation. The Project Steering Committee, which convened regularly during the project's implementation, ensured participatory governance, reviewed progress, and validated work plans and deliverables.

42. The project relied on a network of international, regional, and national partners. National ministries and laboratories in the 15 countries served as focal points, while global expert laboratories and regional centers provided advanced technical capacity, quality assurance, and training. Intergovernmental organizations, such as the World Health Organization (WHO) and the Basel, Rotterdam and Stockholm (BRS) Secretariat, contributed to biomonitoring protocols and compliance with the Stockholm Convention. Regional coordination was supported by the African Regional Organization Group (ROG-Africa), which facilitated cross-country knowledge exchange and technical alignment. The project implementation structure is elaborated in Annex III.

Figure 1: Organigram of Key Project Stakeholders



1.4 Stakeholders

43. The project engaged a wide spectrum of stakeholders across the regional monitoring ecosystem. National ministries and laboratories participated as primary counterparts responsible for sampling, data provision, and national reporting. Regional centers and expert laboratories supported participating countries through training, harmonized

[11] Information extracted from the final Project Implementation Report (PIR).

methodologies, and coordinated analysis. Intergovernmental organizations and international scientific bodies served as knowledge partners, contributing guidance on biomonitoring approaches, ethical considerations, and alignment with global reporting processes. These stakeholder groups collectively shaped the project's implementation environment and ensured that monitoring results were relevant to national, regional, and global policy needs.

44. Technical delivery was supported by leading expert laboratories and academic institutions. CVUA Freiburg, Vrije Universiteit Amsterdam, Örebro University, and CSIC provided advanced analysis, inter-laboratory assessments, and mirror studies to validate data quality. RECETOX, as a Stockholm Convention Regional Centre, hosted the GMP Data Warehouse and delivered training and knowledge management. Regionally, the University of Nairobi and the Environmental Toxicology and Quality Control Laboratory in Mali served as hubs for capacity building and South–South cooperation, embedding expertise in the African region. The African Regional Organization Group (ROG-Africa) further strengthened coordination by facilitating peer learning and harmonizing monitoring practices among the 15 participating countries.

45. At the country level, Ministries of Environment acted as focal points for the Stockholm Convention, coordinating implementation, mobilizing co-financing, and integrating results into policy frameworks. National laboratories carried out sampling and chemical analysis of core matrices, while Ministries of Health oversaw human milk surveys, ensuring informed consent and culturally sensitive engagement with women participants. Communities were engaged most directly through the human milk survey, with women of reproductive age serving as essential contributors of data and drawing attention to gender-specific vulnerabilities to POPs exposure. Marginalized groups, including rural and low-resource communities, benefited indirectly from improved national monitoring and policy responses. Awareness and communication efforts aimed to reduce barriers for broader inclusion, including for people living with disabilities.

1.5 Changes in Design during Implementation

46. The project was approved in March 2015 and planned to end in March 2019. However, it underwent four no-cost extensions, which resulted from delays in sampling, laboratory analysis, and later, the COVID-19 pandemic.

- *Amendment 1 (June 2019):* The project received its first no-cost extension, moving the completion date from March 2019 to June 2021.

- *Amendment 2 (June 2021):* A further extension to June 2022 was approved, accompanied by a budget and workplan revision to reflect implementation delays.

- *Amendment 3 (May 2022):* The project was extended again, to June 2023, with continued budget and workplan adjustments.

- *Amendment 4 (June 2023):* A final no-cost extension carried the project to June 2024 (technical completion and financial closure), alongside another budget/workplan revision.

47. The COVID-19 pandemic represented a major event that disrupted implementation, leading to significant delays in field sampling and laboratory analysis, particularly for human milk and environmental samples.

48. Despite these delays, no formal changes were made to the project's objectives or results framework, and there was no increase in GEF financing beyond the originally approved grant. The total number of formal revisions amounted to four, all of which were no-cost extensions accompanied by workplan and budget revisions. The project ultimately reached operational completion in June 2024. By this time, discussions were already underway for the next phase of the Global Chemicals Monitoring Programme (GCMP, GEF ID 11534), approved in June 2024, which builds directly on the foundations laid by this project.

1.6 Project Financing

49. The planned budget of the GEF grant allocation at approval USD 4,208,000. In-kind co-financing amounted to USD 10,924,222. Cash co-financing of USD 25,000 materialized. The total amount of co-financing was USD 10,949,222. Total disbursements were still to be determined at the time of this evaluation.

Table 4: Project Co-Finance

Co-financing (Type/Source)	UNEP own Financing (US$1,000)		Government (US$1,000)		Other* (US$1,000)		Total (US$1,000)		Total Disbursed (TBC)[12] (US$1,000)
	Planned	Actual	Planned	Actual	Planned	Actual	Planned	Actual	
– Grants					25	25	25	25	25
– Loans									
– Credits									
– Equity investments									
– In-kind support	200	825	8,250	8,622	1,715	1,477	10,165	10,924	10,924
– Other (*)									
Totals	**200**	**825**	**8,250**	**8,622**	**1,740**	**1,502**	**10,190**	**10,949**	**10,949**

[12] Disbursement Data not fully available.

2 EVALUATION METHODS

2.1 UNEP's Evaluation Approach

50. In line with UNEP Evaluation Policy[13] and the UNEP Programme and Project Management Manual[14], the evaluation was undertaken after the completion of the project to assess its performance and determine the outcomes and impacts resulting from the project. The evaluation has two primary purposes: (i) to provide evidence of results to meet accountability requirements, and (ii) to promote operational improvement, learning and knowledge sharing through results and lessons learned (see Annex I: Evaluation Framework for more details on each evaluation criterion).

51. The evaluation's main target audiences include UNEP and other global actors, such as the GEF Secretariat, the BRS Secretariat, WHO, and international expert laboratories, which rely on the results to inform global reporting, policy alignment, and methodological improvements. At the regional level, the findings are expected to be used by regional research organizations. [15] At the national level, the 15 participating Ministries of Environment, their national POPs laboratories, and Ministries of Health and Public Health Institutes draw on lessons learned to embed monitoring systems within national frameworks and improve ethical and gender-sensitive biomonitoring practices. At the community level, civil society organizations and women engaged in the human milk survey benefit indirectly, as the evaluation assures them that their contributions have informed decision-making and supported better policies to reduce exposure to POPs.

52. In line with the UNEP Evaluation Policy, the UNEP Programme Manual and the Guidelines for GEF Agencies in Conducting Terminal Evaluations, the evaluation has been carried out using a set of 9 commonly applied evaluation criteria which include: (1) Strategic Relevance , (2) Quality of Project Design, (3) Nature of External Context, (4) Effectiveness (incl. availability of outputs; achievement of outcomes and likelihood of impact), (5) Financial Management, (6) Efficiency, (7) Monitoring and Reporting, (8) Sustainability, and (9) Factors Affecting Project Performance and Cross-Cutting Issues.

53. Most evaluation criteria are rated on a six-point scale as follows: Highly Satisfactory (HS); Satisfactory (S); Moderately Satisfactory (MS); Moderately Unsatisfactory (MU); Unsatisfactory (U); Highly Unsatisfactory (HU). Sustainability and Likelihood of Impact are rated from Highly Likely (HL) down to Highly Unlikely (HU), and Nature of External Context is rated from Highly Favourable (HF) to Highly Unfavourable (HU). The ratings against each criterion are 'weighted' to derive the Overall Project Performance Rating. The greatest weight is placed on the achievement of outcomes, followed by dimensions of sustainability.

54. In addition to the above criteria, the TE also addressed the following six strategic questions (SQ) that were defined in the TE Terms of Reference. GEF portal inputs are also added in Annex VII.

[13] https://wedocs.unep.org/handle/20.500.11822/41114
[14] https://wedocs.unep.org/20.500.11822/42752
[15] Examples include the African Regional Organization Group (ROG-Africa), the University of Nairobi, ETQCL Mali, and regional centres such as BCRC-South Africa, BCCC-SCRC-LATU, and RECETOX.

Q1: To what extent did the project incorporate lessons learned from the previous phase of the project and any recommendations from its own Mid Term Review into the project design/implementation?

Q2: To what extent did the project promote cross learning/knowledge sharing with three other GMP regional projects? How did the project benefit from having three other regional projects?

Q3: How did the project link scientific monitoring data with decision making at various levels?

Q4: How were the national-level monitoring mechanisms integrated or coordinated with POPs monitoring under GMP?

Q5: To what extent have data from the project been included in the data warehouse and is there evidence of this data being used in subsequent effectiveness evaluation report?

Q6: To what extent have inter-lab assessments contributed to laboratories from developing countries improving their quality assurance/quality control (QA/QC) practices and ultimately improving the quality of analysis?

55. This evaluation adopted a participatory approach, consulting with project team members, partners, and beneficiaries at several stages throughout the process. Central to the evaluation was the analysis (and reconstruction) of the project's Theory of Change. Consultations were held during the evaluation inception phase to arrive at a nuanced understanding of how the project intended to drive change and what contributing conditions ('assumptions' and 'drivers') would need to be in place to support such change. The (reconstructed) Theory of Change, supported by a graphic representation and narrative discussion of the causal pathways, was discussed further with respondents during the data collection phase and refined as appropriate. The final iteration of the Theory of Change is presented in this final evaluation report and has been used throughout the evaluation process.

2.2 Data Collection

2.2.1 Primary data sources

56. The evaluation employed mixed methods to generate both qualitative and quantitative evidence. This approach enabled the evaluator to examine not only the causal links between interventions and results, but also to understand the reasons behind the achievements and challenges. The main data were gathered through:

- **Document Review**: A comprehensive desk review of key project documents included the project document, annual progress and financial reports, Steering Committee meeting minutes, technical outputs, and other relevant materials. This review provided the foundation for understanding the project's design, implementation history, and reported achievements.

- **Semi-structured Interviews**: Interviews were conducted with stakeholders directly engaged in project implementation. A purposive sampling strategy was applied, targeting all national coordinators from the 15 participating countries, as well as representatives of global partners. In total, interviews were completed with 8 out of the 15 national coordinators, alongside UNEP staff, regional partners, and expert laboratories, resulting in a sample of approximately 31 individuals across all

stakeholder groups. Depending on context, interviews were conducted individually or in small groups when multiple stakeholders were present. All interviews were conducted online, as stakeholders are scattered across the globe. Stakeholder sampling across prioritized proportional representation of key actor categories (all national coordinators, laboratory personnel, and implementing partners), with data saturation verified through iterative analysis that identified recurring themes and diminishing new insights after about 75% of planned interviews were completed. The sample was designed to remain flexible, allowing the inclusion of additional direct beneficiaries identified during the process to capture their perspectives. All stakeholders who were interviewed are listed in Annex II.

Table 5: Evaluation Respondents

Stakeholders - Individuals			**A. Total number involved (M/F)**	**B. Number contacted (M/F)**	**Sample size (% B/A)[16]**	**C. Total number responded Total (M/F)**	**Response rate (% C/B)[17]**
Project Team	**Project Team** (with management responsibilities e.g. Project Management Unit)	Implementing agency	6 M 0 F	6 M 0 F	100%	4 M 0 F	67%
		Executing agency	3 M 2 F	3 M 2 F	100%	1 M 2 F	60%
Beneficiaries	**Direct Beneficiaries:** (e.g. duty bearers, gatekeepers, training participants, etc.) **Indirect Beneficiaries:** (e.g. household members, civil society representatives, group members, etc.)		20 M 12 F	10 M 6 F	50%	5 M 3 F	50%
Stakeholders - Entities			**A. Total number involved**	**B. Number contacted**	**Sample size (% B/A)[18]**	**C. Total number responded**	**Response rate (% C/B)[19]**
Partners	**Project implementing/ executing partners** (receiving project funds)		5	5	100%	5	100%
	Project collaborating/ contributing partners[20] (not receiving project fund)		4	3	75%	3	100%
Stakeholders – National Coordinators			**A. Total number involved**	**B. Number contacted**	**Sample size (% B/A)[21]**	**C. Total number responded**	**Response rate (% C/B)[22]**
	Total National Coordinators		15	15	100%	8	53%
Countries	Nigeria Mauritius Kenya Tunisia Egypt Zambia Mali Morocco Uganda Democratic Republic of Congo Ethiopia Ghana Senegal Tanzania Togo		Nigeria Mauritius Kenya Tunisia Egypt Zambia Mali Morocco Uganda Democratic Republic of Congo Ethiopia Ghana Senegal Tanzania Togo	Nigeria Mauritius Kenya Tunisia Egypt Zambia Mali Morocco Uganda Democratic Republic of Congo Ethiopia Ghana Senegal Tanzania Togo	100%	Nigeria Mauritius Kenya Tunisia Egypt Zambia Mali Senegal	53%

2.2.2 Strategies for inclusivity

[16] Percentage of people involved in the project who were contacted.
[17] Percentage of people contacted who responded.
[18] Percentage of entities involved in the project who were contacted.
[19] Percentage of entities contacted who responded.
[20] Contributing partners may be providing resources as either cash or in-kind inputs (e.g. staff time, office space etc.).
[21] Percentage of entities involved in the project who were contacted.
[22] Percentage of entities contacted who responded.

57. To maximize response rates and ensure that all key beneficiaries, including women and marginalized groups, were reached, the evaluation applied several strategies. Gender balance was pursued in stakeholder consultations, with interview protocols incorporating specific questions on gender and human rights. Available gender-disaggregated data, particularly from the human milk surveys, were analyzed to capture differentiated impacts. To address the diversity of human rights contexts across countries, the evaluation adopted context-sensitive approaches and confidentiality protocols for creating a safe space for participation, encouraging open and honest perspectives. Contrasting views were actively sought through triangulation across stakeholder categories, ensuring that the evaluation reflected the full diversity of experiences.

2.2.3 Secondary data sources

58. The evaluation drew on secondary data to complement primary data and provide a robust basis for triangulation. Core documents provided by the project team included the original Project Document and its subsequent amendments, annual Project Implementation Reports (PIRs), financial and progress reports, Project Steering Committee minutes, and technical outputs. Additional materials were collected directly from partners and stakeholders, such as national reports, laboratory records, and presentations prepared for regional workshops (i.e., the final regional workshop held in Morocco in 2023). Monitoring data generated by national laboratories and expert reference laboratories, including sampling results for air, water, human milk, and matrices of national interest, as well as inter-laboratory assessment results, formed a good evidence base for assessing technical achievements. Regular reporting tools provided structured performance data and implementation updates. Together, these secondary sources offered both quantitative and qualitative evidence on project design, delivery, and outcomes, and were essential for validating and contextualizing information obtained through the interviews. Key documents that were consulted are listed in Annex IV.

2.3 Data Analysis

59. The collected information was analyzed through a combination of qualitative and quantitative methods. Qualitative evidence was organized and coded thematically, allowing the evaluator to identify common patterns, contrasting views, and explanatory factors. Project documents and monitoring data were subjected to content analysis. Quantitative data from project reports were reviewed through comparative analysis of baseline and endline information, providing evidence of change over time. Findings were then assessed against the evaluation framework through a structured scoring and rating process, aligned with UNEP and OECD/DAC criteria. To strengthen validity, evidence from different sources was triangulated, ensuring that conclusions were supported by multiple lines of data and that all perspectives were captured.

2.4 Use of Artificial Intelligence (AI)

60. AI (Anthropic's Claude) was used to support document synthesis, identify patterns across findings, and draft report sections, including conclusions, recommendations, and the executive summary. However, all substantive evaluative judgments, performance ratings, and strategic interpretations were determined by human judgment through direct stakeholder engagement and evidence triangulation. AI served as a drafting and analytical support tool to enhance efficiency, while the evaluator maintained full editorial control and professional responsibility for all content, ensuring that human expertise in stakeholder engagement, contextual understanding, and evaluative reasoning remained central to the evaluation's credibility and integrity.

2.5 Limitations and Mitigation Strategies

61. The evaluation faced some limitations, which were addressed through mitigation measures to ensure credible findings:

- **Response rates:** Lower participation from national coordinators. Only 8 out of the 15 countries (listed in Table 5 on Page 25) involved in the project were engaged in the evaluation process. This was primarily due to staff turnover and competing priorities. The evaluation team implemented repeated follow-ups, offered flexible interview times across multiple time zones, and supplemented interviews with documentary evidence from PIRs, workshop reports, sampling records and technical outputs. Triangulation across these sources ensured that the perspectives of non-responding countries were still captured indirectly. The eight countries that did participate represented different subregions and implementation contexts, providing adequate diversity for reliable analysis.

- **Comparability across countries:** Differences in institutional capacity and context limited aggregation. The evaluation applied a cautious approach to aggregation, drawing conclusions only where patterns were consistent across multiple evidence sources. Country-specific variations were documented explicitly, and country cases were analyzed independently before being generalized. Where appropriate, findings were categorized by institutional or regional grouping to maintain analytical integrity.

2.6 Ethical Considerations

62. The evaluation was conducted in line with UNEP's Evaluation Policy and UN ethical standards, ensuring that the rights and dignity of all participants were respected. All respondents were informed of the purpose of the evaluation and their right to decline participation, and informed consent was obtained prior to each interview, survey, or focus group discussion. To safeguard participants, anonymity and confidentiality were guaranteed: responses were recorded without attribution to individuals, and findings are presented in aggregated form without identifying information.

63. Given the diversity of human rights contexts across the 15 participating countries, special care was taken to create a safe and respectful atmosphere during interviews and focus groups. Questions on gender and human rights were integrated into data collection tools, and data were analyzed in a way that considered gender-disaggregated information and differential impacts on vulnerable groups, particularly women participating in human milk surveys. Where sensitive information was shared, strict confidentiality protocols were applied to avoid any potential risk to respondents.

3 THEORY OF CHANGE AT EVALUATION

64. The project document did not include a formal Theory of Change (ToC). During the inception phase of this evaluation, a ToC was developed based on the project document and logical framework and in consultation with the project team. The reconstructed ToC (illustrated in Figure 2 below) presents an approach of how the project's outputs led to outcomes, intermediate states, and to impact. It identifies the causal pathways, assumptions, and drivers that underpinned the project's intervention logic and provides a basis for assessing whether the project's design was appropriate to achieve its objectives.

Table 6: Justification for Reformulation of Results Statements

Formulation in original project document(s)	Formulation for Reconstructed ToC at Evaluation Inception (RTOC)	Justification for Reformulation
(LONG LASTING) IMPACT		
(Overall Goal) Protect human health and environment from toxic exposure to POPs	**Risks to human health and the environment stemming from toxic exposure to POPs are reduced**	*'Protect'* in the original Impact statement sounds like a little strong word that may not be realistic in terms of the linkage between the Impact and the project. *'Risks…reduced'* would be more realistic and clearer about the project's long-term contribution to human health and environmental protection (as well as a causal pathway from the Intermediate States to Impact).
INTERMEDIATE STATES		
N/A (not explicitly defined in the ProDoc)	**1. Data are effectively utilized by national and regional decision makers, contributing to the generation of policies and actions towards the protection of human health and the environment** **2. Regional initiatives/ cooperation for sustainable and effective GMP implementation under the Stockholm Convention is strengthened**	These two Intermediate States would be helpful to clarify the causal pathway from Outcomes to Impact. The achievement of reformulated Outcome 1 leads to Intermediate State 1. The fulfilment of reformulated Outcome 2 leads to Intermediate State 2.
PROJECT OUTCOMES		
National capacities for implementing the updated POPs Global Monitoring Plan (GMP) are strengthened, high quality data on the presence and transport of POPs are generated, and conditions for sustainable monitoring of POPs are in place in the African Region	**1.** National capacities for implementing the updated POPs Global Monitoring Plan (GMP) are strengthened **and demonstrated** **2.** Conditions for sustainable monitoring of POPs in the African region are in place **with effective reporting taking place consistently**	The original Outcome covers 3 different elements that cannot be easily merged. Splitting this Outcome statement into three separate parts clarifies the respective causal pathways. The 1st and 3rd parts of the original Outcome statement are more at the Output level (i.e., governed by phrases like *'in place'*). Hence, these are

Formulation in original project document(s)	Formulation for Reconstructed ToC at Evaluation Inception (RTOC)	Justification for Reformulation
		reframed as Outcome statements (and referred to as Outcome 1 and Outcome 2, respectively). The 2nd part of the original Outcome (*'high quality data on the presence and transport of POPs are generated'*) is removed because this is Output rather than Outcome. This 2nd part of the original Outcome is represented by the reformulated Output 2&3 (see Output 2 and 3 below). The achievement of reformulated Output 1&2&3&4 leads to reformulated Outcome 1. The fulfilment of reformulated Output 1&5 (mainly 5) leads to reformulated Outcome 2.
(Outcome Indicators) 1. # of countries capable to undertake sampling in the core and other matrices for POPs analysis 2. # of countries with reported data on up to 23 POPs 3. # of regional roadmap for sustainable POPs monitoring published.	No change	N/A NOTE: These 3 Outcome indicators will need to be supported by other triangulated data sources. These 3 indicators are not sufficient conditions for the achievement of the reformulated Outcomes, but are necessary conditions for it.
OUTPUTS		
1. Technical and administrative support provided for the implementation of the project and organization of process established in the African Region	**1. The national agreements and laboratory data are in place and supporting the project in the African region**	The original Output 1 statement is more at the activity level. Hence, it is reframed as an Output statement, clarifying its linkage with two Output indicators below.
(Output 1 Indicators) • # of national project implementation agreements signed • # of laboratories submitted information to UNEP for updating information in the databank	No change	N/A
2. Training reports and sectoral reports on POPs analysis undertaken on two abiotic core matrices	2. Training reports and sectoral reports on POPs analysis **are available** on two abiotic core matrices (i.e., air and water) in the African region	The original Output 2 statement is more at the activity level. Hence, it is reframed as an Output

Formulation in original project document(s)	Formulation for Reconstructed ToC at Evaluation Inception (RTOC)	Justification for Reformulation
(i.e., air and water) in the African Region		statement, using the word *'available'*. Please note that this reformulated Output 2 represents a part of the original Outcome statement (i.e., *'high quality data on the presence and transport of POPs are generated'*). Output 2 & 3 are quite similar but might have performed differently. Hence, we keep Output 2 & 3 as they are.
(Output 2 Indicators) • # of countries that carried out sampling in abiotic matrices • # of training reports for analysis of abiotic matrices • # of sectoral reports developed in abiotic matrices	No change	N/A
3. Training reports and sectoral report on POPs analysis undertaken on one biotic core matrix (6th round of human milk survey) in the African Region	Training reports and sectoral report on POPs analysis **are available** on one biotic core matrix (6th round of human milk survey) in the African region	The original Output 3 statement is more at the activity level. Hence, it is reframed as an Output statement, using the word *'available'*. Please note that this reformulated Output 3 represents a part of the original Outcome statement (i.e., *'high quality data on the presence and transport of POPs are generated'*). Output 2 & 3 are quite similar but might have performed differently. Hence, we keep Output 2 & 3 as they are.
(Output 3 Indicators) • # of countries that carried out sampling in biotic matrices • # of training report for analysis of biotic matrices • # of sectoral reports developed in biotic matrices	No change	N/A
4. Assessment report of	No change	N/A

Formulation in original project document(s)	Formulation for Reconstructed ToC at Evaluation Inception (RTOC)	Justification for Reformulation
existing analytical capacities prepared and report on POPs analysis undertaken in samples of national priority (other than core matrices) in the African Region		
(Output 4 Indicators) • # of rounds for interlaboratory assessments held • # of countries having high quality data reported for 3 samples of major national interest	No change	N/A
5. Assessment reports contributing to regional report for the GMP undertaken, and a roadmap for sustainable POPs monitoring developed for the African region	**A roadmap for sustainable POPs monitoring for the African region is developed with assessment reports contributing to regional report for the GMP prepared**	The original Output 5 statement is rephrased as the Output statement, allowing for better alignment with the reformulated Outcome 2 *('Conditions for sustainable monitoring of POPs in the African region are in place with effective monitoring being taken place consistently'*).
(Output 5 Indicators) • # of assessments on POPs presence in the region and its capacity to analyse them • # of regional roadmap for sustainable POPs monitoring in the region, with strategy for implementation, milestones and timetable in a regional roadmap • # of countries providing inputs to develop conclusions and lessons learned on GMP phase 2, as well as recommendations and future plans	No change	N/A
GEF CORE INDICATOR		
N/A (not explicitly defined in the ProDoc)	**GEF Core Indicator 11:** **People benefiting from GEF-financed investments (disaggregated by sex)**	The GEF Core Indicator 11 has been added following the GEF requirement. However, the assessment of progress towards this GEF Core Indicator will not be factored into the rating for the 'Effectiveness' criteria.

Formulation in original project document(s)	Formulation for Reconstructed ToC at Evaluation Inception (RTOC)	Justification for Reformulation
		Definition: This indicator captures the total number of direct beneficiaries, disaggregated by sex.

65. Regarding the impact, the project aimed to address the long-lasting goal of reducing risks to human health and the environment from exposure to POPs. To achieve this impact, the project was designed to progress through two intermediate states, which were not explicitly defined in the project document, but are critical for the causal pathway:

    - Effective use of data by national and regional decision makers, contributing to the generation of policies and actions;

    - Strengthened regional initiatives and cooperation for sustainable and effective GMP implementation under the Stockholm Convention.

66. These intermediate states bridged the gap between the project's immediate outcomes and its long-term impact, providing a more coherent and logical pathway for change. The three outcomes of this project that were defined in the ProDoc were: strengthened national capacities, generation of high-quality data and conditions for sustainable monitoring. In order to improve accuracy and to better reflect the causal pathways, the ToC divided this into two outcome statements: (i) national capacities for implementing the updated POPs GMP are strengthened and demonstrated; and, (ii) conditions for sustainable monitoring of POPs in the African region are in place with effective reporting taking place consistently.

