



United Nations Environment Programme

**Terminal Evaluation of the Four UNEP GEF Medium Size
Projects: GEF ID GFL/2328-2760-4A37/4A76/4A77/4A80**

**Supporting the Implementation of the Global Monitoring Plan of
POPs in the four Sub-Regions: Eastern Southern Africa, West
Africa, Latin America and Caribbean, and Pacific islands**

Dr. Nee Sun Choong Kwet Yive

Dr. Ziad Mahmoud Abu-Kaddourah

Evaluation Consultants

Evaluation Office

December 2013

Contents

Acronyms and Abbreviations	3
Executive summary	5
A. <i>Introduction</i>	5
B. <i>Evaluation findings and conclusions</i>	5
C. <i>Lessons learned</i>	8
D. <i>Recommendations</i>	8
Part I Evaluation Background	9
A. <i>Context</i>	9
B. <i>The Project</i>	10
C. <i>The Evaluation</i>	15
Part II Project Performance and Impact	17
A. <i>Attainment of Objectives and Planned Results</i>	18
B. <i>Sustainability and catalytic role</i>	44
B1. <i>Sustainability</i>	44
B2. <i>Catalytic role and Replication</i>	46
C. <i>Processes affecting attainment of project results</i>	47
C1. <i>Preparation and Readiness</i>	47
C2. <i>Implementation Approach and Adaptive Management</i>	49
C3. <i>Stakeholder Participation and Public Awareness</i>	50
C4. <i>Country Ownership and Drivenness</i>	52
C5. <i>Financial Planning and Management</i>	53
C6. <i>UNEP Supervision and Backstopping</i>	55
C7. <i>Monitoring and Evaluation</i>	55
D. <i>Complementarities with UNEP Medium Term Strategy & Programme of Work.</i>	57
Part III. Conclusions and Recommendations	58
A. <i>Conclusions</i>	58
B. <i>Lessons Learned</i>	62
C. <i>Recommendations</i>	65
Appendix 1 Tables 6, 10, 11 and 12	67
Annex 1 Terms of Reference of the evaluation	70
Annex 2 Evaluation timeline and itinerary	122
Annex 3 List of documents consulted	127
Annex 4 Survey questionnaire	128
Annex 5 List of persons interviewed	129
Annex 6 Technical working paper	131
Annex 7 Tabulated summary of achievement of outputs	154
Annex 8 Review of Project Design	158
Annex 9 Evaluation Framework	173
Annex 10 Summary of Project Expenditure	176
Annex 11 Summary of Co-Finance	180
Annex 12 The Consultants	184

Acronyms and Abbreviations

BCCC-SCRC	Basel Convention Coordinating Centre Stockholm Convention Regional Centre
CETESB	Environmental Sanitation Technology Department
COP	Conference of Parties
CSIC	Consejo Superior de Investigaciones Científicas
CVUA	Chemisches Untersuchungsamt Freiburg
DIGESA	Laboratory of Environmental Health Directorate Ministry of Health, Chile
DILAVE	Ministry of Agriculture, Uruguay
DINAMA	Laboratory of the Department of Environment, Uruguay
DGEF	Division of GEF Coordination
DRC	Democratic Republic of Congo
DTIE	Division of Technology, Industry and Economics
ESA	Eastern & Southern Africa
ETQCL	Environmental Toxicology Quality Control Laboratory Central Veterinary Lab
FAO	Food and Agriculture Organization of the United Nations
FIOCRUZ	Oswaldo Cruz Foundation
FSP	Full Size Project
GAPS	Global Air Passive Sampling
GEBs	Global Environmental Benefits
GEF	Global Environment Facility
GMP	Global Monitoring Plan
GRULAC	Latin America and Caribbean States
ICA	Internal Cooperation Agreement
IVM	Institute for Environmental Studies
LATU	Technological Laboratory of Uruguay
MOU	Memorandum of Understanding
MSP	Medium Size Project
MTM	Människa-Teknik-Miljö
NIP	National Implementation Plan
PAS	Passive Air Samplers
PC	Project Coordinator
PCA	Project Cooperation Agreement
dl-PCB	Dioxin like-Polychlorinated biphenyl
PCDD/Fs	Polychlorinated dibenzo-p-dioxins / furans
PI	Pacific Island
PIR	Project Implementation Review
POPs	Persistent Organic Pollutants
PTS	Persistent Toxic Substances
PUF	Polyurethane Foam
QA/QC	Quality Assurance/Quality Control
RC	Regional Coordinator
ROG	Regional Organisation Group
ROI	Review of Outcomes to Impacts
RECETOX	Research Centre for Environmental Chemistry and Ecotoxicology
SAICM	Strategic Approach to International Chemicals Management
SOP	Standard Operating Procedure
SSC	Secretariat of the Stockholm Convention
SSFA	Small Scale Funding Agreement
TM	Task Manager
TOR	Terms of Reference
UNEP	United Nations Environment Programme
USP	University of the South Pacific
WA	Western Africa

Project titles:	Supporting the Implementation of the Global Monitoring Plan of POPs in Eastern and Southern African countries (ESA); in Latin America and Caribbean States (GRULAC); in West Africa (WA); and in the Pacific Islands Region (PI)
Project numbers:	GFL/2328-2760-4A37/4A76/4A77/4A80 PMS: 3673 (ESA); 3778 (GRULAC); 3674 (WA); 3663 (PI)
Project type:	MSP
Sub-programme title: GEF strategic long-term objective Strategic programme for GEF IV	POPs 1 POPs 1
UNEP priority:	Harmful Substances and Hazardous Waste
Geographical scope:	ESA: Egypt, Ethiopia, Kenya, Mauritius, Uganda, Zambia; GRULAC: Antigua and Barbuda, Brazil, Chile, Ecuador, Jamaica, Mexico, Peru, Uruguay; WA: DRC, Ghana, Mali, Nigeria Senegal, Togo; PI: Fiji, Kiribati, Niue, Samoa, Palau ¹ , Solomon and Tuvalu
Mode of execution:	Internal
Project executing organization:	Global coordination: UNEP Chemicals Branch; Regional coordination: Department of Chemistry, University of Nairobi, Kenya (ESA); Stockholm Centre, Uruguay (GRULAC); Environmental Toxicology and Quality Control Laboratory, Mali (WA); Institute of Applied Science/University of South Pacific (PI)
Planned project duration:	18 MONTHS
GEF approval dates	ESA, WA & GRULAC: 7 April 2009; PI: 24 Nov 2008
UNEP approval dates	ESA: 7 April 2009; WA: 7 April 2009; GRULAC: 7 April 2009; PI: 2 July 2009
Actual commencing dates:	ESA, WA, GRULAC & PI: 2 July 2009
Intended completion dates:	ESA & WA: 30 Sept 2011; GRULAC: Sept 2011; PI: 30 June 2010
Actual completion dates:	ESA, WA, GRULAC & PI: 31 March 2012
Total Cost of projects	ESA: US\$ 1,005,250 (100%); GRULAC: US\$ 1,690,300 (100%); WA: US\$ 1,193,600 (100%); PI: US\$ 1,051,000 (100%)
Cost to the GEF Trust Fund	ESA: US\$484,000 (48%); GRULAC: US\$ 845,000 (50%); WA: US\$ 583,000 (49%); PI: US\$ 517,000 (49.2%)
Co-financing	ESA: US\$ 521,250 (52%); GRULAC: US\$ 845,300 (50%); WA: US\$ 610,600 (51%); PI: US\$ 534,000 (50.8%)

WHO World Health Organisation

¹ At the time of implementation, Palau did not yet ratify the Stockholm Convention and was therefore not eligible to GEF funding for NIP implementation. The country was linked to the project activities exclusively through co-funding.

Executive summary

A. Introduction

1. The Global Environment Facility (GEF) medium size projects “*Supporting the Implementation of the Global Monitoring Plan of POPs in Eastern and Southern African countries (ESA); in Latin America and Caribbean States (GRULAC); in West Africa (WA); and in the Pacific Islands Region (PI)*” was implemented from 2009 – 2012 by UNEP/DGEF and executed by UNEP/DTIE in collaboration with regional coordination institutions in the four regions: Department of Chemistry, University of Nairobi, Kenya for ESA; Environmental Toxicology and Quality Control Laboratory of the Central Veterinary Laboratory (ETQCL), Bamako, Mali for WA; University of the South Pacific (USP), Fiji for PI; and the Basel Convention Coordinating Centre Stockholm Convention Regional Centre, Uruguay (BCCC-SCRC) for GRULAC, and coordinating institutions at national level. Participating countries of the four regions were: **ESA:** Egypt, Ethiopia, Kenya, Mauritius, Uganda, Zambia; **GRULAC:** Antigua and Barbuda, Brazil, Chile, Ecuador, Jamaica, Mexico, Peru, Uruguay; **WA:** DRC, Ghana, Mali, Nigeria Senegal, Togo; **PI:** Fiji, Kiribati, Niue, Samoa, Palau², Solomon and Tuvalu The total costs of the projects were:

Region	GEF (\$) (%)	Co-funding (\$) (%)	Total (\$)
ESA	484,000 (48%)	521,250 (52%)	1,005,250
GRULAC	845,000 (50%)	845,300 (50%)	1,690,300
WA	583,000 (49%)	610,600 (51%)	1,193,600
PI	517,000 (49.2%)	534,000 (50.8%)	1,051,000

2. The common objective of the four sub-regional Projects was to build regional capacity on analysis and data generation for POPs in core matrices for the Global Monitoring Plan (GMP) of POPs to enable the participating countries of the four sub-regions (ESA, WA, GRULAC and PI) to contribute to the global report submitted to the Conference of the Parties of the Stockholm Convention.

B. Evaluation findings and conclusions

3. The major objective of the terminal evaluation was to assess project performance (in terms of relevance, effectiveness and efficiency), and determine outcomes and impacts (actual and potential) stemming from the project, including their sustainability.

4. The projects were highly relevant with regards to the minimum requirements for the first effectiveness evaluation defined by the Conference of the Parties of the Stockholm Convention in decision SC-2/13. The focus of the four projects remains very relevant to the mandate of UNEP that promotes chemical safety by providing policy advice, technical guidance and capacity building to developing countries; UNEP is host organization for the Stockholm Convention on POPs. The intended results are particularly consistent with

² At the time of implementation, Palau did not yet ratify the Stockholm Convention and was therefore not eligible to GEF funding for NIP implementation. The country was linked to the project activities exclusively through co-funding.

UNEP's programmatic objectives and expected accomplishments under its "Environmental Governance" sub-programme of its Medium-term Strategy 2010–2013. These capacity building projects are also consistent with the Bali Strategic Plan for Technology Support and Capacity-building of UNEP's Governing Council decision (UNEP/GC.23/6/Add.1).

5. The projects' objectives were pertinent to the GEF POPs focal area strategy and strategic programming for GEF-4 (2007 – 2010) that made provision for "Strengthening capacities for NIPs implementation, including assisting those countries that lag farthest behind to establish basic, foundational capacities for sound management of chemicals". The projects were also very relevant as they contributed to help the participating countries, parties to the Stockholm Convention, in fulfilling their obligations with regards to Articles 11 and 12 of the Convention.

6. Effectiveness of the projects is considered satisfactory. While high quality data in the core media (generated by the expert laboratories however) have been obtained for all the regions and sampling programs successfully established, the capacity of the personnel of the national laboratories needs to be further enhanced to be able to generate high quality data as seen by the outcome of the inter-calibration study during which most laboratories did not perform satisfactorily.

7. At national level, participation of stakeholders was from the Ministry of Environment, Ministry of Health and academic laboratories, and also to the Ministry of Agriculture in a few cases. Air sampling activities were undertaken by the Ministry of Environment, while the human milk component was executed by the Ministry of Health in most countries. No formal steering committees were planned; coordination was done through informal meetings of an ad-hoc working group constituted by the key stakeholders.

8. Project implementation was cost-effective owing to a number of factors, including establishment of partnerships with key organisations, agencies (e.g. WHO), academic and research institutions (e.g. expert laboratories), building on existing programmes (e.g. MONET or GAPS for passive air sampling or WHO for milk survey), adoption of existing procedures (WHO guidelines for human milk sampling), engaging local stakeholders (e.g. local health centres) for identification of mothers' milk donors, or engaging only laboratories having minimum requirements for POPs analysis. Also countries working with the Quick Start Programme funding under SAICM were included and coordinated with the GEF project (e.g. Barbados, Cuba, etc).

9. However, a number of factors reduced efficiency and hindered the progress of the projects in some countries including delays in signing MOUs (most countries), the movement of the project coordinator without proper handing over (Egypt), delays in funds transfer (e.g. Senegal, Brazil), or delay in getting ethics committee approval (e.g. Brazil and Zambia). As a result two no-cost extensions (corresponding to 15 months) were required to ensure that project activities were successfully completed.

10. The ROTI analysis shows that important ‘drivers’ have been put in place to ensure project impact and these include building of capacities of countries to collect quality core media samples and expert laboratories providing guidance and technical assistance to national laboratories to enable them produce high quality data. The likelihood that the global environmental benefits (GEBs) will be achieved will depend on a number of assumptions including monitoring activities implemented at national level, availability of adequate human and financial resources to establish monitoring programmes and stability of skilled laboratory personnel to generate high quality data.

11. For sustainability of project results, the projects anticipated that being Parties to the Stockholm Convention, the countries would have included sustainability measures into their national planning and budgeting processes by the end of the project to comply with Convention’s obligations on monitoring, reporting and information dissemination. There are indications that this happening to some extent in some countries. For example, CETESB, Brazil is planning to include some of the project activities (air monitoring mainly) in their on-going monitoring programme and future planning. In addition, they will try to cover more regions by allocating the necessary financial resources. In Peru, DIGESA, Ministry of Environment is planning to continue passive air as well as mother’s milk sampling for POPs monitoring and provision will be made in the budget for 2013 and 2014 for these activities. Furthermore, follow-up projects (3 FSPs and one MSP) are being developed and the PIFs are already approved by GEF for a total funding of \$11,780,000.

12. Although strengthening institutional framework would be necessary in some countries, this framework in most countries seems adequate. The Stockholm Convention has somewhat been institutionalised in all countries. All of them have a nominated POPs Focal Point. Most have reinforced their national legislation to strictly manage the life cycle (manufacture, trade, use and release) of most POPs. Most countries have attended the COP (COP1 to COP6) meetings. Those countries with adequate analytical capacity are already monitoring POPs in certain media. Most of them have developed, following a multi stakeholder consultation / process involving many ministries and national institutions, and submitted a national implementation plan that contained detailed actions for the sound management POPs. Some countries are already engaged in post-NIP GEF funded projects to manage some of their priorities mentioned in their NIP.

13. The overall rating for this project is **Highly Satisfactory**.

C. Lessons Learned

14. Valuable lessons emerged during the terminal evaluation that include lessons related to technical aspects as well as to overall management of the project (not arranged in any order of priority):

- i. Project documents need careful screening to ensure that they are technically feasible and that goals and objectives are realistic under the proposed timeframe and are consistent with real capacities at national level.
- ii. Running the same project in one region or in parallel in many regions by the same management team and same technical experts require different time planning.
- iii. Identification and adopting measures that promote efficiency ensures successful implementation of project.
- iv. Clearly defined and agreed roles at all levels avoid delays in project implementation.
- v. The mixed form of agency execution and counterpart execution (through sub-contracts to counterpart institutions e.g. regional coordination institutions) is a very efficient implementation modality when the capacities are sufficient and exist at counterpart level: substantive competence, procurement, financial management, and auditing.
- vi. Recruiting consultants with the appropriate language proficiency ensures better understanding of reports and other documents.

D. Recommendations

15. As the projects have ended, the following recommendations look ahead to the post-project period and development and implementation of follow-up GEF projects and sustaining the results of the GMP projects.

- i. It is recommended that countries allocate appropriate financial resources to sustain project results through adequate monitoring programmes.
- ii. Countries and executing agencies are encouraged to disseminate the projects results and outcomes targeting major national stakeholders including ministries, institutions, NGOs, etc. and the public at large by taking the appropriate actions.
- iii. As follow-up projects are planned, it is recommended that roles at national level (e.g. national coordinator or steering committee) are clearly defined and agreed upon in the project documents.
- iv. For the planned follow-up GMP projects, it is recommended that UNEP and expert laboratories ensure that the capacities of the personnel of national laboratories be strengthened for the analysis of samples that require extraction and work-up, more specifically for the core media.

I. Evaluation Background

A. Context and Rationale

16. According to Article 16 of the Stockholm Convention on Persistent Organic Pollutants (POPs), its effectiveness shall be evaluated starting four years after the date of entry into force of the Convention and periodically thereafter. The Conference of Parties (COP) has agreed upon the essential modalities for the environmental monitoring component of the first evaluation. The Global Monitoring Plan (GMP) initial focus was on the core media mother's milk/human blood to examine human exposure, and ambient air to examine long-range transport. COP3 Decision SC-3/19 invited the Global Environment Facility (GEF) to incorporate activities related to the GMP and capacity-building in developing countries, small island developing states and countries with economies in transition as priorities for providing financial support.

17. So far, in a number of developing countries in Eastern and Southern Africa (ESA) and West Africa (WA) and countries in Latin America and Caribbean (GRULAC) and Pacific islands (PI) sub-regions, monitoring of POPs that would allow establishing time or spatial trends were not carried out prior to these sub-regional projects. Further, the matrices chosen by the COP for the GMP, namely ambient air and human milk have only been analysed in a few occasions or none at all. Typically, there were other national priorities such as food stuff and water monitoring or soil analyses at potential hotspots. Few scattered data collected were mainly generated by some research institutes or universities in a science oriented context rather than for the implementation of multilateral environmental agreements. If a few international cooperation activities on POPs monitoring have been carried out, however, they were not targeted to the core media (air, breast milk/human blood) and some of them did not follow the GMP Guidelines established by the ad hoc Technical Working Group for POPs monitoring and adopted by COP3, so their representativeness and quality still need to be assessed further.

18. The UNEP Regionally Based Analysis project on Persistent Toxic Substances (PTS)³ reported that there was limited or very limited data on POPs in countries in ESA, WA, GRULAC and Pacific Island regions. The countries in these regions either have very limited capacity to manage POPs or have established laboratories with limited capacity and assistance is needed in all areas. This includes the need for increased monitoring capacity, improved regulations, management structures and enforcement systems. As Parties to the Stockholm Convention, the countries of these four sub-regions are eligible for GEF funds to strengthen their monitoring capacity at national level and so to contribute national data to the GMP in a regionally and internationally agreed and harmonized approach that meet the minimum requirements established for comparable data in the GMP guidance document.

³Information and reports accessible at: <http://www.chem.unep.ch/pts/>

B. The Project

Goal and Objectives

19. In line with decisions SC-2/13, the common objective of the four sub-regional Projects was to build regional capacity on analysis and data generation for POPs in core matrices for the Global Monitoring Plan (GMP) of POPs to enable the participating countries of the four sub-regions (ESA, WA, GRULAC and PI) to contribute to the global report submitted to the Conference of the Parties of the Stockholm Convention.

Project components

20. The project document for the four sub-regional projects are exact replicates except for the number of countries in the project and for project costs, which are summarized in Table 3. Henceforth, the discussion regarding the project document refers to the common project document of the four sub-regional projects.

21. It should be pointed out that in the Section 3.3: *Project Components and Expected Results* of the project document, the activities to achieve expected project results/outputs are not mentioned. They are given in Appendix 2 of the project document (*Work plan and Timetable*). Furthermore, there are confusions regarding title, outcomes and outputs of the five components given in the Section 3.3 as compared to what is given in the logical framework (appendix 1 of project document) and work plan of the project document. The outcomes and outputs reported in Table 1 are those given in the logical framework of the project document.

Table 1: Project components

Components	Component Objective
1. Standard operating procedures (SOPs) for sampling and analysis of POPs in relevant matrices	To ensure that sampling and analysis are performed according to international standard by all partners.
2. Adequately equipped laboratories and trained personnel to undertake sampling and analysis	To ensure that lab personnel are trained to high standard and sampling in countries is done according to international standards.
3. Experiences in participation in international inter-calibration studies	To ensure QA protocols are in place and used and Participation in proficiency tests
4. High quality data on presence of POPs in the participating countries are available	To increase regional awareness of POPs exposures and provide Baseline for later effectiveness evaluation and establish a network of air samplers
5. Governments and stakeholders are aware on details in implementation of the GMP issue in their national implementation plan and reporting to the COP	To Improve implementation of the NIP recommendations with respect to POPs monitoring and increase knowledge of POPs presence and the implications in the countries involved and develop basis for follow-up project(s)

Intervention Areas and Target Groups

22. Decision SC-3/19 of the Stockholm Convention also established a regional organization group (ROG) for each of the five United Nations regions to facilitate regional implementation of the global monitoring plan and invited Parties to nominate members to those ROGs with expertise in monitoring and data evaluation.

23. At the first regional workshop of these ROGs (Nairobi, 29 – 31 October 2007 for Africa (ESA & WA); Beijing, 17-19 September 2007 for PI; Mexico City, 14 – 16 January 2008 for GRULAC), it was decided to develop Medium Size Projects for capacity building for POPs monitoring in the respective regions.

24. Amongst the countries that showed interest during this first regional workshop, the following countries of the four regions were finally selected to participate in the project based on national laboratory capacity for POPs analysis and on adequate coverage of each region for generation of POPs data on core matrices:

Eastern and Southern Africa (ESA): Egypt, Ethiopia, Kenya, Mauritius, Uganda and Zambia

Western Africa (WA): DR Congo, Ghana, Mali, Nigeria, Senegal and Togo

Latin America and Caribbean (GRULAC): Antigua and Barbuda, Brazil, Chile, Ecuador, Jamaica, Mexico, Peru and Uruguay; and Pacific Islands (PI): Fiji, Kiribati, Niue, Samoa, Palau, Solomon Islands, and Tuvalu.

25. The key stakeholders and beneficiaries identified during development of the Project Identification Form (PIF) and preparatory phases were limited to a few governmental ministries and agencies, mainly environment and health for air and mothers milk sampling, respectively, and research institutions, national laboratories, and universities for POPs analysis.

26. Expert laboratories for capacity building and POPs analysis were also identified during the preparatory phases of the projects. For instance, the Free University Amsterdam, Institute for Environmental Studies (IVM), the Netherlands, laboratory expert on the analysis of basic POPs, was responsible for analysis and capacity building for ESA, WA and PI countries. The Örebro University, Man Technology Environment Centre (Människa-Teknik-Miljö, MTM), Sweden, expert dioxin⁴ laboratory, was responsible for analysis of dioxin and dioxin-like PCBs for ESA, WA and PI countries. The dioxin laboratory of Consejo Superior de Investigaciones Científicas (CSIC), Barcelona, Spain was responsible for analysis of all POPs and capacity building for GRULAC countries. These three laboratories were also responsible for mirror analysis of samples and organization of inter-calibration studies. The WHO Reference laboratory for mothers' milk at State Institute for Chemical and Veterinary

⁴ Dioxins in fact includes furans; dioxins: polychlorinated dibenzo-p-dioxins (PCDDs); furans: polychlorinated dibenzofurans (PCDFs); PCDD/Fs: dioxins and furans

Analysis of Food (CVUA) in Freiburg, Germany analysed human milk samples for POPs. The Research Centre for Toxic Compounds in the Environment (RECETOX) laboratory, University of Masaryk, Czech Republic was involved in the coordination of air monitoring activities.

27. The institutions responsible for regional coordination in the four regions were already identified during the first regional ROG workshop: Department of Chemistry, University of Nairobi, Kenya for ESA; Environmental Toxicology and Quality Control Laboratory of the Central Veterinary Laboratory (ETQCL), Bamako, Mali for WA; University of the South Pacific (USP), Fiji for PI; and the Basel Convention Coordinating Centre Stockholm Convention Regional Centre, Uruguay (BCCC-SCRC) for GRULAC.

28. The projects also targeted only laboratories of the participating countries which had at least the basis analytical equipment and had staff trained in basic analytical procedures to achieve cost-effectiveness for this project. The project did not allow for setting up new laboratories and training as this would require several times the cost of using the existing laboratory infrastructure.

Milestones in Design

29. As mentioned earlier, the decision to develop those Medium Size Projects (MSPs) for capacity building in POPs analysis were taken during the first regional ROG workshops. It was at the regional workshop for Africa (ESA & WA) held in Nairobi, 29 – 31 October 2007 that the main elements of the project proposal were discussed and developed involving representatives all the participating countries, UNEP (implementing and executing agency), WHO (global milk survey) and RECETOX, responsible for coordination of passive air sampling.

30. The Project Identification Form (PIF) was then developed by UNEP for each of the four regions and submitted to GEF for approval. As it was the case for the project documents, the PIFs for the four regions were exact replicates except for identities of participating countries and stakeholders, and amount of project funds.

31. The approval dates of the PIFs and the MSPs for the four regions by the GEF Chief Executive Officer and UNEP are given in Table 2 below.

Table 2: Approval dates for PIFs and MSPs

Region	GEF PIF Approval	GEF MSP Approval	UNEP Approval
ESA	27 March 2008	7 April 2009	7 August 2009
WA	27 March 2008	7 April 2009	10 July 2009
GRULAC	25 September 2008	7 April 2009	20 July 2009
PI	4 March 2008	24 November 2008	2 July 2009

Implementation and Completion

32. The projects were scheduled to start as from UNEP approval dates (Table 2) for a duration of 18 months and supposed to be completed by February 2011 for ESA and January 2011 for the three other regions.

33. Inception workshops were organized in the four regions, Suva, Fiji, 21 – 23 September 2009 for PI, Nairobi, Kenya, 27 – 29 January 2010 for ESA, Bamako, Mali, 7 – 9 October 2009 for WA and Montevideo, Uruguay, 4 – 6 November 2009 for GRULAC. These workshops were attended by UNEP as Implementing and Executing Partner, a representative of the Stockholm Convention Secretariat, a representative of one expert laboratory (IVM), the regional coordinator, and representatives of participating countries including National POPs focal points in most cases. Given the duration of the project, only two planned steering committee meetings were held and coincided with the inception and final regional workshops.

34. For various reasons that included delays in signature of agreement between the executing agency (Chemicals Branch of UNEP, Division of Technology, Industry and Economics, DTIE) and the implementing agency (UNEP, DGEF) because of the internal revision processes at the executing agency, delays in signature of agreement between the regional co-executing agencies and the participating countries in all four regions, delays in identifying the responsible institution to develop and maintain sampling networks for air and milk, delays in the identification of the experts and delays to identify truly operational laboratories and to equip them with the necessary materials/spares and make them fully operational; the projects were revised in August 2010 for ESA, WA and GRULAC, and in February 2011 for PI, with a new common completion date of September 2011.

35. To allow project partners to deliver all products and reports, delayed due to administrative and logistic challenges, UNEP approved a second no cost extension to 31 March 2012.

36. Regional final workshops were held in the four regions: 28 February – 4 March 2011, Netherlands, Holland for ESA and WA; 24 – 25 March, Barcelona, Spain for GRULAC; and 9 – 10 June 2011, Suva, Fiji for PI.

37. No midterm review was planned and the terminal evaluation was undertaken taking into consideration the available information / documents pertaining to the four projects.

Implementation Arrangements and Main Partners

38. The four projects were implemented by UNEP/DGEF. In December 2010, UNEP DGEF was dissolved and UNEP DGEF Task Managers were integrated into their respective technical Units. In the case of UNEP DGEF task managers dealing with chemicals related projects, they were integrated into the Chemicals Branch of the Division of Technology, Industry and Economics (DTIE) of UNEP. To ensure consistency with GEF and UNEP

policies and procedures, the Task Manager as representative of the implementing agency was responsible for overall project supervision for the four regions. He was also responsible for the review of the quality of draft project outputs and provided feedback to the project partners to ensure adequate quality.

39. As stated in project document, a project steering committee was set up, and it was constituted of UNEP DTIE Implementation and Execution (two staff members), representative of the Stockholm Convention Secretariat and the regional coordinators.

40. As mentioned earlier, at regional level the partners for supervision/coordination of project activities and reporting were contracted by UNEP/DTIE through signed Project Cooperation Agreements (PCA) (Table 4).

41. The regional coordinators identified national coordinators in each of the participating countries who had the responsibility to identify national partners for air and mothers' milk sampling, and for nomination of laboratories to participate in the projects. The national partners were mainly the Ministry of Environment, the Ministry of Health and University and/or National Research laboratories.

42. The main financial partners of the projects were the GEF, the Stockholm Convention Secretariat (all), Australian Government (PI), Swedish Government (ESA and WA), UNEP, Chemicals Branch (GRULAC), and Environment Canada (PI). Table 4 below gives an indication of co-financial partners for each region.

Financing

43. Expected financing and co-financing taken from the project documents are given in Table 3 below.

Table 3: Financing and co-financing of the projects

Source	ESA	WA	GRULAC	PI
Cash	(\$)	(\$)	(\$)	(\$)
GEF	484,000	583,000	845,000	517,000
SSC	120,250	130,600	150,300	24,000
Sweden	90,000	90,000	-	-
Australia	-	-	-	100,000
Env Canada	-	-	-	10,000
Recetox	20,000	-	-	-
UNEP	-	-	102,000	-
Sub total	714,250	803,600	1,097,300	651,000
In kind	(\$)	(\$)	(\$)	(\$)
Governments	199,000	266,000	466,000	320,000
UNEP	37,000	45,000	53,000	50,000
WHO	-	-	-	10,000
Steering group	55,000	59,000	50,000	10,000
Recetox	-	20,000	-	10,000
Env Canada	-	-	24,000	-
Sub total	291,000	390,000	593,000	400,000
Total	1,005,250	1,193,600	1,690,300	1,051,000

Modifications to design before or during implementation

44. No major revision of the project logical framework was required for completion of planned project activities in the four regions. However, as mentioned by the regional coordinators of all regional coordinators during interviews⁵, the time frame was too short for completion of activities in order to meet the objectives of the project. Consequently, two no cost extensions were approved by UNEP, such that initially planned to be completed by early 2011 the projects were closed in March 2012. And for each extension, the work plans and expenditures were rescheduled accordingly for the four regions.

C. The Evaluation

Purpose

45. In compliance with the GEF⁶ and UNEP⁷ Evaluation Policies, and in line with the UNEP Evaluation Manual⁸, the terminal evaluation of four Sub-regional Projects on “*Supporting the Implementation of the Global Monitoring Plan of POPs*” is undertaken to assess project performance (in terms of relevance, effectiveness and efficiency), and determine outcomes and impacts (actual and potential) stemming from the project, including their sustainability.

46. This terminal evaluation was initiated and commissioned by the UNEP Evaluation Office, Nairobi, Kenya, and it has two primary purposes: (i) to provide evidence of results to meet accountability requirements, and (ii) to promote learning, feedback, and knowledge sharing through results and lessons learned among UNEP, governments, the GEF and their partners.

Evaluation criteria and key questions

47. A set of key questions have been identified and given in the terms of reference for this evaluation (Annex 1). These key questions were based on the logical framework (outcomes) of the project documents:

- Did the project approach contribute towards the achievement of the development project objective “*Countries in the four sub-regions have the capacity to contribute with national POPs analysis to the reporting under the Global Monitoring of POPs*” in the participating countries?

⁵ Interview data collected during field mission.

⁶ http://www.thegef.org/gef/sites/thegef.org/files/documents/TE_guidelines7-31.pdf

⁷ <http://www.unep.org/eou/StandardsPolicyandPractices/UNEPEvaluationPolicy/tabid/3050/language/en-US/Default.aspx>

⁸ <http://www.unep.org/eou/StandardsPolicyandPractices/UNEPEvaluationManual/tabid/2314/language/en-US/Default.aspx>

- How successful were the projects in supporting partners in 27 countries in the four sub-regions to perform sampling and analysis of POPs in relevant matrices according to standard operating procedures (SOPs) and international standards?
- Did the projects assist the countries in training laboratory personnel to high standards, including adequately equipping laboratories and training personnel to undertake sampling and analysis?
- To what extent did the projects assist the countries to improve their experiences in participation in international inter-calibration studies, in the establishment and consolidation of a functional national system for handling requests, carry out risk assessment decision-making and administrative tasks?
- How successful were the projects in assisting their partners to make available high quality data on presence of POPs in participating countries?
- Did the projects assist the countries to increase awareness of governments and stakeholders on details in implementation of the GMP issue in their national implementation plan and reporting to the COP?

48. This report was also based on the specific list of review criteria given in the TORs (Annex 1). Evaluation findings and judgments were based on sound evidence and analysis, and clearly documented in the report. To the extent possible information was triangulated (i.e. verified from different sources) before any conclusion made.

49. As recommended in the TORs of this evaluation, the analytical tool, Review of Outcomes to Impacts (ROtI) tool, was used to describe the theory of change that occurred in the countries where the projects were implemented.

Timeframe, data collection and limitations of the evaluation

50. The terminal evaluation was conducted by a team of two consultants⁹ between May 2013 and August 2013. The evaluation timeline and itinerary are provided in Annex 2.

51. The findings of the terminal evaluation was based on the following:

- A desk review of project documents and reports (Annex 3)
- Interviews with Project Fund Management Officer and relevant staff of the UNEP Evaluation Office in Nairobi (lead consultant).
- Interviews with UNEP Project Manager (Execution) and UNEP Task Manager (Implementation) in Geneva (lead consultant)

⁹ The lead consultant was responsible for the overall evaluation and main report, and evaluation in Kenya, Senegal, Zambia and Ghana; and the supporting consultant was responsible for the evaluation in Brazil and Uruguay and the working document.

- Interviews (face to face and telephone) with regional and national coordinators (lead and supporting consultant)
- Interviews with other national stakeholders including POPs focal points (lead and supporting consultant)
- Site visits to Kenya, Ghana, Senegal and Zambia (lead consultant); Uruguay and Brazil (supporting consultant)
- A survey/questionnaire targeting participating laboratories (Annex 4)

52. The list of persons interviewed for this evaluation exercise is given in Annex 5 and the findings from field missions in Brazil and Uruguay by the supporting consultant are reported in the technical working document given in Annex 6.

53. In terms of limitations, this terminal evaluation was undertaken more than two years after closure of the projects. As a result many persons interviewed during field missions could not remember the details of activities undertaken in early phases of the project (2009 / 2010). Furthermore although planned in the TORs of this evaluation, the field mission to Fiji was not possible due to budget constraints. For the same reason, a face to face interview with the regional coordinator of the WA region was not possible. However, the regional coordinators of these two regions (Pacific¹⁰ and WA¹¹) were interviewed by telephone. Information was also obtained through numerous email exchanges.

54. As both evaluators are non-Spanish speaking persons, it was difficult for them to read some of the national reports that were written in Spanish (e.g. the national reports for Chile, Mexico, Peru, Ecuador, and Uruguay). The feedback received from these countries for the survey organized by the evaluation team was also in Spanish. To use information from these reports and questionnaires for drafting this report, the evaluation made use of automatic translator software that is available on the internet.

55. The first draft of this report was circulated for review to relevant persons and the comments and responses were taken into consideration in the final draft of this report.

II. Project Performance and Impact

56. The assessment of the four projects was undertaken according to the set of criteria recommended in the TORs of this evaluation (Annex 1): (i) Attainment of objectives and planned results; (ii) Sustainability and catalytic role; (iii) Processes affecting attainment of project results; and (iv) Complementarity with the UNEP strategies and programmes.

57. For this evaluation exercise, a supporting consultant was recruited to undertake field missions in the GRULAC region. A technical working document was produced from these

¹⁰ Prof. W. Aalbersberg, RC for Pacific region was interviewed by phone on 15 July 2013

¹¹ Dr (Mrs) H Traore, RC for WA was interviewed by phone on 11 July 2013

missions, and the main findings of this document (Annex 6) are incorporated in the main report.

A. Attainment of objectives and planned results

58. Implementation of the four GMP projects started in July/August 2009. The following paragraphs look at the achievement of outputs and activities during project implementation, as well as relevance, effectiveness, efficiency, and a review of the pathway from project outcomes to impacts.

A.1 Achievement of Outputs and Activities

59. The four similar projects include 16 outputs organized under five components and designed to contribute to 5 outcomes as stated in the project documents. It should be pointed out that there have been confusion in the use of the terms ‘outputs’ and ‘activities’ in the logical framework of the project documents. Annex 7 provides a tabulated summary of achievement of outputs for each of the five Components. The following paragraphs present a summary of achievements made in the four regions.

Component 1: Development of Standard Operating Procedures

60. Five outputs were supposed to be delivered for Component 1. The status for each one for the four regions is discussed.

Output 1.1: Set-up of management structure for the project

61. All the activities planned for this output were completed. The project was implemented by UNEP/DGEF, from which a Task Manager (TM) was designated, and executed by UNEP/DTIE, which nominated a Project Coordinator (PC). Although this was an internal execution, it took on average more than one month for the Internal Cooperation Agreements (CPAs) for the four MSPs to be signed between the two divisions of UNEP (DGEF and DTIE).

62. The delay for UNEP approval of the projects (Table 2) was mainly due to reorganization processes that occurred at UNEP/DGEF¹². The previous Task Manager (TM) from UNEP of these projects moved to another position, and it took a few months before he was replaced by the actual Task Manager.

63. The Project Coordinator (PC), from UNEP/DTIE, Chemicals Branch, provided administrative and technical supervision for the implementation of the projects. According to feedback gathered during interviews with regional coordinators and other partners of the project, the guidance, supervision and assistance of the PC was considered excellent and was very much appreciated.

¹² Interview data

64. For regional coordination/supervision, Project Cooperation Agreements (PCAs) were signed with the institutions, already identified during the preparatory phases of the projects. Table 4 reports the identities of these institutions and the dates of signature of PCA with UNEP/DTIE. The structure for regional coordination was constituted by a Regional Coordinator (RC) and an assistant.

Table 4: UNEP/DTIE: PCAs with regional coordination institution

Region	Regional Coordinator	Signature date	Amount (\$)
ESA	Department of Chemistry, University of Nairobi, Kenya	December 2009	179,000
WA	Environmental Toxicology and Quality Control Laboratory of the Central Veterinary Laboratory (ETQCL), Bamako, Mali	August 2009	237,000
PI	University of the South Pacific (USP), Fiji	August 2009	230,000
GRULAC	Basel Convention Coordinating Centre - Stockholm Convention Regional Centre (BCCC-SCRC), Uruguay	August 2009	389,000

65. One of the recommendations of the inception workshops (Output 1.2) was that the country representatives were to submit to RCs names of contact institutions that would act as national coordinator of the project and that would sign a Memorandum of Understanding (MOU) with the regional coordination institution.

66. However, drafting, revision and signature of MOUs between the regional coordination institution and the national counterpart for national coordination took much more time than expected in all the regions.

67. For example, for the Eastern Southern African region (6 participating countries: Kenya, Egypt, Ethiopia, Mauritius, Uganda and Zambia), despite several reminders from the Regional Coordinator (RC), the participating countries took time to sign the MOUs. The delays ranged from 7 months for Uganda through 11 months for Mauritius and Zambia, to 15 months for Ethiopia and 18 months for Egypt. According to information obtained from the RC¹³, Ethiopia was very reluctant to sign the MOU as they feared that they would not have sufficient to collect samples. In the case of Egypt, communication was difficult as the contact person moved to another position with no proper take over, and also because of the Arab Spring¹⁴. For the other countries, these delays were mainly due to lengthy administration procedures.

68. Similarly, in the other regions significant delays were observed for signature of MOUs. For the GRULAC region for instance the delays ranged from 1 month (Uruguay) to 16 months for Brazil. In the WA region, the delays were shorter but still significant given the

¹³ Interview data from RC of ESA during country mission

¹⁴ Information gathered from regional coordinator for ESA

project duration of 18 months. They ranged from 3 months for Ghana, Mali, Nigeria and DRC to 6 months for Togo.

Output 1.2: Sub-regional workshop organized to prepare a detailed workplan for project implementation

69. The planned activities for this output were successfully completed. As mentioned earlier (Para 33), inception workshops in the four regions were held about one month after regional coordination was in place

70. During these inception workshops, the work-plans, as proposed in the project documents, were discussed and deadlines set for the different activities in order to produce outputs of the different components within the planned timetable. For example, for each country and for each activity the responsible party was identified as well as the delivery date for that particular activity.

Output 1.3: Protocols and manuals developed for sampling and analysis of the core matrices during inception workshop

71. Activities to achieve this output were undertaken in the four regions. In most cases protocols and manuals already existed and others were discussed and adopted during the inception workshops.

72. Protocols for air sampling existed in the four regions prior to the project. For GRULAC, many of the participating countries (Brazil, Argentina, Chile, Ecuador and Mexico) were already involved in the Global Air Passive Sampling (GAPS) project that was initiated by Canada and implemented by Environment Canada in 2004/2005. The same protocols developed for the GAPS project were used in the GMP project.

73. For ESA, WA and PI, most countries were engaged in MONET¹⁵, which is a project for monitoring of persistent organic compounds in the air using the passive air sampling technique and implemented by RECETOX¹⁶. All the countries of ESA and WA were involved in the first round of project in 2008, and for the PI region Fiji was involved from 2006 to 2007. The capacity built and the sampling sites identified during the MONET project were used for the GMP projects.

74. For the milk part of the GMP projects, many countries were already involved in the fourth round (2005 – 2007) or fifth round (2008 – 2010) of the WHO human milk surveys that were set to determine the levels of POPs and other pollutants in the milk samples. In that context UNEP funded DRC, Mali, Nigeria, Senegal, Togo and Ghana for WA; Ethiopia, Kenya, Mauritius and Uganda for ESA; Fiji and Kiribati for PI, and Antigua and Barbuda, Brazil, Chile, Ecuador and Uruguay for GRULAC corresponding to 17 out of the 28

¹⁵ <http://www.genasis.cz/index-en.php?pg=data-sources--monet-africa>

¹⁶ <http://www.recetox.muni.cz/index-en.php?pg=regional-pops-center--scope-of-sc-rc-activities--monitoring-of-pops-in-the-cee-countries-and-other-regions>

participating countries. In that context appropriate SOPs based on WHO guidelines¹⁷ were developed for milk sampling. The reports of these milk surveys that were presented at the 4th COP of the Stockholm Convention can be accessed at UNEP/POPS/COP.4/INF/19¹⁸.

75. For GRULAC, adequate SOPs for milk sampling were developed by the office of the regional coordination, BCCC-SCRC, based on the summarized version of the WHO protocol¹⁹ prepared by Oswaldo Cruz Foundation (FIOCRUZ), Sao Paulo, Brazil. The SOPs were translated into Spanish and English before dissemination to the GRULAC GMP countries²⁰.

76. Regarding analysis of samples for POPs, the standard operating procedures were presented and discussed by the expert laboratory (CSIC for GRULAC, MTM for ESA, and IVM for WA & PI) during the inception workshops. The standard operating procedures were further discussed during the training that countries of each region received in the context of the project.

Output 1.4: Responsible staff for air monitoring, mothers' milk monitoring, and POPs analysis assigned

77. Assignment of the responsible staff for air and mother's milk sampling has been completed either during involvement in projects (countries mentioned for GAPS, MONET and fourth & fifth rounds of WHO milk survey) prior to the GMP projects or during implementation (PI: Niue, Samoa, Palau, Solomon Islands, Tuvalu and Marshall Islands; and GRULAC: Jamaica, Mexico and Peru).

78. For national POPs analysis, the names of the laboratories were provided by the National POPs focal points of each country. However, for the GRULAC region, contrary to initial assumptions, during implementation it was found that Antigua and Barbuda did not have an operational POPs laboratory, whilst the dioxin laboratories with High Resolution Mass Spectrometer (HRMS) that were listed by countries were either not existing (Chile) or not operational (Peru). For ESA, the laboratory that was nominated for Nigeria was found not to be adequately equipped and was not allowed to participate in the project. For Zambia, the identified laboratory (Department of Chemistry, University of Zambia), although they received training from the expert laboratory (IVM) from 11 to 22 October 2010, they did not participate in POPs analysis due to unavailability of helium gas.²¹

Output 1.5: Inspection of the POPs laboratory and identification of needs

¹⁷ www.who.int/foodsafety/chem/POPprotocol.pdf

¹⁸ <http://chm.pops.int/Portals/0/Repository/COP4/UNEP-POPS-COP.4-INF-31.English.PDF>

¹⁹ <http://www.who.int/foodsafety>

²⁰ <http://www.ccbasilea-crestocolmo.org.uy/wp-content/uploads/2010/11/SOP-Regional-de-Muestreo-de-COP-en-Leche-materna.pdf>

²¹ Information data gathered during site visit to laboratory by lead consultant

79. The purpose of this output was to identify the needs of laboratories for POPs analysis. The activities for this output were completed and needs identified. However, no actual laboratory inspection / visits were done by the expert laboratory. The needs of the different laboratories were assessed by long-distance mode through a check-list via teleconference / skype or other means (telephone or emails) to identify needs and existing modes of operation in the different laboratories.

Component 2: Training of Sampling Teams and Identification of Sampling Sites

80. Delivery of the three planned outputs was successfully achieved for this component. The following paragraphs give the highlights for each of the outputs.

Output 2.1: Responsible personnel trained to establish and run the network for air samples and mothers' milk sampling

81. Activities for this output were successfully completed in all countries of the four regions. For air sampling, most countries of the project in the four regions were already involved in passive air sampling activities in previous projects (GAPS or MONET). The same persons / teams were responsible for air sampling in the GMP project. For the other countries, training was given to representatives of countries by the expert laboratory during the inception workshop. The countries were satisfied by the training provided²² and they were able to properly collect air samples that were delivered to the expert laboratories (see Output 4.1).

82. For mothers' milk sampling, no training was delivered for mother's milk sampling but the national protocols developed that were developed in the context of the project were closely adhered to. In all countries, the Ministry of Health facilitated the whole sampling process and in most cases, it was responsible for this activity. For example, in Mauritius (ESA region) the Ministry of Health was responsible: to develop the protocol, identify donors, collect the milk samples, pool the samples, send the pooled sample to the expert laboratory, CVUA, in Freiburg for analysis.

Output 2.2: Sampling sites including length of sampling periods and frequency (air matrix)

83. For this output, the activities were also completed successfully. For countries involved in the GAPS and MONET projects, the same sampling sites were used for the GMP project. However, in some countries of ESA region due to the use of same sampling sites, the persons involved air monitoring exercise were not sure if the passive samplers were the MONET or the GMP projects. However, after clarification by the Regional Coordinator and the Project Manager, the passive samplers were properly deployed according to the sampling matrix developed by the PM in consultation with expert laboratories.

²² Interview data gathered in Kenya, Senegal, Ghana, Zambia and Brazil

84. In all countries of the four regions, where possible the sites were chosen near urban or rural land-use areas. However, for practical and security reasons, in many countries, meteorological stations were chosen as sampling sites. This was the case for Zambia for example, where passive samplers were installed at the meteorological station located at the Kenneth Kaunda International Airport²³. In Ghana also, the Ghana Meteorological Agency station at East Legon in Accra was the site chosen for air sampling.

85. All the sampling sites were properly characterized by their GPS locations (latitude and longitude) and also their altitude. The sampling frequency for exposure of filters, polyurethane foam disks (PUFs), was every three months and exchanged with fresh sets over a period of 12 months that corresponded to four sets of sampled filters. For all regions, the four sampling periods were 1 April – 30 June 2010; 1 July – 30 September 2010; 1 October – 31 December 2010; and 1 January 2011 – 31 March 2011. However, in the GRULAC region, due to delays encountered, the sampling started three months later that is on 1 July 2010 for a period of 1 year. Similarly, Ghana started one quarter later.

Output 2.3: Potential donors of mothers' milk identified in the all countries

86. The activities to achieve this output were successfully undertaken in all participating countries except in Ethiopia, Zambia and Egypt, all from ESA. For Ghana, although a coordinator was identified, a consultant paediatrician from the Ministry of Health, the milk survey was not undertaken as clearance from the national ethic committee was not obtained within project duration. According to information gathered during field mission, the clearance has still not been obtained.²⁴ Egypt participated in the third round (2001 – 2002) of the WHO milk survey, but was unable to participate in the project's mothers' milk survey. As mentioned in paragraph 67, communication with Egypt was very difficult due to movement of contact person. With the help of the UNEP Project Coordinator, it took more than one year for the RC to re-establish contact with Egypt, and the MoU was eventually signed with more than 18 months delay. As a result the milk survey as well as the air sampling component was cancelled in Egypt. Ethiopia did not participate within the project duration. However, they did collect and send milk samples to the expert laboratory in Freiburg, Germany after the project.

87. As stated earlier many participating countries (17 out of 28) were already involved in the fourth and fifth rounds of the WHO milk survey. For the other countries, the identification of potential donors was done in close collaboration with the Ministry of Health. For example, for Brazil, the coordinators for human milk sampling were researchers of the National School of Public Health, part of the Oswaldo Cruz Foundation (FIOCRUZ), which

²³ Field visit was done at this site by lead evaluator during country mission

²⁴ Information obtained from national coordinator during field mission.

FIOCRUZ is the main public health research institution in Brazil affiliated to the Ministry of Health²⁵.

88. In some countries, for the identification and getting the consent of potential donors, the important role played by nurses should be highlighted here. Indeed, in rural areas in Zambia and Senegal, for example²⁶, mothers of new born babies were generally very reluctant to participate in the project. However, in many cases, the nurses were successful in convincing them to provide milk samples for the project.

89. According the WHO guidelines²⁷, as a first approximation, a minimum of 50 individual samples is recommended for each country. However, the guidelines recognized that some flexibility may be necessary for countries with small populations and/or low birth rates and in some cases, reducing the number of donors may be unavoidable. This is exactly what happened in the participating countries of the Pacific Island region. Due to low population, the countries were unable to identify 50 potential donors for milk samples: the number of potential donors were much lower and ranged from 3 for Niue to 20 for Marshall Islands (see Table 5).

Table 5: Number of donors for milk survey for PI region

Country	Average age of mothers	Number donors
Solomon Islands	NA	14
Kiribati	19	13
Niue	24	3
Tuvalu	NA	16
Palau	NA	9
Fiji Kadavu	NA	11
Marshall Islands	NA	20

*Data taken from regional report of the Pacific Island region; NA: Not applicable as data were not

Component 3: Quality Enhancement

90. Three outputs were planned for this component and the corresponding activities were undertaken for their achievement. The degree of success for each one of them is discussed in the following paragraphs.

Output 3.1: Needs for spares, consumables and standards identified and supplied to the laboratories for POPs analysis in the relevant matrices

²⁵ Information taken from National report for Brazil

²⁶ Information gathered by lead evaluator during field mission in Zambia and Senegal.

²⁷ WHO, 2007. Fourth WHO-Coordinated survey of Human Milk for Persistent Organic Pollutants in Cooperation with UNEP - Guidelines for Developing a National Protocol

91. As mentioned for Output 1.5, the needs of the participating laboratories were identified by long distance communication. A questionnaire detailing available laboratory facilities and instrumentation followed by telephone and email communication was used to establish an inventory of consumables to procure. Amongst the spares and consumables identified for most laboratories include chromatography columns, glassware such as complete Soxhlet sets for extraction of POPs, chemicals, and labelled standards. It should be pointed out that the laboratories, five in total (four from GRULAC region and one from ESA) that were able to analyse dioxins and furans that is those equipped with Gas Chromatography/High Resolution Mass Spectrometry (GC/HRMS) were provided with all POPs standards including standards for dioxins and furans. The other laboratories were provided with POPs pesticides and Polychlorinated Biphenyl (PCBs) standards only.

92. The expert laboratories involved in the project and identified during the preparatory phases were Free University, Amsterdam, Institute for Environmental Studies (IVM), the Netherlands, the Örebro University; Man Technology Environment Centre (Människa-Teknik-Miljö, MTM), Sweden; and the dioxin laboratory of Consejo Superior de Investigaciones Científicas, (CSIC), Barcelona, Spain. Those three laboratories that were responsible for capacity building in the participating national laboratories were also responsible for the procurement of the spares and consumables to be sent to the participating laboratories, through Small Scale Funding Agreements (SSFAs) signed with UNEP.

93. The WHO Reference laboratory for mothers' milk at State Institute for Chemical and Veterinary Analysis of Food (CVUA) in Freiburg, Germany was responsible for the analysis all milk samples. CVUA was also responsible, through SSFA signed with UNEP, to procure for all countries participating in the milk survey with the adequate milk containers. These were timely shipped to all the countries. No major difficulties were encountered for shipment of those containers except for Egypt that did not accept them, probably as a result of political unrest (Arab Spring) that prevailed in Egypt at that time.

94. For most countries, spares and consumables were received without much delay before the capacity building national training workshops (output 3.2) and the inter-calibration exercise (output 3.3). In the WA, ESA and PI regions, the procurement was completed by mid-2010. For the GRULAC region however, the procurement ended later by the end of 2010 due to delays encountered in some countries (Ecuador and Mexico). The delays were due to difficulties encountered with customs and rejection at recipient address during expedition of these spares and consumables.

95. Regarding laboratory capacity building, the main difficulties that some of the national laboratories are facing are procurement and stocking of the required consumables including chemicals and solvents, and routine equipment maintenance, which are considered as vital for the sustainability of POPs analysis. The persons interviewed during the evaluation view these as a challenge as financial resources are very limited²⁸. For example, due to unavailability of

²⁸ Information gathered by lead evaluator during missions in Zambia, Kenya, Ghana and Senegal

helium gas, the nominated POPs national laboratory for Zambia (Department of Chemistry, University of Zambia) could not undertake POPs analysis for proficiency testing and did not participate in the inter-calibration exercise.

Output 3.2: Personnel trained on POPs analysis on core matrices in developing country laboratory

96. As planned in the project documents, the three expert laboratories (IVM, MTM and CSIC) provided training to the personnel of the participating laboratories in order to build their capacity in POPs analysis in core media (human milk and ambient air) and other matrices such as sediment and fish. The training was done through workshops in the individual countries and the workshops had two components; a theoretical part and a practical part where hands-on training was delivered to the participants. Information (example: date, number of participants, and number of participating laboratories) regarding the training workshops are reported in Table 6 (Given in Appendix 1).

97. A total of 156 laboratory personnel coming from 36 laboratories from 16 of the 28 participating countries have had their capacity built or enhanced for POPs analysis (Table 6 given in Appendix 1). 13 of the 36 laboratories were not among the proposed laboratories to participate in the GMP projects, they were however invited by the respective national coordinators to participate in the training workshops as they had some capacity for POPs analysis. For example, in Kenya, the participating laboratory in the project was the Department of Chemistry, University of Nairobi (UON). Personnel from five other laboratories also attended the training workshop and these were Department of Public Health and Pharmacology (DPHP), University of Nairobi, Pest Control Products Board (PCPB), Kenya Plant Health Inspectorate Services (KEPHIS), Kenya Bureau of Standards (KEBS) and Kenya Revenue Authority (KRA). Similarly in Brazil, two technical staff of FIOCRUZ, a non-participating laboratory of the GMP project, attended the training workshop delivered by CSIC.

98. To get the general feedback of the participating laboratories with respect to the project and on the capacity building for POPs analysis in particular, the evaluation team organised a survey. A questionnaire (Annex 4) was developed and sent to all the participating laboratories with the help of the regional coordinators. Out of the 22 participating laboratories, 17 replied, which corresponds to a response rate of 77%. One of the questions of the survey was to rate the project according to the following qualifiers: 1: Unsatisfactory; 2: Moderately unsatisfactory; 3: Moderately satisfactory; 4: Satisfactory; 5: Highly satisfactory. The outcome of the rating is given in Table 7. The average rating of the laboratories is found to be 3.9 that would tend to indicate that the laboratories were quite satisfied with the project and in particular with the laboratory training provided by the expert laboratories. Note that two laboratories gave ratings (3.5 and 4.5) that did not correspond to any qualifier.

Table 7: Ratings of project by participating laboratories

Qualifier	Rating	Frequency (n)*
Unsatisfactory	1.0	0
Moderately Unsatisfactory	2.0	0
Moderately Satisfactory	3.0	6
NA	3.5	1
Satisfactory	4.0	4
NA	4.5	1
Highly satisfactory	5.0	5
Average rating		3.9

* n corresponds to number of laboratories giving a particular rating

Output 3.3: Participation in international inter-calibration study

99. Activities to achieve this output were successfully undertaken. Inscription to participate in the inter-calibration study was open up to 31 Mar 2010. The matrices included in this study were: (i) Unknown standard solutions (basic POPs and PCDD/Fs²⁹); (ii) Sediment (basic POPs and PCDD/Fs); (iii) Fish (basic POPs and PCDD/Fs) ad (iv) Fly ash (PCDD/Fs)

100. Samples of the different matrices to be analysed were distributed to the participating laboratories during the period September - October 2010. The participating laboratories were given a deadline of 15 January 2011 for submission of results. 21 of the 22 laboratories that had their capacity built participated in the study. Zambia did not participate due to unavailability of helium gas. Mali did not fully participate due to breaking down of chromatography equipment during the study. They were able to analyse only one sample before breakdown of the equipment. The results obtained by the laboratories for this inter-calibration exercise are accessible on the project website: <http://www.chem.unep.ch/Pops/GMP/Global>. The outcome of the inter-calibration study is discussed in the **Effectiveness** section

Component 4: Analysis of National GMP Samples

101. This component is related to the collection and analysis of national samples, and evaluation of results. Activities to achieve the three outputs for this component have been satisfactorily undertaken.

Output 4.1: National air and mothers' milk samples collected and pooled where applicable

102. For air sampling, exposure of the last Passive Air Samplers (PAS) terminated on 31 March 2011 in most countries as planned, and the Polyurethane Foams (PUFs) were collected from the PAS and distributed to national (where applicable) and expert laboratories for

²⁹ See footnote No 3

analysis. For example, IVM received a total of 44 PUFs from ESA and WA countries while MTM received 40 PUFs.

103. In Ghana, Brazil and Ecuador, the collection of the last PUFs were done three months later (30 June 2011) as air sampling exercise started three months later. In the case of Egypt, as explained earlier, this activity was cancelled. In the case of the Pacific Island regions, the PUFs that were sent to the expert laboratories (MTM and IVM) corresponded to exposure periods of 6 months only instead of 1 year. Indeed the number of PUFs to be delivered to each expert laboratory was supposed to be 4, but as indicated in Table 8, most the countries in the PI region were unable to achieve these targets.

Table 8: Number* of PUFs received by IVM and MTM for PI region

Country	IVM	MTM
Fiji	4	2
Kiribati	4	2
Niue	2	2
Samoa	2	2
Palau	4	2
Solomon Islands	5	2
Tuvalu	2	2

* 4 PUFs should have been delivered by each country to each expert laboratory

104. As stated earlier, many of the participating countries: Kenya, Mauritius, Ghana, Zambia, Senegal, Mali, Nigeria, Uganda, DRC, Antigua and Barbuda, Chile, Uruguay and Fiji, that participated in 4th and 5th rounds of the WHO milk survey already collected and sent pooled milk samples to the expert laboratory, CVUA, in Freiburg, Germany, prior to the GMP projects.

105. For the other countries, activities were undertaken and pooled samples sent to CVUA. Most countries including Togo, Ethiopia, Jamaica, Ecuador, Mexico, Peru, Kiribati, Niue, Samoa, Palau, Solomon Islands, Tuvalu and Marshall Islands³⁰ were able to properly collect and process pooled samples according to agreed SOPs and guidelines within the project time frame. However, in Brazil due to delays in starting this component of the project, the sample period was extended to end of 2012, and as a result the milk survey team was unable to ship samples to CVUA within the project time frame. The pooled samples were sent at the end of 2012 after the project³¹. For reasons mentioned earlier, Egypt did not send mothers' milk samples to the expert laboratory in Freiburg.

Output 4.2: National samples exchanged for POPs analysis in developing country laboratory and mirror analysis in experienced back-up laboratory

³⁰ Marshall Islands, not a participating country, was included in project with cash co-funding from the Stockholm Convention Secretariat.

³¹ Information gathered from Project Coordinator

106. The aim of this output was to have the same samples analysed by national laboratories and by the back-up or expert laboratories (IVM, MTM and CSIC) and then compare results in order to assess the capacity of the national laboratories in POPs analysis. As it was the case for Output 3.3, for this output only 16 laboratories of the 22 laboratories that had their capacity built participated in these mirror analyses. The activities were successfully completed in all the regions.

107. Besides the PUFs, other national samples were sent to the expert (back-up) laboratories. Countries of ESA and WA regions sent the following samples to IVM and MTM: fish, smoked fish, sediment, soil, maize, beans, baby milk powder, corn-starch, cassava flour, and fish meal. A total 43 national samples were received by IVM, while MTM received 34 national samples. For GRULAC, the national samples included soil, sediment, fish and cow milk samples. For the PI region, despite several efforts and reminders from the regional coordinator, most countries did not send national samples to the back-up laboratories for analysis of basic POPs or dioxin-like POPs. By December 2011, the samples were analysed by both the expert laboratories and the national laboratories

108. The number of national samples was lower than expected. The results for mirror analyses are given in national reports and reports of expert laboratories, which are accessible on the project website³².

Output 4.3: Analytical data evaluated and results interpreted

109. The activities related to this output were satisfactorily completed. For ESA and WA, analysis of the samples in national laboratories and in expert back-up laboratories (IVM and MTM) was completed by end of 2011. The number of matrices and results for mirror analysis were less than expected however.

110. The analytical data are reported in the respective national reports and reports of the expert laboratories. Interpretation of results is also discussed in those reports. Except for a few national reports, for example, for those of Mauritius or Mali, where results for mirror analyses were properly presented where both sets of data/results for the national laboratory and the expert back-up laboratory were given in the report (and same table), it was difficult for the evaluation team to properly assess the performance of the national laboratories. In most cases, only one set of results/data is reported, only those of the reporting laboratory, and not the set for the other laboratory (expert or national laboratory).

111. In a few cases, the data reported could not be properly understood. For example, in the case of Jamaica, a series of tables of results were given in the national report without proper indication whether those results were those of the national laboratory or those of the expert-back up laboratories. Uganda did not comment on the nationally produced data as the evaluation report of the inter-calibration study and mirror analyses were not available.

³² <http://www.chem.unep.ch/Pops/GMP/Global>.

112. For most countries of GRULAC region, except for Jamaica, Antigua and Brazil for which the national reports were in English language, the national reports were written in Spanish language and it made the evaluation exercise very difficult as both evaluators do not read or understand Spanish language. Although, use of free translator software available on the internet was made use of, it was not possible to properly assess the performance of the different laboratories.

Component 5: Development of Long-term Strategy for GMP under Effectiveness Evaluation

113. This component, aimed at developing long term strategies for GMP, comprises three outputs and the corresponding activities have been undertaken for their achievements.

Output 5.1: Workshop organized to evaluate the project outcomes and communicate the results and lessons learned

114. For ESA and WA regions a joint workshop was organized and hosted by IVM in Amsterdam from 28 February to 4 March 2011. For GRULAC, the workshop was organized by CSIC in Barcelona from 21 – 25 March 2011, and for the Pacific Islands region, the workshop was organized in Suva, Fiji on 9 – 10 June 2011. The workshops were attended by the major stakeholders including representatives of countries, expert laboratories, UNEP, and the Stockholm Convention.

115. The objectives of the workshops, which were successfully met, were to: (i) Review the status of project activities in each participating country; (ii) Discuss the results of the mirror analysis and the inter-calibration study and get the feedbacks of the expert back-up laboratories; (iii) Discuss mothers' milk and the ambient air (PAS) data and; (iv) Discuss elements of the final report, the remaining working plan, timeline of deliverables until completion of the project

116. The expert laboratories commented the training workshops organized in the countries. For example, the representative of CSIC described the experience obtained during capacity building training workshops in countries as positive. However, he mentioned that a longer training period would be required to solve problems such as excessive bureaucracy that hinders access to consumables, issues related to the treatment of waste and training courses for experts. IVM also commented that in general the trainings went well, however African countries faced many challenges such as general lack of good instruments, bureaucratic procedures and sometimes difficult access to consumables.

117. Proposals for follow-ups of the GMP projects were also presented by UNEP at the PI workshop in Suva, Fiji. In particular, it was proposed to develop regional POPs monitoring full size projects (FSPs) in four regions that would include Asia and the two African regions (ESA and WA) will be merged into one region: (i) Asia (to generate results similar to the present GMP projects for 12 POPs – 6-8 countries); (ii) Africa (~12 countries); (iii) Pacific Islands (~8-10 countries); and (iv) Latin America and Caribbean (~10 countries)

118. The objectives of those four FSPs would be to: (i) Continue existing data series for 2-3 more years (air, water); (ii) Undertake next human exposure monitoring (mothers' milk and blood); (iii) Undertake training to further improve POPs labs in their performance and train on new POPs; (iv) Further develop the POPs Labs database and continue inter-calibration studies; and (v) Provide input to 2nd regional/global monitoring plan (due 2015).

119. The evaluation of the workshop by the participants was positive. They commented on the opportunity to network with other colleagues from same region and to establish links with researchers of the expert laboratories (IVM, MTM and CSIC) IVM.

Output 5.2: Long-term strategies developed for future contributions to the Global Monitoring of POPs

120. Activities to achieve this output have been successfully undertaken. As discussed for Output 5.1, plans for follow up including national and regional strategies were proposed at the final results' workshops organized in February / Mar 2011 (for GRULAC and African regions) and June 2011 for PI. Those plans were discussed during COP5 of the Stockholm Convention that was held in Geneva in April 2011.

121. In particular, the issue of Global Monitoring Plan (GMP) for Effectiveness Evaluation was discussed during COP5. Amongst the activities recommended by Decision SC-5/18 on the GMP for effectiveness evaluation, the Conference of the Parties are the following: (i) *Requests the Secretariat, subject to the availability of resources, to continue to support the work of the regional organization groups and the global coordination group for the global monitoring plan;* (ii) *Also requests the Secretariat, within available resources, to continue to support training and capacity-building activities to assist countries in implementing the global monitoring plan for subsequent effectiveness evaluations and to work with partners and other relevant organizations to undertake implementation activities;* and (iii) *Encourages parties to engage actively in the implementation of the global monitoring plan and the effectiveness evaluation*

122. Subsequently, at the global meeting of coordinators of the GMP projects that was held in July 2011, in Geneva, it was agreed to develop FSPs on POPs monitoring including assistance to POPs laboratories in developing countries to seek financial support from GEF and other donors like the European Commission, UNEP, and WHO. According to information received from the Project Coordinator³³, three of the four PIFs have been approved by GEF and co-finance letters have already been secured from participating countries. For Africa (15 countries), GRULAC (12 countries) and Asia (6 countries), it would be FSPs while it would be an MSP for PI (9 countries) (see Table 9).

³³ Interview data

Table 9: Status of follow up projects for GEF grants and co-finance

Region	Countries	GEF Grant (\$)	Co-finance (\$)	PIF status
Africa	DRC, Egypt, Ethiopia, Ghana, Kenya, Mali, Morocco, Mauritius, Nigeria, Senegal, Tanzania, Togo, Tunisia, Uganda, Zambia	4,208,000	8,462,000	Approved Nov 2012
GRULAC	Antigua and Barbuda, Argentina, Barbados, Brazil, Chile, Colombia, Cuba, Ecuador, Jamaica, Mexico, Peru, Uruguay	3,636,000	7,399,200	Approved Nov 2012
Asia	Cambodia, Indonesia, Lao PDR, Mongolia, Philippines, Vietnam	3,936,000	11,470,000	Approved April 2013
PI	Fiji, Kiribati, Marshall Islands, Niue, Palau, Samoa, Solomon Islands, Tuvalu, Vanuatu	1,995,000	5,805,000	PIF technically cleared
Total		11,780,000	33,136,200	

Output 5.3: Results and strategies diffused

123. While at global level activities to disseminate outcomes of the projects have been very satisfactorily, at regional and national level initiatives have been limited.

124. At global level, all the outputs (national and regional reports, reports of workshops, report of inter-calibration study, etc.) of the GMP projects are available on the regularly updated³⁴ UNEP website at: <http://www.chem.unep.ch/Pops/GMP/>. The milk and air data generated by the four GMP projects have been analysed and organized in a very comprehensive manner regarding their structure, geographical coverage, time series availability and data reliability at the following website: <http://www.pops-gmp.org/>. This website also contains an “*On-line data visualization tool*” option that allows users to browse and analyse the existing datasets. Moreover, a number of presentations have been made to meetings of the Conference of Parties of the Stockholm Convention (COP4, COP5 and COP6) to disseminate the results of the GMP projects. Copies of these documents (UNEP/POPS/COP.4/31; UNEP/POPS/COP.5/INF/27; UNEP/POPS/COP.5/INF/28; and UNEP/POPS/COP.6/INF/33) can be accessed at Stockholm Convention website³⁵.