67. The project's reformulated five outputs served as the basis of the causal pathways:

    - The national agreements and laboratory data are in place and supporting the project in the African region;

    - Training reports and sectoral reports on POPs analysis are available on two abiotic core matrices (air and water) in the African region;

    - Training reports and sectoral report on POPs analysis are available on one biotic core matrix (human milk survey) in the African region;

    - Assessment report of existing analytical capacities prepared and report on POPs analysis undertaken in samples of national priority (other than core matrices) in the African region;

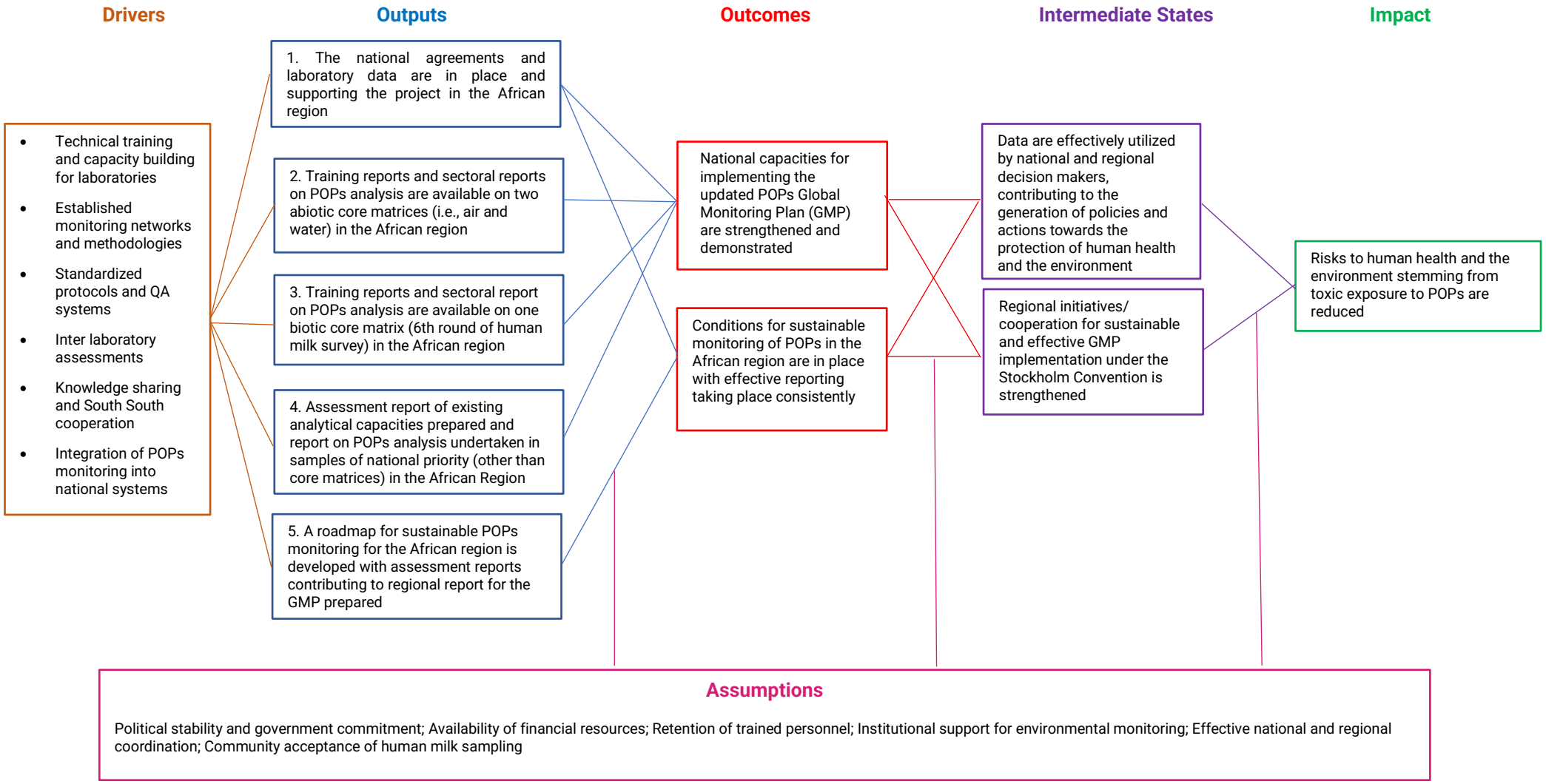
    - A roadmap for sustainable POPs monitoring for the African region is developed with assessment reports contributing to regional report for the GMP prepared.

68. The causal pathways linking these outputs to outcomes are clear. Outputs 1, 2, 3, and 4 collectively contribute to strengthened national capacities (Outcome 1), while Outputs 1 and 5 (particularly Output 5) lead to conditions for sustainable monitoring (Outcome 2).

69. In the causal pathways leading from outputs to outcomes and finally to impact, several key actors played key roles in driving change. National ministries and laboratories were central to generating data and operationalizing new monitoring capacities at the country level. Expert laboratories, including CVUA Freiburg, Örebro University, RECETOX and VU

Amsterdam, ensured data quality, methodological harmonization, and technical backstopping across all matrices. UNEP, through the Chemicals and Waste Unit and the Knowledge and Risk Unit, provided coordination, fiduciary oversight, and alignment with GEF and corporate requirements. The BRS Secretariat and regional centers contributed to regional cohesion by facilitating data integration, supporting compliance with the Stockholm Convention, and strengthening cross-country cooperation. These actors collectively enabled the transition from strengthened technical capacities to sustained regional monitoring structures, thereby supporting progress toward the project's intended long-term impact.

Figure 2: Theory of Change at Evaluation



70. Gender considerations and vulnerabilities of specific population groups were integrated particularly through Output 3, which focuses on human milk sampling. Women, particularly nursing mothers, were both key stakeholders and beneficiaries in this component. The project recognized women's particular vulnerability to POPs exposure, especially during age of childbirth. This gender specific dimension was an important driver of the ToC, because POPs monitoring must account for differential impacts on vulnerable populations. The human milk sampling component relied on ethical approvals, informed consent, respect for privacy and confidentiality, and cultural sensitivity.

71. The evaluation identified several key drivers influenced by the project. These included technical training and capacity building for laboratory staff; establishment of monitoring networks and methodologies; development of standardized protocols; inter-laboratory assessments for quality assurance; knowledge sharing and South-South cooperation; and integration of POPs monitoring into national environmental management systems. The project also relied on several important assumptions (external factors), including political stability and government commitment to POPs monitoring; availability of ongoing financial resources beyond the project period; retention of trained laboratory personnel; continued institutional support for environmental monitoring; effective coordination among national, regional, and international stakeholders; and community acceptance of human milk sampling projects/programs.

72. These drivers and assumptions directly shaped how the project’s causal pathways unfolded. The drivers supported the transition from Outputs to Outcomes by enabling countries to generate high-quality data and strengthen national capacities. Technical training, standardized protocols, and inter-laboratory assessments reinforced the credibility and comparability of data, which accelerated progress toward strengthened national capacities (Outcome 1). Knowledge sharing, South-South cooperation, and the establishment of monitoring networks created the institutional environment necessary for developing a regional roadmap and for embedding POPs monitoring into national systems, thereby contributing to conditions for sustainable monitoring (Outcome 2). The assumptions influenced each subsequent step in the causal chain. Political stability, government commitment, and availability of financial resources were necessary for countries to utilize POPs data in decision-making, enabling the shift from Outcomes to the Intermediate States. Retention of trained personnel and institutional support ensured that regional coordination mechanisms could function as intended. Effective national and regional coordination, together with community acceptance of human milk sampling, supported the final linkage between the Intermediate States and the intended long-term Impact, namely reduced risks to human health and the environment from exposure to POPs.

73. This reconstructed ToC served as a framework for assessing the project's achievements and challenges during the evaluation. It helped to identify where causal pathways functioned as expected and where they faced obstacles.

4 EVALUATION FINDINGS

4.1 Strategic Relevance

4.1.1 Alignment to UNEP's MTS, POW and Strategic Priorities

Table 7: Alignment to the UNEP MTS, POW, and Strategic Priorities

UNEP strategic document	Alignment with UNEP's mandate and thematic priorities	Level of alignment
UNEP's Medium-Term Strategy (2022-2025)	The project contributed to UNEP's Medium-Term Strategy (MTS) under the Chemicals and Pollution Action Sub-programme by generating high-quality POPs monitoring data, strengthening national capacities, and informing evidence-based policy to reduce pollution and protect health.	**Full**
UNEP's Programme of Work (2022–2023, extended to 2025)	The project contributed to UNEP's Programme of Work by advancing outputs under the chemicals and waste thematic area, including support for global monitoring frameworks, capacity building for sound chemicals management, and data integration into UNEP's World Environment Situation Room. The project contributed to UNEP's Expected Accomplishment 5(b) by strengthening national capacities for POPs monitoring, generating high-quality data, and improving reporting processes under the Stockholm Convention. These achievements support the EA 5(b) indicator on enhanced national capacity to implement chemicals and waste agreements.	**Full**
Bali Strategic Plan for Technology Support and Capacity Building[23]	The project abided by the Bali Plan by building laboratory and institutional capacities in 15 African countries, transferring technology and skills for POPs monitoring, and fostering South–South and North–South exchange of knowledge.	**Full**
South-South Cooperation	Regional cooperation was embedded in the design and delivery of the project. The project strengthened laboratory networks, supported peer-to-peer learning.	**Full**

4.1.2 Alignment to GEF/Donor Strategic Priorities

Table 8: Alignment to GEF/Donor Strategic Priorities

Donor or partner strategic document	Alignment with donor or partner strategic priorities	Level of alignment
GEF	The project was fully aligned with GEF's Chemicals focal area, specifically Objective CHEM-1 (phasing out POPs and reducing releases), and contributed to the Global Monitoring Plan (GMP) under the Stockholm Convention. It addressed global environmental benefits by generating POPs data in Africa, closing critical data gaps, and strengthening national capacities – all of this in line with GEF's mandate. The project also contributed to GEF Core Indicator 11 through gender-disaggregated participation in the human milk survey and associated capacity-building activities.	**Full**

[23] The Bali Strategic Plan for Technology Support and Capacity-building (BSP) is a framework adopted by the UN Environment Programme (UNEP) Governing Council in 2005. The Plan seeks to enhance the delivery of technical assistance, capacity-building, and technology transfer in a way that is better coordinated across UNEP and with external partners, while aligned with national sustainable development goals.

Donor or partner strategic document	Alignment with donor or partner strategic priorities	Level of alignment
BRS Secretariat [24] (Stockholm Convention)	The project was aligned with the Secretariat's mandate to implement Article 16 of the Stockholm Convention (Effectiveness Evaluation). It provided key data for the GMP and supported Parties in meeting treaty obligations.	**Full**
RECETOX (Stockholm Convention Regional Centre)[25]	The project had strong alignment with RECETOX's role in hosting the GMP Data Warehouse and supporting global POPs monitoring. It contributed data, capacity building, and technical exchange to strengthen this global platform.	**Full**

4.1.3 Relevance to Global, Regional, Sub-regional and National Priorities

Table 9: Relevance to Global, Regional, Sub-regional & National Environmental Priorities

Strategic document or agreement	Alignment with global, regional, sub-regional, national environmental priorities	Level of Alignment
Stockholm Convention on POPs	The project supported the Global Monitoring Plan under Article 16, generating high-quality data on POPs in Africa for the global effectiveness evaluation. It addressed critical data gaps and strengthened national implementation capacities.	**Full**
Africa's Regional Priorities	The project addressed region-specific needs by strengthening capacity in 15 African countries, including national interest matrices. It leveraged regional networks and centers to ensure relevance to African priorities.	**Full**
National Implementation Plans (NIPs) under the Stockholm Convention	The project was responsive to national needs for capacity building and POPs data. It generated evidence to support chemicals management plans and NIPs in each country.	**Full**
Sustainable Development Goals (SDGs)	The project contributed to global sustainable development priorities by supporting SDG 3 (Good Health and Well-being), particularly Indicator 3.9.1 on reducing mortality from hazardous chemicals through improved POPs exposure data. It also aligned with SDG 6 (Clean Water and Sanitation) by monitoring POPs in water matrices relevant to Indicator 6.3.2 on ambient water quality. The project's strengthening of national systems and laboratories supported SDG 12 (Responsible Consumption and Production), notably Target 12.4 on the environmentally sound management of chemicals and waste. Further, the project's regional cooperation and knowledge sharing contributed to SDG 17 (Partnerships for the Goals), including Target 17.16 on enhancing global partnerships for sustainable development.	**Full**

4.1.4 Complementarity with Existing Interventions/Coherence

Table 10: Complementarity with Existing Interventions/Coherence

Other initiatives by UNEP or other organizations	**Complementarity** *(including collaboration, coordination and overlap or duplication)*	Level of Alignment
UNEP Global Chemicals Outlook and Science-Policy Interface work	The project contributed monitoring data and capacity-building results that complement UNEP's broader chemicals and pollution agenda. There was no duplication, but rather reinforcement of UNEP's science-policy role.	**Full**

[24] The BRS Secretariat is the administrative body that services three closely related multilateral environmental agreements: the Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and their Disposal (1989); the Rotterdam Convention on the Prior Informed Consent Procedure for Certain Hazardous Chemicals and Pesticides in International Trade (1998); and the Stockholm Convention on Persistent Organic Pollutants (2001).

[25] Founded in 1983, RECETOX is an independent department of Masaryk University's Faculty of Science engaged in research and education in the fields of environmental and health. It hosts the Stockholm Convention Regional Center (SCRC) for capacity building and transfer of technology.

Other initiatives by UNEP or other organizations	**Complementarity** *(including collaboration, coordination and overlap or duplication)*	**Level of Alignment**
WHO Human Milk Survey	The project had strong complementarity with the WHO human milk survey, as the project applied the WHO protocols for human milk biomonitoring. Collaboration ensured data comparability at the global level.	**Full**
RECETOX / GMP Data Warehouse	The project complemented the global data infrastructure by feeding African monitoring results into the GMP Data Warehouse, while RECETOX provided training and technical support. No overlap or duplication was noted.	**Full**
BRS Secretariat Effectiveness Evaluation	Findings and data were directly fed into the Stockholm Convention's global effectiveness evaluation process, with high complementarity and strategic coordination.	**Full**

Findings Statements on Strategic Relevance and Complementarity

74. The project has strengthened Africa's participation in the GMP and helped establish the sampling and analytical foundations needed to meet international standards. Interviewees of this evaluation underlined the project's global relevance (related to the Stockholm Convention), regional value (harmonized datasets for Africa), and national benefits (capacity to collect to international standards, awareness-raising, and policy anchoring). They also noted a growing awareness of the project's thematic areas and ongoing efforts to ensure that its results inform policymaking. The project has made significant contributions to UNEP's planned results by directly advancing its Medium-Term Strategy and Programme of Work in the area of chemicals and pollution. At the same time, it has contributed to the GEF Chemicals and Waste focal area objectives. These contributions represent good alignment with donor priorities, showing both strategic relevance and tangible delivery of global environmental benefits.

Rating for Strategic Relevance: Highly Satisfactory

Rating for Alignment to UNEP MTS, POW and Strategic Priorities: Satisfactory

Rating for Alignment to GEF/Donor Strategic Priorities: Highly Satisfactory

Rating for Relevance to Global, Regional, Sub-regional and National Priorities: Highly Satisfactory

Rating for Complementarity with Existing Interventions/Coherence: Satisfactory

4.2 Quality of Project Design

Table 11: Summary of Quality of Project Design Assessment Ratings

	Section	**Rating**[26]	**Weighting**	**Total** (Rating x Weighting/10)
A	Operating Context	5	0.4	0.2
B	Project Preparation	5.5	1.2	0.66

[26] Rating scores: 6=highly satisfactory, 5=satisfactory, 4=moderately satisfactory, 3=moderately unsatisfactory, 2=unsatisfactory, 1=highly unsatisfactory, 0=not applicable

	Section	Rating[26]	Weighting	Total (Rating x Weighting/10)
C	Strategic Relevance	6	0.8	0.48
D	Intended Results and Causality	4.5	1.6	0.72
E	Logical Framework and Monitoring	4.5	0.8	0.36
F	Governance and Supervision Arrangements	4	0.4	0.16
G	Partnerships	5	0.8	0.4
H	Learning, Communication and Outreach	5	0.4	0.2
I	Financial Planning / Budgeting	4.5	0.4	0.18
J	Efficiency	5.5	0.8	0.44
K	Risk identification and Social Safeguards	5	0.8	0.4
L	Sustainability / Replication and Catalytic Effects	4.5	1.2	0.54
M	Identified Project Design Weaknesses / Design	6	0.4	0.24
	Total Weighted Score			**4.98 (Satisfactory)**

75. The project's design was anchored in the Stockholm Convention's GMP and aligned with UNEP's and GEF's priorities. It addressed global and regional data gaps related to POPs by targeting Africa, a region with limited monitoring capacity. The design's other strengths were its technical monitoring framework and well-established partnerships with expert labs and the Convention Secretariat. Complementarity with existing international efforts was built into the design from the outset, especially through collaboration with WHO's human milk survey and the RECETOX GMP Data Warehouse, which ensured international comparability of data. Another positive feature was the strong focus on capacity building, with investments in national laboratories, training, and regional hubs. The design also included regional coordination through ROG-Africa,[27] creating a space for South–South cooperation and peer exchange.

76. At the same time, the design had some challenges that affected implementation.

- The project's scope and timeline were ambitious, given the limited financial and human resources, covering 15 countries with varying institutional capacities. In particular, as will be seen further in this report, the project appears to have been designed with overly optimistic timelines that didn't account for well-known implementation realities. Several interviewees noted that the first years of a typical GEF project are usually slow, ethical clearances for human milk surveys are complex, and several of the countries involved have lengthy administrative processes. These were foreseeable challenges that should have been reflected in the original timeline, yet apparently weren't. The need for four separate extensions suggests continuous re-planning rather than a single recalibration based on lessons learned.

- The project was designed with UNEP serving as both the Implementing Agency and the Executing Agency. While several "*firewall*" mechanisms were introduced by UNEP (such as

[27] Regional Organization Group for Africa on Persistent Organic Pollutants (POPs) under the framework of the Stockholm Convention on Persistent Organic Pollutants is a regional coordination and technical advisory mechanism created to bring together national focal points, laboratories, research institutions, and experts from African countries to strengthen their collective capacity in monitoring, managing, and reporting on POPs.

altered reporting lines to the Deputy Director rather than the Branch Head, separate Fund Management Officers, and higher-level signature authorities), they were mainly procedural distinctions rather than structural independence. The key issue was that the overseer and the implementer shared the same institutional culture, performance incentives, and a common interest in demonstrating success. Strong oversight and accountability require independence. The advantages of UNEP in managing this project are unquestionable.[28] However, the argument that external entities lack sufficient understanding of GMP processes rests on the assumption that technical competence can only be ensured through internal execution, which is debatable. UNEP could have provided technical assistance to an external executing agency, as it now plans to do in the next phase. Furthermore, regional Stockholm Convention Centers existed during project design.

- While gender and human rights were mentioned, they were not systematically integrated into the design, limiting the project's ability to capture differentiated impacts.

Rating for Project Design: Satisfactory

4.3 Nature of the External Context[29]

77. The project was implemented in a challenging context. A significant factor was the COVID-19 pandemic, which disrupted fieldwork, delayed human milk and environmental sampling, and slowed laboratory analysis due to travel restrictions, supply chain interruptions, and reduced institutional capacity. These disruptions led to repeated no-cost extensions and adjustments to workplans. Furthermore, political and institutional instability in some participating countries created difficulties in maintaining continuity of focal points and laboratory staff, affecting consistency of data collection and national reporting. For example, Mali and Ethiopia experienced institutional turnover that disrupted national coordination, while Zambia and Uganda reported repeated losses of trained laboratory personnel. In Kenya and Ghana, customs delays and procurement bottlenecks affected the timely acquisition of sampling materials and consumables. While no large-scale natural disasters directly impacted the project, the broader challenges of fragile institutional systems and limited infrastructure in some countries constrained the efficiency of implementation. These challenges included unreliable laboratory equipment, frequent power outages that delayed sample analysis, slow government procurement systems, long internal approval chains for technical activities, and shortages of laboratory consumables that required repeated resupply. In several countries, limited digital systems also slowed data compilation and reporting.

[28] The project team emphasized that UNEP possesses unique technical capacity developed over 20+ years of coordinating global POPs monitoring activities, arguing that no other entity has comparable expertise to ensure the highly specialized coordination required. The physical proximity to the Stockholm Convention Secretariat was presented as a critical advantage, enabling close coordination with the convention's technical and regional coordination groups. Importantly, the project team noted this arrangement was not improvised but was discussed and approved by GEF during project design, and it followed precedent from the first round of the GMP project. The global and regional character of the project, requiring harmonized monitoring protocols to ensure data comparability across countries and over time, was cited as justification for keeping both functions within UNEP's specialized units.

[29] Key external and unanticipated features of the project's implementing context that may have limited the project's performance (i.e., conflict, natural disaster, unanticipated political upheaval). Note that 'political upheaval' does not include regular national election cycles, but unanticipated unrest or prolonged disruption. The potential delays or changes in political support that are often associated with the regular national election cycle should be part of the project's design and addressed through adaptive management of the project team.

78. The project's context was shaped by several significant external factors. Political and institutional priorities varied across countries, influencing the speed of national implementation. Several participating countries faced recurring challenges, such as customs delays, limited infrastructure, and power outages that disrupted laboratory analyses. The COVID-19 pandemic was a major external shock, halting field sampling, delaying shipments to expert labs, and suspending training and workshops for extended periods. These disruptions required project extensions and adaptive management measures.

79. Across the 15 participating countries, the external context and implementation constraints manifested in different ways. In Mali, political instability and changes in government leadership affected the continuity of focal points and slowed national-level decision-making. Ethiopia faced administrative slowdowns and competing national priorities that delayed ethical clearances for the human milk survey. In Kenya, procurement delays and customs processes affected the timely acquisition of sampling materials. Ghana and Nigeria experienced recurrent power outages that disrupted laboratory operations and created backlogs in analytical work. In Mauritius and Morocco, strong institutional systems facilitated smoother implementation, although COVID-related restrictions still delayed sampling. Senegal and Togo encountered internal reorganizations within ministries, which affected reporting schedules and the approval of agreements. Zambia and Uganda faced staff turnover in key laboratories, which created gaps in institutional memory. In Tanzania, limited laboratory infrastructure constrained the pace of POPs analysis. In Egypt and Tunisia, stringent public sector procedures extended the processing time for national agreements and ethics approvals. These diverse national contexts shaped the pace and sequencing of activities and required continuous adaptation of workplans across the region.

Rating for Nature of the External Context: Moderately Unfavorable

4.4 Effectiveness

4.4.1 Availability of Outputs

80. The project delivered most of its planned outputs, despite considerable delays (addressed in the Efficiency section of this report). **Table 12** below summarizes the key deliverables as planned versus what was actually achieved by the project's end. As shown in the table, nearly all output targets were met or exceeded. Core capacity-building outputs were delivered in full, resulting in strengthened national laboratory capabilities. All 15 countries established functional sampling networks for air and human milk as planned, and 6 countries piloted water monitoring. Also, the project prioritized a single authoritative regional assessment report for all countries rather than multiple separate publications. These adjustments were agreed by the Steering Committee and did not undermine the project's objectives. Overall, the project delivered the full range of planned outputs necessary to achieve its outcomes.

81. The evaluation also provides an estimation of progress against GEF Core Indicator 11 (Number of direct beneficiaries disaggregated by gender), noting that this indicator was identified retrospectively and therefore is not used in any ratings. Based on participation in the sixth round of the human milk survey and associated capacity-building activities, the project is estimated to have directly engaged approximately 450 to 550 individuals across the 15 countries. This includes participating mothers who provided samples, national health personnel supporting ethical procedures and recruitment, and laboratory staff involved in sample processing and analysis. While these figures are approximate and vary

by country, they provide a reasonable estimate of the project's contribution to Core Indicator 11 for reporting purposes.

Table 12: Availability of Outputs

	Narrative Assessment	Sources of Information/Evidence
Output 1: The national agreements and laboratory data are in place and supporting the project in the African region **Performance against Indicator(s) and Target(s)** **# of national project implementation agreements signed** • **Baseline:** 0 • **Target**: 15 • **Achievement**: 15 • **Performance**: **100% TARGET MET**; 15 countries have signed legal agreements with UNEP **# of laboratories submitted information to UNEP for updating information in the databank** • **Baseline:** 0 • **Target**: At least 8 • **Achievement**: 44 • **Performance**: **550% TARGET EXCEEDED;** The global databank has been updated with 256 labs registered from all UN regions including those from the Africa Region which comprise of 44 laboratories.	Output 1 was fully achieved. All fifteen participating countries signed national project implementation agreements with UNEP, ensuring the formal institutional basis required for project execution. Laboratory engagement far exceeded expectations, with forty-four laboratories from the region submitting information for inclusion in the global databank against a target of eight. This substantial level of participation indicates strong institutional uptake and provides a broader regional foundation for future POPs monitoring activities. The national agreements and expanded laboratory network collectively ensured that the core institutional and data management structures needed to support project implementation were firmly in place. Level of delivery: Fully Delivered	• Project Implementation Reports (2016–2024) • Inception workshop report (2016) • POPs databank (InforMEA portal)[30] • Interviews with project staff and national partners
Output 2: Training reports and sectoral reports on POPs analysis are available on two abiotic core matrices (i.e., air and water) in the African region **Performance against Indicator(s) and Target(s)** **# of countries that carried out sampling in abiotic matrices** • **Baseline:** 0 • **Target**: At least 12 • **Achievement**: 15	Output 2 was fully achieved, with performance exceeding most indicator targets. All fifteen countries carried out sampling in the abiotic core matrices, surpassing the target of twelve and demonstrating broad regional engagement in air and water monitoring. The project delivered nine training sessions on abiotic matrix analysis, slightly above the planned target, and these were tailored to the analytical capacities of national laboratories across ten countries. A consolidated training report documented the methodologies and capacity strengthening delivered. In addition, the project produced both planned sectoral	• Published sectoral reports on UNEP website[31] • PIRs and training reports (2016–2024) • Interlaboratory assessment reports (2016–2019) • Interviews with laboratory staff and national coordinators

[30] http://informea.pops.int/HgPOPsLabs/index.html
[31] https://www.unep.org/topics/chemicals-and-pollution-action/pollution-and-health/persistent-organic-pollutants-pops/pops

	Narrative Assessment	Sources of Information/Evidence
• **Performance**: **125% TARGET EXCEEDED**; 15 countries have completed sampling of abiotic matrices **# of training reports for analysis of abiotic matrices** • **Baseline:** 0 • **Target**: At least 8 • **Achievement**: 9 • **Performance**: **112.5% TARGET EXCEEDED**; The trainings were provided based on the existing capacities in national laboratories to analyze different matrices e.g. biotic and/or abiotic. Nine trainings have been delivered with participants from 10 countries joined. A report was drafted summarizing all the training activities conducted under the project. **# of sectoral reports developed in abiotic matrices** • **Baseline:** 0 • **Target**: 2 (one on air; one on water) • **Achievement**: 2 • **Performance**: **100% TARGET MET**; Two sectoral reports on air and water were developed and published on UNEP website	reports on air and water, which were completed and published, providing technical reference materials for national and regional stakeholders. Collectively, these achievements indicate that the necessary technical guidance, training and analytical outputs related to abiotic matrices were delivered in full and widely utilized across the region. Level of delivery: Fully Delivered	
Output 3: Training reports and sectoral report on POPs analysis are available on one biotic core matrix (6th round of human milk survey) in the African region[32] **Performance against Indicator(s) and Target(s)** **# of countries that carried out sampling in biotic matrices** • **Baseline:** 0 • **Target**: At least 12 • **Achievement**: N/A • **Performance**: N/A **# of training report for analysis of biotic matrices** • **Baseline:** 0	The PIR confirms that all project countries conducted the sixth round of the UNEP/WHO human milk survey, with sampling completed following the provision of SOPs, video tutorials, and national ethical clearance support. Based on Activity 3.3, fifteen countries completed sampling of human milk, which meets and exceeds the target of at least twelve countries. Analytical results for the required POPs were generated, shared with countries, and reported to the Stockholm Convention Data Warehouse as documented under Activity 3.4. A sectoral human milk report summarizing these results was developed and published on the UNEP website, fulfilling the output requirement for one biotic sectoral report. The PIR also notes that national laboratories underwent capacity screening for human-milk analysis, although expert reference labs carried out the	• PIRs and final workshop reports (2016–2024) • Published sectoral report on UNEP website[33] • Interviews with national focal points

[32] Assessment on the achievement of this Output was done through the analysis of the related activities, as specific data on the indicators is not available.
[33] https://www.unep.org/topics/chemicals-and-pollution-action/pollution-and-health/persistent-organic-pollutants-pops/pops.

	Narrative Assessment	Sources of Information/Evidence
• **Target**: At least 8 • **Achievement**: N/A • **Performance**: N/A **# of sectoral reports developed in biotic matrices** • **Baseline:** 0 • **Target**: 1 • **Achievement**: N/A • **Performance**: N/A	majority of analytical work. No standalone training-report count was specified for biotic matrices in the PIR, but the human milk implementation was supported by guidance materials, SOPs, and coordination structures described under Component 3. Overall, based solely on PIR evidence, Output 3 is considered achieved as countries completed sampling, POPs data were produced and validated, and a sectoral human-milk report was published. Level of delivery: Fully Delivered	
Output 4: Assessment report of existing analytical capacities prepared and report on POPs analysis undertaken in samples of national priority (other than core matrices) in the African Region[34] **Performance against Indicator(s) and Target(s)** **# of rounds for interlaboratory assessments held** • **Baseline:** 0 • **Target**: 2 • **Achievement**: 2 • **Performance**: **100% TARGET MET**; Two rounds of interlaboratory assessment were organized in 2016-2017 with 175 registrations and in 2018-2019 with 147 registrations **# of countries having high quality data reported for samples of major national interest** • **Baseline:** 0 • **Target**: Up to 10 • **Achievement**: 10 • **Performance**: **100% TARGET MET;** Egypt, Ethiopia, Ghana, Kenya, Morocco, Mauritius, Nigeria, Senegal, Tunisia, Uganda provided at least one sample of major national interest.	Output 4 addressed the assessment of existing analytical capacities and the reporting of POPs analysis undertaken in samples of national priority other than core matrices in the African Region and was fully achieved. Two rounds of interlaboratory assessments were conducted, meeting the target of two rounds, with 175 registrations in 2016–2017 and 147 registrations in 2018–2019, providing a practical basis for assessing laboratory performance, quality assurance practices, and regional analytical capacity. In parallel, the target of up to ten countries reporting high-quality data for samples of major national interest was fully met, with Egypt, Ethiopia, Ghana, Kenya, Morocco, Mauritius, Nigeria, Senegal, Tunisia, and Uganda generating and reporting quality-assured POPs data from at least one non-core matrix of national priority. Together, these achievements demonstrate that analytical capacities were assessed, POPs data beyond core matrices were successfully produced and validated, and reporting objectives were met. Level of delivery: Fully Delivered	• Interlaboratory assessment reports (2016–2019) • National reports from 11 participating countries • PIRs (2016–2024) • Interviews with country representatives

[34] Assessment on the achievement of this Output was done with the help of the analysis of the related activities for the second indicator, as specific data on this indicator is not available.

	Narrative Assessment	Sources of Information/Evidence
Output 5: A roadmap for sustainable POPs monitoring for the African region is developed with assessment reports contributing to regional report for the GMP prepared **Performance against Indicator(s) and Target(s)** **# of assessments on POPs presence in the region and its capacity to analyse them** • **Baseline:** 0 • **Target**: Two assessments, i.e. (i) presence of POPs through quantitative data; (ii) analytical capacity and performance of the national laboratories in the region • **Achievement**: 3 • **Performance**: **150% TARGET EXCEEDED**; A project regional report and three sectoral reports were developed to summarize the results on POPs presence in the region and in air, water and human milk. **# of regional roadmap for sustainable POPs monitoring in the region, with strategy for implementation, milestones and timetable in a regional roadmap** • **Baseline:** 0 • **Target**: 1 • **Achievement**: 1 • **Performance**: **100% TARGET MET**; A project regional report was developed summarizing the results of the project, and a synthesis report on roadmap to secure conditions for sustainable monitoring of POPs was developed. **# of countries providing inputs to develop conclusions and lessons learned on GMP phase 2, as well as recommendations and future plans** • **Baseline:** 0 • **Target**: All countries (15) provide a national sets of recommendations • **Achievement**: 15 • **Performance**: **100% TARGET MET**; All project countries have drafted national reports including a chapter on future plans. Finalized reports were received from fourteen countries with one more national report pending finalization.	Output 5 was fully achieved, with several indicators surpassing expectations. The project produced three assessments on POPs presence and national analytical capacity, exceeding the planned two and providing a comprehensive evidence base for regional analysis. A regional roadmap for sustainable POPs monitoring was completed as planned, outlining implementation strategies, milestones, and long-term coordination needs, and was supported by a synthesis report distilling regional priorities. All fifteen participating countries contributed national inputs, including recommendations and forward-looking plans, with fourteen national reports finalized and one nearing completion. The collective outputs demonstrate strong regional engagement, robust analytical groundwork, and a clearly articulated pathway for sustaining POPs monitoring efforts in the African region. Level of delivery: Fully Delivered	• PIRs (2016–2024) • Regional and sectoral reports (2023–2024) • UNEP technical review publications • Final regional workshop documentation (Nov 2023) • Interviews with project stakeholders

4.4.2 Achievement of Project Outcomes

82. Building on the outputs described above and following the reconstructed Theory of Change, the project achieved both of its reformulated Outcomes. The first reformulated Outcome sought to ensure that national capacities for implementing the updated POPs Global Monitoring Plan were strengthened and demonstrated. By project end, all fifteen countries had established functional sampling mechanisms for at least two core matrices, namely air and human milk. Passive air samplers were successfully deployed in all countries, and national human milk sample collections were completed across the region. Six countries also piloted water sampling for PFOS. These activities, combined with capacity-building interventions, resulted in a demonstrable increase in institutional and human capacity for POPs monitoring. More than ten national and regional laboratory training sessions were delivered, covering sampling protocols, chain of custody, analytical techniques, and quality assurance. National coordinators were designated in each participating country, strengthening institutional linkages and improving continuity in GMP implementation. Two rounds of inter-laboratory assessments enhanced quality assurance and provided performance feedback that helped national laboratories identify and address methodological gaps. Reference laboratories validated all POPs data, confirming their reliability. As a result of these combined efforts, all participating countries produced data on the twenty-three core POPs required by the project, surpassing the original ProDoc expectation that twelve countries would be capable of reporting data. These achievements provide strong evidence that national capacities for implementing the Global Monitoring Plan were strengthened and demonstrated during the project period.

83. The second reformulated Outcome aimed to establish conditions for sustainable POPs monitoring in the African region, with effective reporting taking place consistently. This Outcome was largely achieved. A regional roadmap for sustainable POPs monitoring was developed with wide participation from national institutions, regional centers, and global experts, and was finalized at the project's concluding regional workshop. The roadmap outlines actionable strategies to support long-term sustainability, including specialization of analytical roles among national laboratories, enhanced coordination through regional centers and the need for political and financial commitments within countries. Several countries, notably Morocco, Mauritius, and Egypt, have already initiated follow-up monitoring activities drawing on project-trained personnel and infrastructure, indicating early signs of sustainability. The project also strengthened information flows and regional cooperation. The African Regional Organization Group actively engaged in GMP coordination processes, ensuring that African perspectives were reflected in global technical discussions. The project further promoted sustainability through awareness-raising and communication tools, including national workshops and dashboards that informed policymakers of POPs trends and exposure risks. Continuous reporting was demonstrated through the successful upload of validated data from all fifteen countries to the Stockholm Convention Global POPs Data Warehouse. Taken together, these efforts confirm that the enabling conditions for sustainable monitoring and effective reporting were established to a meaningful degree, although long-term continuity will depend on the domestic resource commitments discussed in the sustainability section of this report.

84. In terms of uptake of outputs by intended beneficiaries, the evidence indicates that national institutions made active use of the project's technical products. Countries applied the harmonized GMP protocols, deployed passive air samplers, completed human milk sampling, and, in six cases, piloted water sampling, demonstrating integration of the tools and training delivered by the project. National coordinators and laboratory staff participated in all rounds of training and interlaboratory assessments, and all fifteen countries validated and submitted datasets to the Stockholm Convention Data Warehouse, showing clear institutional uptake of the outputs. Regarding effects on

disadvantaged groups, the project's engagement with vulnerable populations was most visible in the human milk component, where first-time mothers provided samples following national ethical screening procedures. While no negative effects were identified in the documentation, the project ensured that sampling protocols were implemented in line with WHO breastfeeding guidance to avoid misinterpretation and prevent stigma. Beyond this matrix, the project did not explicitly target or differentiate effects on persons with disabilities or other marginalized groups, and monitoring data were not systematically disaggregated by gender or vulnerability outside of the human milk work. Overall, uptake of outputs was strong among institutional beneficiaries, and no adverse effects on vulnerable groups were reported in project documentation.

85. **Achievement of Project Objective:** The project's stated objective was *"to strengthen the capacity for implementation of the updated POPs Global Monitoring Plan and to create the conditions for sustainable monitoring of POPs in the African Region."* By project closure, this objective has been largely met. The capacity to implement the GMP in Africa is now stronger. All participating countries have the basic skills, equipment, and protocols to conduct POPs sampling and either analyze samples internally or collaborate with reference labs. Regional expert support networks, such as the South-South cooperation through the BCCC-LATU Uruguay center, are in place. High-quality POPs data have been generated and fed into national and international assessment processes. Moreover, conditions for sustainability have been initiated via the roadmap and policy outreach. Any remaining challenges, such as ensuring long-term funding, lie largely outside the project's control and are addressed in the recommendations section.

Table 13: Achievement of Project Outcomes

Outcome 1: National capacities for implementing the updated POPs Global Monitoring Plan (GMP) are strengthened and demonstrated	
Performance against Indicator(s) and Target(s):	• # of countries capable to undertake sampling in the core and other matrices for POPs analysis: **Baseline:** 0, **Target:** 15 **Achievement:** 15, **Performance:** ***15/15 (100% - Target met)*** • # of countries with reported data on up to 23 POPs: **Baseline**: 0, **Target:** 12 **Achievement:** 15, **Performance:** ***15/12 (125% - Target exceeded)***
Sources of Information /Evidence:	• Latest Project Implementation Report
Narrative Assessment:	The Outcome was fully achieved. All fifteen countries demonstrated strengthened national capacities to implement the updated POPs GMP, as evidenced by their ability to conduct sampling in the core matrices and, where relevant, additional matrices. Countries deployed passive air samplers, completed human milk collections, and, in six cases, piloted water sampling. These activities were supported by extensive training, designation of national coordinators, and two rounds of interlaboratory assessments that enhanced technical proficiency and methodological consistency. All countries generated validated POPs data, surpassing the original target of twelve data-reporting countries and confirming that national institutions are now capable of implementing GMP requirements.
Level of Achievement:	*Fully achieved*

Outcome 2: Conditions for sustainable monitoring of POPs in the African region are in place with effective reporting taking place consistently	
Performance against Indicator(s) and Target(s):	• # of regional roadmap for sustainable POPs monitoring published: **Baseline:** 0, **Target:** 1, **Achievement:** 1, **Performance*: 1/1 (100% - Target met)***
Sources of Information /Evidence:	• Latest Project Implementation Report
Narrative Assessment:	This Outcome was fully achieved. The project established the key enabling conditions required for sustainable POPs monitoring across the region. A comprehensive regional roadmap for sustainable POPs monitoring was developed and finalized with participation from all fifteen countries, regional centers, and expert laboratories. This roadmap outlines the coordination, capacity, and financing measures needed to sustain monitoring efforts. Early signs of national follow-up activities in several countries further indicate progress toward longer-term continuity. All validated data were uploaded to the Stockholm Convention Global POPs Data Warehouse, demonstrating consistent reporting and functional information flows. Collectively, these results confirm that the foundational conditions for sustained monitoring and reporting have been put in place.
Level of Achievement:	*Fully achieved*

86. Overall, the project achieved strong performance across both reformulated Outcomes. National capacities for POPs monitoring were demonstrably strengthened, with all fifteen countries establishing functional sampling networks, applying harmonized GMP protocols, and generating validated datasets. The consistent uptake of technical outputs, extensive training efforts, and improvements noted through interlaboratory assessments confirm that technical and institutional capacities were significantly enhanced. Enabling conditions for sustainable monitoring were also established through the development of a regionally endorsed roadmap, strengthened cooperation mechanisms, and active participation of national institutions in reporting to the Stockholm Convention Data Warehouse. Early follow-up activities in several countries further illustrate emerging sustainability prospects. Overall, the evidence shows that the project's Outcomes were fully achieved and that the foundations for long-term POPs monitoring in the region have been meaningfully set, even if continuity will ultimately depend on future domestic resource commitments.

4.4.3 Likelihood of Impact

87. The project's most significant achievement was the generation of monitoring data for the Stockholm Convention's GMP. Before this project, Africa had no representation in the GMP dataset, meaning the global assessment of the POPs convention's effectiveness was blind to an entire continent's experience with these persistent pollutants. The project generated 100% of Africa's human milk monitoring data in the GMP database and approximately 70% of the region's air and water data. This is not a marginal contribution. It represents the difference between having Africa included or excluded in the global POPs trend analysis. The monitoring covered 15 countries across the region, providing geographic breadth that enables meaningful regional characterization rather than isolated data points. For a convention predicated on assessing whether global chemical controls are working, having robust data from Africa transformed the GMP from a predominantly Northern Hemisphere exercise into a genuinely global monitoring system.

88. The significance extends beyond simply having data points for Africa. The project established baseline measurements against which future trends can be assessed, enabling longitudinal analysis of whether Stockholm Convention obligations are reducing POPs concentrations over time or whether levels remain static or increase. Without this

baseline, future monitoring lacks context, and trend detection becomes impossible. The data also revealed Africa-specific patterns in POPs distribution, contamination pathways, and population exposure that differ from temperate regions, contributing to scientific understanding of how these chemicals behave in tropical environments with different temperature regimes, agricultural practices, and exposure patterns. The contribution to peer-reviewed literature (more than 20 publications generated from project data) means these findings entered the broader scientific discourse and will inform research beyond the immediate GMP reporting cycle.

89. The project's achievement in breadth and technical rigor deserves recognition. The monitoring wasn't limited to a single environmental medium but systematically addressed air, water, and human milk as the three core matrices required by GMP, plus additional matrices of national interest. Passive air sampling was completed in all 15 countries with eight rounds of sampling, providing temporal coverage that captures seasonal variations and improves statistical reliability. Three countries additionally implemented active air sampling with technical support from expert laboratories, generating Africa-specific ambient air contamination data for dioxins, Polychlorinated Biphenyls (PCB), Polybrominated Diphenyl Ethers (PBDE), and Per- and Polyfluoroalkyl Substances (PFAS) compounds. Water sampling in six countries completed eight rounds, producing seasonal data on PFOS and related compounds that inform understanding of aquatic contamination patterns. The human milk surveys, despite the ethical and logistical challenges, were completed in all 15 countries with pooled samples analyzed based on international standards.

90. The quality assurance measures implemented provide confidence in data reliability. All samples were analyzed by internationally recognized expert laboratories (CVUA Freiburg for human milk, MTM Örebro for water and PFAS in all core matrices, RECETOX for certain air samples, and IVM Amsterdam for air samples and samples of national interest), ensuring analytical rigor meeting GMP standards. The project conducted two rounds of inter-laboratory assessments where African laboratories participated alongside over 100 facilities worldwide, providing comparative performance data that both validated African laboratory capabilities and identified areas requiring improvement. All analytical results on POPs were submitted to the Stockholm Convention data warehouse, making them publicly accessible and ensuring integration into official convention reporting processes. This wasn't monitoring for monitoring's sake. It was systematic data generation meeting international quality standards and feeding directly into the global policy process it was designed to inform.

Table 14: Likelihood of Impact

Factors influencing likelihood of impact	Assessment	Discussion
Drivers to support transition from Outputs to the Project Outcomes	**In place**	Outputs created a strong enabling environment for achieving both Outcomes. National agreements and sampling systems established under Output 1 ensured institutional readiness across all fifteen countries. Outputs 2 and 3 provided countries with harmonized methodological tools and hands-on training for sampling and analysis of core matrices, building technical competence. Output 4 strengthened quality assurance through two rounds of inter-laboratory assessments and updated capacity assessments, ensuring the reliability of national data. Output 5 delivered a regional roadmap and synthesis of capacity needs, reinforcing regional coordination and strategic direction. Together, these Outputs supplied the technical, institutional and procedural foundations

Factors influencing likelihood of impact	Assessment	Discussion
		required for countries to demonstrate strengthened GMP capacity and to establish conditions for sustainable POPs monitoring.
Assumptions for the change process from Outputs to Project Outcomes	**Hold**	Evidence shows that key assumptions required for Outputs to lead to Outcomes are largely held during implementation. Countries applied the training, protocols, and QA systems received through the Outputs, completing sampling in air and human milk and generating validated data for twenty-three POPs. All fifteen countries contributed data to the Stockholm Convention Data Warehouse, demonstrating functional reporting systems and confirming the assumption that national institutions would actively use the project's outputs. National focal points and laboratories participated in roadmap development and regional assessments, validating assumptions related to stakeholder engagement and regional cooperation. These collective actions indicate that the necessary institutional commitment, technical uptake, and coordination needed to achieve both Outcomes were present during the project period.
Proportion of **Project Outcomes** fully or partially achieved	**All**	Both Outcomes were fully achieved. Countries demonstrated strengthened national capacities for implementing the updated POPs Global Monitoring Plan, and all fifteen countries generated validated POPs data and submitted it to the Stockholm Convention Data Warehouse as required. Conditions for sustainable monitoring were also established, evidenced by the completion and endorsement of the regional roadmap and the initiation of follow-up monitoring activities in several countries. Overall, achievement across all Outcome indicators confirms that the project delivered both Outcomes in full.
Drivers to support transition from Project Outcomes to Intermediate States	**Partially in place**	A solid foundation exists through strengthened national monitoring capacities, validated POPs datasets, established laboratory networks, and a regional roadmap that guides future coordination. These elements support movement toward sustained monitoring and improved information flows. However, continued progress depends on drivers that vary across countries, especially stable national funding and ongoing political attention to POPs monitoring.
Assumptions for the change process from the Project Outcomes to Intermediate States	**Partially hold**	Countries demonstrated commitment through participation, reporting, and contributions to regional planning. These behaviours confirm the core assumptions held during implementation. Yet sustained monitoring requires assumptions that extend beyond project control, including reliable domestic budgets, retention of trained personnel, and institutional continuity. These conditions remain uneven across countries, which affects the predictability of progress toward intermediate states.
Proportion of **Intermediate States** achieved	**Some**	Progress toward the two Intermediate States is uneven. The Intermediate State related to strengthened regional initiatives and cooperation for sustainable POPs monitoring shows clear advancement, supported by the finalized regional roadmap, active engagement of regional coordination mechanisms, and participation of all countries in regional processes. The Intermediate State related to the effective use of POPs data by national and regional decision makers is only partially advanced. Although validated datasets were generated and submitted to the global data warehouse, systematic national-level use of these data for decision-making is still limited and requires continued implementation beyond the project period.
Drivers to support transition from	**Partially in place**	Regional framework and technical capacity established, but long-term environmental impact requires sustained monitoring systems, policy integration at national levels, and continued regional

Factors influencing likelihood of impact	Assessment	Discussion
Intermediate States to Impact		coordination mechanisms that depend on post-project institutional commitment.
Assumptions for the change process from Intermediate States to Impact	**Partially hold**	Assumes continued political commitment to POPs monitoring, sustained funding for laboratory operations, ongoing regional cooperation, and integration of monitoring results into national environmental policies. These assumptions face typical challenges of long-term environmental programs.

Findings Statements on Effectiveness

91. The prospects for the project achieving its intended long-term impact are positive, provided that follow-up support (financial and technical) is mobilized. The likelihood of impact is further discussed under Sustainability (notably financial risks), but given the foundation laid, it is reasonable to expect significant progress toward reduced POPs risks in the region in the coming years, to which this project will have been a major contributing factor.

Rating for Effectiveness: Satisfactory

Rating for Availability of Outputs: Satisfactory

Rating for Achievement of Project Outcomes: Satisfactory

Rating for Achievement of Likelihood of Impact: Moderately Likely

4.5 Financial Management

4.5.1 Adherence to UNEP's Financial Policies and Procedures

92. The project followed UNEP's standard protocols. After GEF CEO endorsement, UNEP created a grant in its internal system, signed legal agreements with partners, and ensured that the first disbursements were processed within two weeks of agreement signature. Disbursements required clear reporting schedules and were released against approved workplans. All subsequent transfers followed quarterly reporting cycles, whereby partners submitted expenditure and progress reports for UNEP's review before further disbursements were approved.

93. Financial management at the country level presented some persistent challenges that intersected with UNEP's own financial rules to create operational constraints. Countries were slow to submit expenditure statements, receipts, and financial reconciliation documentation, often reporting much later than expected or required under their agreements.[35] This created a multi-layered delay cascade: UNEP had to wait for GEF to transfer funds through the internal agreement process, then wait for individual country SSFAs to be signed, then process initial payments, then wait for countries to spend and report on those funds before releasing additional amounts. The project team noted that

[35] UNEP's financial regulations stipulate that countries must expend at least 50% of the first disbursement before receiving subsequent tranches, creating a dependency where slow expenditure reporting directly delayed further funding.

they operated strictly within UNEP's financial procedures, stressing that delays were largely beyond their control as they depended on the finance office processing and country reporting timelines.

94. Monitoring of financial information was structured around quarterly cycles, integrating substantive and financial data. The quarterly cycle strengthened fiduciary control and produced traceable implementation records; the trade-off was that cash-flow lags at the country level (late acquittals) could slow activity cycles, which the team partly mitigated by allowing activities to proceed where national partners could temporarily pre-finance pending clearance.

95. Financial management and supervision followed UNEP/GEF protocols. The project team described a two-step review (programme and finance) before recording eligible expenditures, indicating internal controls and traceability. These processes supported adaptive management (amendments, extensions) while preserving fiduciary assurance, albeit at the cost of throughput when partners' acquittals lagged. There was no evidence of deviations from UNEP or GEF fiduciary policies. Procurement was handled under UNEP systems, and firewall measures between UNEP as the Implementing Agency and Executing Agency were enforced, including separate Fund Management Officers and higher-level signatories. However, delays occurred at the country level due to bottlenecks in signing Small-Scale Funding Agreements (SSFAs) and national legal constraints. These caused postponements in field activities, especially sampling, with some countries advancing costs from internal resources to avoid disruption while awaiting reimbursements.

4.5.2 Completeness of Financial Information

96. Evaluation interviews and project documentation confirmed that UNEP maintained adequate financial documentation. Financial reports were reviewed and cleared by UNEP before recognition in the system. Budget revisions and reallocations were subject to approval, and records of co-financing commitments were tracked. While the interviews highlighted cash flow issues caused by reporting delays from partners, there was no indication of gaps in the underlying financial documentation.

97. Overall, while there were operational inefficiencies linked to country-level disbursement delays, the project showed compliance with UNEP's fiduciary requirements and maintained financial records. One area that required improvement was the need for a consolidated summary of cumulative expenditures for the full project lifecycle, disaggregated by budget lines and components, at the end of the project.

Table 15: Financial Management

Financial management components:	Rating	Evidence/ Comments
1. Adherence to UNEP's/GEF's policies and procedures:	**Satisfactory (S)**	UNEP systems ensured adherence; first disbursements normally processed within the required time; procurement per UNEP rules; firewall arrangements were in place. Country-level SSFA/legal bottlenecks caused delays, but no policy breaches
Any evidence that indicates shortcomings in the project's adherence to UNEP or donor policies, procedures or rules	No	Serious delays due to national and project procedures, but no system failures.
Was first disbursement carried out within 9 months of UNEP's project approval date.	Yes	Confirmed in interviews

Financial management components:		Rating	Evidence/ Comments
Were the procurement policies of UNEP and the donor(s) followed? *(where applicable)*		Yes	UNEP procedures applied
2. Completeness of project financial information: Moderately Satisfactory (MS)			
Provision of key documents to the evaluator		Satisfactory	All standard financial documentation provided: agreements, transfers, quarterly expenditure reports, and budget revisions. No evidence of missing information.
A.	Co-financing and Project Cost's tables at design (by budget lines)	Yes	Available at design stage.
B.	Revisions to the budget	Yes	Approved via UNEP processes.
C.	All relevant project legal agreements (e.g. SSFA, PCA, ICA)	Yes	Present.
D.	Proof of fund transfers	Yes	Maintained by UNEP treasury.
E.	Proof of co-financing (cash and in-kind)	No	Not determined yet by the project team.
F.	A summary report on the project's expenditures during the life of the project (by budget lines, project components and/or annual level)	No Not available by the project team	A finalized, consolidated summary of cumulative expenditures for the full project lifecycle, disaggregated by budget lines and components, is not available at the project's end. Only up-to-date figures are available, noting that certain amounts retained for evaluation activities or pending commitments might not have been reflected yet.
G.	Copies of any completed audits and management responses	Yes	UNEP systems provide audit trails.
H.	Procure documents, including the approved requisition document and Source Selection Plan *(where applicable)*	Yes	Available per the UNEP system.
I.	Any other financial information that was required for this project	No	Key expenditure information for the whole project at the end of its lifetime not available
Overall rating		**Satisfactory (S)**	

Findings Statements on Financial Management

98. UNEP adhered to fiduciary standards and created a firewall between IA and EA roles, but country-level SSFA and legal bottlenecks delayed disbursements and created temporary cash-flow issues. Financial reporting included quarterly expenditure reviews, with no evidence of missing or incomplete records. However, a complete picture of the project's overall expenditure situation against the planned budget at the end of the project would have been useful.

Rating for Financial Management: Satisfactory

Rating for Adherence to UNEP's Financial Policies and Procedures: Satisfactory

Rating for Completeness of Financial Information: Moderately Satisfactory

4.6 Efficiency

Timeliness

99. By far the greatest challenge this project experienced was the significant delay in its implementation. The project received four extensions, which spanned 3.5-4 additional years beyond its planned 2020 completion. The project ultimately closed in December 2023 – about 9 years of implementation (double the intended duration). It experienced significant delays, running from a planned five-year initiative (2015-2020) into a nine-year endeavour that didn't achieve operational closure until 2023 and financial closure until mid-2024. This wasn't a modest extension due to unforeseen circumstances. As shown in the table below, the project required four separate amendments (2019, 2021, 2022, and 2023) to keep the project legally active. To put this in perspective, the project spent nearly as much time in extensions (four years) as it was originally planned to run (five years). Key sampling activities were completed by 2019, yet the project continued for another four years primarily to produce publications and utilize remaining funds.

100. Early delays stemmed from administrative and readiness issues. Small Scale Funding Agreements (SSFAs) between UNEP and each participating country experienced significant delays in negotiation and finalization, with some countries requiring three months or more for internal legal reviews due to parliamentary processes, government transitions, or bureaucratic procedures. Several countries requested modifications to UNEP's standard legal clauses, triggering additional review cycles within UNEP's legal office that extended timelines far beyond original work plans. This created a cascading effect with serious operational consequences. No funds could be disbursed until SSFAs were signed and entered into force, which meant that national coordinators could not be engaged, sampling campaigns could not commence, and seasonal windows for environmentally comparable data collection were missed.

Table 16: Project Extensions

Type of project extension (cost/no-cost)	Duration (# months)	Reason for no-cost extension
No cost extension 1	27 months (Mar 2019 → Jun 2021)	Delays in implementation of sampling and laboratory analysis in the early project years.
No cost extension 2	12 months (Jun 2021 → Jun 2022)	Continued delays and the onset of the COVID-19 pandemic, which disrupted fieldwork and laboratory operations.
No cost extension 3	12 months (Jun 2022 → Jun 2023)	Further COVID-19 impacts and delayed completion of human milk and PFOS water sampling.
No cost extension 4	12 months (Jun 2023 → Jun 2024)	Additional time required for data validation, inter-laboratory assessments, and completion of regional synthesis and sustainability roadmap.