125. At regional level, only the GRULAC region has taken some actions to promote project outputs. The guidelines and all SOPs developed for sampling and analysis, national reports, reports of workshops and final regional report are posted on the website of BCCC-SCRC³⁶, the regional coordination institution for the region. Diffusion of project results has also been done at regional or global scientific forums. For example, CETESB of Brazil

³⁴ Interview data from Project Coordinator UNEP, DTIE, who created these websites: <http://www.chem.unep.ch/Pops/GMP/> and <http://www.pops-gmp.org/>

³⁵ <http://www.pops.int/>

³⁶ <http://www.ccbasilea-crestocolmo.org.uy>

participated in “IX Latin American Symposium on Environmental and Sanitary Analytical Chemistry” held in Salvador – Bahia, Brazil, April 17th-20th, 2011. CETESB made an oral presentation on the GMP – air monitoring activities and Stockholm Convention and its implementation in Brazil. Brazil GMP POPs data were also presented at the “DIOXIN2011 – 31st International Symposium on Halogenated Persistent Organic Pollutants” held in Brussels, Belgium, 21 – 25 August 2011 through oral and poster modes.

126. At national level, some effort has been done in most countries to promote the project’s activities and outcomes amongst stakeholders only and not to the general public at large. For example, National Stakeholder Meetings were held in Mauritius (10 Aug 2011), Kenya (27 Jul 2011) and Uganda (20 July 2011) to inform national partners: Ministry of Environment, Ministry of Health, and participating laboratories on the status of project implementation. In Jamaica, the outcome of the project and the way forward was presented in a workshop to a wider audience than the stakeholders of the project.

127. In Brazil, a national workshop was held in São Paulo in August 2011 during which the results of the project were disseminated and discussed. In Peru, the results of the air samples and breast milk samples were reported at the First National Workshop on POPs held in September 2011. The workshop was attended by major stakeholders and other ministries including the coordinators of the 5 regions of Peru implementing POPs activities. In Chile, the results were disseminated to all stakeholders including the human milk donors. It was pointed out that while communicating the results to technical persons was easy, but with the donors (mothers), they had to explain very carefully the relation of POPs levels in milk and the risk the baby might be exposed to. For this, they compared levels in Peru with levels in other countries of the world.

128. Overall, all the planned outputs have been delivered. For these reasons, the overall rating is **Highly Satisfactory** for delivery of activities and outputs.

A.2 Relevance

129. The focus of the four projects to build regional capacity for POPs sampling and analysis and POPs data generation was very relevant to the mandate of UNEP that promotes chemical safety by providing policy advice, technical guidance and capacity building to developing countries. UNEP is also the host organization for the Secretariat of the Stockholm Convention. The capacity building-objective was also consistent with the Bali Strategic Plan for Technology Support and Capacity-building of UNEP’s Governing Council decision (UNEP/GC.23/6/Add.1).

130. The projects were also highly relevant with regards to the minimum requirements for the first effectiveness evaluation defined by the Conference of the Parties of the Stockholm Convention in decision SC-2/13 that read as follows: (i) *The first monitoring report will provide baselines for further evaluations;* (ii) *Air monitoring and human exposure through breast milk or blood serum would be used as core data;* (iii) *Such comparable and representative core data should be obtained from all five UN regions;* (iv) *Guidance should*

be provided on standardization; and (v) Establish strategic arrangements and build partnerships, including with the health sector

131. The projects' objectives were pertinent to the GEF POPs focal area strategy and strategic programming for GEF-4 (2007 – 2010). In particular, it made provision for “*Strengthening capacities for National Implementation Plans (NIPs) implementation, including assisting those countries that lag farthest behind to establish basic, foundational capacities for sound management of chemicals*”.³⁷

132. All the participating countries except Palau³⁸ were parties to the Stockholm Convention at the moment of project development and implementation. The projects were very relevant as they contributed to help the participating countries in fulfilling their obligations with regards to Articles 11 and 12 of the Convention.

133. The overall rating for relevance is **Highly Satisfactory**

A.3 Effectiveness

134. The evaluation of effectiveness is based on the extent to which the objective was achieved: *To build regional capacity on analysis and data generation for POPs in core matrices for the Global POPs Monitoring (GMP) to enable the participating countries of the four regions to contribute to the global report submitted to the Conference of the Parties (COP).*

135. Based on the objectively verifiable indicators³⁹ given in the project document, the objective has not been fully achieved. While the indicator “*Sampling programs in place in each country*” is achieved, the two indicators “*Data generated in local POPs laboratories have been submitted for inclusion into the regional GMP report*” and “*POPs laboratories feed data into the global database for core matrices*” have not been achieved. Indeed, the POPs data for core matrices that have been generated for the regional GMP report and for the global data base have been generated by the expert laboratories (IVM, MTM, CSIC and CVUA) and not by the national POPs laboratories.

136. Given the way the projects were implemented, it was understood from the start that the data to be fed in the global database would be generated by the expert laboratories. Indeed, many of the participating countries (e.g. most of the countries in PI, Ethiopia for ESA, or DRC and Togo for WA) did not have capacity for POPs analysis. For the other countries, many were not fully equipped to analyse all POPs (basic and dioxin-like POPs) in the core media. Only 5 of the 21 participating laboratories could analyse dioxin-like POPs. It

³⁷ http://www.thegef.org/gef/sites/thegef.org/files/documents/GEF_4_strategy_POP_Oct_2007.pdf. GEF4 has been superseded by GEF5 and POPs falls under the GEF Chemicals Strategy.

³⁸ At the moment of project implementation, Palau, has not yet ratified the Stockholm Convention and was therefore not eligible to GEF funding for NIP implementation. This country was linked to the project activities exclusively through co-funding. Palau ratified the Convention on 8 September 2011.

³⁹ Indicators for the development objective mentioned in the Logframe, Appendix 1 of project document

was also obvious that, even with some capacity building and training from the project, as most of participating laboratories were not adequately equipped with no proper Quality Assurance / Quality Control (QA/QC) system in place, and laboratory personnel lacking experience in POPs analysis in core media (air and human milk), generating high quality POPs data would be very difficult. For these reasons, it was planned since the start of the project to send milk and air samples of all countries to the expert laboratories for analysis in order to generate high quality data, which were indeed obtained and fed in the global database. In that respect, effectiveness can be considered very high as the project was able to produce high quality POPs data in the core matrices in all the countries of the four regions.

137. For this exercise however, the evaluation of effectiveness will be based mainly on the sampling programs and laboratory capacity building aspects of the projects. As mentioned earlier, based on WHO guidelines, SOPs for mothers' milk sampling have been successfully developed in all regions. As a result most countries⁴⁰ have been able to properly collect samples that were then pooled and sent to CVUA, the WHO reference laboratory for milk analysis. Due to delays in starting of activities, Brazil was unable to collect and send pooled within the project duration. However, 15 pooled samples were sent to CVUA by November 2012.⁴¹

138. For air sampling activities, the passive air samplers (PAS) were properly deployed in all countries according to standard procedures developed by RECETOX (Monet project) or Environment Canada (GAPS project), and PUFs were sent to expert laboratories. Four sets of PUFs were collected and sent to the expert laboratories following a sampling schedule planed by UNEP in collaboration with regional coordinators and expert laboratories. In general the expert laboratories were satisfied with the PUF samples they received. But for the PI region, IVM⁴² indicated that most PUFs received were unclearly labelled, i.e. lacking information regarding the exposure period, place, and many of the samples received showed discrepancies when compared with lists provided.

139. The capacity building training workshops delivered by the expert laboratories were very helpful and contributed to enhance their analytical skills according to the feedback of 17 of the 22 national laboratories that responded to the survey organized by the evaluation team. One of the questions of the survey was *"Impact of project on your laboratory"* and some examples of the responses were: *"Training imparted to lab personnel was of very good level"*; *"Analysts were trained and analytical capabilities have been raised"*; *"Staff have greatly improved their GC analysis skills"*; *"The laboratory personnel were trained in POPS analysis and will be able to analyse POPs all things being equal"*. The average rating given by responding laboratories of the survey was 3.9 for a maximum rating of 5 (Table 7).

⁴⁰ For reasons mentioned earlier, Egypt did not send milk and air samples to expert laboratories.

⁴¹ Information obtained by email from milk coordinator (FIOCRUZ) for Brazil

⁴² Information taken from IVM report

140. After the capacity building workshops that were delivered in the second half of 2010 (see Table 6), twenty one of the twenty two national laboratories that had their capacity built participated in the inter-calibration study for which the following matrices were to be analysed: (i) unknown standard solutions (basic POPs and PCDD/Fs); (ii) sediment (basic POPs and PCDD/Fs); (iii) fish (basic POPs and PCDD/Fs); and (iv) fly ash (PCDD/Fs). Samples of the different matrices were delivered in September / October 2010 and the deadline to submit results was January 2011. As mentioned earlier, Zambia did not participate due to failure to get helium gas for running of the gas chromatograph (GC) and Mali could analyse only a few samples due to breakdown of GC equipment that could not be repaired. Most of the other laboratories did not analyse all matrices, and were not equipped to analyse all POPs. 14 of the 21 participating laboratories were equipped to analyse basic POPs⁴³ only.

141. For the inter-calibration exercise, a z-score (Thompson and Wood, 1993)⁴⁴ was calculated for each participant's data for each matrix / analyte combination which was given an assigned value. Following the z-score obtained by a laboratory for a given matrix / analyte combination, the interpretation was as follows:

$|z| < 2 \Rightarrow$ satisfactory performance; $2 < |z| < 3 \Rightarrow$ Questionable performance; $|z| > 3 \Rightarrow$ unsatisfactory performance

142. Table 10 given in Appendix 1 resumes the outcome for the laboratories having analysed basic POPs (POPs pesticides) and PCB markers in the different matrices. Although the laboratories from GRULAC performed better than those of the African regions, it seems obvious that these laboratories need further capacity enhancement to be able to produce quality data as the percentage of satisfactory performance for the analyses ($|z| < 2$) was quite low, 23.7% for the merged African regions (ESA + WA) and 33.4 % for GRULAC. Furthermore, results of Table 10 (given in Appendix 1) tend to indicate that matrices (sediment, milk and fish) requiring work up (solvent extraction), as compared to unknown standard solutions that do not require any work-up before analysis, seem to pose more problems to the participating laboratories. For unknown standard solutions, the two regions obtained higher percentages of results with scores $|z| < 2$ compared to the other matrices (Table 10, given in Appendix 1).

143. Analysis of the z-scores for each laboratory indicates that a great majority of the laboratories performed poorly, only four laboratories (L72, L80, L81 and L87, Table 11 given in Appendix 1) succeeded in achieving satisfactory performances ($|z| < 2$) in more than 70% of analyses undertaken. Table 11 (given in Appendix 1) also confirms that in general the laboratories obtained significantly better results for standard solutions than for the other matrices. This trend might indicate that the solvent extraction step and clean-up before

⁴³ Basic Pops include POPs pesticides, HCBs and PCBs

⁴⁴ Thompson M & Wood R (1993). International Harmonised Protocol for Proficiency Testing of (Chemical) Analytical Laboratories. J. Assoc. Off. Anal. Chem. 76, 926-940

analysis may constitute a major source of error and there is probably need for further capacity enhancement in this area.

144. The inter-calibration study also focused on the capacity for national laboratories to analyse advanced POPs that is dioxins and furans (PCDD/Fs) and dl-PCBs. The analysis of these POPs requires the use of advanced costly equipment such as High Resolution Gas Chromatography/High Resolution Mass Spectrometry. Only 5 national laboratories that were equipped with such equipment participated in this component of the study, four from GRULAC (L54, L57, L72 and L94) and one from ESA (L53) participated (Table 12, given in Appendix 1). It should be noted that two (L57 and L72) of the five laboratories also participated in the basic POPs analysis component while the three others (L53, L54 and L94) did not.

145. In general, except for L57, the other four laboratories performed very well for the standard solutions. In particular, L53, L72 and L94 were 100% successful ($|z| < 2$ for all analyte/standard solution combinations) in analysing the standards. It is worthy to note that L72 was also very successful in analysis of standards for basic POPs too (Table 11, see Appendix 1). For the other matrices, the laboratories obtained poorer z-scores (Table 12, see Appendix 1) ranging from 0% for PCDD/Fs in ash and sediment for L53 or dl-PCBs in ash L54, for example, to 63.6% for dl-PCBs in sediment for L54.

146. These results of the inter-calibration study indicate that although the capacity of all the laboratories have been enhanced through a training workshop delivered prior to this exercise, all the laboratories need further capacity building / enhancement to be able to produce quality POPs data in the core matrices. The study also revealed that some of the laboratories (for e.g. L72) do not require much capacity/further training to perform satisfactorily in all matrices. Finally, the inter-calibration exercise clearly indicates that matrices requiring extraction and clean-up is an issue to all laboratories that probably warrant capacity building in this area.

147. Although high quality data in the core media have been obtained for all the regions, (generated by the expert laboratories however), and sampling programs successfully achieved, the capacity of the national laboratories need to be further enhanced to be able to contribute high quality data to GMP. For these reasons, effectiveness is rated **Satisfactory**.

A.4 Efficiency

148. Overall, a mixed form of agency execution and counterpart execution was applied for the implementation of the project activities in the four regions. In that context, Project Cooperation Agreements (PCAs) and Small Scale Funding Agreements (SSFAs) were signed with the major partners of the projects that include the regional coordination institutions (e.g. BCCC-SCRC) and the expert laboratories (e.g. IVM, CSIC or CVUA).

149. A number of measures to promote efficiency were identified in the project document and adopted during implementation (e.g., building on previous projects or on-going

programmes of existing agencies; adopt existing procedures for sampling, or engaging local stakeholders to identify donors).

150. The major factors that contributed to efficiency included:

- i. Establishment of partnerships with key organisations, agencies (e.g. WHO), academic and research institutions (e.g. expert laboratories) for project execution (see Part B: Target groups and Implementation partners) that were already identified during a good preparatory phase (PIF phase).
- ii. Building on existing programmes (e.g. MONET or GAPS for passive air sampling or WHO milk survey). Most of the participating countries used the same sites that were selected during MONET or GAPS for air sampling. The project benefitted from the WHO milk survey that is Or on past projects (e.g. UNEP/GEF project on “*Assessment of Existing Capacity and Capacity Building Needs to analyse POPs in Developing Countries*”), most of the participating laboratories were already identified during this UNEP project and data regarding those laboratories are available on the following website: UNEP databank of laboratories analysing persistent organic pollutants "pops laboratory databank" ⁴⁵
- iii. Adoption of existing procedures. The WHO standard operating procedures / guidelines for sampling milk were adapted by all regions. For air sampling the MONET or GAPS sampling procedures were adopted.
- iv. Engaging local stakeholders (e.g. local health centres) for identification of mothers' milk donors.
- v. Only laboratories that had at least the basic analytical equipment and that have staff trained in basic analytical procedures were allowed to participate in the project.
- vi. Good communication between PC, UNEP and regional coordinators and other stakeholders. The proficiency of the PC in English, French and Spanish facilitated communication with regional coordinators. This was highlighted by all persons interviewed, in particular they pointed out her quick and helpful responses (emails) to queries and issues they had during project implementation.

151. The implementation approach applied and the cost-efficient measures adopted contributed to the successful completion of project within the planned budget. All planned cash co-funds were effectively mobilized and all the verifiable indicators mentioned for the outputs in the logical framework have been effectively achieved.

⁴⁵ <http://212.203.125.2/databank/Home/Welcome.aspx>

152. However, a number of factors reduced efficiency in some countries. As described earlier, the movement of the project coordinator without proper handing over in Egypt delayed considerably the project and as a result a number of project activities (e.g. participation in milk survey and air sampling) were cancelled. Many countries (e.g. Senegal, Ghana or Brazil) mentioned that the delays in funds transfer (either nationally or regionally) slowed down the process. The delays in getting the approval of ethics committee for milk sampling was also mentioned as a factor that delayed project implementation. For example, Brazil submitted pooled milk samples to CVUA after project closure while Ghana has not yet got the approval of the national ethics committee for milk sampling.

153. Other factors / problems encountered by countries and mentioned during the final workshops (Output 5.1) that delayed implementation are listed below

- Delays in funds transfer (mainly between institutions at national level)
- Problems in funds management at national level (e.g. laboratories / institutions involved in POPs analysis or sampling (air or milk) did not receive funds from National coordinating institution)
- Delays in signing MOU with regional coordination
- Lack of communication at national level amongst stakeholders
- Difficulties in obtaining information from other institutions (e.g. meteorological services reluctant to give data regarding temperatures at PAS sampling sites)
- Difficulties and delays with national ethics committee to get clearance for milk sampling
- Vials fragile for milk sampling
- Long administrative procedures (e.g. lengthy process of Ministry of Finance in clearing warrant)
- Confusion in responsibilities at national level
- Technical issues like concerns regarding milk standards and internal standard calculations, difficulties in interpreting analytical data (e.g. why levels of dioxins is high in milk)
- For French speaking countries, availability of documents in French (delays in translation from English to French)
- Lack of freezer capacity to store samples
- Difficulties to identify national partners for milk survey
- Poor accessibility to funding for maintenance and repair of equipment and for purchasing consumables and chemicals
- Initiatives to develop national monitoring programmes lack the necessary political support

Timeliness of Execution

154. The projects were scheduled to start as from UNEP approval dates (see Table 2) for a duration of 18 months to completed by early 2011. In the four regions, inception workshops were organized (see paragraph 33), during which the government representatives were asked to identify a national coordinator and coordinators for milk and air sampling.

155. As discussed previously (paragraphs 67 and 68), it took much longer than expected for MoUs to be signed between Regional Coordination institutions and countries. Delays were also encountered during signature of agreement between the executing agency (Chemicals Branch of UNEP, DTIE) and the implementing agency (UNEP, DGEF) because of the internal revision processes at the executing agency. As a result of these delays, the projects were revised in August 2010 for ESA, WA and GRULAC, and in February 2011 for PI, and a new common completion date of September 2011 was agreed upon for the 4 regions.

156. A second revision of the four projects was done in September 2011, and it was decided to extend the duration of the four projects to March 2012, in order to allow for completion of project activities. The following reasons were mentioned to justify the extension: (i) Project partners could not deliver all products and reports due to administrative and logistic challenges; (ii) The transfer of small materials and consumables to partner countries took longer than expected, which caused a delay in the analysis of samples at the national level and; (iii) Analysis and reports of mirror samples took longer than expected due to the amount of work of expert labs and delays with countries sending the samples.

157. The budgets of the four projects were revised and re-phased accordingly to take into consideration the second extension. For example, for the ESA region, the year 2011 budget was reduced to \$138,719.10 in order to re-phase \$15,476.54 to year 2012 that would cater for project completion activities. It was also decided that a single terminal evaluation would be conducted for the four GMP projects and the cost for this (approximately \$60,000 as per UNEP Evaluation Office Unit estimation) would be spread across two of the four GMP projects (GFL/4A76 and 4A77, WA and GRULAC regions). Therefore, budget for Final Evaluation under for ESA and PI would be zero.

158. Despite the delays encountered, the projects were successfully completed thanks to the dedication and hard work of the Project Manager and the regional coordinators⁴⁶. The national and regional reports were submitted to UNEP according to an agreed format that was discussed during the second regional workshops organized in February / March 2011.

159. Although delays were encountered during project execution, all outputs have been delivered. For these reasons, the rating for Efficiency is **Highly Satisfactory**.

⁴⁶ Data interview with PM and regional coordinators during field visit. Confirmed by other partners of project

A.5 Review of outcomes towards impacts

160. To assess progress made towards achievement of impact of project, a Review of Outcomes to Impacts (ROtI) analysis is made, and this analysis is described in the annex of the TORs of this evaluation exercise (Annex 1). The ROtI analysis identifies “intermediate states”, which are transitional conditions between the project’s immediate outcomes and the intended impact, and they are necessary conditions for achieving the impact of the project. It is theoretically possible to determine the Impact Drivers (significant factors that if present are expected to contribute to the realization of the intended impacts and can be influenced by the project, its partners and stakeholders) and the Assumptions (significant factors that if present are expected to contribute to the realization of the intended impacts but are largely beyond the control of the project). Based upon this analysis it is possible to recognize if the project has produced sufficient changes, and to identify the intermediate states.

161. The theory of change is based on the premise that increased capacity of the laboratory personnel and other stakeholders of the project (e.g. enhanced analytical capacity, availability of protocols, SOPs and manuals for sampling) and application of these capacities will enable countries to contribute national data to the GMP including analyses and reporting on National POPs data. Based on this premise the **impact** of the GMP projects, their global environmental benefits (GEBs), has to be seen in the context of the efforts of the COP to establish an effective global system for monitoring of the effectiveness of the implementation of the Stockholm Convention. The projects will contribute to these efforts by strengthening the monitoring capacity at national level and with this enabling the participating countries to contribute high quality national data to the GMP in a regionally and internationally agreed and harmonized approach.

162. As illustrated in Figure 1, the important drivers towards project impact include building of capacities of countries to collect quality core media samples and expert laboratories providing technical assistance and guidance to national laboratories in order to enable them produce high quality data. The project’s outcomes in themselves are not sufficient to achieve the intended impact or GEBs. The likelihood that the GEBs will be achieved will depend on a number of assumptions including monitoring activities implemented at national level that would indicate governments’ ownership of the project and their willingness to fulfil their obligations towards the Stockholm Convention, the availability of adequate human and financial resources to establish monitoring programmes and stability of skilled laboratory personnel to generate high quality data.

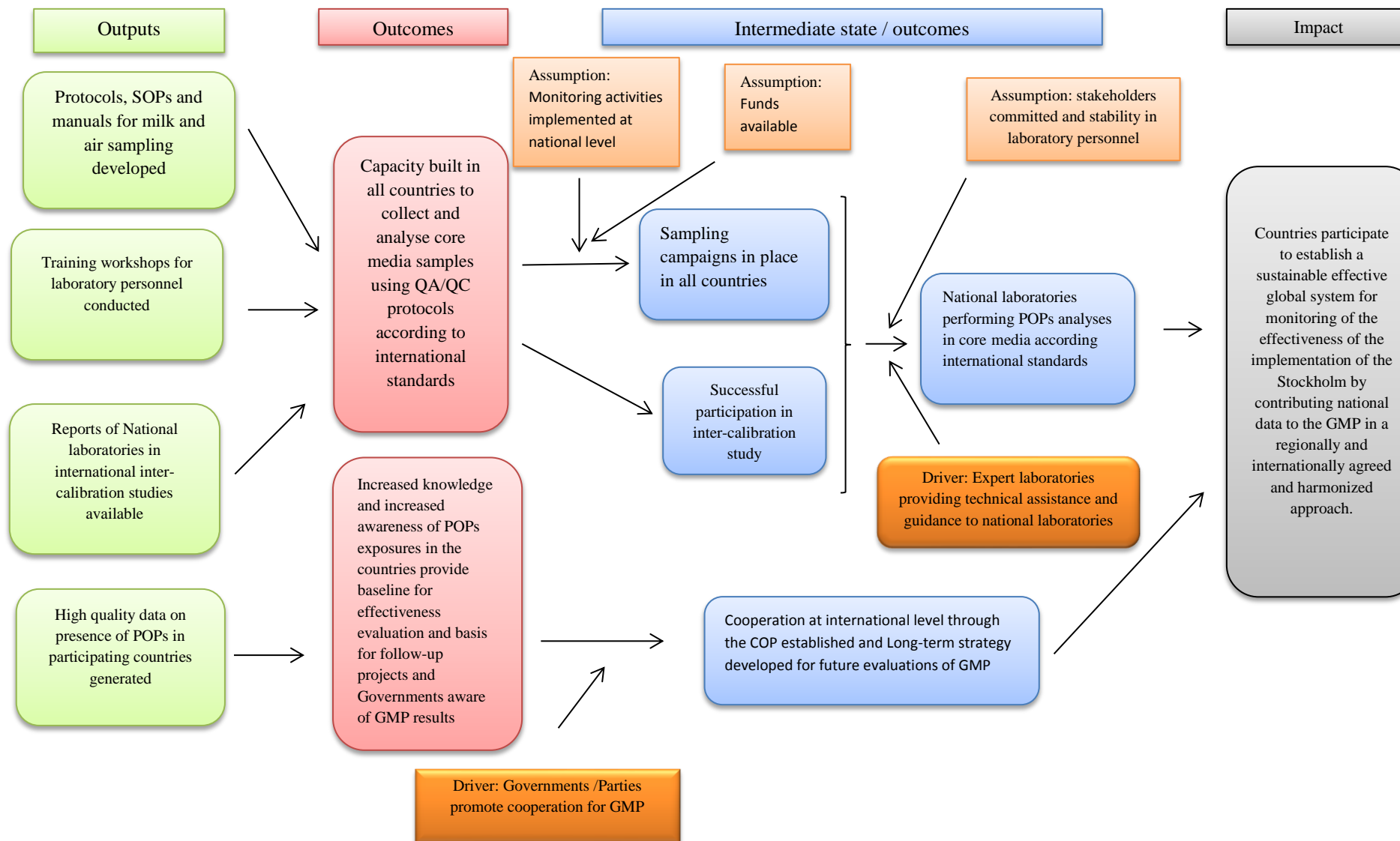


Figure 1: Theory of Change Analysis and Results to Impact Analysis

Table 13: Results and ratings of Review of Outcome to Impact Analysis

Results rating of project entitled: Supporting the Implementation of the Global Monitoring Plan of POPs in Eastern and Southern African countries (ESA); in Latin America and Caribbean States (GRULAC); in West Africa (WA); and in the Pacific Islands Region (PI)							
Objective: To build regional capacity on analysis and data generation for POPs in core matrices for the Global POPs Monitoring (GMP) to enable the participating countries of the four regions to contribute to the global report submitted to the Conference of the Parties (COP).							
		Rating (D – A)		Rating (D – A)		Rating (+)	Overall
Outputs	Outcomes		Intermediary		Impact (GEBs)		
1. Protocols, SOPs and manuals for milk and air sampling developed 2. Training workshops for laboratory personnel conducted 3. Reports of National laboratories in international inter-calibration studies available 4. High quality data on presence of POPs in participating countries generated	1. Capacity built in all countries to collect and analyse core media samples using QA/QC protocols samples according to international standards 2. Increased knowledge and increased awareness of POPs exposures in the countries provides baseline for later effectiveness evaluation and basis for follow-up projects and Governments aware of GMP results	B	1. Sampling campaigns in place in all countries 2. Successful participation in inter-calibration study 3. National laboratories performing POPs analyses in core media according to international standards 4. Cooperation at international level through the COP established and Long-term strategy developed for future evaluations of GMP	C	Countries participate to establishment a sustainable effective global system for monitoring of the effectiveness of the implementation of the Stockholm by contributing national data to the GMP in a regionally and internationally agreed and harmonized approach.	+	Moderately Likely
	Rating justification: B The B rating is justified as although capacity has been built in the national laboratories; all laboratories are not performing according to international as confirmed by the results of the inter-calibration study. However some countries are implementing some of the project outcomes		Rating justification: C+ The C rating is justified; although sampling campaigns have been established, the national laboratories are not performing at international standards. The + sign is given as high quality POPs data for core media have been generated by the expert laboratories from the national samples for all regions		Rating justification: BC+ The BC+ rating corresponds to likely that GEBs will be achieved.		

163. The ratings for the Review of Outcome to Impact Analysis are given in Table 13. The overall rating for impact of the project is **Likely** (BC+) and is based on the following:

- Standard operating procedures, protocols and guidelines have been successfully developed in all the regions and used in all countries for sample collection and analysis. Furthermore, the capacity of national laboratories has been enhanced through training workshops delivered by expert laboratories and national laboratories have participated in an inter-calibration study. However, according to the results of the inter-calibration study, none of the national laboratories are able to perform according to international standards. Also in many countries monitoring activities have not been implemented to sustain capacity built, which fully justify the **C** rating given for outcomes.
- The participation of national laboratories to the international study was not successful and most of the laboratories are not performing POPs analysis according to international standards. The **C** rating is therefore fully justified for intermediate states.
- The + sign is given as high quality data have been produced from national core media samples analysed by the expert laboratories and these data have been submitted to the global database.

164. The overall rating for Section A (**Attainment of planned results**) is **Highly Satisfactory**, reflecting that project outputs have been achieved and high quality data have been produced by the expert laboratories.

B. Sustainability and catalytic role

B1 Sustainability

165. No strategy has been proposed in the project document to sustain the outcomes and benefits of the projects. It was assumed that given the participating countries are Parties to the Stockholm Convention, they would have included sustainability measures into their national planning and budgeting processes for compliance. Planning or proposing for POPs monitoring activities in countries where capacity for POPs analysis would be built and would have ensured sustainability of benefits of the project.

166. The following paragraphs examine sustainability factors that affect progress towards project impacts as described in the ROTI analysis. The factors are primarily considered under financial, institutional, and socio-political sustainability sections. In particular, as this terminal evaluation is undertaken more than 1 year after closure of the projects (March 2012), it provides a good opportunity to examine the prospects for sustainability based on developments that occurred during the post-project period.

Socio-political sustainability

167. Country ownership, interest and commitment to the project are ensured as all the countries are Parties to the Stockholm Convention on POPs. All the countries have submitted

their NIPs and many are engaged in post NIP projects (see section: Institutional Framework, paragraph 172)

168. Socio-political sustainability is rated as **Highly Likely**.

Financial sustainability

169. At national level financial sustainability was assumed to be addressed by inclusion of measures into their national planning and budgeting processes for compliance with the Stockholm Convention. This is already occurring to some extent. For example, the Environmental Sanitation Technology Department (CETESB), Sao Paulo, Brazil is involved in the monitoring of water, soil and sediment for organic pollutants that include POPs pesticides and PCBs. Similarly, the laboratory of the Department of Environment (DINAMA), Uruguay is engaged in the monitoring of the quality of water and sediment of the rivers: Black River, Rio Cuareim, Rio Uruguay and Rio Santa Lucia for organochlorine pesticides. The Environmental Chemistry Laboratory, Chile is also currently involved in the monitoring of pesticides including POPs in water samples and other environmental matrices. According to response of the laboratory survey organised by the evaluators, POPs monitoring is part of the regular business of the Ministry of Health in Chile and it is now being performed regularly.

170. At global level, as mentioned earlier, follow-up projects (3 FSPs and one MSP) are being developed and the PIFs are already approved by GEF for a total funding of \$11,780,000 (Table 9). These follow up projects would have similar objectives as those under evaluation, and they are to continue monitoring POPs in the core media and also in water, provide further training to the national laboratories and provide data for the 2nd regional and global monitoring plan.

171. Financial sustainability is rated as **likely**.

Institutional framework

172. All the participating countries of the projects have ratified the Stockholm Convention and as Parties, are committed to comply with Convention's obligations on POPs monitoring, reporting and information dissemination. In all countries the Stockholm Convention has somewhat been institutionalised. For example, all countries have a nominated POPs Focal Point and they have reinforced their national legislation to strictly manage the life cycle (manufacture, trade, use and release) of most POPs. Most countries have attended the COP (COP1 to COP6) meetings. As discussed earlier (socio-political sustainable section), those countries with adequate analytical capacity are already monitoring POPs in certain media. Most of them have developed, following a multi stakeholder consultation / process involving many ministries and national institutions, and submitted a national implementation plan that contained detailed actions for the sound management of POPs. Some are already engaged in post-NIP GEF funded projects to manage some of their priorities mentioned in their NIP. For example, DRC, Mali, Senegal and Togo are amongst the participating countries of the GEF

funded and UNEP implemented regional project: “*Demonstration of a Regional Approach to Environmentally Sound Management of PCB Liquid Wastes and Transformers and Capacitors Containing PCBs*” (GEF ID 2770). UNDP is implementing a GEF funded project “*Sustainable Management of POPs*” (Project ID: PIMS 3779) in Mauritius to eliminate about 120 tons of POPs (mostly DDT) and wastes.

173. Institutional framework is therefore rated as **Highly Likely**.

Environmental Sustainability

174. No environmental factor that can influence the future flow of project benefits has been identified and, there do not appear to be any output or result that could affect the environment and, consequently, sustainability of project benefits.

175. Environmental sustainability is rated as **Highly Likely**.

B2. Catalytic Role and Replication

Catalytic role

176. The projects were designed to enhance the capacity of participating laboratories and other stakeholders to collect and analyse core media samples. In that context, the project has catalysed the development of internationally accepted protocols, manuals or standard operating procedures that were used during the projects in all the regions. For example, the protocols for mothers’ milk sampling was developed based on the WHO guidelines.

177. The projects have also catalysed behavioural changes in national laboratories. For example, as mentioned earlier, the adoption by the personnel of INECC, Mexico of the isotopic dilution method, learned during the training workshop, contributed to obtaining more reliable results. The laboratory of DIGESA, Peru is also planning to invest in laboratory equipment for processing of more samples for monitoring of POPs in their on-going programmes.⁴⁷

178. Another catalytic effect that the project has produced relates to implementation of monitoring programmes. In Brazil for example, CETESB is planning to include the air sampling aspect of the project so as to cover more media in their monitoring programmes. Finally but not the least, a total amount of \$ 44,916,200 (\$11,780,000 GEF and \$33,136,200 co-financing) have already been secured for follow-up projects as a result of the catalytic role of the projects.

Replication

179. Except for amount of funding and the number of participating countries, the projects under evaluation are exact and replicates what have been implemented in four different

⁴⁷ Feedback received in the filed survey questionnaire from DIGESA

regions. Experiences and lessons have already been discussed and shared regionally during workshops organized in the four regions and globally during COPs (COP4, COP5 and COP6). Potential for replication is very high. One of the FSPs that have been developed for Asia can be considered to be a replication as this project has been developed based on lessons learned from the four GMP projects.

180. Rating for Catalytic Role and replication is **Highly Satisfactory**.

C. Processes affecting attainment of project results

C1. Preparation and Readiness

181. The project document contains relevant information⁴⁸ to allow for building regional capacity on analysis and data generation for POPs in core matrices for the Global Monitoring Programme (GMP) on POPs that would enable the participating countries of the four sub-regions to contribute to the global report to be submitted to the Conference of the Parties. However, as reported in the Effectiveness section (section A3) sample preparation was the problematic step for some laboratories (see section A3 effectiveness and Table 12), with appropriate further training on sample preparation the evaluation considers that these laboratories would probably be able to perform satisfactorily at the level required for producing high quality data.

182. The timeframe planned could have been adequate if the project were run in only one region. However, given that the same project was being run in parallel in 4 regions (same period of implementation: March/April 2009 to Aug/Sept 2010) and involving a total of 28 countries, and the overall management/supervision and technical assistance being provided by the same project management team and the same expert laboratories, this timeframe was no longer realistic⁴⁹. For example, only two months were planned for identification of needs of laboratories and training of personnel of the national laboratories. For ESA only, IVM took much longer to deliver the training workshops in the four countries (Kenya, Mauritius, Uganda and Zambia) as each workshop lasted on average, ten days. The trainings were undertaken during the period beginning August 2010 to beginning December 2010 (see Table 6). And IVM was also responsible to deliver training to WA and PI countries. The two-month timeframe was definitely not realistic. Although the poorly planned timeframe was not the only reason for two revisions of the projects, it however contributed to them. The projects were revised in August 2010 and in September 2011 and they were extended to March 2012 corresponding to a 15-months extension (see Timeliness section).