101. The human milk survey component encountered substantial delays due to ethical approval processes that, while anticipated, proved more complex and time-consuming than planned. Despite WHO providing guidance documents and UNEP supplying template ethical clearance letters, country-specific processes varied significantly in duration and requirements. National ethical review boards requested additional justification for collecting and exporting sensitive biological samples, reflecting legitimate concerns about

biological material handling, data privacy, informed consent procedures, and benefit-sharing from research conducted outside the country.

102. The project took some steps to mitigate these initial delays. The Steering Committee authorized an extended sampling period and additional shipments of sampling materials to ensure all countries could catch up on their monitoring campaigns. By 2017, most countries were on track. The most disruptive delays occurred in 2020–2021 as a result of the COVID-19 pandemic, an unforeseen external shock. Pandemic-related lockdowns and travel restrictions halted or slowed nearly every aspect of the project during that period. National labs had to suspend operations for months, shipment of samples was postponed due to flight cancellations, and planned in-person trainings and meetings (including the final regional workshop) were delayed or moved online. This pause led the project to request a no-cost extension. The fact that activities continued through 2023 for publications reveals a particularly problematic pattern - UNEP's internal publication committee processes caused delays that required extensions. This means UNEP's procedures created the need to extend the project, which proper planning could have anticipated and prevented.

103. Despite the slow-down, the project used the extension to not only complete the delayed activities, but also implement additional outputs (e.g., extra capacity building on data use, development of the online data dashboard, and integration of results into UNEP's platforms) using unspent funds.

104. The project's ability to adapt and re-plan during and after the pandemic showed improved management. For example, when a physical final workshop in 2020 became impossible, the project organized a series of virtual thematic workshops in 2021 to ensure results were shared in a timely manner. Later, when travel resumed, the final face-to-face workshop was held in late 2023 with full participation. These adjustments kept the project going toward its outcomes, albeit on a longer timeline.

105. The management of the project took steps to minimise UNEP's environmental footprint throughout implementation. Most coordination activities were conducted through virtual meetings and remote technical support, which reduced travel related emissions. Regional workshops were consolidated to limit the number of in person events, and expert laboratory consultations were largely held online except where physical presence was essential for quality assurance. Sampling materials were bundled into fewer shipments to reduce transport frequency, and digital platforms were used for data sharing, training materials and reporting to avoid unnecessary printing. Overall, the project adopted a low travel and largely digital operational model that aligned with UNEP's commitment to reducing its environmental footprint.

Cost-Effectiveness

106. In terms of financial efficiency, the project used all its resources. This indicates that the project managed its budget to deliver all activities without significant under-spending or over-spending.

107. Cost-effectiveness benefited from building on existing multilateral architectures - the Stockholm Convention's GMP, established expert laboratories (e.g., CVUA Freiburg; MTM Örebro; the RESET/Recetox team referenced by interviewees), harmonized SOPs, and UNEP's publications and GMP data-warehouse channels—thereby avoiding de-novo system costs while assuring data comparability and visibility. At the same time, timeliness suffered from four sequential no-cost extensions (mid-2019; 2021; 2022; 2023). Interviewees attribute these principally to (i) COVID-19 restrictions that halted field

sampling and prevented international shipment of samples to expert labs, (ii) uneven pacing across the four regional GMP projects, and (iii) UNEP's multi-step clearance for flagship publications; the final extension was also motivated by the need to complete publication and wrap-up activities after operational delivery had finished (final regional workshop in Morocco, November 2023). With balances remaining after core fieldwork, the team applied adaptive, value-adding activities, which included communication packages and targeted "national-interest" analyses (e.g., plastic pellets from recycling facilities), to maximize returns within the existing budget envelope.

108. However, delays had a cost. The scientific value of monitoring data diminishes when it's delayed - trend analysis requires timely, regular data collection, and four-year delays mean policy decisions are based on increasingly outdated information. Country engagement and momentum suffer when projects drag on. [36] Extended timelines exacerbate this disengagement, as national coordinators move on, institutional memory fades, and the project becomes legacy business rather than priority work. Furthermore, the extensions incurred additional project management costs (e.g., to keep coordination staff and offices running longer). If the project had closed on schedule, lessons learned could have informed the next phase design a few years earlier.

109. The project leveraged co-financing and in-kind contributions from partners in the amount of USD 10,949,222 (pledged). The total amount disbursed remained unknown as the project did not track this effectively. Several countries increased their own contributions as the project progressed. For instance, Morocco and Nigeria invested national funds to acquire new laboratory instruments during the project to enhance POPs analysis capacity. Such investments, while not initially budgeted, significantly improved the cost-effectiveness of project outcomes where more equipment and infrastructure became available than GEF alone could fund. All expert partner institutions (universities, research centres) provided in-kind support by hosting trainees and performing analyses at below-market costs.

110. The project also capitalized on synergies with parallel initiatives to reduce costs. For example, some training workshops for African labs were held back-to-back with global POPs meetings or combined with those for Asia/Latin America projects, sharing expert travel costs. The Basel Regional Centre in Uruguay provided support across four regional GMP projects, creating efficiencies in developing common tools such as the data management dashboard. By sharing these costs across regions, the Africa project saved resources. Additionally, the use of regional expert teams rather than hiring multiple national consultants for tasks proved efficient and ensured consistent quality. The project's decision to produce one regional assessment also optimized the use of expert time and funding, while still meeting information needs.

Overall Management Efficiency

111. Nine years to complete what was scoped as five years of work suggests that the scope of the project was underestimated, and execution experienced efficiency challenges. The fact that core sampling activities were completed by 2019, but the project continued until 2024, primarily for publications, indicates the execution phase was reasonably successful. However, the project's closeout phase required almost as much time as its active

[36] For beneficiary countries, delays mean capacity building opportunities were spread too thin over too long a period. Training conducted in 2016-2017 becomes obsolete by 2023 if participants have moved on or equipment has fallen into disuse. The monitoring data generated in 2019 has less policy relevance in 2024. The regional coordination groups established early in the project may have lost momentum by the time publications were ready.

implementation period. The observed pattern of swift technical delivery, contrasted with extended reporting and dissemination phases, indicates that UNEP may have underestimated the backend requirements.

112. The project's management structure allowed for relatively streamlined decision-making and budget oversight. However, as noted previously in this report, it was "unusual" from an accountability perspective. This modality did not cause direct, visible harm - the project achieved its technical objectives and produced quality monitoring data without evidence of financial mismanagement. However, the multiple extensions without consequences, poor documentation, and significant information gaps limit the ability to assess whether an alternative execution modality with independent oversight might have yielded more efficient, timely, or cost-effective results.

Findings Statements on Efficiency

113. The project's multiple extensions indicate persistent challenges in planning, risk management, and oversight. Efficiency was constrained mainly by external factors, such as the COVID-19 pandemic and internal administrative and clearance procedures (e.g., UNEP publication reviews and country SSFA approvals), rather than by shortcomings in technical execution. Adaptive measures, including amendments and residual-balance activities, were introduced to optimize outputs within the fixed budget. Despite the extended timeline, the project maintained steady implementation progress, applied corrective actions when delays emerged, and ensured that resources were used appropriately. Overall, the project delivered its expected outputs within the available budget. Although the timeline was significantly prolonged, the project managed to complete all its main activities.

Rating for Efficiency: Moderately Unsatisfactory

4.7 Monitoring and Reporting

4.7.1 Monitoring of Project Implementation

M&E Design

114. The accountability aspect aside, the project's monitoring and evaluation plan was generally well-designed, providing an adequate framework to track progress. The logical framework (logframe) included clear outcome indicators with baselines and targets, which were specific and measurable, such as the number of countries capable of sampling POPs, the number of POPs analyzed, etc. These indicators were generally SMART[37] and directly aligned with the project objective and outcomes. For instance, the indicator "*number of countries with reported data on 23 POPs*" captured both capacity and data generation aspects of the objective. The M&E plan also delineated responsibilities. UNEP's Task Manager and the Executing Team were tasked with compiling annual Project Implementation Reports (PIRs) and tracking indicators, while national coordinators would report country-level progress. One design gap was that some outcome indicators did not include quantified end-of-project targets in the original logframe; for instance, the indicator

[37] SMART stands for Specific, Measurable, Achievable, Relevant, and Time-bound.

on "*conditions for sustainability in place*" was phrased qualitatively. The project team later added specific targets and milestones during implementation to make these indicators more measurable. Overall, the M&E design met UNEP/GEF standards, providing a good basis for tracking performance.

115. Information available to the evaluation confirms that the project allocated resources for monitoring activities, including the Mid Term Review, annual PIR preparation, Steering Committee meetings, and routine progress reporting. However, the financial documentation provided did not include a dedicated breakdown of expenditures specifically for monitoring and evaluation activities, and a complete cumulative expenditure report was not available at project end. Based on interviews and the presence of required monitoring products, it appears that core M&E activities were funded as needed, but the evaluation could not fully verify the extent to which the planned monitoring budget was spent due to gaps in consolidated financial reporting.

Monitoring Implementation

116. The project followed its M&E plan. Annual PIRs were prepared each year, with input from the Executing Agency and validation by the Task Manager. These reports assessed progress against each logframe indicator and assigned ratings. The project also monitored risks and recorded them in PIRs; notably, when COVID-19 emerged, the risk level was escalated (from Low to Medium in 2020) with a mitigation plan documented. Partners submitted progress reports and expenditure statements, which UNEP reviewed and cleared before recognizing expenditures and releasing subsequent advances. This system was applied consistently, supporting adaptive management through timely amendments, phased extensions, and the reallocation of residual balances to communication products and national-interest analyses.

117. The Mid-Term Review (MTR) was conducted in late 2017 (completed in 2018) as planned. The MTR provided an external assessment of the project's performance and made recommendations. The project team and UNEP responded proactively. MTR suggestions, such as enhancing the sustainability strategy and accelerating national report preparation, were considered in subsequent workplans. For example, following the MTR, the project advanced the development of the sustainable monitoring framework and began an outreach plan with videos and press releases to strengthen knowledge sharing. This showed adaptive management in response to M&E findings. Additionally, the project organized Steering Committee meetings, which were used to review progress and help maintain accountability.

118. However, there were weaknesses in how monitoring information was used to prevent or mitigate implementation delays. The M&E system failed to serve as an effective early warning and intervention mechanism. Many of the delays that ultimately extended the project from five to nine years could have been avoided or substantially mitigated with more rigorous performance tracking and proactive management responses. Administrative bottlenecks, such as Small-Scale Funding Agreement negotiations and ethical clearance processes, were well-known challenges from the first GMP round, yet the M&E system failed to trigger early warnings or prompt adjusted timelines when these delays began materializing in 2014-2016. The project team documented these issues in annual reports but did not translate this information into preventive action or accelerated problem-solving. This reactive monitoring approach allowed predictable challenges to become significant delays.

119. One monitoring aspect that has been noted previously in this report is the implementation and execution roles played by UNEP. While firewall mechanisms were put

in place to separate these roles, internal execution inevitably placed responsibility for implementation, oversight, and escalation within the same institutional framework. From an accountability perspective, there was no evidence that the implementing agency "*pushed back*" strongly or imposed consequences for the significant delays that the project experienced. For example, when UNEP's publication process caused significant delays from 2022 to 2024, the internal oversight apparently did not intervene to expedite the process.

120. Concerning gender disaggregation, interview data did not suggest the existence of systematic gender-disaggregated reporting, apart from the methodological focus on first-time mothers in human milk sampling. This limitation reflects, in part, the absence of mandatory gender integration and gender-disaggregated reporting requirements under the GEF-5 approval framework at the time of project design. There was no clear evidence of reporting related to other vulnerable or marginalized groups, including persons with disabilities. In the later stages of the project, however, reporting began to include gender-disaggregated data on trainees and made explicit reference to gender mainstreaming measures. This suggests that the M&E system captured not only technical outputs but also certain cross-cutting process indicators.

4.7.2 Project Reporting

Reporting Quality

121. Reporting under the project has been generally thorough and realistic. The PIRs and progress reports provided a clear narrative of achievements and challenges each year, staying within the 300-word limit for objective progress but managing to flag key issues such as the difficulties with ethical clearance for human milk, or customs delays. Financial reporting was also regular. Annual expenditure reports and co-financing updates were prepared, and no irregularities were noted.

122. On results reporting, the project produced UNEP publications and made datasets publicly available via the GMP data warehouse, enhancing transparency and external scrutiny. The Executing Agency produced 15 national reports, sectoral and regional reports, and delivered them by the project's end. Moreover, the project demonstrated transparency in sharing its results: beyond internal reporting, it made the inter-laboratory assessment findings publicly available online and disseminated monitoring data through open-access platforms.

123. The project's monitoring reports were largely gender-neutral, focusing on technical progress without systematic differentiation of experiences or outcomes by gender groups. While the human milk component inherently involved women participants, this did not translate into consistent gender sensitive reporting across other areas of implementation. Some gender disaggregation appeared in later reporting on trainees, but overall, the M&E system did not routinely provide differentiated analysis of how women, men, or other groups might have experienced project activities or benefits. As a result, monitoring practices reflected gender considerations only partially and did not fully meet the standard of gender sensitive reporting.

Findings Statements on Monitoring and Reporting

124. The M&E framework, while adequate on paper, was underutilized as a management tool to prevent the timeline expansion. More rigorous performance tracking with clear escalation protocols when milestones were missed could have reduced the number of extensions needed and maintained project momentum. Despite these gaps, the M&E system functioned sufficiently to track progress against key indicators, inform adaptive

adjustments, and ensure that reporting obligations were met. Reporting was adequate at the global level (UNEP publications; GMP data warehouse), supporting transparency and scientific uptake. The system also captured essential information on technical performance and risks, although interviews did not show systematic gender or vulnerability-disaggregated reporting beyond human milk protocol requirements. Overall, the M&E system performed satisfactorily but with room for improvement in its use as an early warning mechanism.

Rating for Monitoring and Reporting: Satisfactory

Rating for Monitoring of Project Implementation: Satisfactory

Rating for Project Reporting: Satisfactory

4.8 Sustainability

The evaluation considered socio-political, institutional, and financial factors affecting the project's sustainability, as well as environmental safeguards.

4.8.1 Socio-political Sustainability

125. Commitment to ongoing POPs monitoring and management in the Africa region appears high among the key stakeholders. The project was country-driven from the start. The participating countries explicitly requested this support to meet their Stockholm Convention obligations, and that demand has not diminished. At the final regional meeting in Casablanca (November 2023), all 15 countries endorsed the steps needed to close the project and expressed support for continuing POPs monitoring efforts in the future. During interviews, several representatives emphasized that POPs data are now recognized as valuable for national policy, for example, in informing chemical regulatory updates and health protection measures. This provides a political incentive to maintain the networks. A number of countries, including Morocco and Kenya, have already integrated POPs monitoring responsibilities into the mandates of their environmental or public health agencies, reflecting early signs of institutionalization at the policy level. In Kenya, data generated through the project were incorporated into the national pollutant register and used as baseline evidence for national monitoring protocols, with POPs reference stations formally recognized in government frameworks.

126. The project's alignment with international obligations such as the Stockholm Convention and the SDGs increases the likelihood of continued external encouragement for governments to sustain their monitoring efforts. One risk to socio-political sustainability, however, lies in competing national priorities: in times of economic or security crises, government attention to POPs monitoring may diminish. Nevertheless, given that chemical management is linked to public health and environmental safety, it is reasonable to expect that at least a core group of countries will continue advocating for POPs monitoring in regional forums. The creation of the African Regional Organization Group under the Convention, in which many project participants are actively involved, provides a platform to keep POPs monitoring on the political agenda.

127. Overall, the socio-political environment is favorable for sustainability. There is clear recognition of the importance of continued POPs data to protect human health and the environment. However, interviewees noted uneven ownership. While the initial stage of the

project saw strong political commitment, sustained engagement appears to have declined, especially after the project's end. This was clearly evidenced by the challenges that this evaluation encountered in engaging with country representatives – many of whom were not very responsive to the request to participate in this evaluation. This suggests that persistence of benefits depends on how effectively the forthcoming GMP project will embed results into institutional mandates rather than relying on ad-hoc advocacy. Regional ownership is expected to improve with execution moving to Regional Centres in the next phase, which could foster stronger South-South cooperation and regional accountability. Overall, socio-political sustainability is rated as **Moderately Likely**.

4.8.2 Financial Sustainability

128. Financial sustainability remains the dimension where additional efforts will be most important to ensure long-term continuity. The core outcomes being ongoing monitoring and data generation, require steady financial inputs for staff time, laboratory consumables, sample shipment, and instrument maintenance. Interviewees emphasized that POPs monitoring is heavily dependent on external donor support and that national budgets rarely provide sustained financing for sampling or advanced laboratory analysis. Even when governments contributed in-kind co-financing (staff time, facilities, logistics), there was little evidence of new domestic budget lines being institutionalized for POPs monitoring. Some laboratories highlighted reliance on donor funds for consumables and maintenance, underscoring vulnerability once project cycles close. Indeed, the project's final workshop identified "*the need for continued financial assistance for African countries*" as a key message. While some national governments, including Nigeria and Morocco, have shown willingness to invest their own funds in laboratory capacity, most countries indicated they would struggle to carry out comprehensive monitoring without external funding. Therefore, the sustainability of many activities depends on new funding streams.

129. It is worth noting that UNEP has been actively advocating for a Phase 3 project for Africa. The roadmap includes a strategy for resource mobilization, and the BRS Secretariat is aware of the need to support continued monitoring, possibly through the Convention's financial mechanism. Additionally, integrating POPs monitoring into related programs, such as health surveillance or water quality programs, could unlock additional domestic funds. In general, without national financing commitments, long-term continuity remains uncertain. However, it is worth noting that subsequent to the completion of this project, funding for the next phase of monitoring in Africa has been secured through a global programme, representing a positive step toward continuity at the regional level. Overall, financial sustainability is rated as **Moderately Unlikely**.

4.8.3 Institutional Sustainability

130. The project contributed to both technical and institutional capacities in all the countries involved. On the technical side, dozens of laboratory analysts and field technicians are now trained in operating sampling equipment, analytical methods, and QA/QC procedures for POPs. These human capacities reside in national institutions, and despite the turnover challenge, they form a cadre of experts that did not exist at this scale before. The project also delivered tangible institutional tools, such as standardized operating procedures (SOPs) and manuals which were published and are available online for continued reference; a fully populated laboratory databank for the region is publicly accessible, which countries and partners can use to identify expertise; and the data systems (database, dashboard) which will continue to be used and updated with minimal cost. The roadmap for sustainable monitoring provides a strategic framework that assigns roles to existing institutions, for example, by recommending that Stockholm Convention Regional Centres and national labs form a support network. If followed, this roadmap will help anchor the project's approaches into regular institutional practice.

131. However, there are some key constraints to institutional sustainability:

- While the project delivered training, equipment, and inter-laboratory assessments, trained personnel often leave institutions after completing their studies, seeking better opportunities elsewhere, with no retention mechanisms or career pathways established to keep skilled staff.[38] This creates episodic rather than sustained capacity - laboratories analyze samples when external projects provide funding and temporary staffing, but cannot maintain regular monitoring independently. The consumables challenge compounds this problem: sophisticated analytical equipment sits idle once project funding ends because no sustainable procurement mechanisms, supplier relationships, or domestic budget lines were established for ongoing supplies of standards, solvents, and reagents.

- National focal points are typically mid-level officials in environmental ministries who serve as representatives to multiple conventions, manage numerous international commitments, and oversee small teams with limited capacity. These individuals may have only two or three staff supporting the entire ministry's international environmental agenda, making it unrealistic to expect rapid responses to project requests or dedicated attention to GMP activities.

- Some national laboratories have limited resources and will require periodic refresher training to keep up with evolving analytical methods. The project mitigated this by fostering partnerships. For instance, laboratories that excelled during the project were encouraged to mentor others in a regional specialization scheme, each country focusing on certain matrices and sharing data. This concept was well-received and is an innovative way to capitalize on collective capacity. The project also institutionalized collaboration with global reference labs such as CVUA Freiburg for human milk, RECETOX for air, ensuring that those channels remain open for technical backstopping.

- Another sustainability challenge is the continued reliance on European, Canadian, and Australian expert laboratories for sample analysis. The capacity-building conducted did not result in regional laboratories capable of meeting GMP analytical standards independently. Some laboratories can perform certain analyses but not the full suite of POPs required, and quality assurance remains dependent on external validation. The project's next phase aims to address this by having regional laboratories analyze more samples, with expert laboratories only handling analyses requiring highly sensitive approaches.

- In countries like Mauritius and Zambia, officials reported that POPs sampling will be incorporated into their national environmental monitoring plans going forward by using existing staff and budget. However, not all countries may do so, especially those with weaker environmental agencies. The variance in national institutional strength means some countries are much more likely to sustain activities than others.

132. Overall, the national capacity built has been tangible. The knowledge, networks, and systems now established provide a foundation that can be reactivated or scaled up when resources allow. However, institutional sustainability remains fragile, as most countries

[38] The personnel sustainability challenge operates at multiple levels. At the national laboratory level, the issue is retaining trained researchers in institutions that cannot offer competitive career pathways. At the national coordination level, the concern is turnover of focal points who understand GMP requirements and maintain relationships with regional and global coordination structures.

have not secured domestic budget lines for POPs monitoring, and retention of trained personnel is inconsistent. Institutional arrangements developed during the project have not yet been embedded into national monitoring mandates, and follow-up activities observed in a few countries remain limited. The transition to Regional Centers in the new programme design is expected to increase regional ownership, reduce reliance on UNEP's internal execution, and support longer-term institutionalization. Given the current level of national commitment and the limited predictability of domestic financing, the likelihood that institutional gains will be sustained without continued external support is low. Based on the above analysis, the project's institutional sustainability is rated **Moderately Unlikely**.

4.8.4 Environmental Sustainability

133. The project's outcomes themselves contribute to environmental sustainability by informing actions to reduce pollution. There are no reported adverse environmental impacts from the project that need mitigation. All laboratory waste was handled following safety standards to prevent contamination. The project also adhered to established ethical protocols, including obtaining informed consent and ethical clearance for human milk sampling, thereby helping to maintain community trust for future monitoring efforts. Continued POPs monitoring is likely to have positive social impacts by providing data to protect vulnerable groups, particularly mothers and infants. No unresolved safeguard issues remain that could threaten sustainability.

Findings Statements on Sustainability

134. Overall, the project has embedded skills and systems in institutions, developed a forward-looking roadmap, and begun mobilizing resources for the future. These are enabling conditions that greatly increase the chance that outcomes will endure. However, evidence shows that most countries have not yet secured domestic financing or institutional commitments needed to maintain regular monitoring activities, which significantly limits the likelihood of sustained application of these capacities. The main constraint is funding, which is a common challenge for environmental monitoring initiatives. If follow-on funding is obtained in the next few years, the sustainability could become more solid. If not, regular data collection is unlikely to continue, and several gains may diminish over time, although capacity will remain latent and technically recoverable. The groundwork laid by this project means that even if there is a decline in interest after the project's end, countries are better positioned to resume POPs monitoring when resources allow, compared to the pre-project situation. Given this analysis, the overall likelihood of sustaining project results is assessed to be **Moderately Unlikely**.

Rating for Likelihood of Sustainability: Moderately Unlikely

Rating for Socio-political Sustainability: Moderately Likely

Rating for Financial Sustainability: Moderately Unlikely

Rating for Institutional Sustainability: Moderately Unlikely

4.9 Factors Affecting Performance and Cross-Cutting Issues

4.9.1 Quality of Project Management and Supervision

4.9.1.1 UNEP/Implementing Agency:

135. As the Implementing Agency, UNEP demonstrated overall adherence to GEF and UNEP policies and procedures throughout the project's extended lifecycle. It ensured that disbursements were processed within required timeframes following CEO endorsement, maintained quarterly reporting cycles that integrated substantive and financial oversight, and established appropriate fiduciary controls. The firewall mechanisms put in place, including altered reporting lines to the Deputy Director, separate Fund Management Officers, and higher-level signature authorities, represented a genuine attempt to create separation between oversight and execution functions. No financial irregularities or policy breaches were identified, and UNEP successfully processed four no-cost extensions with appropriate documentation and justification. Physical proximity in the same building enhanced oversight, allowing the GEF Unit's task manager to maintain closer supervision than would be possible with external partners in different locations. The agency also ensured that a Mid-Term Review was conducted and budgeted for terminal evaluation from the project's inception.

136. However, the evolution from a planned five-year timeline to an actual nine-year implementation represents a near-doubling of the project duration. There was no evidence that the implementing agency imposed real consequences, demanded strong corrective action plans with consequences, or exercised the kind of tough oversight that an external implementing agency is required to have provided (e.g., lack of a formal corrective action plan with time-bound measures or non-use of escalation). The Implementing Agency also did not fully ensure the application of lessons learned from previous experience. The first round of the Global Monitoring Plan had already revealed that country-level legal processes, ethical clearances for human milk surveys, and administrative procedures would be time-consuming. Yet the project did not adequately account for these known challenges.

137. The project maintained an active Steering Committee that served as the primary oversight and guidance mechanism. Records show that sixteen Steering Committee meetings were held, with the final meeting taking place in November 2023. These meetings reviewed technical progress, discussed implementation constraints, endorsed workplan adjustments, and approved the no-cost extensions. Documentation indicates that relevant issues were raised, including delays in sampling and reporting, the need for strengthened coordination, and updates on national-level implementation. The Steering Committee provided a platform for information exchange and decision making, and it fulfilled its expected oversight role. However, despite the regularity of meetings and the relevance of topics discussed, the Committee did not consistently drive decisive corrective actions in response to persistent delays, which limited its effectiveness as an escalation mechanism.

4.9.1.2 UNEP/Executing Agency:

138. As Executing Agency, the UNEP Knowledge and Risk Unit was responsible for technical delivery, day-to-day coordination, and the operational management of activities across the 15 participating countries. Evidence across PIRs, the Inception Report, and technical outputs indicates that the Unit performed its core technical functions effectively. It coordinated the development of sampling protocols, supported the organization of interlaboratory assessments, consolidated POPs datasets for submission to the Global Data Warehouse, and provided continuous technical backstopping to national coordinators and expert laboratories. The Unit also ensured the preparation of training materials, sectoral reports, and assessment products, including the regional roadmap and the final regional report. These contributions formed the backbone of the project's technical achievements, with expert laboratories confirming that the Unit maintained

coherent communication channels and facilitated the timely exchange of data and QA materials.

139. At the administrative level, the Knowledge and Risk Unit managed subgrant agreements, monitored country reporting cycles, and prepared annual PIR inputs. The Unit maintained documentation for four project extensions, coordinated revisions of workplans and budgets, and ensured compliance with UNEP's procurement and financial procedures. Interview evidence confirms that the Unit played a central role in troubleshooting technical challenges, including sample shipment delays and coordination of mirror analyses in national laboratories.

140. However, the Unit's performance was affected by persistent bottlenecks related to national legal procedures, SSFA negotiations, and ethical clearances for human milk sampling. These delays were foreseeable from previous GMP rounds, yet the Unit did not establish accelerated processes or early warning systems to mitigate them. While much of the delay stemmed from slow national administrative environments, the Executing Agency did not always apply proactive risk management or escalate issues in a timely manner to the Implementing Agency. Documentation also shows that publication processes under UNEP contributed significantly to delays in later years, and, although this was not solely within the Unit's control, stronger internal advocacy or parallel dissemination strategies could have reduced the impact on implementation timelines.

141. Overall, the Knowledge and Risk Unit demonstrated strong technical execution and maintained productive relationships with laboratories, national counterparts, and expert partners. Administrative performance was adequate but reactive, contributing to extended implementation delays. The Unit met its obligations as Executing Agency in delivering the project's technical products and coordinating multi-country operations, yet its ability to anticipate and manage systemic bottlenecks was mixed.

4.9.2 Stakeholders Participation and Cooperation

142. As noted previously, project execution was carried out by UNEP, in partnership with expert laboratories and country teams. Interviews note frequent coordination (virtual and in-person) across the Implementing Agency, Executing Agency, reference labs and the Secretariat through inception, mid-term, and final workshops; COVID-19 necessitated a pivot to virtual formats toward the end. A late reallocation from an externally executed component to internal execution was justified to complete remaining deliverables under closeout. Overall, partner cooperation was effective for quality-assured data generation; principal bottlenecks arose from pandemic disruptions and country-level legal/administrative steps (e.g., SSFAs) that delayed activity cycles.

143. Country participation was substantive in sampling campaigns, training, and advocacy. Kenya reported multi-agency participation in trainings (environment, health) and around ten to twelve practitioners trained on air sampling and laboratory methods; Nigeria reported targeted advocacy to policymakers using project results. Project-wide, participation in regional consultations was mixed, with some countries seeking deeper involvement in regional report drafting and steering functions. Interviewees also observed a recurrent pattern of high engagement before approval and more variable responsiveness during implementation, underscoring the need to institutionalize roles in the next phase.

144. Long-term partnerships with participating countries were cited as a key continuity factor, with many national coordinators having worked with UNEP across multiple projects, including previous GMP rounds. The project team noted that they had collaborated with many focal points over the years through different projects, creating informal relationship continuity even when UNEP project managers changed. However,

country relationships depend on those national coordinators remaining in their positions, which was not always the case.

145. Also, the project itself experienced significant personnel turnover throughout its lifecycle, affecting multiple critical positions from design through implementation.[39] This led to some degree of institutional memory gap with implications for accountability and lesson learning. This gap represents a systemic challenge related to knowledge management and institutional memory in the project.

4.9.3 Responsiveness to Human Rights and Gender Equality

146. Human-milk monitoring inherently centers women as data contributors; interviews confirm that inclusion criteria required first-time mothers with residency in the sampling area to ensure scientific representativeness, and that national teams used questionnaires to avoid discriminatory selection. The project and experts emphasized careful communication to protect WHO's breastfeeding guidance and prevent misinterpretation of findings. Beyond this matrix-specific focus, interviews did not find evidence of systematic gender-disaggregated monitoring or dedicated measures for marginalized groups or persons with disabilities. Available documentation does not provide systematic gender-disaggregated information on participation in national or regional training activities. While it is likely that women were included among laboratory and health personnel trained under the project, this cannot be confirmed from the existing records. As a result, the evaluation cannot determine the extent of women's representation in capacity-building activities beyond their role as human milk donors, as systematic gender-disaggregated tracking was introduced only at a late stage of the project.

147. The project addressed gender and human rights in the human-milk protocol by applying non-discriminatory inclusion criteria and carefully communicating findings to protect breastfeeding practices. However, beyond this matrix, systematic gender-disaggregated monitoring and consideration of vulnerable groups were not strongly visible. Future projects need to embed gender- and vulnerability-sensitive reporting across all matrices (air, water, soils) and link POPs data to health and equity outcomes.

4.9.4 Environmental and Social Safeguards

148. Evaluation interviews indicated safeguards were addressed through established GMP protocols, ethical screening for human-milk sampling administered nationally, and QA/QC measures (e.g., blank controls and detection-limit procedures) to protect data integrity. Final regional and global monitoring reports were submitted to the Conference of the Parties, where Parties had the opportunity to review and comment - an added governance layer relevant to safeguards and data acceptance. No evidence pointed to adverse environmental or social impacts arising from project activities.

149. The evaluation found that the project's activities posed minimal environmental or social risk, and that potential impacts on key stakeholders, including vulnerable groups, were largely addressed through established GMP protocols and national ethical procedures. Human milk sampling was the component with the greatest potential

[39] The original project designer retired even before GEF approval in 2015, meaning the individual who conceptualized the project never participated in its implementation. The first project manager served during early implementation before retiring. A new one took over project management responsibilities for approximately three years until their retirement in 2022. The last project manager, who has been with the project since the beginning, transitioned from a supporting role on other projects to become the primary project manager, providing the longest continuity in that position. One staff member joined in 2021 as first reporting officer, while another entered partway through implementation. One staff member provided technical expertise throughout the project, but focused primarily on monitoring and data analysis rather than overall project management.

sensitivity, and participating countries applied national ethics reviews, informed consent procedures, and non-discriminatory inclusion criteria to protect first-time mothers. Interviews confirmed that national teams took steps to avoid coercion, addressed concerns relating to breastfeeding practices, and ensured the confidentiality of participants. No evidence indicated adverse social effects on women participating in the survey, and no groups were excluded on the basis of vulnerability.

150. For other matrices, such as air and water, sampling activities did not interact directly with communities and did not generate environmental impacts, as they used passive samplers and routine water collection methods with a negligible ecological footprint. The project did not conduct activities that posed risks to land access, livelihoods, biodiversity or community health. However, the evaluation also found limited evidence of systematic assessment of potential impacts on vulnerable populations beyond the human milk component. Broader consideration of social differences, including groups affected by pollution hotspots or those with limited access to environmental information, was not part of the project's design. As a result, safeguards were appropriate for a low-risk monitoring project but did not extend to wider social impact analysis. Detailed information is also included in Annex V.

4.9.5 Country Ownership and Driven-ness

151. Overall, country ownership of the project was present, where outputs were translated into national instruments. For example, in the Kenya project, stations were integrated as reference sites in a national POPs monitoring protocol; data were used as baseline inputs for the National Pollutant Register and to design hotspot/baseline studies with the environment authority. However, interviews showed that securing domestic budget lines for routine monitoring was difficult, leaving continuity dependent on external financing.

152. In general, in the way it was structured, the project faced a key challenge related to its ownership by the participating countries. Countries are expected to maintain monitoring activities that serve global trend analysis for the Stockholm Convention, rather than identifying pollution hotspots for immediate national policy decisions. This distinction between what the project delivers and what motivates national buy-in creates a structural challenge. Countries are asked to fund activities that do not necessarily inform their decision-making priorities directly, but instead feed into diffuse, long-term global assessments. The resulting engagement pattern - initial enthusiasm followed by less consistent follow-up - shows rational priority-setting by resource-constrained governments. While the project attempted to address this through "samples of national interest", allowing country-specific analyses, this was supplementary and reached only 10-11 countries. Without clearer national value propositions or better integration of national decision-support functions, securing sustained domestic budgets and political commitment remains difficult, regardless of the technical capacity built. In the next phase of the project, the envisaged shift of key responsibilities to regional centers as executing agencies should increase regional ownership, which could improve commitment and domestic integration.

153. Beyond these structural tensions, interviews across the participating countries confirmed that national leadership over POPs monitoring remains partial. While focal institutions expressed strong technical interest and recognized the importance of contributing to the global GMP dataset, few countries viewed POPs monitoring as a domestically owned program with clear national mandates, financing provisions, or institutional anchoring beyond project cycles. As a result, country ownership is better described as engagement driven by international obligations rather than sustained

national leadership, with only limited cases where governments have begun integrating GMP-related responsibilities into national monitoring frameworks.

4.9.6 Communication and Public Awareness

154. Beyond raw data, the project produced substantial knowledge products that synthesize findings and make them accessible to policy audiences. Multiple UNEP flagship publications were produced, though the delays in publication processes are concerning. Regional reports were developed, providing roadmaps for continued POPs monitoring tailored to regional capacity and priorities. A POPs monitoring dashboard was developed with visualization tools, allowing users to explore trends and patterns interactively rather than requiring technical expertise to interpret raw datasets. Standard operating procedures and multi-language guidance materials were produced to support future monitoring efforts, documenting methodologies so that subsequent phases or other initiatives can build on established approaches rather than starting from scratch. Technical reports documenting inter-laboratory assessment results, sampling protocols, and quality assurance findings provide technical resources for the research community.

155. Experience sharing among project partners was also a consistent feature of implementation. Regional workshops brought together national coordinators, laboratory analysts, and expert laboratories to review sampling results, compare methodological challenges, and co-develop the regional roadmap. Sixteen Steering Committee meetings provided regular opportunities for countries to present progress, identify bottlenecks, and adjust plans collectively. The two interlaboratory assessment rounds enabled technical exchanges between national and reference laboratories, including discussions on analytical discrepancies and corrective guidance. These interactions strengthened cross-country learning and supported alignment with global GMP requirements.

156. The dissemination strategy extended beyond academic audiences. Media engagement when reports were published helped inform broader public awareness of POPs issues in Africa, though the extent and effectiveness of this outreach is not fully detailed in the interview. The integration with Stockholm Convention processes means the data directly informs Conference of Parties discussions and effectiveness evaluation reports, providing evidence for policy deliberations about whether existing controls are sufficient or require strengthening. The fact that the next phase is receiving partnership inquiries based on these publications suggests they've achieved visibility and credibility within the chemicals management community. However, it's worth noting that much of this knowledge dissemination occurred in 2023-2024, years after the data was collected, reducing the immediacy and policy relevance of the information.

Findings Statements on Factors Affecting Performance and Cross-Cutting Issues

157. UNEP's supervisory controls and quarterly finance-linked reporting underpinned quality and fiduciary assurance; throughput was most sensitive to partners' acquittal pace and country SSFA/legal bottlenecks. Multi-level coordination with expert labs and the Secretariat functioned well; COVID-19 shifted late-stage capacity development online and delayed some activities, mitigated through extensions and adaptive scheduling. Gender responsiveness was inherent to the human-milk protocol and safeguarded through communications aligned with WHO guidance; broader gender/vulnerability disaggregation was not evidenced in interviews. Country ownership deepened where results fed into national protocols and registers; durable driven-ness still depends on institutional roles and stable domestic financing, which remain uneven.

Rating for Factors Affecting Performance and Cross-Cutting Issues: Satisfactory

Rating for Quality of Project Management and Supervision: (UNEP / Implementing Agency) Moderately Satisfactory, (Executing Agency) Moderately Satisfactory

Rating for Stakeholders Participation and Cooperation: Satisfactory

Rating for Responsiveness to Human Rights and Gender Equality: Moderately Satisfactory

Rating for Environmental and Social Safeguards: Satisfactory

Rating for Country Ownership and Driven-ness: Moderately Satisfactory

Rating for Communication and Public Awareness: Satisfactory

5 CONCLUSIONS AND RECOMMENDATIONS

5.1 Conclusions

158. Overall, the project is rated as "***Moderately Satisfactory***". The project achieved its main technical and scientific goal, which was to deliver high-quality data for the Stockholm Convention GMP, as well as to build capacity in the 15 countries involved. The project's achievement resulted from its strategic alignment with UNEP's Medium-Term Strategy, GEF's Chemicals focal area, WHO protocols, and the Stockholm Convention. Technical quality was maintained through quality assurance measures, adherence to established GMP protocols, and multi-level coordination across involved agencies, laboratories, and the Secretariat. Capacity building produced practical results, where countries integrated outputs into national systems. The project also produced valuable knowledge products, including regional roadmaps, an interactive monitoring dashboard, and multi-language guidance materials.

159. However, these achievements were challenged by significant implementation delays. The shift from a planned five-year to an actual nine-year timeline was not merely a delay, but also a challenge to the monitoring and oversight systems. The implementing agency could have imposed stronger corrective actions, especially given the foreseeable challenges from previous GMP rounds regarding legal processes, ethical clearances, and administrative procedures. Significant staff turnover created institutional memory gaps. The project also faced an ownership paradox. Countries were expected to maintain monitoring for global trend analysis serving the Stockholm Convention, rather than identifying pollution hotspots for immediate national policy decisions. While the project attempted to address this through "*samples of national interest*", it remained supplementary, with countries experiencing difficulties in securing domestic budget lines for routine monitoring. The planned shift to regional centers as executing agencies in the next phase of the project is expected to improve ownership, but this remains to be seen.

160. Regarding human rights and gender equality, the project demonstrated integration within the human-milk monitoring protocol, specifically requiring first-time mothers with residency in sampling areas, using non-discriminatory selection questionnaires, and emphasizing careful communication to protect WHO's breastfeeding guidance. This approach, where gender responsiveness was integrated into protocol design rather than retrofitted, represents a model for integrating gender considerations into environmental monitoring. However, systematic gender-disaggregated monitoring and consideration of vulnerable groups, such as persons with disabilities, were not evidenced beyond the matrix due to the lack of requests during the project's approval stage. The project met safeguarding standards, but missed opportunities to position POPs monitoring as a tool for understanding environmental health equity by linking exposure data to health and equity outcomes, disaggregating findings by gender and socioeconomic status, and examining how inequalities shape exposure patterns across all matrices (air, water, and soils).

161. This project showed the tensions inherent in global environmental monitoring initiatives. It achieved scientific/technical quality while struggling with the political economy of sustaining monitoring over time. The tension between global monitoring objectives and national policy priorities is a systemic challenge in multilateral environmental agreements - how to create national value propositions for activities serving collective global interests. The project's legacy will depend less on the quality of data generated (which is high) than on whether the capacity that was built, institutional relationships that were established, and knowledge infrastructure that was created can be

sustained without continuous external financing. Where outputs were integrated into national protocols and registers, sustainability prospects are stronger, but the key challenge of aligning global scientific objectives with national decision-making priorities will determine whether technical achievements will translate into lasting change in how Africa monitors and responds to POPs.

162. The evaluation did not identify unintended negative environmental or social effects arising from project activities, and interviews and documentation confirmed that sampling and training processes did not result in harm to communities, ecosystems, or participating individuals.

Responses to Key Strategic Questions

163. The evaluation Terms of Reference included a set of strategic questions of interest to UNEP.

- *Strategic Question 1 - To what extent did the project incorporate lessons learned from the previous phase of the project and any recommendations from its own Mid Term Review into the project design/implementation?* The project incorporated several lessons from the first GMP phase, particularly the need for harmonized protocols, stronger quality assurance systems, and structured training for national laboratories. Recommendations from the Mid Term Review were partially integrated, most notably through expanded sustainability planning, the development of the regional roadmap and enhanced communication products. However, lessons related to early management of known administrative bottlenecks and ethical clearance delays were not fully applied, which contributed to extended implementation timelines.

- *Strategic Question 2 – To what extent did the project promote cross learning/knowledge sharing with three other GMP regional projects? How did the project benefit from having three other regional projects?* The project engaged in cross-regional learning through global GMP coordination structures, expert laboratory interactions, and participation in the Regional Organization Group. Technical guidance developed in other regional projects informed protocol updates, analytical methods, and QA procedures that benefited the Africa region. Although structured cross learning events across the four regions were limited, the Africa project indirectly benefited from harmonized tools, reference methods, and QA feedback that were developed across the global GMP network.

- *Strategic Question 3 – How did the project link scientific monitoring data with decision making at various levels?* The project established pathways for data to inform decision-making at global and regional levels, primarily through submission of validated POPs datasets to the Stockholm Convention Global POPs Data Warehouse and contributions to the global effectiveness evaluation. At the national level, examples, such as Kenya, show how project data informed monitoring protocols and environmental assessments. However, systematic integration of POPs data into routine national decision-making remained limited and depended on future domestic prioritization.

- *Strategic Question 4 – How were the national-level monitoring mechanisms integrated or coordinated with POPs monitoring under GMP?* National sampling networks were structured to follow GMP protocols for air and human milk, and countries adopted harmonized procedures developed through the project. Ethical screenings, standardized sampling tools, and interlaboratory QA procedures ensured that national mechanisms were aligned with GMP requirements. The project strengthened national

coordinators and laboratories as the operational link between national systems and the global GMP framework, although full institutional integration into national monitoring programmes remains incomplete.

- *Strategic Question 5 – To what extent have data from the project been included in the data warehouse and is there evidence of this data being used in subsequent effectiveness evaluation report?* All fifteen participating countries submitted validated POPs data to the Stockholm Convention Global POPs Data Warehouse. These datasets were incorporated into the global effectiveness evaluation, with human milk data from Africa representing a substantial portion of the evidence base for assessing exposure trends. There is clear evidence that the data were used in subsequent global assessments that inform decisions under the Convention.

- *Strategic Question 6 – To what extent have inter-lab assessments contributed to laboratories from developing countries improving their quality assurance/quality control (QA/QC) practices and ultimately improving the quality of analysis?* The two rounds of inter-laboratory assessments significantly enhanced QA and analytical performance in participating laboratories. National laboratories received direct feedback from expert labs, identified methodological errors, and implemented corrective actions. Evidence shows that proficiency improved across rounds, and several laboratories strengthened their ability to generate reliable data. These assessments improved technical capacity in developing country laboratories and supported the generation of data acceptable for global reporting.

164. The table below provides a summary of the ratings.

Table 17: Summary of Project Findings and Ratings

Criterion	Summary assessment	Rating
Strategic Relevance	Strong alignment to UNEP mandate, GEF Chemicals & Waste, and Stockholm Convention GMP; clear additionality for Africa	**HS**
1. Alignment with UNEP's MTS, POW and Strategic Priorities	Normative role, QA/QC, data systems, and regional capacity fit UNEP's core functions.	S
2. Alignment with UNEP and GEF strategic priorities	Direct delivery to GMP effectiveness-evaluation needs; major Africa data contribution.	HS
3. Relevance to global, regional, sub-regional and national environmental priorities	Project enabled Africa's participation in COP-mandated assessments; supported national awareness.	HS
4. Complementarity with existing interventions	Project leveraged specialized/expert labs and UNEP channels.	S
Quality of Project Design	Strong technical logic; risk/ethics timelines and sustainability pathways under-specified.	**S**
Nature of External Context	COVID-19, political/institutional instability, including government leadership changes, staff and capacity constraints in labs, and national legal/ethics bottlenecks, affected procurement and delivery schedules.	**MU**
Effectiveness	Core outputs were fully delivered; outcomes were achieved unevenly; the likelihood of impact was Moderately Likely.	**S**
1. Availability of outputs	Multi-matrix datasets across 15 countries; QA/QC; public repositories & publications.	S
2. Achievement of project outcomes	Outcome 1 fully achieved (evidence base); Outcome 2 partially achieved (capacity/use).	S

Criterion	Summary assessment	Rating
3. Likelihood of impact (use 'likely' scale)	High-quality evidence and rising awareness; constrained by systemic capacities.	ML
Financial Management	Full compliance; complete records; some country-level cash-flow delays due to reporting.	**S**
1. Adherence to UNEP's financial policies and procedures	Robust controls; quarterly finance-linked reviews; firewall between IA/EA.	S
2. Completeness of project financial information	Adequate documentation maintained (agreements, transfers, audits, and expenditure records); no consolidated cumulative expenditure summary for the full project lifecycle.	MS
Efficiency	Project doubled its planned duration (5 to 9 years) due to administrative bottlenecks, COVID-19 disruptions, and lengthy UNEP publication processes; however, all outputs were delivered within budget through adaptive management and leveraged co-financing.	**MU**
Monitoring and Reporting	Quarterly substantive-financial cycles supported adaptive management; strong transparency via GMP/UNEP publications.	**S**
1. Monitoring of project implementation	Integrated, finance-linked monitoring; sensitive to partner acquittal pace.	S
2. Project reporting	UNEP systems used; strong global reporting; limited disaggregation beyond the human milk protocol.	S
Sustainability	Replication potential exists, but the long-term viability of national laboratories remains somewhat fragile.	**MU**
1. Socio-political sustainability	Country-driven demand remains strong, with all 15 countries endorsing continued POPs monitoring and some (Morocco, Kenya) already integrating responsibilities into national mandates, though engagement has declined post-project as evidenced by low responsiveness to this evaluation.	ML
2. Financial sustainability	POPs monitoring remains heavily dependent on external donor support, with little evidence of new domestic budget lines being institutionalized despite in-kind contributions, leaving most countries unable to sustain comprehensive monitoring independently.	MU
3. Institutional sustainability	Project built tangible technical and institutional capacities (trained personnel, SOPs, data systems, regional partnerships), but suffered from staff turnover, lack of domestic budget lines for POPs monitoring, continued reliance on external expert laboratories, and fragile national commitment.	MU
Factors Affecting Performance	Strong IA supervision; effective partnerships; admin/ethics delays; communications safeguards.	**S**
1. Quality of project management and supervision	UNEP fulfilled its fiduciary and technical responsibilities effectively in both the Implementing Agency's and Executing Agency's roles. Oversight was insufficient in imposing consequences for delays, applying lessons from the previous GMP phase, and proactively managing foreseeable bottlenecks.	MS
2.1 UNEP/Implementing Agency:	*Strong strategic oversight and adaptive supervision; some delays in internal clearances and publication approvals.*	*MS*
2.2 Partners/Executing Agency:	*Effective coordination and delivery; some reporting delays and uneven responsiveness.*	*MS*
2. Stakeholders' participation and cooperation	Substantive country participation; variable responsiveness post-approval.	S

Criterion	Summary assessment	Rating
3. Responsiveness to human rights and gender equality	Human-milk ethics and inclusion criteria applied; limited broader disaggregation.	MS
4. Environmental and social safeguards	Ethical approvals; no adverse impacts identified.	S
5. Country ownership and driven-ness	Stronger where outputs were embedded in protocols/registers; financing gaps persist.	MS
6. Communication and public awareness	UNEP/GMP channels and targeted advocacy were used; policy-tailoring was improved.	S
Overall Project Performance Rating	**Overall, high-quality technical outputs and a significant contribution to closing Africa's POPs data gap. Key challenges included the near-doubling of the planned implementation timeline and uncertain long-term sustainability without continued external financing.**	**MS**

5.2 Lessons Learned

165. The following are the key lessons drawn from the experience of this project.

Lesson Learned #1:	**Overly optimistic timelines and loose accountability enable chronic extensions.**
Context/comment:	The project's first extension occurred in 2019, before COVID-19, indicating problems predated the pandemic. While COVID-19 legitimately impacted middle years, extensions continued through 2023. Many delay factors were foreseeable: slow first-year startup is acknowledged as typical for GEF projects, ethical clearances for human milk surveys are predictably complex, and African administrative processes are known to be lengthy. Yet, these were not reflected in the original planning. This type of project requires ample timelines. Project timelines must incorporate realistic buffers for known implementation challenges rather than optimistic best-case scenarios. Foreseeable obstacles, such as bureaucratic startup periods, ethical clearance processes, regional administrative variations, and publication timelines, should be built into the design, not treated as unexpected delays justifying extensions. More critically, accountability systems must impose consequences for chronic underperformance. Extensions should require rigorous justification, demonstrate that acceleration strategies were attempted, and include corrective action requirements rather than simply providing additional time to utilize available funds. The pattern of using leftover money to justify continuation rather than returning unused funds signals weak project discipline. Future projects should include explicit decision points where persistent delays trigger adaptive management, scope reduction, or early closure rather than automatic extension.
Cross-reference(s) to relevant paragraphs	45, 47, 79, 99, 100, 103, 111, 113, 125

Lesson Learned #2:	**Early ethical clearances are essential for biological monitoring projects.**
Context/comment:	Delays in human milk surveys were largely due to late initiation of ethical approval processes at the country level. This created a bottleneck for implementation, slowed sampling, and pushed back laboratory analysis.

	For future projects with biological or socially sensitive components, early launch of ethics clearance processes (ideally in the inception phase) should be prioritized, and dedicated technical support should be provided to national teams to navigate requirements.
Cross-reference(s) to relevant paragraphs	7, 71, 102, 119, 149

Lesson Learned #3:	**Global visibility requires balancing UNEP's publication protocols with timeliness.**
Context/comment:	The project's outputs were tangible through UNEP flagship reports and peer-reviewed papers, raising Africa's profile in the global POPs monitoring system. However, UNEP's multi-step clearance processes for publications were a source of delays, contributing to multiple no-cost extensions. Future projects should plan data strategies and publication pipelines to ensure data are disseminated rapidly while UNEP's clearance procedures proceed.
Cross-reference(s) to relevant paragraphs	6, 103, 108, 155, 157

Lesson Learned #4:	**Establishment of a milestone-based early-warning and escalation system helps eliminate avoidable delays in SSFAs, ethical clearances, and publication gates.**
Context/comment:	The absence of a structured, milestone-based early-warning and escalation system limited the project's ability to proactively identify and address predictable implementation bottlenecks related to Small-Scale Funding Agreements, national legal and ethical approval processes, and publication clearance stages. Monitoring mechanisms tended to track delays after they had already materialized, rather than functioning as preventive management tools capable of triggering timely corrective action. As a result, issues, such as delayed SSFA execution, prolonged ethics approvals, and late-cycle publication processes, accumulated over time and contributed to cascading implementation delays. Future projects would benefit from embedding clearly defined milestones, risk thresholds, and escalation pathways within their management frameworks, enabling earlier intervention, clearer accountability, and more effective use of adaptive management to prevent avoidable slippage.
Cross-reference(s) to relevant paragraphs	99, 102, 103, 119, 125

Lesson Learned #5:	**Fast-track publications by redesigning clearance workflows, introducing parallel technical/editorial reviews, and pre-booking publication slots should be tied to hard deadlines.**
Context/comment:	Lengthy publication and clearance processes during the project's final phase reduced the timeliness and immediate policy relevance of key monitoring outputs, particularly as several deliverables entered review only near project closure. While UNEP's clearance workflows play an important role in safeguarding scientific quality, institutional credibility, and consistency with global conventions, the absence of fast-track

	arrangements and firm publication timelines contributed to extended close-out periods and delayed knowledge uptake by policymakers. The experience demonstrates that future projects would benefit from redesigning publication workflows to include parallel technical and editorial reviews, early engagement with clearance bodies, and pre-booking of publication slots linked to non-negotiable deadlines. Embedding these measures within project management plans would help balance rigor with timeliness, ensuring that evidence is available when policy windows are most relevant rather than after project completion.
Cross-reference(s) to relevant paragraphs	6, 103, 108, 155, 157

Lesson Learned #6:	**It is important to secure financial sustainability through a costed multi-year financing plan that combines domestic budget lines, pooled regional resources, and donor co-financing for consumables and maintenance.**
Context/comment:	The project demonstrated that technical capacity and institutional arrangements for POPs monitoring can be successfully established, but their long-term viability remains vulnerable in the absence of predictable and diversified financing. In many participating countries, routine monitoring activities depend heavily on external project resources, while domestic budget allocations for consumables, laboratory operations, equipment maintenance, and sample analysis remain limited or ad hoc. This financing gap poses a direct risk to the continuity of monitoring once project support ends, potentially undermining data comparability and the cumulative value of long-term trend analysis. The experience highlights the importance of securing financial sustainability through a costed, multi-year financing plan that integrates domestic budget lines with pooled regional mechanisms and donor co-financing. Embedding such financing strategies early in project design can help shift monitoring from a project-based activity to a sustained national and regional function, thereby protecting investments in capacity and ensuring continuity of evidence for Convention reporting and policy use.
Cross-reference(s) to relevant paragraphs	8, 11, 86, 129, 130

Lesson Learned #7:	**Standardization of ethics and biosample flows, using pre-approved protocol packs (ethics templates, informed consent, MTAs) and a regional ethics support hub, may expedite human milk work.**
Context/comment:	The project experience showed that country-specific ethical approval processes and bio-sample export and import procedures were among the most persistent sources of delay in human milk monitoring activities. While ethical review and biosafety safeguards are essential, the absence of standardized tools and coordinated regional support resulted in repeated, parallel negotiations at the national level, often requiring multiple revisions of protocols, informed consent forms, and material transfer agreements. These delays not only affected sampling schedules but also had downstream impacts on laboratory analysis timelines and data comparability across countries.