183. The evaluation team considers that the section describing the different components of the project is adequate; however it could have been improved by detailing activities in the text⁵⁰. This was highlighted by the national coordinator during country visit in Brazil. In particular, he mentioned that no detailed activities were given, roles and responsibilities at

⁴⁸ See Section of Intended Results and Causality of Table 2 in Annex 8 (Inception report)

⁴⁹ See footnote 47

⁵⁰ See footnote 47

national level, regional level, and also the roles and responsibilities of international laboratories were not properly defined, and there were some unclear roles and timeframe for some activities like inter-calibration study.⁵¹

184. The participatory approach used by UNEP through regional workshops organized in the four sub-regions (Nairobi, 29 – 31 October 2007 for ESA & WA; Beijing, 17-19 September 2007 for Pacific; Mexico City, 14 – 16 January 2008 for GRULAC) and attended by representatives of the participating countries (members of the regional organising groups established by COP decision SC-3/19), to develop this project is considered a very good strategy⁵². As indicated in the project documents the key partners of the project were already identified during the preparatory phases of the projects and these include the expert laboratories and the regional coordination institutions (see para 27). Although not explicitly mentioned in the project document, the project was developed, based on information gathered in the context of the GEF funded project “*Assessment of Existing Capacity and Capacity Building Needs to Analyse POPs in Developing Countries*” (GFL / 2328-2760)⁵³. In particular, the laboratory databank⁵⁴ developed during this GEF funded project was very useful as it provided valuable information regarding the needs and capacities of the participating laboratories in this project under evaluation.

185. While the roles of the key stakeholders for project supervision and coordination at global level (implementation and execution) and at regional level are clearly defined and the TORs given. At national level, the roles are not well defined in the project document. In particular, coordination/supervision of activities at national level is not clear. A number of countries also highlighted in their response to the survey that coordination at national level was not adequate⁵⁵. The evaluation considers that defining a national coordinator with clear terms of reference like for RCs and with guidance from a planned national steering committee would have greatly improved the design of project and ensure ownership and awareness of the project amongst major stakeholders of the project. This would have also definitely considerably reduced delays in signature of MOUs with the regional coordination institutions.

186. The steering committee meetings were held back to back with the inception and final workshops. According to feedback gathered during field mission, the recommendations of these meetings were closely adhered to. For example, all the countries used the same format that was developed at the final workshop for drafting their national reports.

187. The rating on preparation and readiness is **Satisfactory**, which reflects the some weaknesses highlighted in the project design.

⁵¹ Interview data during field mission

⁵² See section on Sustainability of Table 2 of Annex 8

⁵³ See Section on Governance and Supervision arrangements in Table 2 of Annex 8

⁵⁴ <http://212.203.125.2/databank/Home/Welcome.aspx>

⁵⁵ Antigua and Barbuda, Senegal, Jamaica, Mauritius, Zambia mentioned that coordination at national was not adequate in the filed questionnaire they submitted.

C2. Implementation Approach and Adaptive Management

Implementation Approach and Management

188. The implementation followed the approach originally agreed upon by stakeholders and as planned in project document. The four projects were implemented by UNEP/DGEF, from which a Task Manager was designated, and executed by the Chemicals Branch of the Division of Technology, Industry and Economics (DTIE) of UNEP, from which a Project Coordinator was nominated. Subsequently, an internal cooperation agreement (ICA) was signed between these two divisions of UNEP for the four projects. However delays were noted in signature of the internal cooperation agreements (see paragraph 155).

189. The coordination, guidance and technical assistance of the UNEP/DTIE project coordinator was greatly appreciated by all the regional coordinators. The RCs highlighted the promptness with which the PC responded to all their queries and issues raised (generally through emails). In particular, the fluency of the PC in English, French and Spanish greatly helped communication during regional workshops. It should be pointed out that: WA is mainly French and English speaking, GRULAC Spanish speaking and English Speaking for ESA and PI.

190. As planned, at regional level project implementation was undertaken by regional coordinators who were sub-contracted by UNEP, DTIE through signed Project Cooperation Agreements (PCAs) (Table 4). Steering committees were also set up and comprised UNEP, DTIE Chemicals, UNEP/DGEF, Secretariat of Stockholm Convention, WHO and RC, and met back-to-back with the two technical workshops, i.e. the inception workshop and final workshop. As recommended by one of the decisions of the inception workshop, country representatives were requested to submit to the RCs names of contact institutions that would act as national coordinator of the project and would sign a Memorandum of Understanding (MOU) with the regional coordination institution. Names were submitted but, as mentioned earlier much delay was encountered in signing of MOUs (see paragraphs 67 and 68).

191. For the training of laboratories and procurement of small laboratory spares and consumables, and participation in the inter-calibration study, the expert laboratories (IVM, MTM, CSIC, CVUA and RECETOX) were sub-contracted through small scale funding agreements (SSFAs) to undertake those activities. For countries with multiple participating laboratories, consumables and other spares were shipped to all the laboratories. No particular major problem was noted, except in a few cases (e.g. Mexico, Egypt or Ecuador) where shipped consumables (e.g. glassware) were rejected due to difficulties with customs or rejection at recipient address that caused some delays.

192. At national level there were no formal committee set, but rather ad-hoc working groups comprising the air and milk coordinators, the national POPs focal point and the national coordinator, who in most cases was from the national laboratory. While most countries were satisfied with coordination at national level, some mentioned that coordination

was not adequate⁵⁶. During country visits, the stakeholders interviewed were in general very satisfied with the regional coordination; some however mentioned problems regarding fund transfers⁵⁷. The problems were at two levels. One problem was funds transfer from regional coordination institution to the national coordination institutions during which up to 20% of the funds transferred was “lost” due to exchange rates and bank charges. This issue was raised during the final regional workshops (in ESA and WA) and one of the solutions proposed was that all stakeholders were to have bank account in dollars. The other problem was that once the funds were transferred to the national institution, then it took time for funds to be transferred to accounts of other national stakeholders. The main cause for this situation was that the national coordinator was not informed when the funds (small amounts) were effectively credited, and this eventually caused delays in fund transfers to other national stakeholders. For example, the Centre Anti Poison, Ministry of Health, Senegal undertook the mothers’ milk activities using their own funds and they were not fully reimbursed by the project funds⁵⁸.

193. As mentioned previously given that the projects suffered significant delays, UNEP, DTIE adapted to the situation by two successive no cost revisions of the projects (in August 2010 and Sept 2011) and the corresponding work plans and budgets were revised accordingly to cater for the extension of project duration agreed by UNEP, DGEF.

194. Despite the delays encountered in project implementation, delivery of outputs was successful. Implementation Approach and Management is rated as **Highly Satisfactory**.

C3. Stakeholder Participation and Public Awareness

Stakeholder Participation and Project Partners

195. The key project partners were already identified during the preparatory phases of the projects. Given that, WHO has been collecting and evaluating information on levels of POPs in foods, including human milk through its GEMS/Food Programme since 1976, it was logical for UNEP to create a strategic partnership with WHO. Over the period 1987-2003, WHO has coordinated three international studies (3 rounds) of human milk to assess the levels and trends of PCDD/Fs and dioxin-like PCBs⁵⁹. The countries of the projects participated in rounds 4 and 5 of the WHO milk survey. The WHO Reference laboratory for mothers’ milk at Chemisches Untersuchungsamt Freiburg (CVUA Freiburg), Germany, was de facto selected to assist in matters related to human milk.

⁵⁶ Information taken from filed survey questionnaires of Mauritius, Jamaica, Antigua and Barbuda, Senegal, Zambia

⁵⁷ Country missions in Kenya, Zambia, Senegal, Ghana, Uruguay and Brazil

⁵⁸ Interview data during country visit in Senegal by lead consultant in

⁵⁹ http://www.who.int/foodsafety/chem/pops_biomonitoring/en/

196. The regional coordination institutions were selected during the preparatory phases. Amongst the criteria that were used for selection of potential institutions were the institution has a functional laboratory with capacity to analyse POPs; has administrative capacity/experience; is involved in GMP activities; is involved in similar projects or experience with UNEP; and has proven professional attitude amongst others. The Department of Chemistry, University of Nairobi, Kenya, the Environmental Toxicology and Quality Control Laboratory of the Central Veterinary Laboratory (ETQCL), Bamako, Mali, the University of the South Pacific (USP), Fiji and the Basel Convention Coordinating Centre - Stockholm Convention Regional Centre (BCCC-SCRC), Uruguay that satisfied those criteria were eventually selected by UNEP. Feedback gathered during country visits as well as from the project coordinator⁶⁰ indicated that the regional coordinators performed very satisfactorily.

197. The expert laboratories - IVM VU, MTM Centre and CSIC – that were also identified during the preparatory phases were chosen for the following reasons: accredited laboratories; proven expertise at international academic level for long-time; personally known to the project coordinator (PC) which meant more commitment and high level of personal; technical and institutional trust towards PC. According to feedback obtained from the survey organised by evaluation team, generally the national laboratories were very satisfied with the technical support of the expert laboratories. However, some indicated that the training workshop, which lasted between 7 to 10 days, was too short as some of their technical issues were not properly addressed or discussed in depth⁶¹. The project coordinator indicated was also fully satisfied with the performance of the expert laboratories⁶².

198. At national level, the participation of stakeholders was mainly those of the Ministry of Environment, the Ministry of Health and the participating laboratories (coming from academia or research institutions) mainly. In most cases, the air sampling coordinator was from the Ministry of Environment and he was responsible for the deployment of passive air samplers (PAS), which generally involved just a few officers. There was no official national committee set up but rather an ad-hoc committee constituted by representatives of the institution involved in the project and the POPs national focal point, and decisions were taken by these ad-hoc committees for project matters at national level⁶³.

199. The Ministry of Health was responsible for the mothers' milk part of the project. In most countries, the approval of the national ethics committee had to be sought before collection of samples. In some countries getting this approval took long, which delayed the process. For example, in Brazil the delay was so long that they were unable to submit human milk samples within the project duration. However, they did send pooled samples to CVUA, Freiburg for analysis after the project in November 2012. In Zambia, they are still waiting for

⁶⁰ Interviews with national coordinators of Ghana, Senegal, Zambia, Kenya, Mauritius, Brazil and Uruguay

⁶¹ Feedback from Peru and Mexico

⁶² Interview data

⁶³ Interview data gathered during field mission in Kenya, Ghane, Zambia, Senegal, Brasil and Uruguay.

this approval⁶⁴. According to feedback gathered during country visits, the identification of potential mothers' milk donors in rural areas was greatly facilitated by the involvement of personnel (e.g. health inspectors and nurses) of the local health centres⁶⁵.

Public Awareness activities

200. No public awareness raising activities were planned in the project document. However, as mentioned in Section A.1 (Component 5, Output 5.2), at the end of the project activities were undertaken to promote project's results and outcomes amongst stakeholders. For example, National Stakeholder meetings were organised in Mauritius (10 Aug 2011), Kenya (27 Jul 2011) and Uganda (20 July 2011). Workshops were organized in Brazil (August 2011), Peru (September 2011), Chile, Uruguay, Ecuador and Mexico. All stakeholders of the projects attended those workshops, and in some cases other institutions and ministries were also invited. These efforts have contributed to raise awareness to some extent. However, it is recommended that efforts are made to promote the projects outcomes and lessons to a wider audience including policy makers and the general public.

201. The overall rating for stakeholder engagement and public awareness is **Satisfactory**.

C4. Country Ownership and Drivenness

202. As stated in the section *Stakeholder Participation*, this capacity building project engaged mainly the Ministries of Environment and Health, and also Ministry of Agriculture in some countries, and academic institutions. The national POPs focal points of the participating countries, generally from Ministry of Environment, were already involved in the development of the projects during regional organization group (ROG) workshops that were organized in 2007/2008 (Nairobi, 29 – 31 October 2007 for Africa (ESA & WA); Beijing, 17-19 September 2007 for PI; Mexico City, 14 – 16 January 2008 for GRULAC).

203. For project execution that was done in consultation with the national POPs Focal point, adequate support was provided by the two key Ministries. The air sampling component was under the direct responsibility of the Ministry of Environment in most countries. Whilst the mothers' milk part of the project was implemented by the Ministry of Health. The commitment of the officers of these two Ministries allowed for the successful completion of air and mother's milk sampling. Samples were successfully collected according to agreed schedule and sent to the expert laboratories, lengthily discussed in A1 section (achievement of outputs). Given the very high technical nature of the project, no NGOs were invited to participate in the project.

204. The rating on country ownership and drivenness is **Highly Satisfactory**.

⁶⁴ At the time (June 2013) of the evaluator's visit to Zambia, approval was still pending.

⁶⁵ Interviews in Ghana, Senegal and Kenya

C5. Financial Planning and Management

205. The financial plans of the four GMP projects and the detailed budgets (UNEP format) were given in the project documents. These budgets were based on the GEF approved budgets provided in the MSP briefs. GEF support amounted to a total of US\$2,429,000 (\$484,000 for ESA, \$583,000 for WA, \$845,000 for GRULAC and \$517,000 for PI).

206. For all four MSPs, a first project revision was undertaken in August 2010. As example, the reasons for revision for ESA were:

- a) To reflect actual expenditures of \$150,804.36 for the year 2010 to the GEF Trust Fund. Total cost to the GEF Trust fund remained unchanged.
- b) To re-phase the unspent balances from the year 2010 of \$154,195.64 to the year 2011.
- c) To introduce a budget of \$154,195.64 for the year 2011 due to point (b) above and to cater for project completion activities.
- d) To extend the duration of the project to September 2011, in order to allow for completion of project activities.

207. Another revision was effected in 2011 for the 4 projects. For ESA, the reasons were:

- a) To extend the duration of the project to March 2012, in order to allow for completion of project activities.
- b) To reduce year 2011 budget to \$138,719.10 and to re-phase \$15,476.54 to year 2012. Thus introducing a budget in the year 2012 of \$15,476.54 to cater for project completion activities.
- c) A single terminal evaluation would be conducted for the four GMP projects and the cost of this (approximately \$60,000 as per EOU estimation) was spread across 2 of the GMP projects (GFL/4A76 and 4A77).

208. As planned sub-contracts were established with the regional coordination institutions through PCAs (Table 4) as well as with the expert laboratories. SSFAs amounting to \$308,650, \$320,750, \$220,000 and \$121,300 were signed with CSIC, IVM, CVUA and MTM, respectively. In all cases, 75% of funds were disbursed on signature of PCAs or SSFAs and the remaining funds were paid upon satisfactory delivery of outputs (e.g. technical, workshop or regional reports).

209. For implementation of activities at country level, the national coordination institutions were also sub-contracted through memorandum of understandings (MOUs) for an amount of \$20,750. On signature, 75% of funds were disbursed and the remaining 25% were paid upon satisfactory delivery of outputs that included interim technical reports and draft country reports.

210. At implementing agency level, the funds were adequately managed and audited according to the UNEP rigorous internal procedures⁶⁶. For the four projects detailed financial reports according to UNEP budget lines as well as actual expenses of funds (GEF and co-funds; see Table 14) were made available to the evaluation team. The actual funding figures are taken from financial sheets submitted by UNEP to the evaluation.

211. At regional level, the funds were adequately managed by the finance department of the institution. For example, the funds for ESA were credited to the accounts of the University of Nairobi. Upon request of the regional coordinator, funds were then disbursed for the different planned activities, for example, disbursements to countries or for organization of inception and final workshops. At national level, the same procedure was applied by the coordinating institutions. It should be highlighted however that a number of stakeholders interviewed indicated that transfer of funds from the coordinating institution was a problem, either they were delayed or they did not receive the last 25 % of the funds.⁶⁷

212. Figures provided in Table 14 below indicate that planned cash as well as in-kind co-funds have been successfully mobilized. The expected cash co-funds were timely transferred that allowed for completion of project activities in the four regions.

213. The rating on financial planning and management is **Satisfactory**.

Table 14: Actual mobilized funds versus planned funding

Source	ESA		WA		GRULAC		PI	
	As per prodoc	Actual	As per prodoc	Actual	As per prodoc	Actual	As per prodoc	Actual
Cash	(\$)	(\$)	(\$)	(\$)	(\$)	(\$)	(\$)	(\$)
GEF	484,000	483,385	583,000	583,465	845,000	834,665	517,000	516,626
SSC	120,250	120,250	130,600	130,600	150,300	150,300	24,000	24,000
Sweden	90,000	90,000	90,000	90,000	-	-	-	-
Australia	-	-	-	-	-	-	100,000	100,000
Env Canada	-	-	-	-	-	-	10,000	10,000
Recetox	20,000	20,000	-	-	-	-	-	-
UNEP	-	-	-	-	102,000	102,000	-	-
Sub total	714,250	713,635	803,600	804,065	1,097,300	1,086,965	651,000	650,626
In kind								
Governments	199,000	199,000	266,000	266,000	466,000	466,000	320,000	320,000
UNEP	37,000	37,000	45,000	45,000	53,000	53,000	50,000	50,000
WHO	-	-	-	-	-	-	10,000	10,000
Steering group	55,000	55,000	59,000	59,000	50,000	50,000	10,000	10,000
Recetox	-	-	20,000	20,000	-	-	10,000	10,000
Env Canada	-	-	-	-	24,000	24,000	-	-
Sub total	291,000	291,000	390,000	390,000	593,000	593,000	400,000	400,000
Total	1,005,250	1,004,635	1,193,600	1,194,065	1,690,300	1,577,965	1,051,000	1,050,626

⁶⁶ Interview with UNEP funds management officer in Geneva

⁶⁷ Interview data gathered during country visits in Senegal, Ghana, Kenya and Zambia. Feedback from survey, FIOCRUZ, responsible for milk component in Brazil mentioned delays in transfer of funds to their account from the national coordination institution.

C6. UNEP Supervision and Backstopping

214. For the implementation of project activities, internal cooperation agreements were signed between the DGEF (implementing agency) and DTIE (executing agency) divisions of UNEP in August 2008. The obligations of each agency were clearly spelled out in the ICAs. During discussion with the Task Manager (TM)⁶⁸, from UNEP DGEF, revealed that the Senior Programmed Officer who developed the GMP projects, and who was supposed to be Task Manager left the division to occupy a higher position in another UN agency. As there was no proper handing over, project implementation was dormant for about 4 months. This is confirmed by GEF and UNEP signature dates given in Table 2. Due to overload, the TM informed the lead evaluator that Project Implementation Reviews (PIRs) were not prepared.

215. Supervision of the projects was done through progress reports submitted by the Project Coordinator (PC) (UNEP, DTIE), and regular face to face discussions with the PC that were facilitated as their offices are located in the same building in Geneva (International Environment House 2). He participated in three of the four inception workshops. For the inception workshop for PI, due to overlapping with activities of other projects, he was represented by the UNEP Task Manager for biodiversity. During the interview, the Task Manager, not being a specialist in POPs analysis and related issues, mentioned that his main interest was to see that the project was being satisfactorily implemented and accomplishing its activities and outputs. He indicated that he left the technical backstopping to the PC⁶⁹, who is very knowledgeable in POPs and related issues like analysis and risk assessment, and the expert laboratories. The technical and administration assistance provided by the UNEP PC was highly appreciated by all stakeholders interviewed during country visits.

216. Financial records for the GEF funds were maintained by a Fund Management Officer (FMO) who was also responsible for oversight on the GEF funds administration.

217. The rating on UNEP supervision and backstopping is **Highly Satisfactory**.

C7. Monitoring and Evaluation

Monitoring & Evaluation Design

218. The monitoring & evaluation (M & E) design followed UNEP's standard monitoring and evaluation procedure. The projects' logical frameworks included objectively verifiable indicators, means of verification and assumptions for the project objectives, outcomes and outputs. For the output level, the M & E activities, responsible parties, and performance indicators are described in the project document. Monitoring and progress reporting at project level (quarterly progress reports, PIRs, terminal evaluation, financial reporting, and audits),

⁶⁸ Interview of UNEP DGEF Task Manager by lead consultant in Geneva

⁶⁹ The UNEP PC developed the UNEP toolkit for the inventory of dioxins and she publishes regularly on POPs in peer reviewed journals.

timing and responsible parties are also described in the project document⁷⁰. A table of key deliverables and benchmarks is given in the project documents. The projects were subjected to two revisions and the time plan for delivery of outputs was revised accordingly.

219. There were no Project Implementation Reviews (PIRs) developed for the four projects due to work overload of the Task Manager. The latter informed UNEP/DGEF about it⁷¹.

220. Rating for Monitoring & Evaluation Design is **Highly Satisfactory**

Budgeting and funding for M&E activities

221. The project budget included the costs for M & E activities. The only costed item was the terminal evaluation, \$30,000 for each project (\$120,000 for the four projects) that is considered adequate. However, as mentioned earlier, a common terminal evaluation was decided during the second revision of the projects and the costing was reduced to \$60,000 and spread over the projects for GRULAC and WA.

222. Rating for budgeting and funding for M&E is **Highly Satisfactory**.

M&E Implementation

223. As mentioned previously (section C6. UNEP Supervision and Backstopping), due to overload the Task Manager (UNEP, DGEF) informed that PIRs would not be developed. However, half yearly progress reports were satisfactorily submitted by the PC (UNEP, DTIE) that allowed proper monitoring of progress in the four regions.

224. During the inception workshops the status of project implementation was reviewed and the work plan was discussed and deadlines for delivery of outputs as well as assignment of responsible parties for each activity were decided upon. These are reflected in the workshop reports submitted to the evaluation. According to feedback gathered from the PC and the RCs progress and final reports as well as financial reports were timely submitted according to the revised timeline. The RCs however reported that despite reminders some countries submitted the signed MOUs with significant delays that resulted in the extension of the projects.

225. The PC confirmed the timely submissions of workshop, interim and final regional reports from the regional coordinators. Technical reports from the expert laboratories were also received timely. However, the evaluation considers that some of the expert laboratory reports could have been substantiated with recommendations and lessons that would have definitely helped the national laboratories in their capacity building process

226. The rating on M & E implementation is **Highly Satisfactory**

⁷⁰ Appendix 4 of project document: Costed M& E plan

⁷¹ Information given in the TORs of this evaluation and confirmed during interview with TM on 8 July 2013

D. Complementarities with UNEP strategies and programmes

Linkage to UNEP's Expected Accomplishments and POW 2010-2011

227. The four GMP projects were developed prior to the completion of the UNEP Medium Term Strategy 2010-2013 and related Programme of Work (POW) for the period 2010-2011. Nevertheless, there are complementarities with the expected accomplishments outlined in two of the six sub-programmes of the medium-term strategy.

228. The intended results are consistent with UNEP's programmatic objectives and expected accomplishments under its "*Environmental Governance*" cross-cutting priorities of its Medium-term Strategy 2010–2013. The objectives and expected accomplishments focus, while respecting the mandates of other entities, on progressively achieving synergies and demonstrating increasing coherence in international decision making processes related to the environment, including those under multilateral environmental agreements. The projects' outcomes have contributed to produce global, regional and sub-regional environmental assessments and reports on the effectiveness evaluation of the Stockholm Convention that have been communicated to the COP. The intended results are also fully consistent with UNEP's sub-programme "*Harmful substances and Hazardous waste*" that sets out Harmful substances and hazardous waste to minimize the impact of harmful substances and hazardous waste on the environment and human beings.

Alignment with the Bali Strategic Plan (BSP)

229. The project's focus on building regional capacity building on analysis and data generation for POPs in core matrices for the Global POPs Monitoring (GMP) to enable the participating countries to contribute to the global report submitted to the Conference of the Parties (COP) is consistent with the Bali Strategic Plan for Technology Support and Capacity-building. In particular, the projects are fully consistent with one of the objectives of the BSP, which is "*To strengthen the capacity of Governments of developing countries as well as of countries with economies in transition, at all levels to develop national research, monitoring and assessment capacity to support national institutions in data collection, analysis and monitoring of environmental trends and in establishing infrastructure for scientific development and environmental management, in order to ensure sustainability of capacity-building efforts*".

Gender

230. The project design did not explicitly make any provisions for consideration of gender. However, some activities of the project required persons of a specific gender for achieving success according to feedback gathered during field mission. For instance, the mother's milk sampling activity was led by women in countries (Senegal, Ghana and Kenya) visited by the lead evaluator⁷². Generally there were no gender inequality both genders were also involved

⁷² The lead evaluator interviewed them during country visits

in all project activities including supervision and coordination. For example, two of the four regional coordinators were females⁷³.

South-South Cooperation

231. The GMP projects did not explicitly intend to promote South-South cooperation, which was not mentioned in the project documents. Nevertheless, the project facilitated South-South Cooperation through participation of the developing countries in the respective regions in the development of common protocols, guidelines and manuals for sampling or analysis. Participation in regional workshops that facilitated the sharing of experience and lessons also helped in capacity building to some extent.

Part III. Conclusions and Recommendations

A. Conclusions

232. The GEF medium size projects “*Supporting the Implementation of the Global Monitoring Plan of POPs in ESA, WA, GRULAC and PI countries*” were designed to build regional capacity on analysis and data generation for POPs in core matrices for the Global POPs Monitoring (GMP) to enable countries of the four regions to contribute to the global report submitted to the Conference of the Parties (COP). Specifically, the projects were set out to put in place sampling programs in each country and to build capacity of local POPs laboratories for the generation of POPs data on core matrices for inclusion into the regional GMP report.

233. The major objective of the terminal evaluation was to assess project performance (in terms of relevance, effectiveness and efficiency), and determine outcomes and impacts (actual and potential) stemming from the project, including their sustainability. These criteria are addressed in Part II, Sections A and B of this report.

234. The projects were highly relevant with regards to the minimum requirements for the first effectiveness evaluation defined by the Conference of the Parties of the Stockholm Convention in decision SC-2/13. The focus of the four projects remains very relevant to the mandate of UNEP that promotes chemical safety by providing policy advice, technical guidance and capacity building to developing countries; UNEP is host organization for the Stockholm Convention on POPs. The intended results are particularly consistent with UNEP’s programmatic objectives and expected accomplishments under its “*Environmental Governance*” sub-programme of its Medium-term Strategy 2010–2013. These capacity building projects are also consistent with the Bali Strategic Plan for Technology Support and Capacity-building of UNEP’s Governing Council decision (UNEP/GC.23/6/Add.1).

235. The projects’ objectives were pertinent to the GEF POPs focal area strategy and strategic programming for GEF-4 (2007 – 2010) that made provision for “*Strengthening capacities for NIPs implementation, including assisting those countries that lag farthest behind to establish basic, foundational capacities for sound management of chemicals*”. The

⁷³ RCs of GRULAC and WA were women.

projects were also very relevant as they contributed to help the participating countries, parties to the Stockholm Convention, in fulfilling their obligations with regards to Article 11 and Article 12 of the Convention.

236. Effectiveness of the projects is considered satisfactory. While high quality data in the core media (generated by the expert laboratories however) have been obtained for all the regions and sampling programs successfully established, the capacity of the national laboratories needs to be further enhanced to able them generate high quality data as seen by the outcome of the inter-calibration study during which most laboratories did not perform satisfactorily. For basic POPs analysis, only 4 out of the 21 laboratories succeeded to achieve satisfactory performances (z-score less than 2) in more than 70% of analyses undertaken during the inter-calibration study. The inter-calibration exercise also clearly indicates that matrices requiring extraction and clean-up is problematic for all laboratories that probably warrant capacity building in this area.

237. At national level, participation of stakeholders was those of the Ministry of Environment, Ministry of Health, and academic laboratories, and also to the Ministry of Agriculture in a few cases. Air sampling activities were undertaken by the Ministry of Environment, while the human milk component was executed by the Ministry of Health in most countries. No formal steering committees were planned; coordination was done through informal meetings of an ad-hoc working group constituted by the key stakeholders.

238. Project implementation was cost-effective, owing to a number of factors, including establishment of partnerships with key organisations, agencies (e.g. WHO), academic and research institutions (e.g. expert laboratories), building on existing programmes (e.g. MONET or GAPS for passive air sampling or WHO for milk survey), adoption of existing procedures (WHO guidelines for human milk sampling), engaging local stakeholders (e.g. local health centres) for identification of mothers' milk donors, or engaging only laboratories having minimum requirements for POPs analysis.

239. However, a number of factors reduced efficiency and hindered the progress of the projects in some countries including delays in signing MOUs (most countries), the movement of the project coordinator without proper handing over (Egypt), delays in funds transfer (e.g. Senegal, Brazil), or delay in getting ethics committee approval (e.g. Brazil and Zambia). As a result two no-cost extensions, corresponding to 15 months, were required to ensure that project activities were successfully completed.

240. The ROtI analysis shows that important 'drivers' have been put in place to ensure project impact and these include building of capacities of countries to collect quality core media samples and expert laboratories providing guidance and technical assistance to national laboratories to enable them produce high quality data. The likelihood that the GEBs will be achieved will depend on a number of assumptions including monitoring activities implemented at national level, availability of adequate human and financial resources to establish monitoring programmes and stability of skilled laboratory personnel to generate high quality data.

241. For sustainability of project results, the projects anticipated that being Parties to the Stockholm Convention, the countries would have included sustainability measures into their national planning and budgeting processes by the end of the project to comply with Convention's obligations on monitoring, reporting and information dissemination. There are indications that this is happening to some extent in some countries. For example, CETESB, Brazil is planning to include some of the project activities (air monitoring mainly) in their on-going monitoring programme and future planning. In addition, they will try to cover more regions by allocating the necessary financial resources. In Peru, DIGESA, Ministry of Environment is planning to continue passive air as well as mother's milk sampling for POPs monitoring and provision will be made in the budget for 2014 for these activities. Furthermore, follow-up projects (3 FSPs and one MSP) are being developed and the PIFs are already approved by GEF for a total funding of \$11,780,000.

242. Although strengthening would be necessary in some countries, the institutional framework in most countries seems adequate. The Stockholm Convention has somewhat been institutionalised in all countries. All of them have a nominated POPs Focal Point. Most have reinforced their national legislation to strictly manage the life cycle (manufacture, trade, use and release) of most POPs. Most countries have attended the COP (COP1 to COP6) meetings. Those countries with adequate analytical capacity are already monitoring POPs in certain media. Most of them have developed, following a multi stakeholder consultation / process involving many ministries and national institutions, and submitted a national implementation plan that contained detailed actions for the sound management of POPs. Some countries are already engaged in post-NIP GEF funded projects to manage some of their priorities mentioned in their NIP. For example, DRC, Mali, Senegal and Togo are amongst the participating countries of the GEF funded and UNEP implemented regional project "*Demonstration of a Regional Approach to Environmentally Sound Management of PCB Liquid Wastes and Transformers and Capacitors Containing PCBs*" (GEF ID 2770).

243. Ratings for the individual criteria are given in Table 15. The overall rating for the four GMP projects based on the evaluation findings is **Highly Satisfactory**.

Table 15: Summary Assessment and Ratings using Evaluation Criterion*

Criterion	Summary Assessment	Rating
A. Attainment of project objectives and results	The project's objectives were partially achieved. Effectiveness is moderately satisfactory. Delivery of outputs is highly satisfactory and the project is highly relevant (HS).	HS
1. Effectiveness	Objectives partially achieved. Sampling programmes in place and high quality data generated (by expert laboratories and not by national laboratories). Laboratories need further capacity enhancement to be able to produce quality data to contribute to GMP.	S
2. Relevance	The projects are very relevant to UNEP mandate on chemical safety by providing policy advice, technical guidance and capacity building to developing countries. The projects' objectives were pertinent to the GEF POPs focal area strategy and strategic programming for GEF-4, still relevant for GEF-5. Countries are parties to Stockholm Convention.	HS
3. Efficiency	A number of measures to promote efficiency that were adopted during implementation (e.g., establishment of partnerships with key stakeholders, building on existing programmes). All outputs have been delivered	HS
B. Sustainability of project outcomes	The overall rating on this criterion is based on the lowest rating of the individual sub-criteria	L
1. Financial	Indications that some countries are planning and budgeting for POPs monitoring. GEF funding secured for follow-up projects	L
2. Socio-political	Country ownership is high as all countries are parties to the Stockholm Convention.	HL
3. Institutional framework	Stockholm Convention somewhat institutionalized. Most countries have strengthened legislation for POPs management. National POPs focal point nominated. Participation in COP meetings. Some countries engaged in post-NIP GEF funded project.	HL
4. Environmental	There do not appear to be any output or result that could affect the environment	HL
C. Catalytic role (and replication)	Project catalyzed behavioral changes in	

Criterion	Summary Assessment	Rating
	laboratories. Replication planned as GEF funded follow-up projects have been developed.	HS
D. Stakeholders involvement	Projects allowed for active involvement of relevant stakeholders.	HS
E. Country ownership / driven-ness	Project activities executed by Ministries of Environment and Health. Capacity countries built for sampling and analysis. There is some indication that capacity built is being used in many countries.	HS
F. Achievement of outputs and activities	All outputs achieved and activities completed.	HS
G. Preparation and readiness	Appropriate partners identified during preparatory phases. Some weaknesses in project design e.g. proposed timeframe not appropriate.	S
H. Implementation approach	The project was implemented as planned, but due to delays two no-cost extensions of the projects were required.	HS
I. Financial planning and management	The financing and co-financing of the project was well planned. Disbursement of funds was generally timely except at national level where delays were encountered. All co-funding was materialized.	HS
J. Monitoring and Evaluation	The overall rating on M & E is based on rating for M&E Implementation.	HS
1. M&E Design	M & E design followed UNEP's standard monitoring and evaluation procedure.	HS
2. M&E Plan Implementation	Progress, technical, country and regional reports satisfactorily submitted and used to track project performance and progress.	HS
3. Budgeting and funding for M&E activities	Only the terminal evaluation was budgeted.	HS
K. UNEP Supervision and backstopping	UNEP DGEF and UNEP DTIE played an adequate role in supervision and backstopping.	HS

* HS: highly satisfactory, S: satisfactory; HL: Highly likely; L: Likely

B. Lessons

244. Valuable lessons emerged during the terminal evaluation that include lessons related to technical aspects as well as to overall management of the project (not arranged in any order of priority).

	Context	Lessons learned
1.	<p>The project document contains relevant information to allow for building regional capacity on analysis and data generation for POPs in core matrices for the Global Monitoring Programme (GMP) on POPs that would enable the participating countries of the four sub-regions to contribute to the global report to be submitted to the COP. As it stands the objective is feasible. However when considering the verifiable indicators for the Development Objective and for Immediate Objective that read “<i>POPs laboratories feed data into the global database for core matrices</i>” and “<i>Data generated in local POPs laboratories submitted for inclusion into the regional GMP</i>” then the objective of the projects is no longer feasible and realistic. To generate high quality data, it requires laboratories performing at high standards. At the start of the projects, although some laboratories had significant capacities for POPs analysis, they were not however performing at the required standard to be able to generate these quality data. And the design of the project (planned activities and timeframe) did not allow for these laboratories to reach those standards within the project duration</p>	<p>Project documents need careful screening to ensure that they are technically feasible and that goals and objectives are realistic under the proposed timeframe and are consistent with real capacities at national level.</p>
2.	<p>The timeframe planned could have been adequate if the project were run in only one region. However, given that the same project was being run in parallel in 4 regions (same period of implementation: March/April 2009 to Aug/Sept 2010) involving a total of 28 countries, and the overall management/supervision and technical assistance being provided by the same project management team and the same expert laboratories, this timeframe was no longer realistic. For example, only two months were planned for identification of needs of laboratories and training of personnel of the national laboratories. For ESA only, IVM took much longer to deliver the training workshops in the four countries (Kenya, Mauritius, Uganda and Zambia) as each workshop lasted on average ten days. The trainings were undertaken during the period beginning August 2010 to beginning December 2010 (see Table 6). And IVM was also responsible to deliver training to WA and PI countries. The two-month timeframe was</p>	<p>Running the same project in one region or in parallel in many regions by the same management team and same technical experts require different time planning.</p>

	definitely not realistic.	
3.	A number of measures to promote efficiency were identified in the project document and adopted during implementation (e.g., building on previous projects or on-going programmes of existing agencies; adopt existing procedures for sampling, or engaging local stakeholders to identify donors)	Identification and adopting measures that promote efficiency ensures successful implementation of project.
4.	While the roles of the key stakeholders for project supervision and coordination at global level (implementation and execution) and at regional level are clearly defined and the TORs given. At national level, the roles are not well defined in the project document. In particular no mention is made about coordination/supervision of activities at national level. The evaluation considers this to be a weakness. This is probably the reason why significant delays have been encountered at national level. For example very long delays were encountered for signing of MOUs between national institutions and the regional coordination institutions. A number of countries also highlighted in their response to the survey that coordination at national level was not adequate	Clearly defined and agreed roles at all levels help in avoiding delays in project implementation.
5.	Overall, a mixed form of agency execution and counterpart execution was applied for the implementation of the project activities in the four regions. In that context, Project Cooperation Agreements (PCAs) and Small Scale Funding Agreements (SSFAs) were signed with the major partners of the projects that include the regional coordination institutions (e.g. BCCC-SCRC) and the expert laboratories (e.g. IVM, CSIC or CVUA).	The mixed form of agency execution and counterpart execution (through sub-contracts to counterparts e.g. regional coordination institutions) is a very efficient implementation modality when the capacities are sufficient and exist at counterparts level; substantive competence, procurement, financial management, and auditing.
6.	As both evaluators were non-Spanish speaking persons, it was difficult for them to read and understand some of the national reports and documents that were in Spanish. For example the national reports for Chile, Mexico, Peru, Ecuador, and Uruguay of the Latin America and Caribbean region were in Spanish language. The feedback received from these countries for the survey organized by the evaluation team was also in Spanish.	Recruiting consultants with the appropriate language proficiency ensures better understanding of reports and other documents.

C. Recommendations

245. As the projects have ended, the following recommendations look ahead to the post-project period and development and implementation of follow-up GEF projects and sustaining the results of GMP projects.

Context / Conclusion	Recommendations	Responsible
<p>At national level financial sustainability was assumed to be addressed by inclusion of measures into their national planning and budgeting processes for compliance with the Stockholm Convention. This was already occurring to some extent. Indeed, as mentioned in the previous section (socio-political sustainability) some monitoring activities that covered POPs analysis were being undertaken by governmental institutions. However, according to responses of the survey, no national POPs monitoring programme has been established as a result of the GMP projects, this information was confirmed during country visits.</p>	<p>1. It is recommended that countries allocate appropriate financial resources to sustain project results by the monitoring of POPs through existing national programmes / initiatives.</p>	<p>Countries</p>
<p>No public awareness raising activities were planned in the project document. However, as mentioned in Section A.1 (Component 5, Output 5.2), at the end of the project some activities were undertaken to promote project's results and outcomes. For example, National Stakeholder meetings were organised in Mauritius (10 Aug 2011), Kenya (27 Jul 2011) and Uganda (20 July 2011). Workshops were organized Brazil (August 2011), in Peru (September 2011), in Chile, in Uruguay, in Ecuador and Mexico. All stakeholders of the projects attended those workshops, and in some cases other institutions and ministries were also invited. These efforts have contributed to raise awareness to some extent.</p>	<p>2. Countries are encouraged to disseminate the projects results and outcomes targeting major national stakeholders including ministries, institutions, NGOs, etc. and the public at large by taking the appropriate actions.</p>	<p>National coordinator, Countries</p>
<p>While the roles of the key stakeholders for project supervision and coordination at global level (implementation and execution) and at</p>	<p>3. As follow-up projects are planned, it is recommended that roles at national level (e.g. national coordinator or steering committee)</p>	<p>UNEP, countries</p>

<p>regional level are clearly defined and the TORs given. At national level, the roles are not well defined in the project document. In particular no mention is made about coordination/supervision of activities at national level. The evaluation considers this to be a weakness. This is probably the reason why significant delays have been encountered at national level. For example very long delays were encountered for signing of MOUs between national institutions and the regional coordination institutions. A number of countries also highlighted in their response to the survey that coordination at national level was not adequate</p>	<p>are clearly defined and agreed upon in the project documents.</p>	
<p>Analysis of the z-scores for each laboratory that participated in the inter-calibration study indicates that a great majority of the laboratories performed poorly, only four laboratories succeeded to achieve more than 70% of analyses with satisfactory z-scores ($z < 2$). The results (Table 11) also confirm that in general the laboratories obtained significantly better results for standard solutions than for the other matrices. This trend might indicate that the solvent extraction step and clean-up before analysis may constitute a major source of error and there is probably need for further capacity enhancement in this area.</p>	<p>4. For the planned follow-up GMP projects, it is recommended that UNEP and expert laboratories ensure that the capacities of the personnel of national laboratories be strengthened for the analysis of samples that require extraction and work-up, more specifically for the core media.</p>	<p>UNEP, expert laboratories</p>

Appendix 1: Tables 6, 10, 11 and 12 of Evaluation Report

Table 6: Information on capacity building training workshops for national laboratories

Region: ESA		Expert laboratory delivering training: IVM	
Country	Date of workshop	No of participants	No of Participating national laboratories ²
Egypt*	1 – 4 November 2010	7	1: Quality Control of Agricultural Products laboratory (QCAP)**
Kenya	18 – 22 October 2010	19	6: UON** , DPHP, PCPB, KEPHIS, KEBS and KRA
Mauritius	24 Nov – 8 Dec 2010	8	2: Government Analyst Division lab (GAD)** ; National Environmental Laboratory (NEL)
Uganda	2 – 12 August 2010	17	2: Directorate of Government Analytical Laboratory (DGAL)**; University of Makerere
Zambia	11- 22 October 2010	3	1: Dept. of Chemistry, University of Zambia**
Region: WA		Expert laboratory delivering training: IVM	
Country	Date of workshop	No of participants	Participating national laboratories ²
Ghana*	8 – 16 November 2010	22	7: Ghana Atomic Energy Commission (GAEC)**, Environmental Protection Agency, Food and Drugs Board, Ghana Standards Board, Food Research Institute, Water Research Institute and Cocoa Research Institute of Ghana
Mali	13 – 21 September 2010	6	1 : Laboratoire de Toxicologie et de Contrôle de Qualité Environnementale (LTCQE)**
Senegal	4 – 12 October 2010	9	2 : CERES LOCUSTOX ; Centre anti-poison
Region : PI		Expert laboratory delivering training: IVM	
Country	Date of workshop	No of participants	Participating national laboratories ²
Fiji	12 – 30 July 2010	2	1: University of South Pacific (USP)**
Region : GRULAC		Expert laboratory delivering training: CSIC	
Country	Date of workshop	No of participants	Participating national laboratories ²
Brazil	20 – 24 September 2010	8	2: Environmental Sanitation Technology Department (CETESB)** ; FIOCRUZ
Chile	2 – 9 October 2010	7	3: Department of Environmental Sciences, University of Concepción (EULA) ; Institute of Public Health (ISP)** ; CENMA
Ecuador	1 – 7 November 2010	7	2: Ecotoxicology Laboratory Ecuadorian Atomic Energy Commission (CEEAA)** ; Agrocalidad laboratory
Jamaica	21 – 29 August 2010	8	1: Pesticide Research Laboratory, Department of Chemistry, University of West Indies**
Mexico	11 – 15 October 2010	6	1: National Centre for Environmental Research and Training (CENICA)**
Peru	8 – 13 November 2010	13	2: Laboratory of Environmental Health Directorate Ministry of Health (DIGESA)**¹ ; Centre for Control Toxic Waste, Agricultural National Service (SENASA)**¹
Uruguay	20 – 24 September 2010	14	3: Technological Laboratory of Uruguay (LATU)** ; Dept. of Environment (DINAMA) ; DILAVE, Ministry of Agriculture.
16 countries	-	Total = 156	36 laboratories

*Expert laboratory for Egypt and Ghana was MTM. **Host laboratory for training workshop. **¹In Peru training was carried out in both laboratories.²The laboratories in bold responded to survey organized by evaluation team

Table 10: Z scores for basic POPs and PCBs analyses for inter-calibration study

Matrix	Africa (ESA + WA)			GRULAC		
	Total number of analyses	Number of Analyses with scores $ z < 2$ (%)	Number of analyses with scores $ z > 2$ (%)	Total number of analyses	Number of Analyses with scores $ z < 2$ (%)	Number of analyses with scores $ z > 2$ (%)
Standards	75	32 (42.6%)	43 (57.4%)	221	125 (56.6%)	96 (43.4%)
Sediment	33	6 (18.2%)	27 (81.8%)	96	34 (35.4%)	62 (64.6%)
Milk	20	0 (0%)	20 (100%)	51	9 (17.6%)	42 (82.4%)
Fish	49	4 (8.2%)	45 (91.8%)	87	25 (28.7%)	62 (71.3%)
Total	177	42 (23.7%)	135 (76.3%)	455	193 (33.4%)	262 (66.6%)

Source: Table developed by evaluators based on inter-calibration data obtained from reports

Table 11: Performance of laboratories for basic POPs in the inter-calibration study

African regions (ESA + WA)			
Laboratory code	Ratio of number of samples having results with scores $ z < 2$ versus total number of samples analysed (%)	Ratio of number of standard solutions* having results with z scores $ z < 2$ versus total number of standard solutions analysed (%)	Ratio of number of matrices** having results with z scores $ z < 2$ versus total number of matrices analysed (%)
L56	2 / 17 (11.8%)	-	2 / 17 (11.8%)
L67	5 / 21 (23.8%)	3 / 8 (37.5%)	2 / 13 (15.4%)
L69	22 / 59 (37.3%)	18 / 23 (78.3%)	4 / 36 (11.1%)
L74	3 / 17 (17.6%)	1 / 7 (14.3%)	2 / 10 (20%)
L77	5 / 12 (41.7%)	-	5 / 12 (41.7%)
L79	3 / 10 (30%)	3 / 5 (60%)	0 / 5 (0%)
L91	7 / 18 (38.9%)	7 / 12 (58.3%)	0 / 6 (0%)
GRULAC region			
Laboratory code	Ratio of number of samples having results with z scores $ z < 2$ versus total number of samples analysed	Ratio of number of standard solutions having results with z scores $ z < 2$ versus total number of standard solutions analysed	Ratio of number of matrices** having results with z scores $ z < 2$ versus total number of matrices analysed
L43	4 / 11 (36.4%)	-	4 / 11 (36.4%)
L47	1 / 24 (4.2%)	0 / 9 (0%)	1 / 15 (6.7%)
L48	6 / 10 (60%)	6 / 10 (60%)	-
L51	9 / 18 (50%)	7 / 11 (63.6%)	2 / 7 (28.6%)
L57	19 / 56 (33.9%)	9 / 22 (40.9%)	10 / 34 (29.4%)
L60	19 / 49 (38.8%)	9 / 18 (50%)	10 / 31 (32.3%)
L62	0 / 28 (0%)	-	0 / 28 (0%)
L63	20 / 35 (57.1%)	15 / 16 (93.8%)	5 / 19 (26.3%)
L65	0 / 20 (0%)	0 / 14 (0%)	0 / 20 (0%)
L72	31 / 38 (81.6%)	18 / 18 (100%)	13 / 20 (65%)
L80	23 / 30 (76.7%)	13 / 14 (92.9%)	10 / 16 (62.5%)
L81	12 / 16 (75%)	11 / 11 (100%)	1 / 5 (20%)
L84	1 / 23 (4.3%)	0 / 14 (0%)	1 / 9 (11.1%)
L87	12 / 17 (70.6%)	10 / 12 (83.3%)	2 / 5 (40%)
L102	23 / 40 (57.5%)	17 / 20 (85%)	6 / 20 (30%)
L103	5 / 19 (26.3%)	3 / 9 (33.3%)	2 / 10 (20%)

Source: Table developed by evaluators based on inter-calibration data obtained from reports. *Unknown standard solutions of POPs to be analysed by participating laboratories **matrices include ash, fish, sediment and milk

Table 12: Performance of laboratories for dl-POPs in the inter-calibration study

Matrix	Analyte, z score	ESA region		GRULAC		
		L53; n/N; (%)*	L54; n/N; (%)*	L57;n/N;(%)*	L72;n/N; (%)*	L94;n/N; (%)*
Standard	PCDDFs: z < 2	17 / 17 (100%)	12/17(70.6%)	8/17 (47.1%)	17/17(100%)	17/17(100%)
	z > 2	0 / 17 (0%)	5/17 (29.4)	9/17 (52.9%)	0/17 (0%)	0/17 (0%)
	dl-PCBs: z < 2	10 / 12(83.3%)	12/12(100%)	0/12 (0%)	12/12(100%)	10/12(83.3%)
	z > 2	2 / 12 (16.7%)	0 /12 (0%)	12/12(100%)	0/12 (0%)	2/12(16.7%)
	Total: z < 2	27 / 29(93.1%)	24/29(82.8%)	8/29 (27.6%)	29/29(100%)	27/29(93.1%)
	z > 2	2 / 29 (6.9%)	5/29 (17.2%)	21/29(62.4%)	0/29 (0%)	2/29 (6.9%)
Ash	PCDDFs: z < 2	0 / 16 (0%)	N/A	N/A	8/16 (50%)	N/A
	z > 2	16 / 16 (100%)			8/16 (50%)	
	dl-PCBs: z < 2	1 / 12 (8.3%)	0 /12 (0%)	N/A	12/12(100%)	N/A
	z > 2	11 / 12(91.7%)	12/12(100%)		0/12 (0%)	
	Total: z < 2	1 / 28 (3.6%)	0 /12 (0%)	N/A	20/28(71.4%)	N/A
	z > 2	27 /28(96.4%)	12/12(100%)		8/28 (28.6%)	
Sediment	PCDDFs: z < 2	0 / 16 (0%)	10/16(62.5%)	4/10 (40%)	5/16 (31.3%)	N/A
	z > 2	16 / 16 (100%)	6/16 (37.5%)	6/10 (60%)	11/16(68.7%)	
	dl-PCBs: z < 2	7 / 11 (63.6%)	7/11 (63.6%)	3/9 (33.3%)	5/11 (45.5%)	N/A
	z > 2	4 / 11 (36.4%)	4 / 11(36.4%)	6/9 (66.7%)	6/11 (54.5%)	
	Total: z < 2	7 / 27 (25.9%)	17/27 (63%)	7/19 (36.8%)	10/27 (37%)	N/A
	z > 2	20 / 27(74.1%)	10/27 (37%)	12/19(63.2%)	17/27 (63%)	
Fish	PCDDFs: z < 2	0 / 7 (0%)	N/A	2/3 (66.7%)	5/7 (71.4%)	N/A
	z > 2	7 / 7 (100%)		1/3 (33.3%)	2/7 (28.6%)	
	dl-PCBs: z < 2	4 / 11 (36.4%)	N/A	3/11 (27.3%)	0/11 (0%)	N/A
	z > 2	7 / 11 (63.6%)		8/11 (72.7%)	11/11 (100%)	
	Total: z < 2	4 / 18 (22.2%)	N/A	5/14 (35.7%)	5/18 (27.8%)	N/A
	z > 2	14 / 18(77.8%)		9/14 (64.3%)	13/18(72.2%)	
Milk	PCDDFs: z <2	4 / 15 (26.7%)	N/A	0/8 (0%)	N/A	N/A
	z > 2	11 / 15(73.3%)		8/8 (100%)		
	dl-PCBs: z < 2	2 / 11 (18.2%)	N/A	1/3 (33.3%)	N/A	N/A
	z > 2	9 / 11 (81.8%)		2/3 (66.7%)		
	Total: z < 2	6 / 26 (23.1%)	N/A	1/11 (9.1%)	N/A	N/A
	z > 2	20 / 26(76.9%)		10/11(90.9%)		
Grand total	z < 2	45/128(35.2%)	41/68(60.3%)	21/73(26.8%)	64/102(62.7%)	27/29(93.1%)
	z > 2	83/128(64.8%)	27/68(39.7%)	52/73(73.2%)	38/102(37.3%)	2/29 (6.9%)

Source: Table developed by evaluators based on inter-calibration study data obtained from reports. *L53, L54, L57, L72 and L94 correspond to codes of laboratories; n/N is the ratio of n analyses with z-score $|z| < 2$ or $|z| > 2$ compared to total analyses, N

Annex 1: Terms of Reference of the Evaluation

TERMS OF REFERENCE

Terminal Evaluation of Four Sub-regional Projects on Supporting the Implementation of the Global Monitoring Plan of POPs

(Project Number: GEF ID GFL/2328-2760-4A37/4A76/4A77/4A80

PMS: 3673 GF/GF/4030-09-01/06/07/08)

PROJECT BACKGROUND AND OVERVIEW

A. Project General Information⁷⁴

B. Table 1. Project Summary

Project title:	Supporting the Implementation of the Global Monitoring Plan of POPs in Eastern and Southern African countries.
Project number:	GFL/2328-2760-4A37/4A76/4A77/4A80 PMS: 3673
Project type:	MSP
Sub-programme title: GEF strategic long-term objective: Strategic programme for GEF IV:	POPs 1 POPs 1
UNEP priority:	Harmful Substances and Hazardous Waste
Geographical scope:	Region Eastern and Southern Africa: Egypt, Ethiopia, Kenya, Mauritius, Uganda, Zambia
Mode of execution:	Internal
Project executing organization:	UNEP Chemicals Branch (global coordination), in cooperation with the Department of Chemistry, University of Nairobi, Kenya (regional coordination)
Duration of project:	18 MONTHS
Commencing date:	March 2009
Completion date:	August 2010
Total Cost of project	US\$ 1,005,250 (100%)
Cost to the GEF Trust Fund	US\$ 484,000 (48%)
Co-financing	US\$ 521,250 (52%)

⁷⁴ Source: UNEP Project Document

C. Project Rationale

According to Article 16 of the Stockholm Convention on Persistent Organic Pollutants (POPs), its effectiveness shall be evaluated starting four years after the date of entry into force of the Convention and periodically thereafter. The Conference of Parties (COP) has agreed upon the essential modalities for the environmental monitoring component of the first evaluation. The Global Monitoring Plan (GMP) will focus initially on the core media mother's milk/human blood to examine human exposure, and ambient air to examine long-range transport. COP3 Decision SC-3/19 invited the Global Environment Facility (GEF) to incorporate activities related to the GMP and capacity-building in developing countries, small island developing states and countries with economies in transition as priorities for providing financial support.

So far, in a number of developing countries in ESA and WA and countries in LAC and Pacific islands region, monitoring of POPs that would allow establishing time or spatial trends has not yet been carried out. Further, the matrices chosen by the COP for the GMP, namely ambient air and human milk have only been analysed in a few occasions or none at all. Typically, there are other national priorities such as food stuff and water monitoring or soil analyses at potential hotspots. Few scattered data collected were mainly generated by some research institutes or universities in a science oriented context rather than for the implementation of multilateral environmental agreements. If a few international cooperation activities on POPs monitoring have been carried out, however, they were not targeted to the core media (air, breast milk/human blood) and some of them did not follow the GMP Guidelines established by the ad hoc Technical Working Group for POPs monitoring and adopted by COP3, so their representativeness and quality still need to be assessed further.

The UNEP Regionally Based Analysis project reported that there was limited or very limited data on POPs in countries in ESA, WA, LAC and Pacific Island regions. The countries in these regions either have very limited capacity to manage POPs or have established laboratories with limited capacity and assistance is needed in all areas. This includes the need for increased monitoring capacity, improved regulations, management structures and enforcement systems.

As Parties to the Convention, ESA, LAC, WA countries and the Pacific Islands Region are eligible for application of GEF funds to strengthen the monitoring capacity at national level and so to contribute with national data to the GMP.

C. Project objectives and components

These terms of reference have been prepared to cover the terminal evaluation of four sub-regional UNEP-GEF projects on Supporting the Implementation of the Global Monitoring Plan (GMP) of Persistent Organic Pollutants (POPs) in

Eastern and Southern African-ESA countries; Latin America and Caribbean-LAC States; Pacific Islands Region and West African-WA countries.

The four sub-projects have been implemented in the following countries under each sub-region: ESA: Egypt, Ethiopia, Kenya, Mauritius, Uganda, Zambia; LAC: Antigua and Barbuda, Brazil, Chile, Ecuador, Jamaica, Mexico, Peru, Uruguay; WA: DR Congo, Ghana, Mali, Nigeria, Senegal and Togo; Pacific: Fiji, Kiribati, Niue, Samoa, Palau¹, Solomon Islands, Tuvalu.

The terminal evaluation covers four sub-regional Projects on Supporting the Implementation of the Global Monitoring Plan of POPs in the following countries under each sub-region: ESA: Egypt, Ethiopia, Kenya, Mauritius, Uganda, Zambia; LAC: Antigua and Barbuda, Brazil, Chile, Ecuador, Jamaica, Mexico, Peru, and Uruguay; WA: DR Congo, Ghana, Mali, Nigeria, Senegal and Togo; Pacific: Fiji, Kiribati, Niue, Samoa, Palau, Solomon Islands, Tuvalu.

The initial duration of the four sub-regional projects was 18 months and their completion date foreseen for late 2010. However, due to a number of challenges encountered during project execution and implementation, these were extended to March 2012.

Generally, the projects in the four sub-regions share the same **goal**, namely to build regional capacity on analysis and data generation for POPs in core matrices for the Global POPs Monitoring (GMP) to enable ESA, LAC, WA and Pacific islands' countries to contribute to the global report submitted to the Conference of the Parties (COP).

The **impact** of the projects, their global environmental benefit, has to be seen in the context of the efforts of the COP to establish an effective global system for monitoring of the effectiveness of the implementation of the Stockholm Convention. The projects contribute to these efforts by strengthening the monitoring capacity at national level and with this enabling the participating countries to contribute national data to the GMP in a regionally and internationally agreed and harmonized approach.

All projects have the same **components and objectives**, as presented in table 2.

Table 2. Project components and component objectives

Components	Component objectives
1: Standard operating procedures (SOPs) for sampling and analysis of POPs in relevant matrices	To ensure that sampling and analysis are performed according to international standard by all partners.
2: Adequately equipped laboratories and trained personnel to undertake sampling and analysis	To ensure that lab personnel are trained to high standard and sampling in countries is done according to international standards.
3: Experiences in participation in international	To ensure QA protocols are in place and used and Participation in

inter-calibration studies	proficiency tests
4: High quality data on presence of POPs in participating countries are Available	To increase regional awareness of POPs exposures and provide Baseline for later effectiveness evaluation and establish a network of air samplers
5: Governments and stakeholders are aware on details in implementation of the GMP issue in their national implementation plan and reporting to the COP	To Improve implementation of the NIP recommendations with respect to POPs monitoring and increase knowledge of POPs presence and the implications in the countries involved and develop basis for follow-up project(s)

The project activities are based on the NIPs of the participating countries as far as they are available. A number of countries have already finalized and submitted their NIPs (Ghana, Mali, Senegal, Togo; Antigua/Barbuda, Chile, Ecuador, Mexico, Peru, Uruguay; Egypt, Ethiopia, Kenya Mauritius). Others have prepared a final draft of the NIP (Fiji, Kiribati, Nieu, Samoa, Uganda, Zambia, Jamaica) while a few have started the process to initiate NIP development (Palua, Tuvalu, Salomon, Brazil, DR Congo, Nigeria).

Development of detailed guidelines, protocols and manuals, as well as training of staff in participating laboratories and strengthening the performance of sampling and analysis was intended to enable the national laboratories to have the infrastructure in place to analyse POPs according to international standards consistent with GMP Guidelines. With this, the project was to strengthen the capacity of the participating countries for monitoring POPs concentrations in the key media and to facilitate reporting under the first effectiveness evaluation and drafting the regional report.

D. Executing Arrangements

UNEP/ Division of Technology, Industry and Economics (DTIE) - Chemicals Branch was the executing agency and international coordinator for all the projects. It was to provide administrative and technical supervision to the implementation of the project. UNEP-Chemicals was to closely liaise with the Stockholm Convention Secretariat, other co-founding partners, including the World Health Organization which is implementing a global mothers' milk survey.

For the regional delivery in the four sub-regions, a number of centers were subcontracted to coordinate the project at the regional and national levels and report to UNEP-Chemicals, as follows:

- i. ESA: Department of Chemistry, University of Nairobi, Kenya
- ii. LAC: Stockholm Center, Uruguay
- iii. Pacific islands: the University of South Pacific (USP) through Institute of Applied Science (IAS), Fiji

- iv. WA: Environmental Toxicology and Quality Control Laboratory (ETQCL), Mali

These centers had a dual role in the projects as: i) sub-regional coordinators responsible for the regional delivery of the project (all sub-regions) and ii) coordinator for the national data generation project (LAC) or participating laboratory for the national data generation (ESA, WA).

At the national levels other stakeholders include: the partner laboratories with experience on POPs analysis at different levels assigned a partner laboratory and national coordinators.

The project was envisaged to build upon the experiences of the UNEP/GEF Project on “Assessment of Existing Capacity and Capacity Building Needs to Analyse POPs in Developing Countries”. In order to provide highest technical standards, it was envisaged that UNEP-Chemicals would subcontract the expert laboratories from Free University Amsterdam-IVM, the Netherlands, and Örebro University-MTM Centre, Sweden, for training and mirror analysis of samples, and organization of intercalibration studies. The WHO Reference laboratory for mothers’ milk at Chemisches Untersuchungsamt Freiburg (CVUA Freiburg), Germany, was to assist in matters related to this core matrix. Further coordination was to be started with the programs implementing air monitoring activities such as Environment Canada.

A Project Steering Committee was to be established, receive periodic reports on progress and make recommendations to UNEP concerning the need to revise any aspects of the Results Framework or the M&E plan. Project oversight to ensure project met UNEP and GEF policies and procedures was the responsibility of the Task Manager in UNEP-GEF. The Task Manager was also to review the quality of draft project outputs, provide feedback to the project partners, and establish peer review procedures to ensure adequate quality of scientific and technical outputs and publications.

E. Project Cost and Financing

The GEF provided a total of US\$ 2,429,000 of external financing to the four projects. All projects belong to the Medium-Size Project category. The projects were expected to mobilize another US\$ 2,511,150 million in co-financing, from Governments, multilateral and bilateral agencies and NGO. Table 3a also summarizes expected costs per financing sources.

UNEP finances reports that the projects (4) have effectively disbursed US\$ 2,366,371.06 of the GEF grant to UNEP, being 99 percent, by March 2012. By then, the project had mobilized a total of about US\$ 2,511,150 as co-financing as shown in Table 3b.

Table 3a. Estimated project costs per financing source

	Co-financing Governments	Co-financing others	GEF	TOTAL
LAC	466,000	379,300	845,000	1,690,300

Pacific	320,000	214,000	517,000	1,051,000
ESA	199,000	322,250	484,000	1,005,250
WA	266,000	344,600	583,000	1,193,600
Total Project Financing	1,251,000	1,260,150	2,429,000	4,940,150

Source: Project Document for CEO Approval dates; Pacific (GF/4A37), Nov. 2008 and the other 3 projects in April 2009–

Table 3b: Details of Co-Finance for the Project by March 2012⁷⁵

Project	Cofinance		Sub-total
	Cash	In-kind	
West Africa	220,600	390,000	610,600
E+S Africa	230,250	291,000	521,250
GRULA C	252,300	593,000	845,300
Pacific	134,000	400,000	534,000
Total	837,150	1,674,000	2,511,150

F. Project Implementation Issues

No Mid-term Evaluation of the Projects on “Supporting the Implementation of the Global Monitoring Plan of POPs” was conducted. The Logframe (Annex 12) was also not revised in the course of implementation.

There were no PIRs developed for the project. The 2010-2011 PIR was not developed due to work overload of the project task manager. The task manager informed UNEP GEF about it.

⁷⁵ Information provided by Heidelore Fiedler, Project Coordinator, Geneva.

II. TERMS OF REFERENCE FOR THE EVALUATION

A. Objective and Scope of the Evaluation

In line with the UNEP Evaluation Policy⁷⁶, the UNEP Evaluation Manual⁷⁷ and the Guidelines for GEF Agencies in Conducting Terminal Evaluations⁷⁸, the terminal evaluation of four Sub-regional Projects **on Supporting the Implementation of the Global Monitoring Plan of POPs** is undertaken at the end of the projects to assess project performance (in terms of relevance, effectiveness and efficiency), and determine outcomes and impacts (actual and potential) stemming from the project, including their sustainability. The evaluation has two primary purposes: (i) to provide evidence of results to meet accountability requirements, and (ii) to promote learning, feedback, and knowledge sharing through results and lessons learned among UNEP, governments, the GEF and their partners. Therefore, the evaluation will identify lessons of operational relevance for future project formulation and implementation. It will focus on the following sets of **key questions**, based on the project's intended outcomes, which may be expanded by the consultants as deemed appropriate:

How successful were the projects in supporting partners in 27 countries in the four sub-regions to perform sampling and analysis of POPs in relevant matrices according to standard operating procedures (SOPs) and international standards?

Did the projects assist the countries in training laboratory personnel to high standards, including adequately equipping laboratories and training personnel to undertake sampling and analysis?

To what extent did the projects assist the countries to improve their experiences in participation in international inter-calibration studies, in the establishment and consolidation of a functional national system for handling requests, carry out risk assessment decision-making and administrative tasks?

How successful were the projects in assisting their partners to make available high quality data on presence of POPs in participating countries?

Did the projects assist the countries to increase awareness of governments and stakeholders on details in implementation of the GMP issue in their national implementation plan and reporting to the COP?

⁷⁶

<http://www.unep.org/eou/StandardsPolicyandPractices/UNEPEvaluationPolicy/tabid/3050/language/en-US/Default.aspx>

⁷⁷

<http://www.unep.org/eou/StandardsPolicyandPractices/UNEPEvaluationManual/tabid/2314/language/en-US/Default.aspx>

⁷⁸

http://www.thegef.org/gef/sites/thegef.org/files/documents/TE_guidelines7-31.pdf

Overall Approach and Methods

The terminal evaluation of the Four Sub-regional Projects on Supporting the Implementation of the Global Monitoring Plan of POPs will be conducted by a team of independent consultants under the overall responsibility and management of the UNEP Evaluation Office (Nairobi), in consultation with the UNEP GEF Coordination Office and the UNEP/Division of Technology, Industry and Economics (DTIE) - Chemicals Branch (Geneva).

It will be an in-depth evaluation using a participatory approach whereby key stakeholders are kept informed and consulted throughout the evaluation process. Both quantitative and qualitative evaluation methods will be used to determine project achievements against the expected outputs, outcomes and impacts.

The findings of the evaluation will be based on the following:

A **desk review** of project documents⁷⁹ including, but not limited to:

- Relevant background documentation, inter alia UNEP and GEF policies, strategies and programmes pertaining to POPs and their conventions;
- Project design documents; Annual Work Plans and Budgets or equivalent, revisions to the logical framework and project financing;
- Project reports such as progress and financial reports from countries to the IA and from the EA to UNEP; Steering Committee meeting minutes; annual Project Implementation Reviews and relevant correspondence;
- Documentation related to project outputs such as: report of the inter-calibration studies, compiled report for ambient air monitoring, compiled report on mother's milk analysis, national and regional reporting, experts' reports on training and capacity building activities, among other relevant documents.

Interviews⁸⁰ with:

- Project management and execution support;
- Regional coordinator of the project;
- Sub-regional coordinators at sub-regional coordinating centers⁸¹
- UNEP Task Manager (Geneva) and Fund Management Officer (Nairobi);
- Country lead execution partners and other relevant partners including participating laboratories receiving trainings and consumables;
- Relevant staff of GEF Secretariat;
- Representatives of other multilateral agencies such as WHO and other relevant organisations as needed
- Governments' representatives especially from Ministries of Environment, national focal points for the Stockholm Convention and research institutions.

⁷⁹ Documents to be provided by UNEP and UNEP-Chemicals are listed in Annex 7.

⁸⁰ Face-to-face or through any other appropriate means of communication

⁸¹ The sub-regional coordinating centers are ESA – Department of Chemistry, Univ. of Nairobi, Kenya; LAC – Stockholm Center, Uruguay; Pacific Islands – The University of South Pacific (USP) through institute of applied Sciences (IAS), Fiji; WA – Environmental Toxicology and Quality Control Laboratory (ETQCL), Mali

Questionnaire/survey. A questionnaire/survey covering all the countries participating in the projects will be organized by the evaluators and details presented in the inception report.

Country visits. The evaluation team will visit a representative sample of countries from the four projects, about two from each sub-region. These are Kenya and Zambia in ESA, Ghana and Senegal in WA, Uruguay and Brazil in LAC and in the Pacific Island region, Fiji. A visit to an expert laboratory is recommended.

Key Evaluation principles

Evaluation findings and judgements should be based on **sound evidence and analysis**, clearly documented in the evaluation report. Information will be triangulated (i.e. verified from different sources) to the extent possible, and when verification was not possible, the single source will be mentioned⁸². Analysis leading to evaluative judgements should always be clearly spelled out.