	The experience indicates that future projects could significantly reduce transaction costs and implementation risks by developing pre-approved protocol packs that include standardized ethics templates, informed consent documentation, and material transfer agreements adapted to Convention requirements. Establishing a regional ethics support hub to provide technical guidance, liaise with national ethics committees, and support regulatory compliance could further streamline processes while respecting national sovereignty. Such standardization would help preserve scientific rigor while accelerating implementation and improving predictability for human biomonitoring activities.
Cross-reference(s) to relevant paragraphs	7, 71, 102, 134, 149

5.3 Recommendations[40]

Recommendation #1:	**Recommendation for the future phase of the project to establish formal and standing knowledge management and communication strategies for national GMP coordinators and experts, anchored by Regional Centres, to institutionalize peer support, technical exchange, and rapid problem-solving beyond the project's lifetime.** **The above strategies include Community of Practice (CoP) activities, such as having regular online sessions on a rotational basis, organizing peer support sessions, and sharing experiences, best practices, and lessons on selected topics in order to enhance communications and coordination among the respective regions.** **CoP should also cover key stakeholders who are involved in the implementation of the National Implementation Plans under the Stockholm Convention in participating countries, to broaden stakeholder engagement, facilitate policy reform, and enhance sustainability.**
Challenge/problem to be addressed by the recommendation:	While the objectives of the project (i.e., to strengthen capacity for implementation of the updated POPs GMP and to create the conditions for sustainable monitoring of POPs) were clear, the number of people engaged in the projects was limited in many participating countries. The continuity of project implementation was affected by the engagement of a small number of people, e.g., through the turnover of key staff. Furthermore, cooperation and knowledge sharing were not strong enough due to a lack of sustained interest from the people involved, staff turnover, and a lack of institutional structures that facilitate inter-country cooperation. Involvement of a broader number and type of stakeholders, coupled with enhanced cooperation/ knowledge sharing among them, would help

[40] 8 recommendations were identified through the synthesis of terminal evaluations of all 4 regional projects, *namely "Continuing Regional Support for the POPs Global Monitoring Plan under the Stockholm Convention in the Africa Region (GEF ID 4886)", "Continuing Regional Support for the POPs Global Monitoring Plan under the Stockholm Convention in the Latin American and Caribbean Region (GEF ID 4881)", "Implementation of the POPs Monitoring Plan in the Asian Region (GEF ID 4894)",* and *"Continuing Regional Support for the POPs Global Monitoring Plan under the Stockholm Convention in the Pacific Region (GEF ID 6978)".* Each recommendation is cross-referenced to findings of each evaluation, but is not necessarily perfectly linked to specific paragraphs of the respective evaluation reports.

	mitigate the risk of discontinuity and facilitate communication across sectors and stakeholder groups.
Cross-reference(s) to relevant paragraphs	2, 5, 6, 10, 12, 146
Priority Level:	High level
Type of Recommendation	Project level
Responsibility:	UNEP Task/ Project Manager
Proposed implementation time-frame:	Within one year, during the inception stage of the next phase of the project

Recommendation #2:	**Recommendation for the future phase of the project to shift the execution body to Regional Centres (or qualified consortia), with UNEP as the Implementing Agency, and constitute an independent oversight board with authority to enforce corrective actions.** **Initiate the formulation of a coherent regional strategy and collaboration, especially on POPs monitoring, which considers the current capacities, networks, and interests of the member countries.**
Challenge/problem to be addressed by the recommendation:	An internal execution (IA/EA modality within the same Branch under the same Division) challenged the perceived independence of oversight. Additionally, the third round of interlaboratory assessments concluded that none of the participating countries was able to carry out all analyses set out, as full-spectrum analysis of POPs requires advanced laboratory performances and as laboratories are often specialized in matrix or compound types. This could also relate to the unavailability of the equipment and laboratory infrastructure to undergo the specified analysis. As more POPs are revised and annexed by the Stockholm Convention, it is unrealistic, according to experts and through experience gained in the project, that laboratories, especially in low-and middle-income countries, can monitor all listed POPs and produce high-quality data. Instead, a regional strategy that considers current capacities and interests, enabling countries to contribute and rectify their commitments as members of the Stockholm Convention, needs to be established in the future. Further collaborations in the region are also vital for an efficient and coherent regional strategy.
Cross-reference(s) to relevant paragraphs	4, 7, 10, 12, 86, 99, 111, 113, 120
Priority Level:	High level
Type of Recommendation	Project level
Responsibility:	UNEP Task Manager, UNEP Senior Management at the Branch/Unit level
Proposed implementation time-frame:	Within one year, during the inception stage of the next phase of the project

Recommendation #3:	**Recommendation for the future phase of the project to consider that the project design integrates links between POPs monitoring and policymaking at the national level to support the project's sustainability.**

	Plan and prepare to conduct a training needs assessment that covers the entire decision-making process from POP monitoring to policy decisions. Prepare training to meet national/local needs and requirements.
Challenge/problem to be addressed by the recommendation:	The project faced insufficient national funding during and after the project and a lack of mechanisms to sustain enhanced national capacities over the long term. As a result, there was limited evidence to substantiate a connection between POP monitoring and national decision-making. Furthermore, reflecting on a lesson learned from the project, it is important not only to ensure more routine POPs analytical work for national laboratories but also to strengthen links between the scientific monitoring data and national policies for enhanced usage of the monitoring data for informing policy decisions on POPs management and control. In addition, especially in relation to the linkage between POPs monitoring and national decision-making, the screening of capacity at the beginning of the project based on self-reporting provided only a rough understanding of training needs. More efforts in detailing a capacity baseline would support targeted training and create a foundation for future capacity-building efforts.
Cross-reference(s) to relevant paragraphs	5, 6, 8, 11, 12, 86, 153
Priority Level:	High level
Type of Recommendation	Project level
Responsibility:	UNEP Task/ Project Manager
Proposed implementation time-frame:	Within one year, during the inception stage of the next phase of the project

Recommendation #4:	**Recommendation for the future phase of the project to develop a clear communication strategy to strengthen the dissemination of results to a wider audience outside the scientific sphere, and to broaden awareness, visibility, and support for POPs-related policies and monitoring.**
Challenge/problem to be addressed by the recommendation:	The project did not necessarily utilize communication tools effectively to promote advocacy for a wider audience, which resulted in low prioritization and buy-in at the governmental level. This partly affected a weak linkage between POPs monitoring and national decision-making. Public dissemination and campaigning could have been designed and implemented more effectively to increase awareness among various stakeholders, including government officials, on the POPs monitoring. It would help strengthen the connection between POPs monitoring and decision-making at the national level.
Cross-reference(s) to relevant paragraphs	6, 8, 11, 12, 84, 157
Priority Level:	Medium level
Type of Recommendation	Project level
Responsibility:	UNEP Task/ Project Manager
Proposed implementation time-frame:	Within one year, during the inception stage of the next phase of the project

Recommendation #5:	**Recommendation for the future phase of the project to plan to conduct detailed baseline studies in each participating region, including risk analysis and mitigation strategies, in cooperation with national governments and institutions at the design stage.** **This also includes ensuring the involvement of more than one laboratory per participating region.**
Challenge/problem to be addressed by the recommendation:	Due to the project design, the project delivered limited support to the establishment of conducive local conditions for POP monitoring and related decision-making, resulting in a project with limited impact on the national POP monitoring efforts and low likelihood of sustainability. Furthermore, the sustainability of capacities generated by the project was low due to staff turnover. And cooperation between POPs laboratories at the regional level could further be improved.
Cross-reference(s) to relevant paragraphs	29, 78, 80, 89, 115, 146, 152
Priority Level:	Medium level
Type of Recommendation	Project level
Responsibility:	UNEP Task/ Project Manager
Proposed implementation time-frame:	Within one year, during the inception stage of the next phase of the project

Recommendation #6:	**Recommendation for the future phase of the project to develop a set of quality indicators for robust results measurement at the design stage (or at the inception stage if the design is not found adequate). In particular, desired outcomes should be properly explored and spelled out with meaningful indicators.** **To enhance timely adaptive management, utilize a monitoring system to include monthly traffic-light dashboards and time-bound reviews that trigger automatic management responses and help avoid delays.**
Challenge/problem to be addressed by the recommendation:	The formulation of project outcomes was not necessarily perfect, leaving room for interpretation. Outcome 1 'National capacities for implementing the updated POPs Global Monitoring Plan (GMP) are strengthened' should have been followed up with an explanation of the desired capacities and tangible targets for strengthening, and Outcome 2 'Conditions for sustainable monitoring of POPs in the Asian region are in place' lacks substance if the term, 'Conditions', was not investigated and detailed. Designing relevant indicators would lead to a better understanding of the direction of the project. During the project implementation, monitoring did not consistently prompt preventive action. Indicators lacked milestone specificity in parts. Furthermore, excessive implementation delays were driven by SSFA/legal bottlenecks, ethics approvals, and late-cycle publication processes. To address these issues, monitoring should be done reactively rather than preventively.
Cross-reference(s) to relevant paragraphs	2, 7, 10, 115, 119, 125, 137
Priority Level:	High level

Type of Recommendation	Project level
Responsibility:	UNEP Task/ Project Manager
Proposed implementation time-frame:	Within one year, during the inception stage of the next phase of the project

Recommendation #7:	**Recommendation for the future phase of the project to provide necessary support to the countries/partners for a better understanding of co-financing and its reporting.**
Challenge/problem to be addressed by the recommendation:	The evaluation reveals that co-financing reporting among the project's co-financing partners was inconsistent and incomplete. This might potentially prevent effective financial tracking and financial management as a whole. Furthermore, particularly as most of the co-financing was provided in kind rather than in cash for this project, the lack of understanding of co-financing reporting also adversely affected financial management.
Cross-reference(s) to relevant paragraphs	45, 49, 95, 97, 110, 122
Priority Level:	Medium level
Type of Recommendation	UNDP-wide
Responsibility:	Relevant Units in UNEP
Proposed implementation time-frame:	Within one year, during the inception stage of the next phase of the project

Recommendation #8:	**Recommendation for the future phase of the project to develop and promote specific gender mainstreaming project metrics based on analysis of gender equality and women's empowerment issues in the respective regions and countries.**
Challenge/problem to be addressed by the recommendation:	The project was developed at a time when gender action plans were not required, and, hence, the project results framework did not include gender-responsive indicators and targets. However, through a focused gender analysis, gender-specific issues associated with differences in exposure, health impacts, and participation related to POPs monitoring would help inform a gender-responsive action plan for future projects.
Cross-reference(s) to relevant paragraphs	9, 10, 121, 124
Priority Level:	Medium level
Type of Recommendation	Project level
Responsibility:	UNEP Task/ Project Manager
Proposed implementation time-frame:	Within one year, during the inception stage of the next phase of the project

ANNEX I. EVALUATION FRAMEWORK

EVALUATION QUESTIONS	METHODS	SOURCES OF INFORMATION
Strategic Questions		
Q1: To what extent did the project incorporate lessons learned from the previous phase and any recommendations from its own Mid Term Review?	• Evidence of lessons from Phase 1 incorporated into design/implementation • Actions taken in response to MTR recommendations • Changes in approach from Phase 1 to Phase 2	• Project Document • Terminal Evaluations of Phase 1 projects • Mid-Term Review • PIR reports/progress reports • Interviews with PM/TM and staff involved in both phases • Interviews with key stakeholders & online survey
Q2: To what extent did the project promote cross learning/knowledge sharing with three other GMP regional projects? How did the project benefit from having three other regional projects?	• Evidence of coordination mechanisms with other regional projects • Joint activities or knowledge products • Shared methodologies or approaches • Benefits derived from multi-regional approach	• PIR reports/progress reports • Meeting minutes from inter-regional coordination • Knowledge products • Interviews with PMs of all regional projects • Interviews with global coordination staff • Interviews with key stakeholders & online survey
Q3: How did the project link scientific monitoring data with decision making at various levels?	• Evidence of monitoring data used in policy decisions • Mechanisms for translating scientific data to policy advice • Uptake of monitoring results by decision-makers • Policy changes informed by project data	• PIR reports/progress reports • GMP regional/global reports • Policy documents referencing monitoring data • Interviews with policy makers • Interviews with Stockholm Convention focal points • Interviews with key stakeholders & online survey
Q4: How were the national-level monitoring mechanisms integrated or coordinated with POPs monitoring under GMP?	• Alignment between national monitoring programs and GMP Integration of national priorities into GMP activities • Coordination mechanisms between national and global monitoring • Sustainability of integrated approaches	• PIR reports/progress reports • National monitoring plans • GMP coordination documents • Interviews with national focal points • Interviews with laboratory staff • Interviews with key stakeholders &

EVALUATION QUESTIONS	METHODS	SOURCES OF INFORMATION
Q5: To what extent have data from the project been included in the data warehouse and is there evidence of this data being used in subsequent effectiveness evaluation report?	• Inclusion of project data in regional/global GMP reports after following-up with BRS Secretariat and SC GMP to obtain formal confirmation of data acceptance status and expected utilization timeline. • Quality assessment of data by GMP coordination groups Acknowledgment of project contributions in official documentation Utilization of project methodologies in broader GMP context	• GMP regional/global reports • BRS Secretariat documentation • COP decisions referencing monitoring data • Interviews with BRS Secretariat staff • Interviews with regional GMP coordinators • Interviews with key stakeholders & online survey
Q6: To what extent have inter-lab assessments contributed to laboratories from developing countries improving their quality assurance/quality control (QA/QC) practices and ultimately improving the quality of analysis?	• Laboratory performance improvements over assessment rounds Adoption of standardized procedures • Quality of data reported by participating laboratories • Laboratory staff capacity development	• Interlaboratory assessment reports • Laboratory performance metrics • Quality assurance documentation • Interviews with laboratory staff • Interviews with expert laboratory representatives • Interviews with key stakeholders & online survey
Q7: In what ways, and to what extent, have the needs and interests of differentiated groups been considered in the implementation and monitoring of the project?	• Inclusion of gender considerations in project activities Consideration of vulnerable populations in sampling design Differentiated impacts identified through monitoring • Specific measures to address needs of different groups	• Project Document • Gender analysis documents • PIR reports/progress reports • Sampling protocols • Interviews with key stakeholders & online survey
Q8: What changes were made to adapt to the effects of COVID-19 and how might any changes affect the project's performance?	• Adaptive measures implemented in response to COVID-19 Impact of COVID-19 on project timeline and deliverables Innovative solutions	• Project revision documents
Strategic relevance		
Key questions: To what extent were the Project objectives and expected outcomes relevant to global, national and local development environmental strategies and priorities? How well are the project objective and expected outcomes and outputs suited to the priorities, policies and strategies of the implementing agencies, donors and target groups?		
Alignment to the UNEP Medium term strategy (MTS), programme of Work (POW), and other strategic priorities		
• To what extent was the POPs GMP project aligned with UNEP's mandate and how did it contribute to the Expected Accomplishment 5(b) and Output 522? • How did the project contribute to UNEP's strategic priorities including the Bali Strategic Plan for Technology Support and Capacity Building	• Degree of alignment with UNEP MTS 2014-2017 and PO • Extent of contribution to Output 522: "Thematic Assessments of environmental transport and fate of chemicals, and monitoring of trends in	• UNEP MTS 2014-2017 • UNEP POW documents • Project Document • PIR reports/progress reports • Interviews with UNEP staff

EVALUATION QUESTIONS	METHODS	SOURCES OF INFORMATION
(BSP) and South-South Cooperation (S-SC)? • To what extent did the project reflect UNEP's programmatic objectives and priorities?	chemicals production, handling, movement, use, release and disposal..." • Evidence of alignment with BSP objectives for capacity building • Evidence of South-South cooperation promotion	• PM/TM • UNEP Chemicals Strategy documents • Interviews with key stakeholders & online survey
Alignment to Donor Strategic Priorities GEF		
• To what extent was the project aligned with GEF-5 Chemicals Strategy and the POPs focal area strategic objectives? • How did the project contribute to the implementation of the Stockholm Convention, particularly Article 16 on effectiveness evaluation? • How did the project support global efforts to monitor and assess POPs?	• Degree of alignment with GEF-5 Chemicals focal area objectives • Contribution to Stockholm Convention's Global Monitoring Plan • Alignment with other relevant donor strategic policies	• Project Document • GEF-5 Strategy documents • PIR reports/progress reports • Interviews with PM and GEF Liaison • Stockholm Convention documents relating to GMP • Interviews with key stakeholders & online survey
Relevance to Regional, Sub- Regional and national Environmental Priorities		
• To what extent did the project respond to the stated environmental concerns and needs of the 15 participating African countries? • How well did the project align with National Implementation Plans (NIPs) for the Stockholm Convention in participating countries? • Did the project address regional monitoring capacity needs identified through the GMP implementation and the first phase projects?	• Degree of alignment with regional and national priorities • Consistency with National Implementation Plans • Relevance to specific monitoring needs identified by participating countries • Evidence of stakeholder endorsement of project objectives	• Project Document • National Implementation Plans • Regional strategies • PIR reports/progress reports • Interviews with PM/TM, regional coordinators (ETQCL and UoN), and Project Steering Group (PSG) • Interviews with key stakeholders & online survey Interviews with government representatives
Complementarity with existing interventions		
• To what extent did the project take into account ongoing and planned initiatives at design stage? • How did the project coordinate with other relevant initiatives, particularly the WHO human milk survey, the MSP project on new POPs analytical methods, and the other three regional GMP projects? • What efforts were made to ensure synergies with other UNEP, GEF and partner initiatives, and to avoid duplication?	• Degree of potential synergies identified • Absence of duplication of efforts • Evidence of complementarities with the first phase GMP projects and other sister projects • Level of coordination with WHO human milk survey and BRS Secretariat activities	• Project Document • PIR reports/progress reports • Interviews with PM/TM and PSG • Interviews with other project managers (WHO milk survey, other regional GMP projects) Documentation on coordination mechanisms Interviews with representatives of complementary initiatives • Interviews with key stakeholders &

EVALUATION QUESTIONS	METHODS	SOURCES OF INFORMATION
		online survey
Quality of Project Design		
Key question: How adequate was the Project design to achieve the Project Outputs, Outcomes and Objectives?		
Relevance and logic of Project Objectives, activities, Outputs and Outcomes according Project Quality Design template.		
• How logically constructed was the causal pathway from activities to outputs to outcomes? • Were the project objectives SMART (Specific, Measurable, Achievable, Relevant, Time-bound)? • How appropriate were the indicators for monitoring project implementation? Was the project design technically sound considering the specific requirements for POPs monitoring? • To what extent did the design incorporate lessons learned from the first phase of GMP projects?	• Result of Overall Project Design Quality rating • Clarity and logic of results framework • Quality of indicators and targets Appropriateness of project design for building regional POPs monitoring capacity	• Project Document (original and revised) • Project review sheets • Terminal Evaluations of first phase • GMP projects • Interviews with PM/TM and PSG • Documentation of project design process • Interviews with key stakeholders & online survey
Nature of External Context		
Key question: To what extent does the project consider external factors which might have an effect on project implementation?		
Aspects related to external operating context		
• What external factors affected project implementation (e.g., political stability, conflicts, security issues, natural disasters, COVID-19)? • How did the COVID-19 pandemic specifically impact project activities, particularly in 2020-2021? • What challenges were encountered related to customs clearance for shipment of equipment and samples? • How did personnel changes and institutional arrangements affect project implementation? • What steps were taken to mitigate these external challenges?	• Number of project delays related to external factors • Evidence of adaptive management in response to external challenges • Number of samples collected versus planned • Extent to which COVID-19 affected project timelines • Barriers related to customs clearance and bureaucratic procedures	• Project Document • PIR reports/progress reports • Final report • Project revision documents • Interviews with PM/TM and PSG • Interviews with laboratory staff and regional coordinators • Interviews with government representatives • Interviews with key stakeholders & online survey
Effectiveness		
Key question: To what extent did the projects achieve the expected results at various levels, including Outcomes and Outputs?		
Availability of Outputs		
• To what extent were the planned outputs delivered on time and to the expected quality? • Were the technical and administrative support mechanisms for project	• Number of countries conducting sampling in abiotic and biotic matrices • Quality of training reports for analysis of abiotic	• Project Document • PIR reports/progress reports

EVALUATION QUESTIONS	METHODS	SOURCES OF INFORMATION
implementation effectively established? • How successful was the capacity building for air and water sampling and analysis, and human milk sampling? • Were high-quality data generated and reported for POPs in the core matrices (air, water, human milk)? • To what extent were interlaboratory assessments conducted and what was their quality? • Were the assessment reports for regional GMP reporting and roadmap for sustainable POPs monitoring produced?	and biotic matrices • Number of sectoral reports developed • Number of rounds of interlaboratory assessments held • Number of countries with high-quality data reported • Quality of assessment reports for regional GMP reporting • Quality of roadmap for sustainable POPs monitoring	• Training reports • Laboratory assessment reports • Sectoral reports on POPs analysis • Human milk survey reports • Regional roadmap document • Interviews with PM/TM and PSG • Interviews with laboratory staff and regional coordinators • GMP data submissions • Interviews with key stakeholders & online survey
Achievement of Project Outcomes		
• To what extent were the five expected outcomes achieved? • Was regional network and national capacity to carry out air, water, and human milk sampling enhanced in the African region? • Was high-quality data generated on the presence of initial and new POPs in the region? • Was the accuracy of POPs assessment consolidated through performance evaluation of national laboratories? • Was a roadmap for sustainable POPs monitoring developed? • To what extent were these outcomes a direct result of the project's interventions?	• Number of countries with demonstrated capacity to undertake sampling and analysis • Number of countries with reported data on up to 23 POPs • Quality of data submitted to GMP • Evidence of improved analytical capacity in participating laboratories • Existence of a regional roadmap for sustainable POPs monitoring • Evidence of contribution to regional GMP report	• Project Document • PIR reports/progress reports • Final report • Regional GMP report contributions • Assessment reports • Laboratory performance evaluations • Roadmap document • Interviews with PM/TM and PSG • Interviews with laboratory staff and regional coordinators • Interviews with key stakeholders & online survey
Likelihood of impact		
• What is the likelihood of the intended positive impacts becoming a reality? • To what extent has the project played a catalytic role in promoting continued POPs monitoring beyond the project period? • How likely is the project to contribute to long-term environmental and health benefits through improved understanding of POPs presence and transport? • To what extent has the project contributed to the Global Monitoring Plan's effectiveness evaluation under the Stockholm Convention? • Is the project likely to contribute to the SDGs, particularly SDGs 3, 6, 12, and 17?	• Evidence of institutional arrangements in place for continued POPs monitoring • Indicators of sustained analytical capacity • Evidence of integration of POPs monitoring into national programs • Adoption of monitoring approaches beyond the project • Evidence of POPs data being used in decision-making • Contribution to Stockholm Convention effectiveness evaluation	• Likelihood of Impact Assessment • Reconstructed Theory of Change • Project Document • PIR reports/progress reports • Final report • Roadmap document • Interviews with PM/TM and PSG • Interviews with Stockholm Convention focal points • Interviews with BRS Secretariat representatives

EVALUATION QUESTIONS	METHODS	SOURCES OF INFORMATION
		• Interviews with key stakeholders & online survey
Financial Management		
Key question: How conducive was the financial management for the achievement of project Outputs and Outcomes?		
Adherence to UNEP's financial policies and procedures		
• Was the project implemented in compliance with UN/UNEP financial management standards and procedures? • Were financial resources used efficiently and effectively? • Were there any issues with financial management that affected project delivery?	• Approval of contracting documents and financial reports • Alignment of expenditures with approved budget • Evidence of financial controls and compliance	• Project budget • Financial reports • Audit reports • Interview with UNEP Fund Management Officer (FMO) • Interviews with PM/TM and financial staff • Interviews with key stakeholders & online survey
Completeness of financial information		
• Was the project's financial information complete and transparent? • What was the actual expenditure across the life of the project compared to the planned budget? • What changes were made to the project budget and why? • How was co-financing realized compared to commitments?	• Completeness of financial documentation • Quality of financial reporting • Evidence of budget management and revisions • Realization of co-financing commitments	• Project budget • Financial reports • Budget revision documents • Co-financing reports • Audit reports • Interview with UNEP FMO • Interviews with key stakeholders & online survey
Communication between financial and Project management staff		
• How effective was the communication between project management and financial management staff? • Did communication affect project efficiency? • How were financial issues addressed throughout project implementation?	• Evidence of regular financial reporting • Timeliness of financial decisions • Alignment of financial management with project needs • Examples of financial issue resolution	• Project budget • Financial reports • Meeting minutes • Interview with UNEP FMO • Interviews with PM/TM and PSG • Interviews with project partners that received financial support • Interviews with key stakeholders & online survey
Efficiency		

EVALUATION QUESTIONS	METHODS	SOURCES OF INFORMATION
Key question: To what extent and how were cost-effectiveness and timeliness considered during Project implementation? How did these factors affect Project performance? The extent to which results have been delivered with the least costly resources possible?		
Cost-effectiveness and timeliness of Project execution		
• Were cost or time-saving measures implemented during the project? • To what extent did the project make use of existing institutions, partnerships, and data sources to increase efficiency? • How appropriate was the use of passive air samplers versus active samplers in terms of efficiency and effectiveness? • Were activities sequenced efficiently? • How effective was the project's governance structure (e.g., Project Steering Committee [PSC], regional coordination) in supporting efficient implementation? • Which factors caused delays and how did they affect project execution and effectiveness? • To what extent have project results been delivered with the least costly resources possible?	• Number of cost-saving measures implemented • Use of existing structures and partnerships (e.g., ETQCL, UoN) • Timeliness of implementation versus original schedule • Number of project extensions and reasons • Evidence of adaptive management to improve efficiency • Cost-effectiveness of sampling approaches	• Project Document • PIR reports/progress reports • Financial reports • Project revision documents • PSC meeting minutes • Interviews with PM/TM and PSG • Interviews with regional coordinators • Interviews with key stakeholders & online survey
Monitoring and Reporting		
Key question: How were monitoring, evaluation and reporting used to support, adapt and improve Project implementation?		
Monitoring of project implementation		
• To what extent was the monitoring system operational and facilitated tracking of results? • How effectively did the project gather relevant baseline data? • How was monitoring information used to adapt and improve project execution? • Were funds allocated for monitoring actually used to support this activity? • How effectively was project performance tracked against Core Indicator Targets?	• Quality and regularity of progress reports • Evidence of monitoring data being used for decision-making • Completeness of monitoring records • Performance against Core Indicator Targets	• Project Document • PIR reports • Progress reports • Monitoring reports • Mid-Term Review • Interviews with PM/TM and PSG • Interviews with key stakeholders & online survey • Project revision documents
Project reporting		
• Were project status reports delivered in a timely manner? • How well did reporting fulfill UNEP and GEF requirements? • To what extent have other UNEP and donor reporting requirements been fulfilled?	• Timeliness of report submission • Quality of reports (PIRs, progress reports) • Compliance with reporting requirements • Stakeholder satisfaction with reporting	• Project Document • PIR reports • Half-yearly progress reports • PSC meeting minutes • Interviews with TM and PSG • • Interviews with key stakeholders & online survey