The evaluation will assess the project with respect to **a minimum set of evaluation criteria** grouped in four categories: (1) Attainment of objectives and planned results, which comprises the assessment of outputs achieved, relevance, effectiveness and efficiency and the review of outcomes towards impacts; (2) Sustainability and catalytic role, which focuses on financial, socio-political, institutional and ecological factors conditioning sustainability of project outcomes, and also assesses efforts and achievements in terms of replication and up-scaling of project lessons and good practices; (3) Processes affecting attainment of project results, which covers project preparation and readiness, implementation approach and management, stakeholder participation and public awareness, country ownership/driven-ness, project finance, UNEP supervision and backstopping, and project monitoring and evaluation systems; and (4) Complementarity with the UNEP strategies and programmes. The lead consultant can propose other evaluation criteria as deemed appropriate.

Ratings. All evaluation criteria will be rated on a six-point scale. However, complementarity of the project with the UNEP strategies and programmes is not rated. Annex 3 provides detailed guidance on how the different criteria should be rated and how ratings should be aggregated for the different evaluation criterion categories.

In attempting to attribute any outcomes and impacts to the project, the evaluators should consider the difference between **what has happened with** and **what would have happened without** the project. This implies that there should be consideration of the baseline conditions and trends in relation to the intended project outcomes and impacts. This also means that there should be plausible evidence to attribute such outcomes and impacts to the actions of the project. Sometimes, adequate information on baseline conditions and trends is lacking. In such cases this should be clearly highlighted by the evaluators,

⁸²

Individuals should not be mentioned by name if anonymity needs to be preserved.

along with any simplifying assumptions that were taken to enable the evaluator to make informed judgements about project performance.

As this is a terminal evaluation, particular attention should be given to learning from the experience. Therefore, **the “why?” question** should be at front of the consultants’ minds all through the evaluation exercise. This means that the consultants needs to go beyond the assessment of “what” the project performance was, and make a serious effort to provide a deeper understanding of “why” the performance was as it was, i.e. of processes affecting attainment of project results (criteria under category 3). This should provide the basis for the lessons that can be drawn from the project. In fact, the usefulness of the evaluation will be determined to a large extent by the capacity of the consultants to explain “why things happened” as they happened and are likely to evolve in this or that direction, which goes well beyond the mere assessment of “where things stand” today.

Evaluation criteria

1. Attainment of Objectives and Planned Results

The evaluation should assess the relevance of the project’s objectives and the extent to which these were effectively and efficiently achieved or are expected to be achieved.

Achievement of Outputs and Activities: Assess, for each component, the project’s success in producing the programmed outputs as presented in Table A1.1 (Annex 1), both in quantity and quality, as well as their usefulness and timeliness. Briefly explain the degree of success of the project in achieving its different outputs, cross-referencing as needed to more detailed explanations provided under Section 3 (which covers the processes affecting attainment of project objectives). The achievements under the regional and national demonstration projects will receive particular attention.

Relevance: Assess, in retrospect, whether the project’s objectives and implementation strategies were consistent with: i) Sub-regional environmental issues and needs; ii) the UNEP mandate and policies at the time of design and implementation; and iii) the relevant GEF focal areas, strategic priorities and operational programme(s).

Effectiveness: Appreciate to what extent the project has achieved its main objective **to improve the capacity of the participating countries to contribute to national POPs analysis to the reporting under the Global Monitoring of POPs**. To measure achievement, use as much as appropriate the indicators for achievement proposed in the Logical Framework Matrix (Logframe) (Annex 12) of the project, adding other relevant indicators as appropriate. Briefly explain what factors affected the project’s success in achieving its objectives, cross-referencing as needed to more detailed explanations provided under Section 3.

Efficiency: Assess the cost-effectiveness and timeliness of project execution. Describe any cost- or time-saving measures put in place in attempting to bring the project

to a successful conclusion within its programmed budget and (extended) time. Analyse how delays, if any, have affected project execution, costs and effectiveness. Wherever possible, compare the cost and time over results ratios of the project with that of other similar projects. Give special attention to efforts by the project teams to make use of/build upon pre-existing institutions, agreements and partnerships, data sources, synergies and complementarities with other initiatives, programmes and projects etc. to increase project efficiency.

Review of Outcomes to Impacts (ROtI): Reconstruct the logical pathways from project outputs over achieved objectives towards impacts, taking into account performance and impact drivers, assumptions and the roles and capacities of key actors and stakeholders, using the methodology presented in the GEF Evaluation Office's ROtI Practitioner's Handbook⁸³ (summarized in Annex 8 of the TORs). Appreciate to what extent the project has to date contributed, and is likely in the future to further contribute to changes in stakeholder behaviour as a result of i) laboratory personnel trained to high and international standard, ii) improved regional awareness of POPs exposures, iii) increased knowledge of POPs presence in the countries at government and stakeholders level and the likelihood of those leading to changes in the global system for monitoring of the effectiveness of the implementation of the Stockholm convention: a) countries enabled to strengthen the monitoring capacities at national level and to contribute national data to the GMP in a regionally and internationally agreed and harmonized approach.

Sustainability and catalytic role

Sustainability is understood as the probability of continued long-term project-derived results and impacts after the external project funding and assistance ends. The evaluation will identify and assess the key conditions or factors that are likely to undermine or contribute to the persistence of benefits. Some of these factors might be direct results of the project while others will include contextual circumstances or developments that are not under control of the project but that may condition sustainability of benefits. The evaluation should ascertain to what extent follow-up work has been initiated and how project results will be sustained and enhanced over time. Application of the ROtI method will assist in the evaluation of sustainability.

Four aspects of sustainability will be addressed:

Socio-political sustainability. Are there any social or political factors that may influence positively or negatively the sustenance of project results and progress towards impacts? Is the level of ownership by the main national and regional stakeholders sufficient to allow for the project results to be sustained? Are there sufficient government and stakeholder awareness, interests, commitment and incentives to execute, enforce and pursue the programmes, plans, agreements, monitoring systems etc. prepared and agreed upon under the project?

⁸³ http://www.thegef.org/gef/sites/thegef.org/files/documents/Impact_Eval-Review_of_Outcomes_to_Impacts-RotI_handbook.pdf

Financial resources. To what extent are the continuation of project results and the eventual impact of the project dependent on continued financial support? What is the likelihood that adequate financial resources⁸⁴ will be or will become available to implement the programmes, plans, agreements, monitoring systems etc. prepared and agreed upon under the project? Are there any financial risks that may jeopardize sustenance of project results and onward progress towards impact?

Institutional framework. To what extent is the sustenance of the results and onward progress towards impact dependent on issues relating to institutional frameworks and governance? How robust are the institutional achievements such as governance structures and processes, policies, sub-regional agreements, legal and accountability frameworks etc. required to sustaining project results and to lead those to impact on human behaviour and environmental resources?

Environmental sustainability. Are there any environmental factors, positive or negative, that can influence the future flow of project benefits? Are there any project outputs or higher level results that are likely to affect the environment, which, in turn, might affect sustainability of project benefits?

Catalytic Role and Replication. The *catalytic role* of GEF-funded interventions is embodied in their approach of supporting the creation of an enabling environment and of investing in pilot activities which are innovative and showing how new approaches can work. UNEP and the GEF also aim to support activities that upscale new approaches to a national, regional or global level, with a view to achieve sustainable global environmental benefits. The evaluation will assess the catalytic role played by this project, namely to what extent the project has:

catalyzed behavioural changes in terms of use and application by the relevant stakeholders of: i) technologies and approaches show-cased by the demonstration projects; ii) strategic programmes and plans developed; and iii) assessment, monitoring and management systems established at a national and sub-regional level;

provided *incentives* (social, economic, market based, competencies etc.) to contribute to catalyzing changes in stakeholder behaviour;

contributed to *institutional changes*. An important aspect of the catalytic role of the project is its contribution to institutional uptake or mainstreaming of project-piloted approaches in the regional and national demonstration projects;

contributed to *policy changes* (on paper and in implementation of policy);

contributed to sustained follow-on financing (*catalytic financing*) from Governments, the GEF or other donors;

⁸⁴ Those resources can be from multiple sources, such as the public and private sectors, income generating activities, other development projects etc.

created opportunities for particular individuals or institutions (“*champions*”) to catalyze change (without which the project would not have achieved all of its results).

Replication, in the context of GEF projects, is defined as lessons and experiences coming out of the project that are replicated (experiences are repeated and lessons applied in different geographic areas) or scaled up (experiences are repeated and lessons applied in the same geographic area but on a much larger scale and funded by other sources). The evaluation will assess the approach adopted by the project to promote replication effects and appreciate to what extent actual replication has already occurred or is likely to occur in the near future. What are the factors that may influence replication and scaling up of project experiences and lessons?

Processes affecting attainment of project results

Preparation and Readiness. Were the project’s objectives and components clear, practicable and feasible within its timeframe? Were the capacities of executing agencies properly considered when the project was designed? Was the project document clear and realistic to enable effective and efficient implementation? Were the partnership arrangements properly identified and the roles and responsibilities negotiated prior to project implementation? Were counterpart resources (funding, staff, and facilities) and enabling legislation assured? Were adequate project management arrangements in place? Were lessons from other relevant projects properly incorporated in the project design? Were lessons learned and recommendations from Steering Committee meetings adequately integrated in the project approach? What factors influenced the quality-at-entry of the project design, choice of partners, allocation of financial resources etc.?

Implementation Approach and Adaptive Management. This includes an analysis of approaches used by the project, its management framework, the project’s adaptation to changing conditions (adaptive management), the performance of the implementation arrangements and partnerships, relevance of changes in project design, and overall performance of project management. The evaluation will:

Ascertain to what extent the project implementation mechanisms outlined in the project document have been followed and were effective in delivering project outputs and outcomes. Were pertinent adaptations made to the approaches originally proposed?

Assess the role and performance of the units and committees established and the project execution arrangements at all levels;

Evaluate the effectiveness and efficiency of project management by the EA and how well the management was able to adapt to changes during the life of the project;

Assess the extent to which project management responded to direction and guidance provided by the Steering Committee and IA supervision recommendations;

Identify administrative, operational and/or technical problems and constraints that influenced the effective implementation of the project, and how the project partners tried to overcome these problems;

Assess the extent to which MTE recommendations were followed in a timely manner.

Stakeholder⁸⁵ Participation and Public Awareness. The term stakeholder should be considered in the broadest sense, encompassing project partners, government institutions, private interest groups, local communities etc. The assessment will look at three related and often overlapping processes: (1) information dissemination between stakeholders, (2) consultation between stakeholders, and (3) active engagement of stakeholders in project decision making and activities. The evaluation will specifically assess:

the approach(es) used to identify and engage stakeholders in project design and implementation. What were the strengths and weaknesses of these approaches with respect to the project's objectives and the stakeholders' motivations and capacities? What was the achieved degree and effectiveness of collaboration and interactions between the various project partners and stakeholders during the course of implementation of the project?

the degree and effectiveness of any public awareness activities that were undertaken during the course of implementation of the project; or that are built into the assessment methods so that public awareness can be raised at the time the assessments will be conducted;

how the results of the project (strategic programmes and plans, monitoring and management systems, sub-regional agreements etc.) engaged key stakeholders in building regional capacity on analysis and data generation for POPs to enable participating countries to contribute to the global report submitted to the COP.

The ROI analysis should assist the consultants in identifying the key stakeholders and their respective roles, capabilities and motivations in each step of the causal pathway from activities to achievement of outputs and objectives to impact.

Country Ownership and Driven-ness. The evaluation will assess the performance of the Governments of the countries involved in the project, namely:

in how the Governments have assumed responsibility for the project and provided adequate support to project execution, including the degree of cooperation received from the various contact institutions in the countries involved in the project and the timeliness of provision of counter-part funding to project activities;

⁸⁵ Stakeholders are the individuals, groups, institutions, or other bodies that have an interest or stake in the outcome of the project. The term also applies to those potentially adversely affected by the project.

to what extent the political and institutional framework of the participating countries has been conducive to project performance. Look, in particular, at the extent of the political commitment to enforce (sub-) regional agreements promoted under the project;

to what extent the Governments have promoted the participation of communities and their non-governmental organisations in the project; and

how responsive the Governments were to the National Executing Agencies' coordination and guidance and to UNEP supervision.

Financial Planning and Management. Evaluation of financial planning requires assessment of the quality and effectiveness of financial planning and control of financial resources throughout the project's lifetime. The assessment will look at actual project costs by activities compared to budget (variances), financial management (including disbursement issues), and co-financing. The evaluation will:

Verify the application of proper standards (clarity, transparency, audit etc.) and timeliness of financial planning, management and reporting to ensure that sufficient and timely financial resources were available to the project and its partners;

Appreciate other administrative processes such as recruitment of staff, procurement of goods and services (including consultants), preparation and negotiation of cooperation agreements etc. to the extent that these might have influenced project performance;

Present to what extent co-financing has materialized as expected at project approval (see Table 1). Report country co-financing to the project overall, and to support project activities at the national level in particular. The evaluation will provide a breakdown of final actual costs and co-financing for the different project components (see tables in Annex 4).

Describe the resources the project has leveraged since inception and indicate how these resources are contributing to the project's ultimate objective. Leveraged resources are additional resources—beyond those committed to the project itself at the time of approval—that are mobilized later as a direct result of the project. Leveraged resources can be financial or in-kind and they may be from other donors, NGO's, foundations, governments, communities or the private sector.

Analyse the effects on project performance of any irregularities in procurement, use of financial resources and human resource management, and the measures taken by the EA or IA to prevent such irregularities in the future. Appreciate whether the measures taken were adequate.

UNEP Supervision and Backstopping. The purpose of supervision is to verify the quality and timeliness of project execution in terms of finances, administration and achievement of outputs and outcomes, in order to identify and recommend ways to deal with problems which arise during project

execution. Such problems may be related to project management but may also involve technical/institutional substantive issues in which UNEP has a major contribution to make. The evaluators should assess the effectiveness of supervision and administrative and financial support provided by UNEP including:

The adequacy of project supervision plans, inputs and processes;

The emphasis given to outcome monitoring (results-based project management);

The realism and candour of project reporting and ratings (i.e. are PIR ratings an accurate reflection of the project realities and risks);

The quality of documentation of project supervision activities; and

Financial, administrative and other fiduciary aspects of project implementation supervision.

Monitoring and Evaluation. The evaluation will include an assessment of the quality, application and effectiveness of project monitoring and evaluation plans and tools, including an assessment of risk management based on the assumptions and risks identified in the project document. The evaluation will appreciate how information generated by the M&E system during project implementation was used to adapt and improve project execution, achievement of outcomes and ensuring sustainability. M&E is assessed on three levels:

M&E Design. Projects should have sound M&E plans to monitor results and track progress towards achieving project objectives. An M&E plan should include a baseline (including data, methodology, etc.), SMART indicators and data analysis systems, and evaluation studies at specific times to assess results. The time frame for various M&E activities and standards for outputs should have been specified. The evaluators should use the following questions to help assess the M&E design aspects:

- Quality of the project logframe as a planning and monitoring instrument; analyse/compare logframe in Project Document,) and logframe used in Project Implementation Review reports to report progress towards achieving project objectives;
- SMART-ness of indicators: Are there specific indicators in the logframe for each of the project objectives? Are the indicators measurable, attainable (realistic) and relevant to the objectives? Are the indicators time-bound?
- Adequacy of baseline information: To what extent has baseline information on performance indicators been collected and presented in a clear manner? Was the methodology for the baseline data collection explicit and reliable?
- Arrangements for monitoring: Have the responsibilities for M&E activities been clearly defined? Were the data sources and data collection instruments appropriate? Was the frequency of various monitoring activities specified and adequate? In how far were project users involved in monitoring?

- Arrangements for evaluation: Have specific targets been specified for project outputs? Has the desired level of achievement been specified for all indicators of objectives and outcomes? Were there adequate provisions in the legal instruments binding project partners to fully collaborate in evaluations?
- Budgeting and funding for M&E activities: Determine whether support for M&E was budgeted adequately and was funded in a timely fashion during implementation.

M&E Plan Implementation. The evaluation will verify that:

- the M&E system was operational and facilitated timely tracking of results and progress towards projects objectives throughout the project implementation period;
- annual project reports and Progress Implementation Review (PIR) reports were complete, accurate and with well justified ratings;
- the information provided by the M&E system was used during the project to improve project performance and to adapt to changing needs;
- projects had an M&E system in place with proper training, instruments and resources for parties responsible for M&E.

Complementarities with UNEP strategies and programmes

UNEP aims to undertake GEF funded projects that are aligned with its own strategies. The evaluation should present a brief narrative on the following issues:

Linkage to UNEP's Expected Accomplishments and POW 2011-2012. The UNEP MTS specifies desired results in six thematic focal areas. The desired results are termed Expected Accomplishments. Using the completed ROtI analysis, the evaluation should comment on whether the project makes a tangible contribution to any of the Expected Accomplishments specified in the UNEP MTS. The magnitude and extent of any contributions and the causal linkages should be fully described. Whilst it is recognised that UNEP GEF projects designed prior to the production of the UNEP Medium Term Strategy (MTS)⁸⁶/ Programme of Work (POW) 2011/12 would not necessarily be aligned with the Expected Accomplishments articulated in those documents, complementarities may still exist.

*Alignment with the Bali Strategic Plan (BSP)*⁸⁷. The outcomes and achievements of the project should be briefly discussed in relation to the objectives of the UNEP BSP.

Gender. Ascertain to what extent project design, implementation and monitoring have taken into consideration: (i) possible gender inequalities in access to and the control over natural resources; (ii) specific vulnerabilities of women and children to environmental degradation or disasters; and (iii) the role of women in mitigating or adapting to environmental changes and engaging in environmental

⁸⁶ <http://www.unep.org/PDF/FinalMTSGCSS-X-8.pdf>

⁸⁷ <http://www.unep.org/GC/GC23/documents/GC23-6-add-1.pdf>

protection and rehabilitation. Appreciate whether the intervention is likely to have any lasting differential impacts on gender equality and the relationship between women and the environment. To what extent do unresolved gender inequalities affect sustainability of project benefits?

South-South Cooperation. This is regarded as the exchange of resources, technology, and knowledge between developing countries. Briefly describe any aspects of the project that could be considered as examples of South-South Cooperation.

The Consultants' Team

For this evaluation, two consultants will be hired, preferably of mixed gender, at least one of which is from the project sub-region. In general, the evaluation team will combine the following of decades long expertise and experience in:

Evaluation of GEF projects;

Organic pollutants or other hazardous substances, agriculture or chemistry;

Capacity and institution building, coupled with higher level education in (Team Leader) and (Supporting consultant).

The **Team Leader** will be responsible for coordinating the data collection and analysis phase of the evaluation, and preparing the main report. (S)He will ensure that all evaluation criteria are adequately covered by the team. The inception report will provide a matrix which presents the distribution of roles and responsibilities between evaluation team members which will be approved by the Evaluation Office. The Team Leader will undertake field visits to Uruguay, Brazil and Fiji.

The **Supporting Consultant** will prepare a regional report on the sub-regional project s(he) will assess that will be appended to the main report, the content of which will be agreed upon with the Team Leader. The Supporting Consultant is also expected to contribute to selected sections of the main report as agreed with the Team Leader, and provide constructive comments on the draft report prepared by the Team Leader. The Supporting Consultant will undertake field visits to Kenya, Zambia, Senegal and Ghana.

By undersigning the service contract with UNEP/UNON, the consultants certify that they have not been associated with the design and implementation of the project in any way which may jeopardize their independence and impartiality towards project achievements and project partner performance. In addition, they will not have any future interests (within six months after completion of their contract) with the project's executing or implementing units.

Evaluation Deliverables and Review Procedures

The Team Leader will prepare and submit an inception report to the UNEP Evaluation Office before starting fieldwork or desk based phone/email interviews. See Annex 11 for annotated Table of Contents of Inception Report.

The inception report lays the foundations for the main evaluation. Its purpose is to develop an evaluation framework that includes:

A review of the quality of project design to help identify how project design impacts on project implementation and performance;

An analysis of the project's theory of change, creating a baseline which can be used to assess the actual project outcomes and impacts (expected and unexpected) during field visits and interviews;

A detailed plan for the evaluation process.

The main components of the inception report are:

Review of the Quality of Project Design: The review of project design is done on the basis of the project document and log frame. The Team Leader should also familiarize her/himself with the history and wider context of the project (details available on UNEP and GEF website, documentation from past projects etc). The analysis should be used to complete the 'Template for assessment of the quality of project design' (in the Annex 9 of the TORs). The rating system follows the Evaluation ratings used for the main evaluation (also described in the annex of the TORs).

Theory of Change Analysis: Annex 8 of the TORs on Introduction to Theory of Change/Impact pathways, the ROI Method and the ROI results score sheet describes in details the Theory of Change approach. The Theory of Change analysis should be captured in a Theory of Change diagram, found in the annex. The diagram can be shared with project stakeholders in the course of the evaluation, as tool to aid discussion. Please note that the ratings requested in the annex are not needed in the inception report's Theory of Change analysis. The team leader should complete the ratings after the field visits/interviews. The ToC diagram and ratings should be incorporated in final evaluation report.

Evaluation Process Plan: The evaluation process plan is based on a review of the project design, theory of change analysis and also of all the project documentation (listed in TORs). The evaluation plan should include: summary of evaluation questions/areas to be explored/questions raised through document review; description of evaluation methodologies to be used including use of surveys/questionnaires; list of data sources, indicators; list of individuals to be consulted; detailed distribution of roles and responsibilities among evaluation consultants (for larger evaluation teams); revised logistics (selection of countries to be visited)/dates of evaluation activities.

The Team leader will prepare the main evaluation report. The main evaluation report should be brief (no longer than 35 pages – excluding the executive summary and annexes), to the point and written in plain English. The report will follow the annotated Table of Contents outlined in Annex 2. It must explain the purpose of the evaluation, exactly what was evaluated and the methods used (with their limitations). The report will present evidence-based and balanced findings, consequent conclusions, lessons and recommendations,

which will be cross-referenced to each other. The report should be presented in a way that makes the information accessible and comprehensible. Any dissident views in response to evaluation findings will be appended in footnote or annex as appropriate.

Technical working paper. The format and contents of the working paper prepared by the Supporting Consultants should be agreed upon with the Team Leader and approved by the UNEP Evaluation Office before any data collection and analysis work is undertaken. It is recommended that the working papers follow the same structure as the main evaluation report, for easy reference by the Team Leader (Annex 2). The Team Leader will carry out a first review of the working papers and provide comments to the Supporting Consultants for improvement. Only a version acceptable to the Team Leader will be submitted to the EO as an appendix to the draft main report.

Report summary. If needed, the Team Leader will prepare a 15-slide presentation summarizing the key findings, lessons learned and recommendations of the evaluation. This presentation will be presented at the final Steering Committee meetings of the projects if planned during the evaluation timeline. The purpose of this presentation is to engage the main project partners in a discussion on the evaluation results.

Review of the draft evaluation report. The Team Leader will submit the zero draft report according to the evaluation timeline proposed in the inception report to the UNEP EO and revise the draft following the comments and suggestions made by the EO. The EO will then share the first draft report with the UNEP GEF Coordination Office and the UNEP-Chemicals in Geneva. The UNEP Task Manager will forward the first draft report to the other project stakeholders, for review and comments. Stakeholders may provide feedback on any errors of fact and may highlight the significance of such errors in any conclusions. Comments would be expected within two weeks after the draft report has been shared. Any comments or responses to the draft report will be sent to the UNEP EO for collation. The EO will provide the comments to the Team Leader for consideration in preparing the final draft report. The Team Leader will submit the final draft report after reception of stakeholder comments according to the timeline proposed in the inception report. The Team Leader will prepare a **response to comments** that contradict the findings of the evaluation team and could therefore not be accommodated in the final report. This response will be shared by the EO with the interested stakeholders to ensure full transparency.

Consultations will be held between the consultants, EO staff, the UNEP/GEF, UNEP/-Chemicals, and key members of the project execution team. These consultations will seek feedback on the proposed recommendations and lessons.

Submission of the final Terminal Evaluation report. The final report shall be submitted by Email to:

Segbedzi Norgbey, Head
UNEP Evaluation Office
P.O. Box 30552-00100
Nairobi, Kenya
Tel.: (+254-20) 762 3387
Email: segbedzi.norgbey@unep.org

The Head of Evaluation will share the report with the following persons:

Maryam Niamir-Fuller, Director
UNEP/GEF Coordination Office
P.O. Box 30552-00100
Nairobi, Kenya
Tel: (+254-20) 762 4686
Email: maryam.niamir-fuller@unep.org

Sylvie Lemmet, Director
UNEP/Division of Technology, Industry and Economics (DTIE)
P.O. Box 30552-00100
Nairobi, Kenya
Tel:
Email: sylvie.lemmet@unep.org

Jorge Ocaña, Task Manager - POPs and Chemicals
UNEP/DTIE (Chemicals Branch / GEF Operations)
Chemin des Anémones 11-15
Chatelaine, 1219 Geneva
Switzerland
Tel: +41 22 917 8195
Email : jorge.ocana@unep.org

Dr. Heidelore Fiedler, Project Coordinator
UNEP/DTIE (Chemicals Branch / GEF Operations)
Chemin des Anémones 11-15
Chatelaine, 1219 Geneva
Switzerland
Tel: +41 22 917 8195
Email : heidelore.fiedler@unep.org

Tim Kasten, Head, Chemicals Branch
UNEP DTIE
13, chemin des Anémones
CH-1219 Chatelaine, Geneva
Switzerland

Phone: +41 22 917 81 83
Email : tim.kasten@unep.org

David Piper, Deputy Head, Chemicals Branch
Division of Technology, Industry and Economics
United Nations Environment Programme
International Environment House
15 Chemin des Anémones,
CH-1219, Châtelaine
Geneva, Switzerland
Phone: +41 22 917 8345
Email : david.piper@unep.org

The final evaluation report will be published on the UNEP Evaluation Office web-site www.unep.org/eou and may be printed in hard copy. Subsequently, the report will be sent to the GEF Office of Evaluation for their review, appraisal and inclusion on the GEF website.

As per usual practice, the UNEP EO will prepare a **quality assessment** of the zero draft and final draft report, which is a tool for providing structured feedback to the evaluation consultants. The quality of the report will be assessed and rated against both GEF and UNEP criteria as presented in Annex 5.

The UNEP Evaluation Office will also prepare a **commentary** on the final evaluation report, which presents the EO ratings of the project based on a careful review of the evidence collated by the evaluation team and the internal consistency of the report. These ratings are the final ratings that the UNEP Evaluation Office will submit to the GEF Office of Evaluation.

Resources and Schedule of the Evaluation

This Terminal Evaluation will be undertaken by a team of independent evaluation consultants contracted by the UNEP Evaluation Office. The consultants will work under the overall responsibility of the UNEP Evaluation Office and they will consult with the EO on any procedural and methodological matters related to the evaluation. It is, however, the consultants' individual responsibility to arrange for their travel, obtain documentary evidence, meetings with stakeholders, field visits, and any other logistical matters related to their assignment. The UNEP Task Manager, and regional and national project staff will provide logistical support (introductions, meetings, transport, lodging etc.) for the country visits where necessary, allowing the consultants to conduct the evaluation as efficiently and independently as possible.

The Consultants will be hired for about seven weeks (Team Leader) and about four weeks (Supporting Consultant), respectively spread over three months (March to May 2013). They will travel to 7 countries in the four sub-regions. These are Kenya, Zambia, Senegal, Ghana, Uruguay, Brazil and Fiji. The team leader will also travel to Switzerland to meet with project task manager and coordinator.

H. Schedule of Payment

Lump Sum.

The consultants will be hired under an individual Special Service Agreement (SSA). The fee will be estimated as a lump sum, inclusive of all expenses such as travel, accommodation and incidental expenses.

The consultants will receive an initial payment covering the travel costs upon signature of the contract.

Fee ONLY.

The consultant will be hired under an individual Special Service Agreement (SSA) and is NOT inclusive of all expenses such as airfares, in-country travel, accommodation, incidental and terminal expenses. Air tickets will be paid separately by UNEP and 75% of the DSA for each authorised travel mission will be paid up front. Local in-country travel and communication costs will be reimbursed on the production of acceptable receipts. Terminal expenses and residual DSA entitlements (25%) will be paid after mission completion.

The Team Leader will receive 20% of the honorarium portion of his/her fee upon submission and acceptance of the inception report, then 30% upon acceptance of a draft report deemed complete and of acceptable quality by the EO. The remainder (50%) will be paid upon satisfactory completion of the work.

The Supporting Consultant will be paid the honoraria in one single payment upon satisfactory completion of their work. The Team Leader will advise the EO whether the Supporting Consultant has provided satisfactory inputs in the evaluation.

In case the consultants are not able to provide the deliverables in accordance with these TORs, in line with the expected quality standards by the UNEP Evaluation Office, payment may be withheld at the discretion of the Head of the Evaluation Office until the consultants have improved the deliverables to meet UNEP's quality standards.

If the consultants fail to submit a satisfactory final product to UNEP in a timely manner, i.e. within one month after the end date of their contract, the Evaluation Office reserves the right to employ additional human resources to finalize the report, and to reduce the consultants' fees by an amount equal to the additional costs borne by the Evaluation Office to bring the report up to standard.

Annex 1. Project outputs and demonstration projects

Table A1.1. Project components and outputs

Component	Outputs
<u>Component I</u>	Output 1.1: Set-up the management structure for the project
	Output 1.2: Organization of a sub-regional workshop prepare a detailed workplan for project implementation
	Output 1.3: At the same workshop develop protocols and manuals for sampling and analysis of the core matrices
	Output 1.4: Assignment of responsible staff for air monitoring, mothers' milk monitoring, and POPs analysis
	Output 1.5: Inspection of the POPs laboratory and identification of needs
<u>Component II</u>	Output 2.1: Training of responsible personnel to establish and run the network for air samples and mothers' milk sampling
	Output 2.2: Identification of sampling sites including length of sampling periods and frequency (air matrix)
	Output: 2.3: Identification of potential donors of mothers' milk in the six countries
<u>Component III</u>	Output 3.1: Identification and supply of spares consumables, standards to the laboratories to equip them for POPs analysis in the relevant matrices
	Output 3.2: Training of laboratory personnel on core matrices in developing country laboratory
	Output 3.3: Participation in international intercalibration study
<u>Component IV</u>	Output 4.1.: Collection of national air and mothers' milk samples and preparation of pools where applicable
	Output 4.2.: Exchange of national samples for POPs analysis in developing country laboratory and mirror analysis in experienced back-up laboratory
	Output 4.3.: Evaluation of analytical data and interpretation of results
<u>Component V</u>	Output 5.1.: Organization of a workshop to evaluate the project outcomes and communicate the results and lessons learned
	Output 5.2.: Development of long-term strategies for future contributions to the Global Monitoring of POPs
	Output 5.3.: Diffusion of results and strategies

Annex 2. Annotated Table of Contents of the Main Report

Project Identification Table	An updated version of the table in Section I.A. of these TORs
Executive Summary	Overview of the main findings, conclusions and recommendations of the evaluation. It should encapsulate the essence of the information contained in the report to facilitate dissemination and distillation of lessons. The main points for each evaluation parameter should be presented here (with a summary ratings table), as well as the most important lessons and recommendations. Maximum 4 pages.
I. Evaluation Background	
A. Context	A. Overview of the broader institutional and country context, in relation to the project's objectives.
B. The Project	B. Presentation of the project: rationale, objectives, components, intervention areas and target groups, milestones in design, implementation and completion, implementation arrangements and main partners, financing (amounts and sources), modifications to design before or during implementation.
C. Evaluation objectives, scope and methodology	C. Presentation of the evaluation's purpose, evaluation criteria and key questions, evaluation timeframe, data collection and analysis instruments used, places visited, types of stakeholders interviewed, and limitations of the evaluation.
II. Project Performance and Impact	
A. Attainment of objectives and planned results B. Sustainability and catalytic role C. Processes affecting attainment of project results D. Complementarity with UNEP, UNDP and UNIDO programmes and strategies	This section is organized according to the 4 categories of evaluation criteria (see section D of these TORs) and provides factual evidence relevant to the questions asked and sound analysis and interpretations of such evidence. This is the main substantive section of the report. Ratings are provided at the end of the assessment of each evaluation criterion.
III. Conclusions and Recommendations	
A. Conclusions	This section should summarize the main findings of the evaluation, told in a logical sequence from cause to effect. It is suggested to start with the positive achievements and a

	<p>short explanation why these could be achieved, and, then, to present the less successful aspects of the project with a short explanation why. The conclusions section should end with the overall assessment of the project. Findings should be cross-referenced to the main text of the report (using the paragraph numbering). The overall ratings table should be inserted here (see Annex 2).</p>
B. Lessons Learned	<p>Lessons learned should be anchored in the main findings of the evaluation. In fact, no lessons should appear which are not based upon a conclusion of the evaluation. The number of lessons learned should be limited. Lessons learned are rooted in real project experiences, i.e. based on good practices and successes which could be replicated or derived from problems encountered and mistakes made which should be avoided in the future. Lessons learned must have the potential for wider application and use. Lessons should briefly describe the context from which they are derived and specify the contexts in which they may be useful.</p>
C. Recommendations	<p>As for the lessons learned, all recommendations should be anchored in the conclusions of the report, with proper cross-referencing, and their number should be limited to 3 or 4. Recommendations are actionable proposals on how to resolve concrete problems affecting the project or the sustainability of its results. They should be feasible to implement within the timeframe and resources available (including local capacities), specific in terms of who would do what and when, and set a measurable performance target. In some cases, it might be useful to propose options, and briefly analyze the pros and cons of each option.</p>
Annexes	<p>These may include additional material deemed relevant by the evaluator but must include:</p> <ol style="list-style-type: none"> 1. Evaluation TORs 2. The evaluation framework (second part of the inception report) 3. Evaluation program, containing the names of locations visited and the names (or functions) of people met 4. Bibliography 5. Summary co-finance information and a statement of project expenditure by activity (See annex of these TORs) 6. The review of project design (first part of the inception report)

	<p>7. Technical working paper 8. Brief CVs of the consultants</p> <p>TE reports will also include any formal response/ comments from the project management team and/ or the country focal point regarding the evaluation findings or conclusions as an annex to the report, however, such will be appended to the report by UNEP Evaluation Office.</p>
--	--

Examples of UNEP GEF Terminal Evaluation Reports are available at www.unep.org/eou.

Annex 3. Evaluation ratings

The evaluation will provide individual ratings for the evaluation criteria described in section II.D. of these TORs. Some criteria contain sub-criteria which require separate ratings (i.e. sustainability and M&E). Furthermore, an aggregated rating will be provided for Relevance, effectiveness and efficiency under the category “Attainment of project objectives and results”.

Most criteria will be 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 is rated from Highly Likely (HL) down to Highly Unlikely (HU).

In the conclusions section of the report, ratings will be presented together in a table, with a brief justification cross-referenced to the findings in the main body of the report. Please note that the order of the evaluation criteria in the table will be slightly different from the order these are treated in the main report; this is to facilitate comparison and aggregation of ratings across GEF project evaluation reports.

Criterion	Summary Assessment	Rating
A. Attainment of project objectives and results		HS → HU
1. Effectiveness		HS → HU
2. Relevance		HS → HU
3. Efficiency		HS → HU
B. Sustainability of project outcomes		HL → HU
1. Financial		HL → HU
2. Socio-political		HL → HU
3. Institutional framework		HL → HU
4. Environmental		HL → HU
C. Catalytic role		HS → HU
D. Stakeholders involvement		HS → HU
E. Country ownership / driven-ness		HS → HU
F. Achievement of outputs and activities		HS → HU
G. Preparation and readiness		HS → HU
H. Implementation approach		HS → HU
I. Financial planning and management		HS → HU
J. Monitoring and Evaluation		HS → HU
1. M&E Design		HS → HU
2. M&E Plan Implementation		HS → HU
3. Budgeting and funding for M&E activities		HS → HU
K. UNEP and UNDP Supervision and backstopping		HS → HU

Criterion	Summary Assessment	Rating
1. UNEP		HS → HU
2. UNDP		HS → HU

Rating of Attainment of project objectives and results. A compound rating is given to the category based on the assessment of relevance, effectiveness and efficiency. This aggregated rating is not a simple average of the separate ratings given to the evaluation criteria, but an overall judgement by the consultants. Relevance and effectiveness, however, will be considered as critical criteria. This means that the aggregated rating for Attainment of objectives and results may not be higher than the lowest rating on either of these two criteria.

Ratings on sustainability. According to the GEF Office of Evaluation, all the dimensions of sustainability are deemed critical. Therefore, the overall rating for sustainability will not be higher than the lowest rating on the separate dimensions.

Ratings of monitoring and evaluation. The M&E system will be rated on M&E design, M&E plan implementation, and budgeting and funding for M&E activities (the latter sub-criterion is covered in the main report under M&E design) as follows:

Highly Satisfactory (HS): There were no shortcomings in the project M&E system.

Satisfactory(S): There were minor shortcomings in the project M&E system.

Moderately Satisfactory (MS): There were moderate shortcomings in the project M&E system.

Moderately Unsatisfactory (MU): There were significant shortcomings in the project M&E system.

Unsatisfactory (U): There were major shortcomings in the project M&E system.

Highly Unsatisfactory (HU): The Project had no M&E system.

M&E plan implementation will be considered critical for the overall assessment of the M&E system. Thus, the overall rating for M&E will not be higher than the rating on M&E plan implementation.

Annex 4. Project costs and co-financing tables

Project Costs

Component/sub-component	Estimated cost at design	Actual Cost	Expenditure ratio (actual/planned)

Co-financing

Co financing (Type/Source)	IA own Financing (mill US\$)		Government (mill US\$)		Other* (mill US\$)		Total (mill US\$)		Total Disbursed (mill US\$)
	Planned	Actual	Planned	Actual	Planned	Actual	Planned	Actual	
- Grants									
- Loans									
- Credits									
- Equity investments									
- In-kind support									
- Other (*)									
-									
TOTALS									

* This refers to contributions mobilized for the project from other multilateral agencies, bilateral development cooperation agencies, NGOs, the private sector and beneficiaries.

Annex 5. Quality Assessment of the Evaluation Report

All UNEP evaluation reports are subject to a quality assessment by the Evaluation Office. The quality assessment is used as a tool for providing structured feedback to the evaluation consultants. The quality of the draft evaluation report is assessed and rated against the following criteria:

GEF Report Quality Criteria	UNEP EO Assessment	Rating
A. Did the report present an assessment of relevant outcomes and achievement of project objectives in the context of the focal area program indicators if applicable?		
B. Was the report consistent and the evidence complete and convincing and were the ratings substantiated when used?		
C. Did the report present a sound assessment of sustainability of outcomes?		
D. Were the lessons and recommendations supported by the evidence presented?		
E. Did the report include the actual project costs (total and per activity) and actual co-financing used?		
F. Did the report include an assessment of the quality of the project M&E system and its use for project management?		
UNEP additional Report Quality Criteria		
G. Quality of the lessons: Were lessons readily applicable in other contexts? Did they suggest prescriptive action?		
H. Quality of the recommendations: Did recommendations specify the actions necessary to correct existing conditions or improve operations ('who?' 'what?' 'where?' 'when?'). Can they be implemented? Did the recommendations specify a goal and an associated performance indicator?		
I. Was the report well written? (clear English language and grammar)		
J. Did the report structure follow EOU guidelines, were all requested Annexes included?		
K. Were all evaluation aspects specified in the TORs adequately addressed?		
L. Was the report delivered in a timely manner		

$$\text{Quality} = (2*(0.3*(A + B) + 0.1*(C+D+E+F)) + 0.3*(G + H) + 0.1*(I+J+K+L))/3$$

The Totals are rounded and converted to the scale of HS to HU

Rating system for quality of Terminal Evaluation reports: A number rating between 1 and 6 is used for each criterion: Highly Satisfactory = 6, Satisfactory = 5, Moderately Satisfactory = 4, Moderately Unsatisfactory = 3, Unsatisfactory = 2, Highly Unsatisfactory = 1.

Annex 6 – Matrix for Distribution of responsibilities and tasks among evaluation consultants

L: Lead assessor

S: Support in data collection and analysis

Evaluation Criteria		Team Leader	Supporting Consultant 1	Supporting Consultant 2
Attainment of Objectives and Planned Results	Achievement of Outputs and Activities			
	Relevance			
	Effectiveness			
	Achievement of main objective			
	Achievement of component objectives:			
	o Component I			
	o Component II			
	o Component III			
	o Component IV			
	o Component V			
	Efficiency			
	Review of Outcomes to Impacts (ROtI)			
Sustainability and catalytic role	Socio-political sustainability			
	Financial resources			
	Institutional framework			
	Environmental sustainability			
	Catalytic Role and Replication			
Processes affecting attainment of project results	Preparation and Readiness			
	Implementation Approach and Adaptive Management			
	Stakeholder Participation and Public Awareness			
	Country Ownership and Driven-ness			
	Financial Planning and Management			
	UNEP Supervision and Backstopping			
	Monitoring and Evaluation			
Complementarities with the UNEP Medium Term Strategy and Programme of Work	Linkage to UNEP's EAs and POW 2011-2012			
	Alignment with the Bali Strategic Plan (BSP)			
	South-South Cooperation			

Annex 7. Documentation list for the evaluation to be provided by the UNEP Task Manager

- Project design documents
- Project supervision plan, with associated budget
- Correspondence related to project
- Supervision mission reports
- Steering Committee meeting documents, including agendas, meeting minutes, and any summary reports
- Project progress reports, including financial reports submitted
- Cash advance requests documenting disbursements
- Annual Project Implementation Reports (PIRs)
- Management memos related to project
- Other documentation of supervision feedback on project outputs and processes (e.g. comments on draft progress reports, etc.).
- Extension documentation. Has a project extension occurred?
- Project revision documentation.
- Budget revision documentation.
- Project Terminal Report (draft if final version not available)

Annex 8. Introduction to Theory of Change / Impact pathways, the ROTI Method and the ROTI Results Score sheet

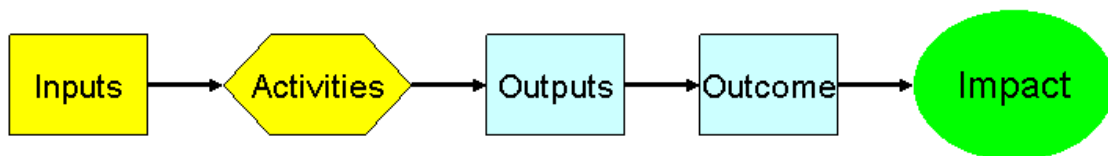
Terminal evaluations of projects are conducted at, or shortly after, project completion. At this stage it is normally possible to assess the achievement of the project's outputs. However, the possibilities for evaluation of the project's outcomes are often more limited and the feasibility of assessing project **impacts** at this time is usually severely constrained. Full impacts often accrue only after considerable time-lags, and it is common for there to be a lack of long-term baseline and monitoring information to aid their evaluation. Consequently, substantial resources are often needed to support the extensive primary field data collection required for assessing impact and there are concomitant practical difficulties because project resources are seldom available to support the assessment of such impacts when they have accrued – often several years after completion of activities and closure of the project.

Despite these difficulties, it is possible to enhance the scope and depth of information available from Terminal Evaluations on the achievement of results **through rigorous review of project progress along the pathways from outcome to impact**. Such reviews identify the sequence of conditions and factors deemed necessary for project outcomes to yield impact and assess the current status of and future prospects for results. In evaluation literature these relationships can be variously described as 'Theories of Change', Impact 'Pathways', 'Results Chains', 'Intervention logic', and 'Causal Pathways' (to name only some!).

Theory of Change (ToC) / impact pathways

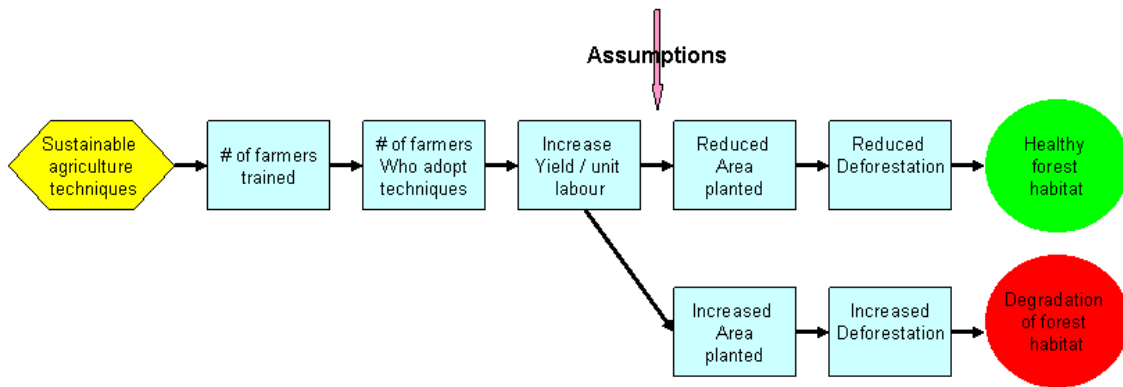
Figure 1 shows a generic impact pathway which links the standard elements of project logical frameworks in a graphical representation of causal linkages. When specified with more detail, for example including the key users of outputs, the processes (the arrows) that lead to outcomes and with details of performance indicators, analysis of impact pathways can be invaluable as a tool for both project planning and evaluation.

Figure 1. A generic results chain, which can also be termed an 'Impact Pathway' or Theory of Change.



The pathways summarise casual relationships and help identify or clarify the assumptions in the intervention logic of the project. For example, in the Figure 2 below the eventual impact depends upon the behaviour of the farmers in using the new agricultural techniques they have learnt from the training. The project design for the intervention might be based on the upper pathway assuming that the farmers can now meet their needs from more efficient management of a given area therefore reducing the need for an expansion of cultivated area and ultimately reducing pressure on nearby forest habitat, whereas the evidence gathered in the evaluation may in some locations follow the lower of the two pathways; the improved farming methods offer the possibility for increased profits and create an incentive for farmers to cultivate more land resulting in clearance or degradation of the nearby forest habitat.

Figure 2. An impact pathway / TOC for a training intervention intended to aid forest conservation.



The GEF Evaluation Office has recently developed an approach that builds on the concepts of theory of change / causal chains / impact pathways. The method is known as Review of Outcomes to Impacts (ROtI)⁸⁸ and has three distinct stages:

- a. Identifying the project's intended impacts
- b. Review of the project's logical framework
- c. Analysis and modelling of the project's outcomes-impact pathways

The **identification of the projects intended impacts** should be possible from the 'objectives' statements specified in the official project document. The next stage is to **review the project's logical framework** to assess whether the design of the project is consistent with, and appropriate for, the delivery of the intended impact. The method requires verification of the causal logic between the different hierarchical levels of the logical framework moving 'backwards' from impacts through outcomes to the outputs; the activities level is not formally considered in the ROtI method⁸⁹. The aim of this stage is to develop an understanding of the causal logic of the project intervention and to identify the key 'impact pathways'. In reality such process are often complex; they often involve multiple actors and decision-processes and are subject to time-lags, meaning that project impact often accrue long after the completion of project activities.

The third stage involves analysis of the 'impact pathways' that link project outcomes to impacts. The pathways are analysed in terms of the '**assumptions**' and '**impact drivers**' that underpin the processes involved in the transformation of outcomes to impacts via **intermediate states** (see Figure 3). Project outcomes are the direct intended results stemming from the outputs, and they are likely to occur either towards the end of the project or in the short term following project completion. **Intermediate states** are the transitional conditions between the project's immediate outcomes and the intended impact. They are necessary conditions for the achievement of the intended impacts and there may be more than one intermediate state between the immediate project outcome and the eventual impact.

Impact drivers are defined as the significant factors that if present are expected to contribute to the realization of the intended impacts and **can be influenced** by the project / project

⁸⁸ GEF Evaluation Office (2009). ROtI: Review of Outcomes to Impacts Practitioners Handbook. http://www.gefweb.org/uploadedFiles/Evaluation_Office/OPS4/Roti%20Practitioners%20Handbook%2015%20June%202009.pdf

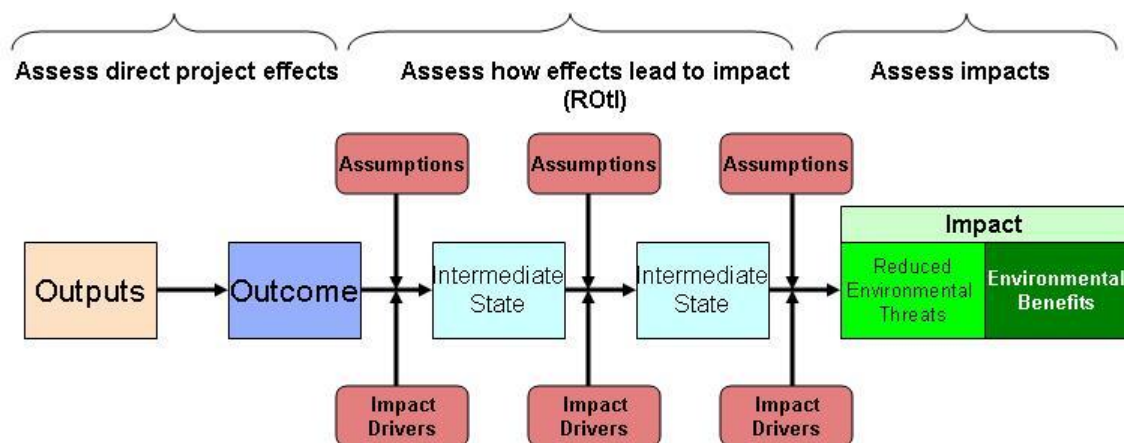
⁸⁹ Evaluation of the efficiency and effectiveness in the use of resources to generate outputs is already a major focus within UNEP Terminal Evaluations.

partners & stakeholders. **Assumptions** are the significant factors that if present are expected to contribute to the realization of the intended impacts but are largely **beyond the control of the project** / project partners & stakeholders. The impact drivers and assumptions are ordinarily considered in Terminal Evaluations when assessing the sustainability of the project.

Since project logical frameworks do not often provide comprehensive information on the processes by which project outputs yield outcomes and eventually lead, via ‘intermediate states’ to impacts, the impact pathways need to be carefully examined and the following questions addressed:

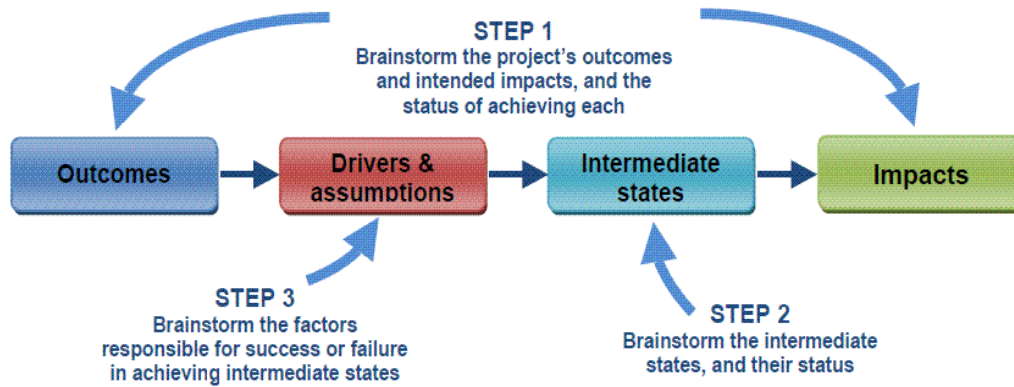
- Are there other causal pathways that would stem from the use of project outputs by other potential user groups?
- Is (each) impact pathway complete? Are there any missing intermediate states between project outcomes and impacts?
- Have the key impact drivers and assumptions been identified for each ‘step’ in the impact pathway.

Figure 3. A schematic ‘impact pathway’ showing intermediate states, assumptions and impact drivers (adapted from GEF EO 2009).



The process of identifying the impact pathways and specifying the impact drivers and assumptions can be done as a desk exercise by the evaluator or, preferably, as a group exercise, led by the evaluator with a cross-section of project stakeholders as part of an evaluation field mission or both. Ideally, the evaluator would have done a desk-based assessment of the project’s theory of change and then use this understanding to facilitate a group exercise. The group exercise is best done through collective discussions to develop a visual model of the impact pathways using a card exercise. The component elements (outputs, outcomes, impact drivers, assumptions intended impacts etc.) of the impact pathways are written on individual cards and arranged and discussed as a group activity. Figure 4 below shows the suggested sequence of the group discussions needed to develop the ToC for the project.

Figure 4. Suggested sequencing of group discussions (from GEF EO 2009)



Once the theory of change model for the project is complete the evaluator can assess the design of the project intervention and collate evidence that will inform judgments on the extent and effectiveness of implementation, through the evaluation process. Performance judgments are made always noting that project contexts can change and that adaptive management is required during project implementation.

The ROTI method requires ratings for outcomes achieved by the project and the progress made towards the ‘intermediate states’ at the time of the evaluation. According to the GEF guidance on the method; “*The rating system is intended to recognize project preparation and conceptualization that considers its own assumptions, and that seeks to remove barriers to future scaling up and out. Projects that are a part of a long-term process need not at all be “penalized” for not achieving impacts in the lifetime of the project: the system recognizes projects’ forward thinking to eventual impacts, even if those impacts are eventually achieved by other partners and stakeholders, albeit with achievements based on present day, present project building blocks.*” For example, a project receiving an “AA” rating appears likely to deliver impacts, while for a project receiving a “DD” this would seem unlikely, due to low achievement in outcomes and the limited likelihood of achieving the intermediate states needed for eventual impact (see Table 1).

Table 1. Rating scale for outcomes and progress towards ‘intermediate states’

Outcome Rating	Rating on progress toward Intermediate States
D: The project’s intended outcomes were not delivered	D: No measures taken to move towards intermediate states.
C: The project’s intended outcomes were delivered, but were not designed to feed into a continuing process after project funding	C: The measures designed to move towards intermediate states have started, but have not produced results.
B: The project’s intended outcomes were delivered, and were designed to feed into a continuing process, but with no prior allocation of responsibilities after project funding	B: The measures designed to move towards intermediate states have started and have produced results, which give no indication that they can progress towards the intended long term impact.

A: The project's intended outcomes were delivered, and were designed to feed into a continuing process, with specific allocation of responsibilities after project funding.	A: The measures designed to move towards intermediate states have started and have produced results, which clearly indicate that they can progress towards the intended long term impact.
---	---

Thus a project will end up with a two letter rating e.g. AB, CD, BB etc. In addition the rating is given a '+' notation if there is evidence of impacts accruing within the life of the project. The possible rating permutations are then translated onto the usual six point rating scale used in all UNEP project evaluations in the following way.

Table 2. Shows how the ratings for 'achievement of outcomes' and 'progress towards intermediate states translate to ratings for the 'Overall likelihood of impact achievement' on a six point scale.

Highly Likely	Likely	Moderately Likely	Moderately Unlikely	Unlikely	Highly Unlikely
AA AB BA CA BB+ CB+ DA+ DB+	BB CB DA DB AC+ BC+	AC BC CC+ DC+	CC DC AD+ BD+	AD BD CD+ DD+	CD DD

In addition, projects that achieve documented changes in environmental status during the project's lifetime receive a positive impact rating, indicated by a "+". The overall likelihood of achieving impacts is shown in Table 11 below (a + score above moves the double letter rating up one space in the 6-point scale).

The ROI method provides a basis for comparisons across projects through application of a rating system that can indicate the expected impact. However it should be noted that whilst this will provide a relative scoring for all projects assessed, it does not imply that the results from projects can necessarily be aggregated. Nevertheless, since the approach yields greater clarity in the 'results metrics' for a project, opportunities where aggregation of project results might be possible can more readily be identified.

Results rating of project entitled:							
Outputs	Outcomes	Rating (D - A)	Intermediary	Rating (D - A)	Impact (GEBs)	Rating (+)	Overall
1.	1.				1.		
2.	2.		2.		2.		
3.	3.		3.		3.		

	Rating justification:		Rating justification:		Rating justification:		

Scoring Guidelines

The achievement of **Outputs** is largely assumed. Outputs are such concrete things as training courses held, numbers of persons trained, studies conducted, networks established, websites developed, and many others. Outputs reflect where and for what project funds were used. These were not rated: projects generally succeed in spending their funding.

Outcomes, on the other hand, are the first level of intended results stemming from the outputs. Not so much the number of persons trained; but how many persons who then demonstrated that they have gained the intended knowledge or skills. Not a study conducted; but one that could change the evolution or development of the project. Not so much a network of NGOs established; but that the network showed potential for functioning as intended. A sound outcome might be genuinely improved strategic planning in SLM stemming from workshops, training courses, and networking.

Examples

Funds were spent, outputs were produced, but nothing in terms of outcomes was achieved. People attended training courses but there is no evidence of increased capacity. A website was developed, but no one used it. (Score – D)

Outcomes achieved but are dead ends; no forward linkages to intermediary stages in the future. People attended training courses, increased their capacities, but all left for other jobs shortly after; or were not given opportunities to apply their new skills. A website was developed and was used, but achieved little or nothing of what was intended because users had no resources or incentives to apply the tools and methods proposed on the website in their job. (Score – C)

Outcomes plus implicit linkages forward. Outcomes achieved and have *implicit forward linkages* to intermediary stages and impacts. Collaboration as evidenced by meetings and decisions made among a loose network is documented that should lead to better planning. Improved capacity is in place and should lead to desired intermediate outcomes. Providing implicit linkages to intermediary stages is probably the most common case when outcomes have been achieved. (Score - B)

Outcomes plus explicit linkages forward. Outcomes have *definite and explicit forward linkages* to intermediary stages and impacts. An alternative energy project may result in solar panels installed that reduced reliance on local wood fuels, with the outcome quantified in terms of reduced C emissions. Explicit forward linkages are easy to recognize in being concrete, but are relatively uncommon. (Score A)

Intermediary stages:

The **intermediate stage** indicates achievements that lead to Global Environmental Benefits, especially if the potential for scaling up is established.

“Outcomes” scored C or D. If the outcomes above scored C or D, there is no need to continue forward to score intermediate stages given that achievement of such is then not possible.

In spite of outcomes and implicit linkages, and follow-up actions, the project dead-ends. Although outcomes achieved have *implicit forward linkages* to intermediary stages and impacts, the project dead-ends. Outcomes turn out to be insufficient to move the project towards intermediate stages and to the eventual achievement of GEBs. Collaboration as evidenced by meetings and among participants in a network never progresses further. The implicit linkage based on follow-up never materializes. Although outcomes involve, for example, further participation and discussion, such actions do not take the project forward towards intended intermediate impacts. People have fun getting together and talking more, but nothing, based on the implicit forwards linkages, actually eventuates. **(Score = D)**

The measures designed to move towards intermediate states have started, but have not produced result, barriers and/or unmet assumptions may still exist. In spite of sound outputs and in spite of explicit forward linkages, there is limited possibility of intermediary stage achievement due to barriers not removed or unmet assumptions. This may be the fate of several policy related, capacity building, and networking projects: people work together, but fail to develop a way forward towards concrete results, or fail to successfully address inherent barriers. The project may increase ground cover and or carbon stocks, may reduce grazing or GHG emissions; and may have project level recommendations regarding scaling up; but barrier removal or the addressing of fatal assumptions means that scaling up remains limited and unlikely to be achieved at larger scales. Barriers can be policy and institutional limitations; (mis-) assumptions may have to do with markets or public – private sector relationships. **(Score = C)**

Barriers and assumptions are successfully addressed. Intermediary stage(s) planned or conceived have feasible direct and explicit forward linkages to impact achievement; barriers and assumptions are successfully addressed. The project achieves measurable intermediate impacts, and works to scale up and out, but falls well short of scaling up to global levels such that achievement of GEBs still lies in doubt. **(Score = B)**

Scaling up and out over time is possible. Measurable intermediary stage impacts achieved, scaling up to global levels and the achievement of GEBs appears to be well in reach over time. **(Score = A)**

Impact: Actual changes in environmental status

“Intermediary stages” scored B to A.

Measurable impacts achieved at a globally significant level within the project life-span. . (Score = ‘+’)

Annex 9: Template for the assessment of the Quality of Project Design – UNEP Evaluation Office September 2011

Relevance	Evaluation Comments	Prodoc reference
Are the intended results likely to contribute to UNEPs Expected Accomplishments and programmatic objectives?		
Does the project form a coherent part of a UNEP-approved programme framework?		
Is there complementarity with other UNEP projects, planned and ongoing, including those implemented under the GEF?		
Are the project's objectives and implementation strategies consistent with:	i) Sub-regional environmental issues and needs?	
	ii) the UNEP mandate and policies at the time of design and implementation?	
	iii) the relevant GEF focal areas, strategic priorities and operational programme(s)? (if appropriate)	
	iv) Stakeholder priorities and needs?	
Overall rating for Relevance		
Intended Results and Causality		
Are the objectives realistic?		
Are the causal pathways from project outputs [goods and services] through outcomes [changes in stakeholder behaviour] towards impacts clearly and convincingly described? Is there a clearly presented Theory of Change or intervention logic for the project?		
Is the timeframe realistic? What is the likelihood that the anticipated project outcomes can be achieved within the stated duration of the project?		
Are the activities designed within the project likely to produce their intended results		
Are activities appropriate to produce outputs?		
Are activities appropriate to drive change along the intended causal pathway(s)		
Are impact drivers, assumptions and the roles and capacities of key actors and stakeholders clearly described for each key causal pathway?		

Overall rating for Intended Results and causality		
Efficiency		
Are any cost- or time-saving measures proposed to bring the project to a successful conclusion within its programmed budget and timeframe?		
Does the project intend to make use of / build upon pre-existing institutions, agreements and partnerships, data sources, synergies and complementarities with other initiatives, programmes and projects etc. to increase project efficiency?		
Overall rating for Efficiency		
Sustainability / Replication and Catalytic effects		
Does the project design present a strategy / approach to sustaining outcomes / benefits?		
Does the design identify the social or political factors that may influence positively or negatively the sustenance of project results and progress towards impacts? Does the design foresee sufficient activities to promote government and stakeholder awareness, interests, commitment and incentives to execute, enforce and pursue the programmes, plans, agreements, monitoring systems etc. prepared and agreed upon under the project?		
If funding is required to sustain project outcomes and benefits, does the design propose adequate measures / mechanisms to secure this funding?		
Are there any financial risks that may jeopardize sustenance of project results and onward progress towards impact?		
Does the project design adequately describe the institutional frameworks, governance structures and processes, policies, sub-regional agreements, legal and accountability frameworks etc. required to sustain project results?		
Does the project design identify environmental factors, positive or negative, that can influence the future flow of project benefits? Are there any project outputs or higher level results that are likely to affect the environment, which, in turn, might affect sustainability of project benefits?		
Does the project design foresee adequate measures to catalyze behavioural changes in terms of use and application by the relevant stakeholders of (e.g.):	i) technologies and approaches showcased by the demonstration projects;	
	ii) strategic programmes and plans developed	
	iii) assessment, monitoring and	

	management systems established at a national and sub-regional level		
Does the project design foresee adequate measures to contribute to institutional changes? [An important aspect of the catalytic role of the project is its contribution to institutional uptake or mainstreaming of project-piloted approaches in any regional or national demonstration projects]			
Does the project design foresee adequate measures to contribute to policy changes (on paper and in implementation of policy)?			
Does the project design foresee adequate measures to contribute to sustain follow-on financing (catalytic financing) from Governments, the GEF or other donors?			
Does the project design foresee adequate measures to create opportunities for particular individuals or institutions (“champions”) to catalyze change (without which the project would not achieve all of its results)?			
Are the planned activities likely to generate the level of ownership by the main national and regional stakeholders necessary to allow for the project results to be sustained?			
Overall rating for Sustainability / Replication and Catalytic effects			
Risk identification and Social Safeguards			
Are critical risks appropriately addressed?			
Are assumptions properly specified as factors affecting achievement of project results that are beyond the control of the project?			
Are potentially negative environmental, economic and social impacts of projects identified			
Overall rating for Risk identification and Social Safeguards			
Governance and Supervision Arrangements			
Is the project governance model comprehensive, clear and appropriate?			
Are roles and responsibilities clearly defined?			
Are supervision / oversight arrangements clear and appropriate?			
Overall rating for Governance and Supervision Arrangements			
Management, Execution and Partnership Arrangements			
Have the capacities of partner been adequately assessed?			
Are the execution arrangements clear?			
Are the roles and responsibilities of internal and external partners properly			

specified?		
Overall rating for Management, Execution and Partnership Arrangements		
Financial Planning / budgeting		
Are there any obvious deficiencies in the budgets / financial planning		
Cost effectiveness of proposed resource utilization as described in project budgets and viability in respect of resource mobilization potential		
Financial and administrative arrangements including flows of funds are clearly described		
Overall rating for Financial Planning / budgeting		
Monitoring		
Does the logical framework: <ul style="list-style-type: none"> • capture the key elements in the Theory of Change for the project? • have 'SMART' indicators for outcomes and objectives? • have appropriate 'means of verification' • adequately identify assumptions 		
Are the milestones and performance indicators appropriate and sufficient to foster management towards outcomes and higher level objectives?		
Is there baseline information in relation to key performance indicators?		
Has the method for the baseline data collection been explained?		
Has the desired level of achievement (targets) been specified for indicators of Outcomes and are targets based on a reasoned estimate of baseline??		
Has the time frame for monitoring activities been specified?		
Are the organisational arrangements for project level progress monitoring clearly specified		
Has a budget been allocated for monitoring project progress in implementation against outputs and outcomes?		
Overall, is the approach to monitoring progress and performance within the project adequate?		
Overall rating for Monitoring		
Evaluation		
Is there an adequate plan for evaluation?		
Has the time frame for Evaluation activities been specified?		
Is there an explicit budget provision for mid term review and terminal evaluation?		

Is the budget sufficient?		
Overall rating for Evaluation		

Annex 10: Evaluation Tentative Timeline

Activity	Date
Start of contract	1 March 2013
Inception report to EO	8 March 2013
Field work	10 March- 5 April 2013
Zero draft evaluation report to EO	19 April 2013
EO's comments on zero draft evaluation report	26 April 2013
First draft evaluation report	3 May 2013
First draft evaluation report circulated to stakeholders for comments	4 May 2013
Consolidated comments to consultants	12 May 201
Final evaluation report	20 May 2013
End of contract	31 May 2013

Annex 11: Annotated Table of Contents of the Inception Report.