EVALUATION QUESTIONS	METHODS	SOURCES OF INFORMATION
Sustainability		
Key questions: How do socio-political, financial and institutional factors affect the probability of Project Outcomes being maintained and developed after the Projects end? How likely is that the project will continue to deliver benefits after the project has ended?		
Socio-political sustainability		
• What is the level of ownership, interest and commitment among governments and other stakeholders? • What is the likelihood that project achievements will be maintained at the national level by government agencies? • Is there evidence of capacity development being sustained? • Has increased capacity in the countries been sustained to the present?	• Number of follow-up initiatives by governments • Evidence of POPs monitoring being integrated into national programs • Level of ownership demonstrated by national stakeholders • Evidence of continued operation of sampling networks	• Project Document • PIR reports/progress reports • Final report • Roadmap document • Interviews with PM/TM and PSG • Interviews with key stakeholders & online survey Interviews with government representatives
Financial sustainability		
• To what extent are project outcomes dependent on future funding? • Is there government funding secured to sustain POPs monitoring activities? • What efforts have been made to secure funding for future monitoring activities? • Is there any evidence of new projects or initiatives building on this project (such as the Global Chemicals Monitoring Programme)?	• Evidence of budget allocations for continued monitoring • Funding commitments from governments • Existence of resource mobilization strategies • Funding secured for follow-up activities • Evidence of integration in national budgets	• Project Document • PIR reports/progress reports • Final report • National budget documents • Follow-up project documents (GEF ID 11534) • Interviews with PM/TM and PSG • Interviews with key stakeholders & online survey • Interviews with government representatives
Institutional Sustainability		
• To what extent were institutional frameworks, policies, and governance structures established to support continued POPs monitoring? • Are laboratory facilities and human resources adequate to continue analytical work? • How robust are the established institutional arrangements for sustained POPs monitoring? • How well are regional institutions (ETQCL, UoN) positioned to continue coordination functions?	• Evidence of institutional arrangements for POPs monitoring • Integration of monitoring into national policies • Maintenance of laboratory capacity • Formalization of monitoring responsibilities • Status of regional coordination mechanisms	• Project Document • PIR reports/progress reports • Final report • Roadmap document • Laboratory assessment reports • Interviews with PM/TM and PSG • Interviews with regional coordinators • Interviews with laboratory staff • Interviews with government representatives • Interviews with key stakeholders & online survey

EVALUATION QUESTIONS	METHODS	SOURCES OF INFORMATION
Factors affecting project performance and cross cutting issues		
Key questions: How and to what extent did certain factors – preparation and readiness, quality of Project management and supervision, stakeholder participation and cooperation, responsiveness to human rights and gender, and environmental and social safeguards - affect Project performance?		
Quality of project management and supervision		
• Was project management proactive and responsive to issues encountered? What was the nature of communication and collaboration with stakeholders, regional coordinators, and laboratory networks? • How effective was communication with UNEP staff and the executing agency? How were risks managed and was adaptive management applied? How effective was the project governance structure in facilitating implementation?	• Evidence of adaptive management • Quality of project coordination • Timeliness of management responses • Effectiveness of risk management • Satisfaction of stakeholders with project management	• Project Document • PIR reports/progress reports • PSC meeting minutes • Risk management documentation • Interviews with PM/TM and PSG • Interviews with UNEP Senior staff-Head of Branch • Interviews with regional coordinators • Interviews with laboratory staff • Interviews with key stakeholders & online survey
Stakeholder participation and cooperation		
• Were all important stakeholders properly identified and involved in project implementation? What consultation and communication mechanisms were established to ensure active stakeholder engagement? • What was the quality of participation from government agencies, laboratories, and other key stakeholders? • What measures were taken to ensure inclusion of all differentiated groups? • How were stakeholders' feedback incorporated into project implementation?	• Quality of stakeholder participation plan • Number and diversity of stakeholders actively involved • Evidence of inclusive participation • Stakeholder satisfaction with participation mechanisms • Evidence of stakeholder input influencing project activities	• Project Document • PIR reports/progress reports • PSC meeting minutes • Workshop reports • Interviews with PM/TM and PSG • Interviews with key stakeholders & online survey Interviews with government representatives Interviews with laboratory staff
Responsiveness to human rights and gender equity		
• To what extent did the project apply the UN Common Understanding on the human rights-based approach? • How were gender considerations incorporated into project design and implementation? • How were human milk donors' rights and privacy protected in sampling activities? • Were ethical clearances properly obtained for human milk sampling? • How were vulnerable groups considered in the design of sampling and analysis activities?	• Evidence of gender considerations in project design and implementation • Inclusion of gender-disaggregated data where relevant • Documentation of ethical approvals for human milk sampling • Protection of human subjects' rights and privacy • Consideration of differential impacts on vulnerable groups	• Project Document • PIR reports/progress reports • Gender analysis documents • Ethical clearance documentation • Human milk sampling protocols • Interviews with human milk survey coordinators • Interviews with WHO representatives • Interviews with key stakeholders &

EVALUATION QUESTIONS	METHODS	SOURCES OF INFORMATION
		online survey
Environmental and social safeguards		
• To what extent were UNEP's requirements, with respect to environmental and social • safeguards, met (through the process of environmental and social screening at Project approval stage, risk assessment and management) of potential environmental and • social risks and impacts associated • with Project and programme activities? • To what extent were the following • activities carried out: • Review of risk ratings on a regular basis; • Monitoring of Project implementation • for possible safeguard issues • Providing responses to safeguard issues; • To what extent did the Project management minimize UNEP's environmental footprint? What measures, if any, where taken?	• Frequency of review of risk ratings • Number of monitoring reports that • include monitoring of safeguard issues • Evidence of adequate responses to • safeguard issues	• ProDoc • Project progress reports • Final report • Interviews with PM/TM and PSG • Interviews with key stakeholders & online survey
Country ownership and driven-ness		
• To what extent were governments qualitatively involved in the project? How did the project contribute to embedding changes in national institutions and laboratories? • Did participating countries provide adequate resources (in-kind or financial) to the project? • To what extent do the national agencies consider the needs or interests of all differentiated groups? • How engaged were national focal points in project activities?	• Level of government participation • Evidence of project results integrated into national programs • In-kind and financial contributions from countries • National commitment to POPs monitoring Engagement of national focal points	• Project Document • PIR reports/progress reports • Co-financing reports • National reports to Stockholm • Convention • Interviews with national focal points • Interviews with government representatives Interviews with laboratory staff • Interviews with PM/TM and PSG • Interviews with key stakeholders & online survey
Communication and public awareness		
• How were learning and experience shared between project partners? What public awareness activities were undertaken during project implementation? • How effective were communication channels and networks in the project? • To what extent did communication activities influence attitudes or behavior? How were existing communication channels utilized?	• Quality of communication materials • Evidence of knowledge sharing mechanisms • Public awareness activities conducted • Effectiveness of project website or information platforms • Dissemination of project results	• Project Document • PIR reports/progress reports • Communication materials • Project website/information platforms • Workshop reports

EVALUATION QUESTIONS	METHODS	SOURCES OF INFORMATION
		• Knowledge products • Interviews with key stakeholders & online survey Interviews with PM/TM and PSG

ANNEX II. STAKEHOLDERS CONSULTED DURING THE EVALUATION

Stakeholders consulted during the evaluation

Organization	Title	Role in the project	Gender
UN Environment Programme	Programme Management Officer, Chemicals and Waste Unit, Chemicals and Health Branch, Industry and Economy Division	Task Manager	Male
UN Environment Programme	Associate Programme Management Officer, Chemicals and Waste Unit, Chemicals and Health Branch, Industry and Economy Division	Assisting Task Manager	Male
UN Environment Programme	Fund Management Officer (FMO), Chemicals and Waste Unit, Chemicals and Health Branch, Industry and Economy Division	Fund Management Officer (FMO)	Male
UN Environment Programme	Associate Programme Management Officer, Knowledge and Risk Unit (KRU), Chemicals and Health Branch, Industry and Economy Division	Project Manager	Female
UN Environment Programme	Head of KRU, Chemicals and Health Branch, Industry and Economy Division	Former Task Manager	Male
UN Environment Programme	Programme Management Officer, KRU, Chemicals and Health Branch, Industry and Economy Division	Supervisor of Project Manager	Female
UN Environment Programme	Programme Management Analyst, KRU, Chemicals and Health Branch, Industry and Economy Division	Technical expert, project support	Male
Chemisches und Veterinaeruntersuchungsamt Freiburg (CVUA) – European Union Reference Laboratory for Pesticides in Food of Animal Origin and Commodities with High Fat Content	Director	Expert laboratory (Provision of expertise to analysis of samples)	Male
Department of Environment and Health, Vrije Universiteit (Netherlands, IVM)	Emeritus Professor	Expert laboratory (Provision of expertise to analysis of samples)	Male
RECETOX – Stockholm Convention Regional Centre hosted by Masaryk University, Czech Republic	Director	Expert laboratory (Provision of expertise to analysis of samples)	Female

Organization	Title	Role in the project	Gender
Basel Convention Coordinating Centre, Stockholm Convention Regional Centre, for Capacity Building and Transfer of Technology hosted by Uruguay (BCCC-SCRC-LATU)	Co Director	Expert laboratory, ROG member (cum Global Coordination Group coordinator) (Use of data generated by project)	Female
Secretariat of the Basel, Rotterdam and Stockholm Secretariat	Senior Programme Management Officer	Partner (Coordination of GMP process for Stockholm Convention)	Female
The International Panel of Chemical Pollution (IPCP), Swiss Federal Institute of Technology (ETH Zurich)	Professor	Partner (Undertaking of grants from projects for specific work)	Male
Basel Convention Regional Centre for Training and Technology Transfer for the English-Speaking African Countries (BCRC-South Africa)/Stockholm Convention Regional Centre For Capacity-Building and the Transfer of Technology (SCRC-South Africa)	Project Manager	Partner (Regional-specific work/support for POPs GMP Africa project)	Male
Regional Organization Group	ROG member at global level (cum Global Coordination Group coordinator/co-chair)	ROG (Use of data generated by project)	Male
Waste Management Regulatory Agency (WMRA), Ministry of Environment (MOE)	Director, Final Disposal Department/ Stockholm Convention National Focal Point	Egypt National Coordinator	Female
University of Nairobi	Dr., Lecturer, Department of Chemistry, Faculty of Science and Technology	Kenya National Coordinator	Male
Ministère de l'Environnement, de l'Assainissement et du Développement Durable Département Direction Nationale de l'Assainissement et du Contrôle des Pollutions et des Nuisances (DNACPN)	Directeur National Adjoint de la DNACPN et Point focal de la convention de Stockholm sur les Polluants Organiques Persistants (POPs).	Mali National Coordinator	Male
National Environmental Laboratory, Ministry of Environment, Solid Waste Management and Climate Change National Laboratories Complex Reduit	Senior Scientific Officer	Mauritius Project Implementation Officer	Female
National Environmental Laboratory	Scientific Officer	Acting National Coordinator	Female
Laboratoire National des Etudes et de Surveillance de la Pollution; Ministère de la Transition Energétique et du Développement Durable	Directeur et Secrétariat Général du Département du Développement Durable	Morocco National Coordinator	Male

Organization	Title	Role in the project	Gender
Federal Ministry of Environment	Assistant Director of Pollution Control and Environmental Health	Nigeria National Coordinator	Male
Unite Chimie Organique Direction Des Laboratoires Tunis Tunisia	Chef Unite Chimie Organique	Tunisia National Coordinator	Female
Operation Department, Zambia Environmental Management Agency	Acting Director	Zambia National Coordinator	Male
Regional Organization Group	Regional Organization Group (ROG) member (cum Global Coordination Group coordinator/co-chair)	ROG	Male
Regional Organization Group	ROG member	ROG	Female
Regional Organization Group	ROG member (cum Global Coordination Group member)	ROG	Male

ANNEX III. PROJECT IMPLEMENTATION STRUCUTRE

The implementation of the project "Continuing Regional Support for the POPs Global Monitoring Plan under the Stockholm Convention in the Africa Region" (GEF ID 4886) followed a multi-tiered structure that combined global oversight with strong regional and national delivery. At the highest level, the United Nations Environment Programme (UNEP), through its Chemicals and Waste Unit in the Industry and Economy Division, acted as the GEF Implementing Agency. In this role, UNEP provided strategic oversight, ensured compliance with GEF and UNEP requirements, and supervised overall project progress. Execution was entrusted to UNEP's Knowledge and Risk Unit within the same division, which managed day-to-day operations, coordinated technical activities, and liaised with national and regional partners to ensure the smooth delivery of outputs.

The project governance was supported by a Project Steering Committee, which met 16 times during the project's lifespan. The Steering Committee served as a forum for joint decision-making, review of progress and financial performance, validation of annual work plans, and discussion of key strategic issues. Its inclusive composition, bringing together UNEP staff, national focal points, and technical partners, ensured that implementation was guided by both global expertise and national realities.

At the country level, the Ministries of Environment in the 15 participating African countries acted as the national focal points for the Stockholm Convention, providing coordination, mobilizing co-financing, and integrating POPs monitoring into national frameworks. In Mauritius, the Senior Scientific Officer and Scientific Officer were designated as Project Implementation Officers, responsible for technical coordination, day-to-day implementation, and reporting to UNEP, rather than serving as National Coordinators. National POPs laboratories carried out the core technical tasks of sampling and analysis of air, water, and human milk, as well as matrices of national interest. They also participated in inter-laboratory assessments, which were crucial to ensuring the credibility and comparability of data. Complementing this, Ministries of Health and Public Health Institutes provided oversight for the human milk sampling component, ensuring ethical procedures, informed consent, and engagement with communities.

The regional dimension of the project was anchored by two African institutions: the University of Nairobi in Kenya and the Environmental Toxicology and Quality Control Laboratory (ETQCL) in Mali. These acted as regional delivery hubs, supporting laboratory analysis, training, and coordination. The African Regional Organization Group (ROG-Africa) further reinforced regional collaboration, serving as a platform for technical guidance, peer exchange, and alignment of national monitoring with regional strategies.

Global expert laboratories played a central role in strengthening technical quality and capacity. Institutions such as CVUA Freiburg in Germany, Vrije Universiteit Amsterdam in the Netherlands, Örebro University in Sweden, and CSIC in Spain conducted inter-laboratory assessments, provided specialized training, and carried out "mirror analyses" of African samples to validate the data. RECETOX in the Czech Republic, serving as a Stockholm Convention Regional Centre, hosted the Global Monitoring Plan (GMP) Data Warehouse, offered training, and acted as a knowledge hub. Intergovernmental organizations were also closely involved: the World Health Organization provided technical guidance on biomonitoring protocols and coordinated aspects of the human milk surveys, while the Basel, Rotterdam and Stockholm (BRS) Secretariat ensured that project results contributed directly to the global effectiveness evaluation under the Convention.

Knowledge management and communication were integrated throughout implementation. Training workshops, inter-laboratory comparisons, and regional meetings provided

opportunities for capacity building and exchange of experiences. UNEP developed platforms such as a laboratory databank and a data dashboard integrated into the World Environment Situation Room to improve the use of monitoring data in policy processes. The project's final regional workshop, held in Casablanca in November 2023, brought together all countries and partners to review achievements, consolidate lessons learned, and endorse a roadmap for the sustainability of POPs monitoring in Africa.

In practice, this structure ensured that implementation worked as an interconnected system: UNEP provided global leadership and technical execution; national governments and laboratories delivered on-the-ground sampling and analysis; regional institutions anchored capacity building and coordination; expert laboratories guaranteed quality and credibility; and the Steering Committee created a space for joint oversight and accountability. This combination of global, regional, and national action enabled the project to deliver high-quality monitoring data while strengthening long-term capacities for the implementation of the Stockholm Convention in the African region.

ANNEX IV. KEY DOCUMENTS CONSULTED

- Terms of Reference for the Terminal Evaluation of the UNEP/GEF project "Continuing Regional Support for the POPs Global Monitoring Plan under the Stockholm Convention in the Africa Region" (GEF ID 4886)
- Request for CEO Endorsement POPs GMP Africa;
- Stakeholders List POPs GMP Africa;
- Project Identification Form (PIF);
- UNEP Evaluation Tools/Guidelines
- GEF Secretariat Review for Full/Medium-Sized Projects: The GEF/LDCF/SCCF Trust Funds
- 12-15-2014_ID4886__Council_Notification
- Scientific and Technical Advisory Panel
- Financial Reports
- Progress Reports
- Project Steering Committee minutes
- Technical outputs
- Project Implementation Report PIR 2018
- Project Implementation Report PIR 2019
- Project Implementation Report PIR 2020
- Project Implementation Report PIR 2021
- Project Implementation Report PIR 2022
- Project Implementation Report PIR 2023
- Project Implementation Report PIR 2024

ANNEX V. ENVIRONMENTAL AND SOCIAL SAFEGUARDS ASSESSMENT

ESS PLANNING AT PROJECT DESIGN	
List any ESS issues identified at project design	SS1.1 (environmental and social risk screening), SS2.1 (human rights and social equity), SS3.1 (gender equality and women's empowerment), SS4.2 (community health, safety and security), SS7.1 (pollution prevention and resource efficiency).
For any ESS issues identified at project design, were mitigation strategies developed (Y/N)? (If yes, briefly describe)	Yes – The project was screened as low-moderate risk. UNEP and national laboratory safety standards were applied for sample handling and waste disposal; ethical approvals and informed consent were required for human milk sampling; gender-sensitive participation and data collection were ensured through inclusion of female participants and disaggregation where possible.
Were any gaps in ESS issues identified at the evaluation inception phase (Y/N)? (If yes, briefly describe)	Yes – The inception phase noted that while safeguards were effectively applied, explicit integration of human rights principles and gender analysis could be strengthened.

ESS MONITORING AT PROJECT IMPLEMENTATION	
Is there evidence that the potential emergence of ESS issues was actively monitored during project implementation (Y/N)? (If yes, briefly describe)	Yes – ESS aspects were monitored through UNEP supervision, Project Steering Committee meetings, and partner reporting. Laboratory operations and sampling followed UNEP biosafety and waste management protocols, while ethical procedures for human milk sampling were regularly reviewed. No new environmental or social risks emerged during implementation.
Is there a justification for the absence of ESS monitoring (Y/N)? (If yes, briefly describe)	N/A – ESS monitoring was integrated into project management and supervision processes; therefore, no absence of monitoring required justification.

MANAGEMENT RESPONSIVENESS DURING PROJECT IMPLEMENTATION	
Identify the ESS issues/events triggered by the project.	Minor risks associated with laboratory chemical handling, biological sampling (human milk), and waste disposal. No major environmental or social issues were triggered.
Describe consequences of ESS issues/events during project implementation.	No significant adverse effects occurred. Potential risks were limited to routine laboratory safety concerns and ethical management of human samples, all of which were effectively contained through established protocols.
Describe the management response and identify supporting documentation.	UNEP and national laboratories applied biosafety and chemical waste management procedures in line with UNEP standards. Ethical oversight for human milk sampling was ensured through informed consent and national ethical approvals. Compliance was verified through project supervision reports, training records, and QA/QC documentation.

Were negative ESS effects offset by management response (Y/N)? (If yes, briefly describe)	Yes – Risks were mitigated proactively through training, supervision, and adherence to UNEP and WHO ethical and safety standards, preventing any adverse ESS outcomes.

ANNEX VI. BRIEF CV OF THE EVALUATOR

Name	Elinor Bajraktari
Profession	Consultant
Nationality	Canada
Country experience	• Europe: Albania, Kosovo, Belarus, Ukraine, Bosnia and Herzegovina, Montenegro, Serbia, Moldova, Slovakia, North Macedonia, Ireland • Asia & Pacific: Afghanistan, Myanmar, Laos, China, India, Thailand, Bhutan, Nepal, Cambodia, Uzbekistan, Kyrgyzstan, Kazakhstan, Tajikistan, Azerbaijan, Georgia, Armenia, Turkmenistan, Iran, Turkey, Vietnam, Papua New Guinea, Pacific Region • Africa: Mozambique, Mali, South Africa, Lesotho, Kenya, Sierra Leone, Somalia, South Sudan, Uganda, Zambia • Arab Region: Bahrain, Saudi Arabia, Kuwait, Egypt, Lebanon, Iraq • Americas: Canada, USA, Chile, Belize, Trinidad & Tobago, Barbados, Jamaica, Guyana, Saint Martin, Suriname
Education	Master's degree in Public Administration

Short biography

The consultant who conducted this review is an experienced public policy professional with over 20 years of diverse international experience. He has an extensive background in program management and evaluations, impact studies, policy assessments, program design and formulation, results-based management, data analysis, and reporting. His experience spans over 50 countries in Europe, Central Asia, the Middle East, Africa, Southeast Asia, and North America. He has worked for several governments and international organizations like UNDP, World Bank, UNICEF, UNDESA, UNCDF, etc. The consultant holds a Master's degree in Public Administration in International Development from Harvard University's John F. Kennedy School of Government.

Key specialties and capabilities cover:

- Over 15 years of experience in programme and project evaluations, impact studies, policy assessments, and results-based management across 55+ countries.
- Expertise in evaluation methodologies including case study, surveys, outcome mapping, randomized control trials, contribution analysis, participatory evaluation, and utilization-focused evaluation.
- Proven ability to design, implement, and assess large-scale international development programmes for UN agencies, governments, and donor organizations. Strong analytical and reporting skills with proficiency in STATA, SPSS, Tableau, SQL, and other data analysis tools.
- Skilled in public financial management, governance, and institutional capacity development.
- Academic grounding with an MPA in International Development (Harvard University) and ongoing PhD in Political Science (University of Alberta).
- Multilingual: fluent in English and French; advanced Russian; working knowledge of Spanish. Selected assignments and experiences

ANNEX VII. GEF PORTAL INPUTS

The following table contains text to be uploaded to the GEF Portal. **It will be drawn from the Evaluation Report, either as copied or summarised text.** In each case, references should be provided for the paragraphs and pages of the report from which the responses have been copied or summarised.

GEF Portal Inputs

Question: What was the performance at the project's completion against Core Indicator Targets? (For projects approved prior to GEF-7[41], these indicators will be identified retrospectively and comments on performance provided[42]).
Response: As the project was approved prior to GEF-7, Core Indicators were identified retrospectively. Core Indicator 11 (Direct beneficiaries, disaggregated by gender) was the only indicator applicable to the project. Based on participation in the human milk survey and associated capacity-building activities, the evaluation estimates that approximately 450 to 550 individuals were directly engaged. This includes participating mothers, national health personnel supporting sample collection, and laboratory staff involved in analysis. The figure is indicative because gender-disaggregated and beneficiary-specific data were not systematically collected during implementation. No other Core Indicators were relevant to the project's design or results framework.
Question: What were the progress, challenges and outcomes regarding engagement of stakeholders in the project/program as evolved from the time of the MTR? *(This should be based on the description included in the Stakeholder Engagement Plan or equivalent documentation submitted at CEO Endorsement/Approval)*
Response: Stakeholder engagement strengthened after the Mid Term Review. National coordinators, laboratories, and expert partners increased their participation in sampling campaigns, interlaboratory assessments, and regional planning processes. Regional workshops and Steering Committee meetings facilitated regular exchange among countries and contributed to the development of the regional roadmap. However, several challenges persisted. Administrative delays at the country level, including slow legal clearances, ethics approvals, and SSFA processing, continued to affect timely engagement. Staff turnover in national institutions also limited continuity of participation. Despite these constraints, outcomes were positive. All fifteen countries completed sampling activities, contributed data to the Global POPs Data Warehouse, and took part in the final regional workshop, demonstrating stronger engagement and coordination compared to the period before the Mid Term Review.
Question: What were the completed gender-responsive measures and, if applicable, actual gender result areas? *(This should be based on the documentation at CEO Endorsement/Approval, including gender-sensitive indicators contained in the project results framework or gender action plan or equivalent)*
Response:

[41] The GEF is currently operating under the seventh replenishment period of the GEF Trust Fund covering the period July 1, 2018 to June 30, 2022. The GEF Portal Reporting Guide for FY20 Reporting Process indicates that GEF-6 projects that have yet to map existing indicators to GEF-7 Core Indicators need to do so at MTR stage or (if already there) at the time of the TE. .(i.e. not GEF projects approved before GEF-6).

[42] This is not applicable for Enabling Activities.

The project did not include a dedicated gender action plan or gender sensitive indicators at CEO endorsement, as this was not an explicit GEF requirement at the time of approval. Gender responsive measures were therefore limited. The human milk monitoring component incorporated gender considerations through non-discriminatory inclusion criteria, informed consent procedures, and national ethical reviews, which ensured that participating mothers were protected and selected appropriately. Beyond this, the project documents do not show systematic gender disaggregation in training, reporting or stakeholder engagement, and no broader gender result areas were identified. Late-stage reports included isolated gender-disaggregated information on training participation, but this was not consistent across countries and did not constitute a defined gender result. Overall, gender responsiveness was confined to safeguards and ethical procedures within the human milk survey.

Question: What was the progress made in the implementation of the management measures against the Safeguards Plan submitted at CEO Approval? The risk classifications reported in the latest PIR report should be verified and the findings of the effectiveness of any measures or lessons learned taken to address identified risks assessed. *(Any supporting documents gathered by the Consultant during this review should be shared with the Task Manager for uploading in the GEF Portal)*

Response:

The project was approved before the adoption of UNEP's current Environmental and Social Safeguards Policy, and no formal Safeguards Plan was submitted at CEO approval. The project was classified as low risk and was implemented through standard GMP protocols, national ethical approvals for human milk sampling, and routine QA and QC procedures for sampling and analysis. The latest PIRs confirm that no environmental or social risks materialized during implementation and that risk classifications remained low throughout. Ethical screening for human milk donors was completed in all participating countries, and informed consent procedures were verified through national ethics committees. No unintended adverse impacts were identified, and no corrective safeguard measures were required. Overall, safeguards risks were managed appropriately for a low-risk project, and all relevant measures foreseen at approval were implemented.

Question: What were the challenges and outcomes regarding the project's completed Knowledge Management Approach, including: Knowledge and Learning Deliverables (e.g. website/platform development); Knowledge Products/Events; Communication Strategy; Lessons Learned and Good Practice; Adaptive Management Actions? *(This should be based on the documentation approved at CEO Endorsement/Approval)*

Response:

The project implemented a broad Knowledge Management approach consistent with the design approved at the CEO endorsement. Key deliverables were completed, including the regional POPs monitoring dashboard, multi-language guidance materials, standard operating procedures, and sectoral reports on air, water, and human milk. Knowledge products were disseminated through regional workshops, Steering Committee meetings, and technical exchanges with expert laboratories. The communication strategy supported the publication of flagship reports, although several documents experienced substantial delays in UNEP's publication process, which reduced the timeliness of knowledge uptake. Lessons learned were captured through the regional roadmap process and final workshop, and good practices included the harmonization of sampling protocols, interlaboratory feedback loops, and the use of country interest sampling to enhance national relevance. Adaptive management was evident in the development of additional communication materials and the adjustment of workplans following the Mid Term Review. Overall, despite publication delays, the Knowledge Management approach produced substantial technical and communication outputs and supported experience sharing across the 15 participating countries.

Question: What are the main findings of the evaluation?

Response:

The evaluation found that the project successfully delivered the full technical package required under the Global Monitoring Plan. All fifteen participating countries completed sampling for air and human milk and generated high-quality data on twenty-three POPs, exceeding the original target of twelve countries. Six countries also undertook water sampling as planned. National technical capacity was strengthened through extensive training, the establishment of sampling networks, and two rounds of interlaboratory assessments, which improved adherence to protocols and analytical quality. The project produced validated datasets that were uploaded to the Stockholm Convention Global POPs Data Warehouse and were used in the global effectiveness evaluation. A regional roadmap was developed, providing a foundation for longer-term sustainability.

Implementation efficiency was mixed. While the project maintained strong technical delivery, it experienced significant administrative delays, including extended ethical clearances, slow SSFA processing, and a protracted publication process. These delays, compounded by the COVID 19 pandemic, required four no-cost extensions and expanded the implementation period from five to nine years. Financial management followed UNEP and GEF procedures, with adequate controls in place, although country reporting delays periodically slowed cash flow.

The sustainability of outcomes remains uncertain. Although the project strengthened technical capacity and created regional coordination structures, long-term continuation of monitoring depends on domestic financing and political prioritization, which remain limited. The likelihood of sustained impact is therefore rated as Moderately Unlikely.

Gender and safeguards considerations were addressed primarily through ethical procedures for the human milk survey. Beyond this component, gender disaggregation and systematic social safeguards monitoring were limited. No unintended negative environmental or social impacts were identified.

Stakeholder engagement was strong at the technical level. National coordinators, laboratories, and expert partners participated actively in sampling, QA processes, and regional planning. Experience sharing occurred through regional workshops, Steering Committee meetings, and interlaboratory exchanges. The project's knowledge management approach produced substantial technical outputs, including standard operating procedures, sectoral reports, and a monitoring dashboard, although publication delays reduced their timeliness.

Across the six strategic questions, the project demonstrated partial integration of lessons from the previous phase, benefited from harmonized methods used across other regions, contributed directly to global decision-making processes through its data, and aligned national mechanisms with GMP requirements. Interlaboratory assessments significantly improved QA and QC performance among national laboratories.

ANNEX VIII. QUALITY ASSESSMENT OF THE EVALUATION REPORT

Evaluand Title:

Terminal Evaluation: UNEP/GEF Project, "Continuing Regional Support for the POPs Global Monitoring Plan under the Stockholm Convention in the Africa Region (GEF ID 4886)"

All UNEP evaluations are subject to a quality assessment by the Evaluation Office. This is an assessment of the quality of the evaluation product (i.e. evaluation report) and is dependent on more than just the consultant's efforts and skills.

Report Quality Criteria	UNEP Evaluation Office Comments	Final Report Rating
Section A: Executive Summary	Assessment	
1. Does the ***Executive Summary*** act as a concise, accurate standalone section, especially to inform decision-making? Consider how clearly and concisely the report presents: • a clear summary of the evaluation object • evaluation objectives, scope and methodology • the overall project evaluation rating • a summary of main evaluation findings, including key features of performance (strengths and weaknesses) • summary responses to key strategic evaluation questions • summary of main conclusions, lessons learned and recommendations	Coverage/omissions: All required elements are covered. Strengths/weaknesses: The Executive Summary serves as a concise presentation of evaluation analyses, which covers both achievements and drawbacks of the project in a well-balanced manner. Important points of the project's performance are effectively presented, which enables readers to understand the gist of the evaluation report. Gender and human rights dimensions of the project are well described in a separate paragraph. The only minor caveat is that the Executive Summary slightly exceeds the page limit by about 10 lines (about a quarter of one page), but this compromises neither the quality of the report nor its readability. It is still a comprehensive Executive Summary.	5.5
Section B: The Project	Assessment	
2. Does the report clearly describe the ***key parameters, scale and complexity of the evaluand***? Consider how well the report presents: • an overview of the main issue that the project is trying to address • timeline, including dates of project approval, duration and number of phases (where appropriate) • geographic coverage (regions/countries) • total secured budget and project financing, including a table with funding sources • implementing and funding partners • institutional context (i.e. UNEP sub-programme, Division, Branch etc.) • implementation structure with diagram • UNEP results frameworks to which it contributes (e.g. PoW Direct Outcome) • summary of results framework as stated in the ProDoc (or as officially revised) • stakeholder groups organised according to relevant common characteristics • whether the project has been evaluated in the past (e.g. mid-term, by an external agency, etc.)	Coverage/omissions: The section provides all the required information on the project. Strengths/weaknesses: Various project information is well presented in this section, enabling readers to verify key dimensions of the evaluand. Furthermore, stakeholders and project implementation structures are well elaborated. The project financing sub-section is generally well described, but more elaboration on the financial aspects of the project could have enhanced the clarity of the section. Overall, the section is strong and convincing with the abovementioned minor reservation.	5

Report Quality Criteria	UNEP Evaluation Office Comments	Final Report Rating
• substantive or significant changes in design during implementation		
Section C: Evaluation Methods and Theory of Change	Assessment	
3. Does the report present a clear, comprehensive and adequate description of the ***evaluation methodology***? Consider how well it presents the following elements, and their adequacy based on the scope of the evaluation: • statement of the purpose of the evaluation and the key intended audience for the evaluation findings • data collection methods and information sources • justification for methods used (e.g. electronic/face-to-face interviews, qualitative/quantitative analysis) • criteria and sampling strategies used to select stakeholders for consultations, and for sites/countries visited • number and types of respondents *(including in a table broken down by gender)* • strategies used to increase stakeholder engagement and response rate • methods used to include the voices/experiences of different and potentially excluded groups (e.g. women, marginalised) • data verification methods (e.g. triangulation) • data analysis methods (e.g. scoring, thematic analysis) • evaluation limitations and mitigation measures (e.g. how these were addressed by the evaluator) • consideration for ethics and human rights issues, including how anonymity and confidentiality were protected	Coverage/omissions: All required elements are included in the section. Strengths/weaknesses: The section is well elaborated with all the required information, which enables readers to easily understand the details of evaluation methodologies. There is no major weakness in the section. In particular, the methods used to include the voices of women and different excluded groups are well elaborated, especially in conjunction with consideration for ethics and human rights issues, including anonymity and confidentiality. The use of Artificial Intelligence (AI) is also detailed, covering not only the name of the software and usage but also how to ensure the evaluation's credibility and integrity.	6
4. Does the report describe an assessment and reformulation of the ***Theory of Change***, and present an adequate articulation of the TOC causal pathways that were used to assess project performance (*narratively and diagrammatically)?* Consider how well the report presents: • whether the project design included a TOC • how the *TOC at Evaluation*[43] was designed (e.g. who was involved, etc)	Coverage/omissions: Almost all required elements are covered in the section, while how the TOC at Evaluation was designed is only briefly mentioned. Strengths/weaknesses: Reconstruction of the TOC is well done and described properly in the section, incorporating most of the required information.	5

[43] During the Inception Phase of the evaluation process a *TOC at Evaluation Inception* is created based on the information contained in the approved project documents (these may include either logical framework or a TOC or narrative descriptions), formal revisions and annual reports etc. During the evaluation process this TOC is revised based on changes made during project intervention and becomes the *TOC at Evaluation*.

Report Quality Criteria	UNEP Evaluation Office Comments	Final Report Rating
• confirmation/reconstruction of results in accordance with UNEP definitions (*including reformulation table, which may have initially been presented in the Inception Report and should appear in the Main Evaluation report.)* • articulation of causal pathways • identification of drivers and assumptions • identification of key actors in the change process	Together with the reformulation table, causal pathways of the reconstructed TOC are well articulated, with sound analyses, in narrative form, which serves as a core part of this section. The TOC diagram highlights the linkages between different levels of the results. Drivers and assumptions are identified and linked to the respective causal pathways. Indicating the linkages between assumptions/drivers and causal pathways (i.e., different levels of results) in the TOC diagram would have further strengthened the quality of the TOC reconstruction. Key actors in the change process are well analysed. Gender considerations and vulnerabilities of specific population groups are also described in a standalone paragraph.	
Section D: Evidence and Analysis	Assessment	
5. Is the report based on ***sufficient and adequate data*** and ***clear and credible evidence***? Consider how well the report presents: • sufficient evidence that is consistent throughout the report • evidence that is supported by data sources (e.g. quotes, reports, etc) • evidence that is explicitly triangulated, unless noted as having a single source • gaps in data are explained and justified • data sources that are reliable, adequate, sufficient for the scope of the evaluation	Coverage/omissions: Sufficient data and credible evidence are covered in the TE report. Strengths/weaknesses: Evidence, i.e., interviews and documents, is generally well presented to support findings, although these are not necessarily cited in the main texts specifically (the Annex includes lists of interviewees and documents consulted). Triangulation is also occasionally and implicitly done in some parts of the report. The evaluation had difficulty securing interview appointments with national coordinators, partly due to staff turnover within the governments that often resulted from a prolonged project. However, the report clearly states this gap and elaborates on how the evaluator mitigates these challenges. Except for national coordinators that were not available, data sources are adequate and sufficient to support findings and ratings as credible evidence.	5.5
6. Does the report include ***rigorous analysis*** and ***logical findings***? Consider the extent to which the findings are: • supported by clear analysis that is consistent with the evidence presented • logical, clear and coherent • aligned with UNEP's Criteria Ratings Matrix • aligned with the evaluation framework • more than descriptions and provide insights into 'how' and/or 'why' the project performed a certain way • balanced, presenting both successes and weaknesses	Coverage/omissions: The report generally includes rigorous analysis and logical findings. Strengths/weaknesses: In general, findings are supported by clear analysis that is consistent with evidence, which makes the evaluator's argument logical, clear, and coherent. Although not all evidence is articulated in narrative form, readers can generally see many findings being backed up by certain evidence rather than the evaluator's predetermined ideas. Findings and analyses are well aligned with the evaluation framework. Consistent support for	5.5

Report Quality Criteria	UNEP Evaluation Office Comments	Final Report Rating
	findings and performance ratings is ensured in line with UNEP's Criteria Ratings Matrix. Many findings that are derived from the evaluator's in-depth analysis also provide insights that enhance learning. The report is generally well-balanced, demonstrating both successes and weaknesses of the project, based on which lessons learned and recommendations are derived.	
Section E: Evaluation Findings	Assessment	
7. Does the report present evidence and analysis of project ***Strategic Relevance*** with respect to UNEP, partner and geographic policies and strategies at the time of project approval? Consider how well the report addresses: • Alignment to the UNEP Medium Term Strategy (MTS), Programme of Work (POW) and Strategic Priorities • Alignment to Donor/GEF/Partners Strategic Priorities • Relevance to Regional, Sub-regional and National Environmental Priorities • Complementarity with Existing Interventions: complementarity of the project at design (or during inception/mobilisation [44]), with other interventions addressing the needs of the same target groups.	Coverage/omissions: All necessary elements are well covered in the section. Strengths/weaknesses: Alignments to various strategies, policies, and priorities are well elaborated with proper categorization. Overall, relevance analysis is well done in general. The project's alignment to relevant indicators, including the UNEP corporate indicators and the GEF Core Indicator, is also mentioned. Coherence analysis, covering both external coherence and internal coherence, is described. Complementarities and their effects brought from the project to other interventions (and vice versa) are mentioned, but they could have been further analysed and expanded.	5
Does the report present a summary of the strengths and weaknesses of the ***Quality of Project Design***, based on the detailed assessment presented in the Inception Report?	Coverage/omissions: The section presents a summary of the project design, covering both strengths and weaknesses, assuming that details are covered in the inception report in a table format. Strengths/weaknesses: Both strengths and weaknesses of the project design are described in a well-balanced manner, which serves as a good summary of the quality of the project design. Major aspects of the project design are well articulated with concrete examples.	***NOT RATED**
Does the report recognise and describe, when appropriate, key features of the ***Nature of the External Context*** under which the project was implemented that limited the project's performance (e.g. conflict, natural disaster, political upheaval [45]), and how they affected performance?	Coverage/omissions: The section provides a description and analysis of key external features of the project's implementing contexts. Strengths/weaknesses:	***NOT RATED**

[44] A project's inception or mobilization period is understood as the time between project approval and first disbursement. Complementarity during project implementation is considered under Efficiency, see below.

[45] Note that 'political upheaval' does not include regular national election cycles, but unanticipated unrest or prolonged disruption. The potential delays or changes in political support that are often associated with the regular national election cycle should be part of the project's design and addressed through adaptive management of the project team.

Report Quality Criteria	UNEP Evaluation Office Comments	Final Report Rating
	The analysis is well done from multiple perspectives and well described in detail, especially covering political and institutional instability and the COVID-19 pandemic. The section elaborates on 1) how these external factors have affected the project performance, citing many specific country examples, which makes the evaluator's arguments convincing.	
8. Does the report present a well-reasoned, complete and evidence-based assessment of the ***Availability of Outputs*** to the intended beneficiaries? Consider how well the report presents: • a convincing, evidence-supported and clear presentation of the outputs made available by the project compared to its approved plans and budget • assessment of the nature and scale of outputs versus the project indicators and targets • assessment of the timeliness, quality and utility of outputs to intended beneficiaries • identification of positive or negative effects of the project on disadvantaged groups, including those with specific needs due to gender, vulnerability or marginalisation (e.g. through disability).	Coverage/omissions: Almost all elements are well covered, especially the assessments of outputs versus the project output statements, indicators, and targets. Strengths/weaknesses: The project's performance at the output level is elaborated with sufficient detail, referring to the baseline and targets that were set during the project design phase. The availability and details of evidence are also highlighted for each indicator. The assessment of the quality of outputs is generally well analysed, while their timeliness could have been more explicitly mentioned for a few Outputs. EOU notes that 3 indicators under Output 3 could not be assessed due to insufficient data and evidence.	5
9. Does the report present a well-reasoned, complete and evidence-based assessment of the ***Achievement of Outcomes***, as a result of the uptake, adoption and/or implementation of outputs by the intended beneficiaries? This may include behaviour changes at an individual or collective level. Consider how well the report presents: • a convincing and evidence-supported analysis of the uptake of outputs by intended beneficiaries • assessment of the nature, depth and scale of outcomes versus the project indicators and targets • discussion of the contribution, credible association and/or attribution of outcome level changes to the work of the project itself • any constraints to attributing effects to the projects' work • identification of positive or negative effects of the project on disadvantaged groups, including those with specific needs due to gender, vulnerability or marginalisation (e.g. through disability).	Coverage/omissions: The sub-section provides most required information with evidence. Strengths/weaknesses: The Outcome analyses are well done, covering indicator-wise outcome results and the assessment of the nature, depth, and scale of the project outcomes versus the project indicators and targets. The uptake of outputs by intended beneficiaries is also described as well as an explicit identification of positive or negative effects of the project on disadvantaged groups. While the uptake of results is well analysed, a linkage between outputs and outcomes could have been described in more detail, with clearer reference to TOC and causal pathways.	5.5
10. Does the report present an integrated analysis, guided by the causal pathways represented by the TOC, of all evidence relating to ***Likelihood of Impact***? Consider how well the report presents:	Coverage/omissions: The likelihood of impact is described with almost all the required information, including a discussion of drivers and assumptions. Strengths/weaknesses:	5

Report Quality Criteria	UNEP Evaluation Office Comments	Final Report Rating
• an explanation of how causal pathways emerged and the resulting change processes • an explicit discussion of how drivers and assumptions played out • an explanation of roles played by key actors and change agents • identification of any unintended negative effects of the project, especially on disadvantaged groups, including those with specific needs due to gender, vulnerability or marginalisation (e.g. through disability).	The likelihood of impact is well analysed with evidence. Causal pathways towards the impact are well examined in a table format, together with an adequate assessment of the roles of drivers and assumptions in the causal pathways. The roles played by key actors and change agents are briefly mentioned across the section, but could have been more explicit. Identification of the unintended negative effects of the project on disadvantaged groups, including women, could have been more explicitly described.	
11. Does the report present an integrated analysis of all dimensions evaluated under ***Financial Management*** and include a completed 'financial management' table? Consider how well the report addresses the following: • *adherence* to UNEP's financial policies and procedures • *completeness* of financial information, including the actual project costs and actual co-financing used and explanation of any variances between planned and actual expenditures	Coverage/omissions: The section covers almost all the required information. Strengths/weaknesses: Various dimensions of financial management are well analysed, which provides insights into the project's performance in financial management. Especially, *'Adherence to UNEP's Financial Policies and Procedures'* is well analysed with evidence. Meanwhile, the *'Completeness of Financial Information'* part may require a little more explanation or elaboration for better clarity, although it is generally sufficient.	5.5
12. Does the report present an integrated analysis of all dimensions evaluated under ***Efficiency***? Consider how well the report presents: • cost-effective or time-saving measures put in place to maximise results within the secured budget and agreed project timeframe • implications of any delays and no cost extensions • discussion of making use, during project implementation, of/building on pre-existing institutions, partnerships and complementarities with other initiatives, programmes and projects etc. • the extent to which the management of the project minimised UNEP's environmental footprint.	Coverage/omissions: All required information is included in the section. Strengths/weaknesses: Efficiency analysis is well done. In-depth analyses are conducted for two separate themes: timeliness and cost-effectiveness. Especially, issues surrounding repeated no-cost extensions are well analysed to draw a convincing finding regarding the efficiency of the project. A discussion of building on pre-existing institutions and partnerships is generally well articulated.	5.5
13. Does the report present a well-reasoned, complete and evidence-based assessment of the project's ***Monitoring and Reporting***? Consider how well the report addresses the following: • the quality of *monitoring of project implementation* (including use of monitoring data for adaptive management) • the quality of *project reporting* (e.g. PIMS and donor reports)	Coverage/omissions: The section serves as a summary of the Monitoring and Reporting aspect of the project with all required information. Strengths/weaknesses: The section looks at the project's monitoring and reporting function in depth. Various dimensions of the project's monitoring and reporting performance are well elaborated with concrete examples. The detailed analyses include, but are not limited to, the quality of M&E plans, indicators, reporting, and	5.5

Report Quality Criteria	UNEP Evaluation Office Comments	Final Report Rating
	gender/ human rights dimensions of the monitoring and reporting. In addition to these details, the section addresses an overall M&E system that could have helped improve the project's efficiency, which leads to the lessons learned and recommendations.	
14. Does the report present an integrated analysis of all dimensions evaluated under ***Sustainability*** (i.e. the endurance of benefits achieved at outcome level)? Consider how well the report addresses the following: • socio-political sustainability • financial sustainability • institutional sustainability	Coverage/omissions: All required elements are included in the section. Strengths/weaknesses: All three dimensions of sustainability are well analysed to substantiate findings and ratings. Various aspects are well addressed, including political commitments, heavy reliance on external funding, and retention of capacities, which affect the likelihood of sustainability. Especially, institutional sustainability is well analysed with concrete examples, which makes the evaluator's arguments convincing.	5.5
15. Does the report present a well-evidence analysis of the ***Factors Affecting Performance***, either in this section or in cross-referenced sections? *These factors are not always discussed in stand-alone sections and may be integrated in the other performance criteria as appropriate. However, if not addressed substantively in this section, a cross reference must be given to where the topic is addressed, and that entry must be sufficient to justify the performance rating for these factors.* Consider how well the report addresses the following cross-cutting issues: • quality of project management and supervision[46] • stakeholder participation and co-operation • responsiveness to human rights and gender equality • environmental and social safeguards • country ownership and driven-ness • communication and public awareness	Coverage/omissions: The section includes almost all elements that are required for each sub-sections. Strengths/weaknesses: All sub-criteria are well analysed with the required information. Almost all the necessary parameters that are required to determine the respective ratings are generally well described. The section is well articulated and concise. The sub-section, *'Responsiveness to Human Rights and Gender Equality'* could have been elaborated in more detail. However, the human rights and gender dimensions of the project are well captured and analysed from various perspectives across the report, which is one of the strengths of the report.	5.5
Section F: Conclusions, Lessons Learned and Recommendations	Assessment	
16. Do the ***Conclusions*** present a summative assessment of the evaluand as a whole, reflecting on prominent aspects of the project's performance? Consider how well the conclusions:	Coverage/omissions: All required elements are covered in the section. Strengths/weaknesses:	5.5

[46] In some cases, 'project management and supervision' will refer to the supervision and guidance provided by UNEP to implementing partners and national governments while in others, specifically for GEF funded projects, it will refer to the project management performance of the executing agency and the technical backstopping provided by UNEP. This includes providing the answers to the questions on Core Indicator Targets, stakeholder engagement, gender responsiveness, safeguards and knowledge management, required for the GEF portal.

Report Quality Criteria	UNEP Evaluation Office Comments	Final Report Rating
• provide a compelling narrative and integrated assessment of project project's performance (i.e. achievements and limitations) • add deeper insights and analysis beyond the findings under each individual criterion • are derived from the synthesized analysis of evidence gathered during the evaluation process • provide clear and succinct response to the key strategic questions • address the human rights and gender dimensions of the intervention explicitly (e.g. how these dimensions were considered, addressed or impacted on) • provide lessons that are rooted in real project experiences, describe the context from which they are derived, and do not duplicate recommendations	The section serves as a series of summative statements, covering major findings of the project's performance, which enables readers to understand the overview of the performance. It includes both achievements and limitations of the project in a well-balanced manner. Gender and human rights dimensions are well described in a separate paragraph. Responses to the key strategic questions are well elaborated with important elements The narratives are well-organized, which makes the Conclusions well-structured and reader-friendly. However, adding more compelling narratives and summarizing key findings in an integrated manner could have further strengthened the Conclusions, providing deeper insights and analysis beyond the findings under each criterion. All lessons learned are properly derived from evaluation findings. Many of these lessons cover 1) identification of the problem (based on evaluation analysis/findings), 2) the root cause of the problem, 3) proposed course correction, and 4) potential benefits and applicability to other projects/similar contexts.	
17. Does the report present ***Recommendations*** for specific action to be taken by identified people/position-holders to resolve concrete problems affecting the project or the sustainability of its results? Consider how well the recommendations: • are clearly formulated and logically derived from the findings and/or conclusions • are feasible to implement within the timeframe and resources available (including local capacities) and specific in terms of who would do what and when • include at least one recommendation relating to strengthening the human rights and gender dimensions of UNEP interventions • represent a measurable performance target in order that the Evaluation Office can monitor and assess compliance with the recommendations. NOTES: **(i)** In cases where the recommendation is addressed to a third party, compliance can only be monitored and assessed where a contractual/legal agreement remains in place. Without such an agreement, the recommendation should be formulated to say that UNEP project staff should pass on the recommendation to the relevant third party in an effective or substantive manner. The effective transmission by UNEP of the recommendation will then be monitored for compliance.	Coverage/omissions: The section covers all required elements. Strengths/weaknesses: The section presents eight common recommendations in a table format, covering all required information. All these recommendations are the same across the four regional projects. Each recommendation entails sufficient detail with in-depth analyses. All are derived from the findings of the evaluation, which makes them realistic. All recommendations are also feasible, concrete, and measurable, which enables UNEP to make a detailed action plan to address these recommendations. These are intended for practical application. All recommendations can be addressed within the timeframe. Recommendation #8 directly addresses the strengthening of the gender dimensions of UNEP interventions.	5.5

Report Quality Criteria	UNEP Evaluation Office Comments	Final Report Rating
(ii) Where a new project phase is already under discussion or in preparation with the same third party, a recommendation can be made to address the issue in the next phase.		
Section G: Report Structure and Presentation	Assessment	
18. Is the report ***well-structured and complete***? Does it: • follow the Evaluation Office structure and formatting guidelines • include all required sections and annexes, as applicable • not exceed 50 pages in length from the Executive Summary to the end of the Conclusion Does the report ***present*** information clearly and appropriately? Is it written: • in clear and accessible language • largely free from grammar, spelling and punctuation errors • in an adequate and professional tone • with the use of visual aids, such as maps, graphs tables and photos	Coverage/omissions: The report contains all necessary sections, mostly following the UNEP guidelines. All required Annexes are included. Strengths/weaknesses: The report is well-structured. The report follows the reporting structure and formatting guidelines in principle. It is well-formatted in general. With the use of clear English, the report is generally easy to follow, enabling all readers to understand what is written across the report. It is a well-written English report without major grammatical errors. The language is adequate, and the tone is also appropriate. Visual aids, especially tables, are generally well used where needed. The report contains 70 pages due to detailed analyses of each evaluation criterion, but it does not significantly compromise the readability of the report. Important points are well summarized in the Executive Summary and Conclusions.	5.5
OVERALL REPORT QUALITY RATING		**5**

A number rating 1-6 is used for each criterion, with half-point increments allowed (e.g., 3.5 or 4.5). Highly Satisfactory = 6, Satisfactory = 5, Moderately Satisfactory = 4, Moderately Unsatisfactory = 3, Unsatisfactory = 2, Highly Unsatisfactory = 1. The overall rating is based on a simple average of the ratings for each criterion.

* This criterion was not rated to avoid giving it disproportionate weight in calculating the overall score, as this section is typically brief. The remaining criteria are comprehensive and substantial enough to provide a balanced and meaningful overall rating for the report.

Rating the Report Quality Criteria

Rating (1–6)	Description
6	Provides all content with high quality.
5	Provides all content with minor weaknesses.
4	Provides most content with minor weaknesses.
3	Provides most content with significant weaknesses.
2	Omits substantive content with significant weaknesses.
1	Omits almost all content with major weaknesses.

At the end of the evaluation, compliance of the evaluation process against the agreed standard procedures is assessed, based on the table below. *All questions with negative compliance must be explained further in the table below.*

Evaluation Process Quality Criteria	**Compliance**	
	Yes	**No**
Consultant's independence:		
1. Were possible conflicts of interest of proposed Evaluation Consultant(s) appraised and addressed in the final selection?	✔	
2. Was the Evaluation Consultant given direct access to identified external stakeholders?	✔	
3. Did the Evaluation Consultant raise any concerns about being unable to work freely and without interference or undue pressure from project staff or the Evaluation Office?		✔
4. If Yes to Q3: Were these concerns resolved to the mutual satisfaction of both the Evaluation Consultant and the Evaluation Manager?	**N/A**	
Project's engagement and support:		
5. Did the project make available all required/requested documents?	✔	
6. Did the project make all financial information (and audit reports if applicable) available in a timely manner and to an acceptable level of completeness?	✔	
7. Was adequate support provided by the project to the evaluator(s) in planning and conducting evaluation missions?	✔	
8. Were the project team, relevant UNEP senior staff, partners and interviewed stakeholders given an opportunity to provide comments on key deliverables, as appropriate (e.g. Terms of Reference, Inception Report and Draft Evaluation Report)?	✔	
Quality assurance of key deliverables:		
9. Were the Terms of Reference peer-reviewed?	✔	
10. Was the inception report peer-reviewed, including the Theory of Change?	✔	
11. Were evaluation preliminary findings presented to the project team in a format allowing discussion, before drafting the report?	✔	
12. Was the draft report peer-reviewed?	✔	
Transparency and commenting:		
13. Was the inception report, including the (reconstructed) TOC, sent to the project team, relevant UNEP senior staff and partners, with a minimum of eight working days to comment?	✔	
14. Was the draft evaluation report sent directly by the Evaluation Consultant to the Evaluation Office?	✔	
15. Were all stakeholder comments to the draft evaluation report sent directly to the Evaluation Office	✔	
16. Did the Evaluation Consultant(s) respond adequately to all factual corrections and comments?	✔	
17. Did the Evaluation Office share substantive comments and Evaluation Consultant responses with those who commented, as appropriate?	✔	
Financial Resources:		
18. Was the evaluation budget approved at project design available for the evaluation? If not, comment in the table below on the sufficiency of the funds made available.	✔	
19. Were the agreed evaluation funds readily available to support the payment of the evaluation contract throughout the payment process? If not, comment in the table below.	✔	

Timeliness:		
20. If a Terminal Evaluation: Was the evaluation initiated within six months after project operational completion and not more than three months prior? (Or, if a Mid Term Evaluation: Was the evaluation initiated within a six-month period prior to the project's mid-point?)	✔	
21. Was the inception report delivered and reviewed/approved prior to commencing any travel?	✔	
22. Were all submission and commenting deadlines met as set by the Evaluation Manager and as far as unforeseen circumstances allowed? If not, comment on exceptional delays.	✔	