Section	Notes
1. Introduction	Brief note of documents consulted in preparing the inception report.
2. Review of Project Design	<p>Complete the Template for assessment of the quality of project design given in the annex of the Terms of Reference.</p> <p>Data sources: background information on context (UNEP or GEF programme etc), first phase of project – if any, project document, logical framework.</p>
3. Theory of Change Analysis	<p>The section should start with a brief description of the project context.</p> <p>The ‘theory of change’ should be developed using the process described in the Annex (Introduction to Theory of Change/Impact pathways, the ROtI Method and the ROtI results score sheet) of the TORs.</p> <p>The final ToC diagram can be designed on the basis of figure 3 of the above Annex. Outputs do not necessarily occur at the beginning of the process, additional outputs may be required at different stages of the process (for example to move from one intermediate state to another). The diagram can be represented horizontally or vertically.</p> <p>Data sources: project document, logical framework <u>and</u> a review of other project documents.</p>
4. Evaluation Process Plan	<p>This section should include:</p> <ul style="list-style-type: none"> - Detailed evaluation questions (including new questions raised by review of project design and theory of change analysis). - Data Sources and Indicators - List of individuals to be consulted. - Distribution of roles and responsibilities among evaluation consultants (in case of larger evaluation teams). - Revised logistics (dates of travel and key evaluation milestones). <p>The framework can be presented as a table for ease of use, showing which data sources will be used to answer which questions (see attached sample).</p> <p>Data sources: review of all project documents as per list in Annex. Discussion with project team on logistics.</p>

Annex 12: **PROJECT LOGICAL FRAMEWORK**

Objectives and Outcomes/Outputs	Objectively Verifiable Indicators	Means of Verification	Assumptions
Development Objective			
<ul style="list-style-type: none"> Countries in Eastern and Southern Africa have the capacity to contribute with national POPs analysis to the reporting under the Global Monitoring of POPs 	<ul style="list-style-type: none"> Sampling programs in place in each country; Data generated in local POPs laboratories submitted for inclusion into the regional GMP report 	<ul style="list-style-type: none"> Report to the Conference of the Parties to the Stockholm Convention 	<ul style="list-style-type: none"> Decisions SC-2/13 and SC-3/16 remain unchanged in its main objectives
Immediate Project Objective			
<ul style="list-style-type: none"> To build regional capacity on analysis and data generation for POPs in core matrices for the Global POPs Monitoring (GMP) to enable Eastern and Southern African countries to contribute to the global report submitted to the Conference of the Parties 	<ul style="list-style-type: none"> POPs laboratories feed data into the global database for core matrices 	<ul style="list-style-type: none"> National POPs data sent to regional coordination group for inclusion into global report. 	<ul style="list-style-type: none"> Financial and human resources available to implement the sub-regional component of the GMP for East Africa region
Outcomes			
<ol style="list-style-type: none"> Sampling and analysis are performed according to international standard by all partners 	<ul style="list-style-type: none"> SOPs available and accessible three months after project start 	<ul style="list-style-type: none"> Information exchange within Eastern African countries and international contacts; 	<ul style="list-style-type: none"> GMP component reflected in NIP
<ol style="list-style-type: none"> Technical personnel is able to carry out sampling in participating countries and analysis in designated laboratories; 	<ul style="list-style-type: none"> Procurement of spares, consumables, standards, and small equipment carried out to enable analysis of GMP relevant compounds and matrices 	<ul style="list-style-type: none"> Laboratory logbook updated and proof of ongoing activities on a monthly basis. 	<ul style="list-style-type: none"> Stability in personnel and provision of spares and consumables to maintain operation of POPs laboratory
<ol style="list-style-type: none"> High quality data on presence of 	<ul style="list-style-type: none"> Participation of up to 5 	<ul style="list-style-type: none"> Reports on results of 	<ul style="list-style-type: none"> Successful participation in

Objectives and Outcomes/Outputs	Objectively Verifiable Indicators	Means of Verification	Assumptions
POPs in Eastern and Southern African countries available;	laboratory staff each in two thematic training courses; <ul style="list-style-type: none"> • Inscription in up to 2 international intercalibration studies; 	intercalibration studies	international intercalibration studies;
4. High quality data on presence of POPs in Eastern Southern African countries available;	<ul style="list-style-type: none"> • Chromatograms and results tables contribute to regional GMP cooperation plan and are available for interpretation 	<ul style="list-style-type: none"> • Reports and publications authored 	<ul style="list-style-type: none"> • Implementation of national programs on sampling of core matrices possible financially and with human resources
5. Governments and stakeholders aware on details in implementation of the GMP issue in their national implementation plan and reporting to Conference of the Parties.	<ul style="list-style-type: none"> • Long-term strategy developed for future evaluations of GMP data by end of project; • Cooperation at international level through the COP established Regional Coordination Group 	<ul style="list-style-type: none"> • Governments' participation documented in Regional Reports 	<ul style="list-style-type: none"> • Governments and stakeholders willing to cooperate and share data
Outputs for Outcome 1:			
1.1 Set-up the management structure for the project	<ul style="list-style-type: none"> • Institutional arrangements with University of Nairobi, Chemistry Department in Kenya made; • Consultants/Institutions identified and contracted 	<ul style="list-style-type: none"> • MoU with University of Nairobi, Chemistry Department in Kenya signed 	<ul style="list-style-type: none"> • GEF funding and co-financing readily available; • Personnel with necessary qualifications available
1.2 Organization of a sub-regional workshop prepare a detailed workplan for project implementation	<ul style="list-style-type: none"> • Stakeholders and UNEP to meet and agree on main issues 	<ul style="list-style-type: none"> • Detailed workplan prepared and published at project's Web 	<ul style="list-style-type: none"> • All funds available and stakeholders committed
1.3 At the same workshop develop protocols and manuals for sampling and analysis of the core matrices	<ul style="list-style-type: none"> • Guidance documents from SSC and WHO available; • Workshop held 	<ul style="list-style-type: none"> • Report of workshop, <i>i.e.</i>, list of participants; • SOPs drafted; • WHO ethical commitment 	<ul style="list-style-type: none"> • GMP Guidance document applicable to Eastern and Southern African sub-region;

Objectives and Outcomes/Outputs	Objectively Verifiable Indicators	Means of Verification	Assumptions
		signed	<ul style="list-style-type: none"> • WHO guidelines available and can be adapted to local conditions; • POPs laboratories operational
1.4 Assignment of responsible staff for air monitoring, mothers' milk monitoring, and POPs analysis	<ul style="list-style-type: none"> • Informed and trained staff 	<ul style="list-style-type: none"> • Contracts for responsible staff in all 6 countries 	<ul style="list-style-type: none"> • Country willingness to explore this option
1.5 Inspection of the POPs laboratory and identification of needs	<ul style="list-style-type: none"> • Visit to the POPs laboratory 	<ul style="list-style-type: none"> • Inspection protocols filled out 	<ul style="list-style-type: none"> • Cooperation of the POPs laboratories
Outputs for Outcome 2:			
2.1 Training of responsible personnel to establish and run the network for air samples and mothers' milk sampling	<ul style="list-style-type: none"> • Training program developed • Training of sampling teams held 	<ul style="list-style-type: none"> • Contract with training laboratories; • Report by training laboratory 	<ul style="list-style-type: none"> • Cooperation at national level; • Access to samples; • Provision of in-kind contribution
2.2 Identification of sampling sites including length of sampling periods and frequency (air matrix)	<ul style="list-style-type: none"> • Shortlist of potential sampling locations; • List of needs for sampling equipment developed 	<ul style="list-style-type: none"> • Report demonstrating location of sampling sites; • Sampling equipment deployed 	<ul style="list-style-type: none"> • Access to sampling sites; • Air samplers prepared for deployment
2.3 Identification of potential donors of mothers' milk in the six countries	<ul style="list-style-type: none"> • List of potential donors 	<ul style="list-style-type: none"> • Signed agreements 	<ul style="list-style-type: none"> • Hospitals and mothers willing for cooperation
Outputs for Outcome 3:			
3.1 Identification and supply of spares consumables, standards to the laboratories to equip them for POPs analysis in the relevant matrices	<ul style="list-style-type: none"> • List of needs prepared • Procurement carried out 	<ul style="list-style-type: none"> • Procurement documents authorized 	<ul style="list-style-type: none"> • Infrastructure sufficiently developed so that only minor components are needed

Objectives and Outcomes/Outputs	Objectively Verifiable Indicators	Means of Verification	Assumptions
3.2 Training of laboratory personnel on core matrices in developing country laboratory	<ul style="list-style-type: none"> • Training sessions for laboratory personnel held; • Training matrices available 	<ul style="list-style-type: none"> • Training programmes available 	<ul style="list-style-type: none"> • Developing country laboratory willing to be trained; • Back-up laboratory prepared and having access to developing country laboratory
3.3 Participation in international intercalibration study	<ul style="list-style-type: none"> • Developing country laboratory inscribes to the intercalibration study and submits data within the timeframe 	<ul style="list-style-type: none"> • Results letter from organizer of intercomparison study 	<ul style="list-style-type: none"> • Relevant international intercalibration study existing; • Participation fee be paid
Outputs for Outcome 4:			
4.1 Collection of national air and mothers' milk samples and preparation of pools where applicable	<ul style="list-style-type: none"> • Cartridges from air samplers collected and shipped to the laboratories; • Mothers' milk sample containers collected; pools prepared, and shipped to the laboratories 	<ul style="list-style-type: none"> • Sample shipment documents and receipt at laboratories 	<ul style="list-style-type: none"> • Samples will be available; <i>i.e.</i>, no damage to air samplers and sufficient number of participating pregnant mothers
4.2 Exchange of national samples for POPs analysis in developing country laboratory and mirror analysis in experienced back-up laboratory	<ul style="list-style-type: none"> • Samples analyzed at subregional POPs laboratory and in back-up laboratories 	<ul style="list-style-type: none"> • Table of results from developing country laboratory • Table of results from back-up laboratory 	<ul style="list-style-type: none"> • POPs laboratories operational at required quality • Data will be made available by all parties
4.3 Evaluation of analytical data and interpretation of results	<ul style="list-style-type: none"> • Meeting to discuss the results (possibly by teleconference and electronic means) 	<ul style="list-style-type: none"> • Consolidated data report • Publication including comparison with data from other regions or time trends 	<ul style="list-style-type: none"> • Quantifiable amounts of POPs found in the samples to allow for comparison with other data

Objectives and Outcomes/Outputs	Objectively Verifiable Indicators	Means of Verification	Assumptions
Outputs for Outcome 5:			
5.1 Organization of a workshop to evaluate the project outcomes and communicate the results and lessons learned	<ul style="list-style-type: none"> • Good representation at subregional workshop (<i>i.e.</i>, letters of invitation and confirmation, participants list); • Draft reports available 	<ul style="list-style-type: none"> • Workshop report prepared and published; • Issues for lessons learned reflected in report 	<ul style="list-style-type: none"> • Necessary funds available to organize the sub-regional workshop; • Adequate coverage in all participating countries
5.2 Development of long-term strategies for future contributions to the Global Monitoring of POPs	<ul style="list-style-type: none"> • All countries and stakeholders actively contributing in discussions 	<ul style="list-style-type: none"> • Bulleted list of future actions at national/sub-regional level published 	<ul style="list-style-type: none"> • Countries not capable to implement the components of the NIP; • Change in policy priorities
5.3 Diffusion of results and strategies	<ul style="list-style-type: none"> • Information materials prepared 	<ul style="list-style-type: none"> • Reports and publications available 	<ul style="list-style-type: none"> • Results obtained or of good quality

Annex 2: Evaluation Timeline and Itinerary

Revised Timeline

Activity	Date
Start of contract	1 March 2013
Inception report to EO	15 May 2013
Field work:	
Mission to Brazil and Uruguay*	22 - 30 May 2013
Mission to Fiji*	26 – 28 June 2013
Mission to Zambia, Kenya, Senegal and Ghana**	16 – 29 June 2013
Mission to Geneva**	8 – 10 July 2013
Zero draft evaluation report to EO	31 July 2013
EO's comments on zero draft evaluation report	10 August 2013
First draft evaluation report	12 August 2013
First draft evaluation report circulated to stakeholders for comments	13 August 2013
Consolidated comments to consultants	25 August 2013
Final evaluation report	27 August 2013
End of contract	31 August 2013

Field mission of lead consultant:

Zambia: 16 – 19 June 2013			
Date	Time	Venue	Persons met / comments
16 June 2013	15H55	Arrival in Zambia	
17 June 2013	9H30 – 10H00	Zambia Environmental Management Agency (ZEMA)	Joseph SAKALA, Acting Director, ZEMA
	10H00 – 10H45		David KAPINDULA, Principal Inspector, ZEMA; National coordinator of GMP project; National POPs Focal point
	10H 45 – 11H15		Maxwell NKOYA, Inspector, ZEMA, team member for air sampling
	11H30 – 12H45	University of Zambia, Department of Chemistry.	Dr Onesmus M. MUNYATTI, Head Department of Chemistry
	12H45 – 13H00		Chipo SYABBAMBA, Chief technician Chilutga LENGWE, Senior technician Golden ZYAMBO, Senior technician Visit of Chemistry laboratory
	13H00 – 14H00	Lunch	
	14H00 – 16H00	Kenneth Kaunda International Airport	Meteorological Department, field visit to air sampling site
18 June 2013	10H00 – 11H30	Zambia Bureau of Standards (ZABS)	Dominic M. PHIRI, Laboratory analyst Chrissy SHONGA, Lab. Technician Visit of laboratory
	12H30 - 14H00	Working lunch	Andrew BASIL, Laboratory analyst, ZABS
	14H30 – 15H00	ZEMA	Debriefing with Joseph SAKALA, Acting Director, ZEMA

19 June 2013	12H35	Departure to Kenya	
Kenya: 19 – 23 June 2013			
20 June 2013	9H00 – 11H00	Ghana High Commission	Application for entry visa to Ghana
	11H30 – 16H00	UNEP, Gigiri	Segbedzi NORGBEY, Chief, Evaluation Office Dr. Sylvana KING, Evaluation Officer Tiina PIIRONEN, Evaluation Officer Paul VRONTAMITIS, Funds Manager
	16H00 – 17H30		<ul style="list-style-type: none"> Lead evaluator made a presentation of the major findings of inception report to members of UNEP evaluation office and discussion
21 June 2013	10H00 – 11H00	Department of Chemistry, University of Nairobi	Prof. Shem WANDINGA, National Coordinator for air sampling and analysis
	11H00 – 11h45		Francis KIHUMBA, Coordinator of NIP; Officer, Ministry of Environment and Water Resources, representative of National POPs Focal point
	11H45 – 13H00		Dr Laetitia KANJA, University of Nairobi, Dept of Public Health, responsible of mother's milk sampling
	13H00 – 14H00	Lunch	
	14H00 – 16H30	Department of Chemistry, University of Nairobi	Dr Vincent MADADI, sub-regional coordinator (RC) of GMP Dr Charles MIRIKAU, assistant to RC
	16H00 – 16H30		Visit of laboratory
22 June 2013	10H30 – 12H00	UNEP, Gigiri	Dr. Sylvana KING, Evaluation Officer
23 June 2013	9H20	Departure to Senegal	
Senegal: 23 – 26 June 2013			
24 June 2013	9H30 – 11H30	Direction de L'Environnement et des Etablissements Classes (DEEC)	Ousmane SOW, DEEC, National POPs Focal Point, National Coordinator of GMP Gatta Soule BA, DEEC, assistant to NC
	11H30 – 12H30	Centre Anti Poison (CAP)	Prof. Amadou DIOUF, Director CAP Dr Aminata TOURE, CAP, member of mother's milk group
	12H30 – 13H30	Lunch	
	14H30 – 16H00	Ceres-Locustox premises	Dr. Dogo SECK, Administrateur General, Ceres Locustox; Mr. Baba GADJI, Responsable Unité Chimie Environnementale, Locustox ; Finance officer from Locustox
	16H00 – 16-15		Visit of laboratory
26 June 2013	7H30	Departure to Ghana	
Ghana: 26 – 28 June 2013			
27 June 2013	9H00 – 9H30	Office of National Nuclear Research Institute (NNRI),	Prof. Shiloh OSAE, Director NNRI, GAEC, National Coordinator GMP

	9H30 – 10H30	Ghana Atomic Energy Commission (GAEC)	Dr Sam ADU-KUMI, Chief Programme Officer, Ghana Environmental Protection Agency (GEPA), Representative of National POPs Focal Point
	11H30 – 13H00	Chemistry Lab of NNRI	NNRI Research scientists responsible for chemical analysis: Archibold BUAH-KWOFIE, George APPIAH, Catherine OPAREBEA, Ibrahim KWARTENG, Isaac KUDU, Francis ARYEEQUAYE, Linda PALM
	13H00 – 14H00	Lunch	
	14H00 – 15H00	Office of NNRI, GAEC	Prof. Shiloh OSAE, Director NNRI, GAEC, National Coordinator GMP
	15H00 – 16H00		Dr Sam ADU-KUMI, Chief Programme Officer, GEPA, mother's milk group
28 June 2013		Departure	

Field mission of supporting consultant:

Brazil: 22 – 24 May 2013

Brasília: 22 May 2013

Meeting Place: MMA – Ministério do Meio Ambiente (Ministry of Environment), SEP 505 Bloco B – Edifício Marie Prendi Cruz – Sala 202 – CEP:70730-542 - Brasília/DF

May 22 nd , 2013	
13:00 – 13:30	Introduction Participants: Ministry of Environment - National Coordinator: Ministry of Environment – Camila Arruda Boechat National Focal Point of Stocholm Convention – Letícia Reis de Carvalho and/or Alberto da Rocha Neto
13:30 – 16:00	Evaluation of Project Results Participants: 1) Project Evaluators, 2) National Coordinator and other representatives of the Ministry of Environment (Paulo Alexandre Toledo) 3) Air Sampling/Analysis responsible: CETESB/Physical Chemical Analysis Division - Maria Yumiko Tominaga – Maria Inês Zanoli Sato 4) Human Milk Sampling/Analysis responsible: FIOCRUZ – Thomas Krauss
16:00 - 17:00	Final considerations/Conclusions

Sao Paulo: 23-24 May 2013: Meeting Place: CETESB – Companhia Ambiental do Estado de São Paulo (Environmental Agency of São Paulo State), Avenida Frederico Hermann Jr., 345 – São Paulo – SP- Brazil

May 23 rd , 2013	
09:00 - 10:00	Introduction CETESB's Director, International Cooperation Department, SC Regional Center, Environmental Analysis Department, Physical Chemical Analysis Division, Organic Chemistry Laboratory, Air sampling and Analysis Laboratory
10:00 – 11:00	GMP project ID 3778 – CETESB's participation/results Physical Chemical Analysis Division
11:00 – 12:30	Questions issued to the National Responsible for Air sampling/Analysis Physical Chemical Analysis Division
12:30-14:00	Lunch
14:00 – 14:45	Visit to the dioxin analysis Laboratory/Organic Chemistry Laboratory
14:45-15:30	Visit to the Air Monitoring Station (Pinheiros Station/ automatic monitoring network) Ambient Air passive sampling site for POPs monitoring
15:30 – 17:00	Questions issued to the Laboratories – Air sampling/Analysis Physical Chemical Analysis Division
May 24 th , 2013	
09:00-10:00	Visit to the Air sampling/analysis Laboratory ; Ambient Air – Active sampler (does not include POPs sampling yet)
10:00-11:30	Visit to Environmental Analysis Department (Toxicology and Genotoxicology Division Laboratories; Ecotoxicology laboratories, Sampling Division, etc)
11:30-12:30	Final considerations/Conclusions; International Cooperation Department, SC Regional Center, Environmental Analysis Department, Physical Chemical Analysis Division, Organic Chemistry Laboratory, Air sampling and Analysis Laboratory

Uruguay: 28 - 30 May 2013: Meeting Place: Basel Convention Coordinating Centre - Stockholm Convention Regional Centre for Latin America and the Caribbean, with offices in Uruguay (BCCC-SCRC)

DAY	TIME	INSTITUTION	RESPONSIBLE
28/05	14:00-17:00	BCCC-SCRC	Alejandra Torre Gabriela Medina Virginia Santana
	9:00-11:00	DILAVE - Breast milk Laboratory	Osvaldo Rampoldi

29/05	11:30-12:30	DINAMA Laboratory	Natalia Barboza Alejandro Mangarelli
	12:30-13:30	Lunch time	
	13:30-15:00	DINAMA – Air Quality	Magdalena Hill
	15:00-16:00	DINAMA – Hazardous Substances	Silvia Aguinaga Judith Torres
30/05	9:00-10:30	Health Ministry	Adriana Sosa Dra. Barboza
	11:00-12:30	BCCC-SCRC	Alejandra Torre Gabriela Medina
	12:30	Airport	

Annex 3: List of documents consulted

1. Project documents of four regions
2. Progress reports of four projects
3. Inception, and final regional Workshop reports of the four projects
4. Technical reports of expert laboratories (IVM, MTM, CSIC and CVUA) for core media and national samples
5. Documents related to brainstorming meeting held in Geneva, June 2011
6. Capacity training workshop reports
7. Standard operating procedures for passive air and human milk sampling
8. Documents requesting for project extensions
9. Inter-calibration assessment reports
10. Report on Passive Air Sampling under the Global Monitoring Plan for POPs - GMP Projects 2010-2011
11. Revised budgets for the four projects
12. Revised time frame and work plan for the four projects
13. ICAs signed between UNEP DGEF and UNEP DTIE
14. PCAs signed with regional coordination institutions
15. SSPAs with expert laboratories
16. Financial reports
17. National reports
18. Regional reports
19. Summary of project expenditures
20. Summary of co-finance

Annex 4: Survey Questionnaire

Terminal evaluation of GMP sub-regional Projects on POPs

Questionnaire / Survey

Name of Laboratory:

Contact person (including email):

Type of laboratory (public / governmental, private or research centre):

POPs analysis

- (i) Was your laboratory engaged in POPs analysis prior to the GMP project?
- (ii) If yes, in which context was your laboratory undertaking POPs analysis?

Role and responsibility

- (i) What was your overall role (or role of the laboratory) and responsibilities in the GMP project?
- (ii) How did you (or your laboratory) come to be involved in the project?

Capacity building – Value added of GMP project

- (i) Did the laboratory personnel receive training in the context of the project? What type of training?
- (ii) Did your laboratory benefit from other type support from the project? Which ones?
- (iii) Did your laboratory participate in an inter-calibration or similar exercise? What was the outcome/result of this exercise?
- (iv) Overall, how successful was the project in supporting your laboratory to perform and analyse POPs?
- (v) Was the project's support adequate? If no, please elaborate on what was missing.

Stakeholders' participation and Implementation of activities

- (i) Who were the other national stakeholders involved in the project?
- (ii) Was coordination at national level adequate to undertake project activities?
- (iii) What was the involvement of the national POP focal point in the GMP project?
- (iv) Were there delays in running of project activities? Give reasons for these delays.
- (v) Were objectives of planned activities met? If no, give reasons.

Visibility of Project, dissemination of results and Awareness

- (i) Was there a National Steering Committee (or national task team) set up for this project? If yes, give the constitution of this committee / team.
- (ii) Were the results of the project disseminated at national level? How?

Sustainability and Impact

- (i) What has been the real impact of the Project on your laboratory? (Capacity building: improved POPs analysis capacity, personnel training, etc...)
- (ii) Is your laboratory involved in any on-going national POPs monitoring programme?
- (iii) If no, are you aware if there are plans to set up national POPs monitoring programmes / activities?

Feedback on Project

- (i) General feedback on project stressing on strengths and weaknesses.
 - (ii) *Rate the overall performance (support) of the project:* from 1 to 5 (1: unsatisfactory 2: moderately unsatisfactory; 3: moderately satisfactory; 4: satisfactory and 5: highly satisfactory):
-

Annex 5: List of persons interviewed

	Name	Position	Institute
1	Camila Arruda Boechat	National coordinator	Ministry of Environment, Brazil
2	Leticia Reis de Carvalho	National Focal Point of Stockholm Convention	Ministry of Environment, Brazil
3	Maria Yumiko Tominaga	Air sampling and analysis responsible	CETESB, Brazil
4	Thomas Manfred Krauss	Responsible for human milk and analysis	Ministry of Health, Fundacao Oswaldo Cruz (FIOCRUZ), Brazil
5	Alejandra Torre	Regional Coordinator (RC)	LATU, Uruguay
2	Gabriela Medina	National Coordinator (NC)	BCCC – SCRC, Uruguay
3	Virginia Santana	Technical Assistant for NC and RC	BCCC – SCRC, Uruguay
4	Adriana Sosa Dra. Barboza	Milk collection team	Ministry of Health, Uruguay
5	Oswaldo Rampoldi	Pool and analysis of milk samples	DILAVE – Ministry of Agriculture , Livestock and Fishery, Uruguay
6	Natalia Barboza	DINAMA laboratory	Uruguay
7	Alejandro Mangarelli	DINAMA laboratory	Uruguay
8	Magdalena Hill	In charge of air quality Department	DINAMA Air quality, Uruguay
9	Judith Torres	Hazardous Substances Laboratory	National Environmental Directorate, DINAMA, Uruguay
10	Joseph Sakala	Acting Director,	Zambian Environmental Management Agency, Zambia
11	David KAPINDULA	Principal Inspector, NC of GMP project; National POPs Focal point	ZEMA
12	Maxwell NKOYA,	Inspector, ZEMA, team member for air sampling	ZEMA
13	Dr O. M. MUNYATTI	Head, Dept of Chemistry	University of Zambia
14	Chipo SYABBAMBA	Chief technician	University of Zambia
15	Chilutga LENGWE	Senior technician	University of Zambia
16	Golden ZYAMBO	Senior technician	University of Zambia
17	Dominic M. PHIRI,	Laboratory analyst	Zambia Bureau of Standards
18	Chrissy SHONGA	Lab Technician	Zambia Bureau of Standards
19	Segbedzi NORGBEY,	Chief, Evaluation Office, Nairobi	UNEP
20	Dr. Sylvana KING	Evaluation Officer	UNEP, Nairobi
21	Tiina PIIRONEN	Evaluation Officer	UNEP, Nairobi
22	Paul VRONTAMITIS	Funds management officer	UNEP. Nairobi
23	Ousmane SOW	National POPs Focal Point, National Coordinator	Direction de l'Environnement et des Etablissements Classes (DEEC), Sénégal
24	Gatta Soule BA	Assistant to NC	DEEC, Senegal
25	Prof. Amadou DIOUF,	Director	Centre Anti Poison (CAP), Senegal
26	Dr Aminata TOURE	Responsible for Mothers' milk sampling	CAP, Senegal

27	Dr. Dogo SECK	Administrateur General	CERES Locustox, Senegal
28	Baba GADJI	Responsable Unité Chimie Environnementale	CERES Locustox, Senegal
29	Prof. Shiloh OSAE,	Director, National Coordinator GMP	National Nuclear Research Institute (NNRI), Ghana Atomic Energy Commission (GAEC)
30	Dr Sam ADU-KUMI	Chief Programme Officer, National POPs Focal Point	Ghana Environmental Protection Agency (GEPA),
31	A. BUAH-KWOFIE	Research scientist	NNRI, GAEC
32	George APPIAH	Research scientist	NNRI, GAEC
33	Catherine OPAREBEA	Research scientist	NNRI, GAEC
34	Ibrahim KWARTENG	Research scientist	NNRI, GAEC
35	Isaac KUDU	Research scientist	NNRI, GAEC
36	Francis ARYEEQUAYE	Research scientist	NNRI, GAEC
37	Linda PALM	Research scientist	NNRI, GAEC
38	Dr (Mrs) H. TRAORE*	Regional Coordinator	ETQCL, Bamako, Mali
39	Prof. W. Aalbersberg*	Regional Coordinator	University of the South Pacific, Fiji

*Interview carried out via telephone

Annex 6: Technical Working Paper

Working Paper (Report) for Brazil and Uruguay

For the Terminal Evaluation of the Four UNEP GEF Projects

Supporting the Implementation of the Global Monitoring Plan of POPs

In the four Sub-Regions:

Eastern Southern Africa

West Africa

Latin America and Caribbean

Pacific islands

10 July 2013

Draft Report

1. Introduction

1. Generally, the projects **goals** is to build regional capacity on analysis and data generation for POPs in core matrices for the Global POPs Monitoring (GMP) to enable the region of Latin America and the Caribbean (LAC) countries to contribute to the global report submitted to the Conference of the Parties (COP).
2. The implementation of the UNEP/GEF project in the GRULAC region managed by the Basel Convention Coordinating Centre -Stockholm Convention Regional Centre (BCCC-SCRC) for Latin America and the Caribbean, with offices in Uruguay (hereinafter called BCCC-SCRC), in cooperation with the laboratories designated by the countries participating in this project: Antigua and Barbuda, Brazil, Chile, Ecuador, Jamaica, Mexico, Peru and Uruguay.
3. The Laboratory of Dioxins, as well as the Laboratory for the Analysis of Organic Pollutants in Water, of the Institute of Environmental Assessment and Water Research-Spanish Council for Scientific Research (IDÆA-CSIC) of Barcelona, Spain, participated in the project as reference laboratories for air samples. The reference laboratory for the WHO and UNEP for human milk samples has been Chemisches und Veterinäruntersuchungsamt (CVUA), of Freiburg, Germany. The total GEF Fund was USD 34,125 for each country.
4. A Visit by the evaluation consultant to Brazil and Uruguay were carried out during the following timing:
 - a. 22-May 2013, Brasilia, Brazil
 - b. 23- 24 May 2013, Sao Paulo, Brazil
 - c. 28-30 May 2013, Montevideo, Uruguay
5. The Meeting agenda for the above visit are presented in Annex 1

2. Objective and Scope of the Evaluation

In line with the UNEP Evaluation Policy⁹⁰, the UNEP Evaluation Manual⁹¹ and the Guidelines for GEF Agencies in Conducting Terminal Evaluations⁹², the terminal evaluation of four Sub-regional Projects **on Supporting the Implementation of the Global Monitoring Plan of POPs** is undertaken at the end of the projects to assess project performance (in terms of relevance, effectiveness and efficiency), and determine outcomes and impacts (actual and potential) stemming from the project, including their sustainability. The evaluation has two primary purposes: (i)

⁹⁰ <http://www.unep.org/eou/StandardsPolicyandPractices/UNEPEvaluationPolicy/tabid/3050/language/en-US/Default.aspx>

⁹¹ <http://www.unep.org/eou/StandardsPolicyandPractices/UNEPEvaluationManual/tabid/2314/language/en-US/Default.aspx>

⁹² http://www.thegef.org/gef/sites/thegef.org/files/documents/TE_guidelines7-31.pdf

to provide evidence of results to meet accountability requirements, and (ii) to promote learning, feedback, and knowledge sharing through results and lessons learned among UNEP, governments, the GEF and their partners. Therefore, the evaluation will identify lessons of operational relevance for future project formulation and implementation. It will focus on the following sets of **key questions**, based on the project's intended outcomes, which may be expanded by the consultants as deemed appropriate:

- (a) How successful were the projects in supporting partners in 27 countries in the four sub-regions to perform sampling and analysis of POPs in relevant matrices according to standard operating procedures (SOPs) and international standards?
- (b) Did the projects assist the countries in training laboratory personnel to high standards, including adequately equipping laboratories and training personnel to undertake sampling and analysis?
- (c) To what extent did the projects assist the countries to improve their experiences in participation in international inter-calibration studies, in the establishment and consolidation of a functional national system for handling requests, carry out risk assessment decision-making and administrative tasks?
- (d) How successful were the projects in assisting their partners to make available high quality data on presence of POPs in participating countries?
- (e) Did the projects assist the countries to increase awareness of governments and stakeholders on details in implementation of the GMP issue in their national implementation plan and reporting to the COP?

3. Project Rationale

1. According to Article 16 of the Stockholm Convention on Persistent Organic Pollutants (POPs), its effectiveness shall be evaluated starting four years after the date of entry into force of the Convention and periodically thereafter. The Conference of Parties (COP) has agreed upon the essential modalities for the environmental monitoring component of the first evaluation. The Global Monitoring Plan (GMP) will focus initially on the core media mother's milk/human blood to examine human exposure, and ambient air to examine long-range transport. COP3 Decision SC-3/19 invited the Global Environment Facility (GEF) to incorporate activities related to the GMP and capacity-building in developing countries, small island developing states and countries with economies in transition as priorities for providing financial support.

2. So far, in a number of developing countries in ESA and WA and countries in LAC and Pacific islands region, monitoring of POPs that would allow establishing time or spatial trends has not yet been carried out. Further, the matrices chosen by the COP for the GMP, namely ambient air and human milk have only been

analysed in a few occasions or none at all. Typically, there are other national priorities such as food stuff and water monitoring or soil analyses at potential hotspots. Few scattered data collected were mainly generated by some research institutes or universities in a science oriented context rather than for the implementation of multilateral environmental agreements. If a few international cooperation activities on POPs monitoring have been carried out, however, they were not targeted to the core media (air, breast milk/human blood) and some of them did not follow the GMP Guidelines established by the ad hoc Technical Working Group for POPs monitoring and adopted by COP3, so their representativeness and quality still need to be assessed further.

3. The UNEP Regionally Based Analysis project reported that there was limited or very limited data on POPs in countries in ESA, WA, LAC and Pacific Island regions. The countries in these regions either have very limited capacity to manage POPs or have established laboratories with limited capacity and assistance is needed in all areas. This includes the need for increased monitoring capacity, improved regulations, management structures and enforcement systems.

4. As Parties to the Convention, ESA, LAC, WA countries and the Pacific Islands Region are eligible for application of GEF funds to strengthen the monitoring capacity at national level and so to contribute with national data to the GMP.

4. Description of evaluation methods to be used

6. The findings of the terminal evaluation will be based on the following:

(a) A **desk review** of project documents including, but not limited to:

- Relevant background documentation, inter alia UNEP and GEF policies, strategies and programmes pertaining to POPs and their conventions;
- Project design documents; Annual Work Plans and Budgets or equivalent, revisions to the logical framework and project financing;
- Project reports such as progress and financial reports from countries to the IA and from the EA to UNEP; Steering Committee meeting minutes; annual Project Implementation Reviews and relevant correspondence;
- Documentation related to project outputs such as: report of the inter-calibration studies, compiled report for ambient air monitoring, compiled report on mother's milk analysis, national and regional reporting, experts' reports on training and capacity building activities, among other relevant documents.

(b) **Interviews**⁹³ with:

- Project management and execution support;
- Regional coordinator of the project;
- Sub-regional coordinators at sub-regional coordinating centers⁹⁴

⁹³Face-to-face or through any other appropriate means of communication

- UNEP Task Manager (Geneva) and Fund Management Officer (Nairobi);
- Country lead execution partners and other relevant partners including participating laboratories receiving trainings and consumables;
- Relevant staff of GEF Secretariat;
- Representatives of other multilateral agencies such as WHO and other relevant organisations as needed
- Governments' representatives especially from Ministries of Environment, national focal points for the Stockholm Convention and research institutions.

(c) **Questionnaire/survey.**

7. A questionnaire/survey covering all the countries participating in the projects will be organized. A copy of this survey that concerns mainly the built capacities of laboratories is given in Annex 2.

⁹⁴The sub-regional coordinating centers are ESA – Department of Chemistry, Univ. of Nairobi, Kenya; LAC – Stockholm Center, Uruguay; Pacific Islands – The University of South Pacific (USP) through institute of applied Sciences (IAS), Fiji; WA – Environmental Toxicology and Quality Control Laboratory (ETQCL), Mali

5. List of data sources, indicators

8. Data sources for project achievement will include the project's annual reports, PIRs, records maintained by project partners, other related project documents such the documents to be submitted to the evaluation by the UNEP Task Manager that include:
- Project design documents
 - Project supervision plan, with associated budget
 - Correspondence related to project
 - Supervision mission reports
 - Steering Committee meeting documents, including agendas, meeting minutes, and any summary reports
 - Project progress reports, including financial reports submitted
 - Cash advance requests documenting disbursements
 - Annual Project Implementation Reports (PIRs)
 - Management memos related to project
 - Other documentation of supervision feedback on project outputs and processes (e.g. comments on draft progress reports, etc.).
 - Extension documentation. Has a project extension occurred?
 - Project revision documentation.
 - Budget revision documentation.
 - Project Terminal Report (draft if final version not available)

Annex 3 present the different interview discussions with different involved partners in GMP project in Brazil and Uruguay.

6. Attainment of Objectives and Planned Results

During the visit evaluation, the evaluator assesses the relevance of the project's objectives and the extent to which these were effectively and efficiently achieved or are expected to be achieved.

- (a) *Achievement of Outputs and Activities:* Table 1 Assess, for each component, the project's success in producing the programmed outputs, both in quantity and quality, as well as their usefulness and timeliness.

Component	Outputs	Evaluation Comments
-----------	---------	---------------------

<p><u>Component I</u></p>	<p>Output 1.1: Set-up the management structure for the project</p>	<p>The BCCC-SCRC was defined as the Regional Coordinator, responsible for monitoring the project, developing guidelines, collaborating in the organization of workshops, among other things.</p> <p>As national counterparts, each country appointed:</p> <ul style="list-style-type: none"> • A National Coordinator. • Staff in charge of air and human milk monitoring. • Laboratories to perform analysis of POPs in different matrices. <p>During the execution of the GMP project, administration difficulties were faced during signing the MOU with the nominated institutions in the different countries, and finalizing the internal agreement between the nominated national institution and the other involved partners. These difficulties affects the project timing which resulting in some delay in certain activities, for example, some partners were not attend the inception workshop due to the delay in finalizing the internal agreement with them . Each country set-up their management structure for the project which consist the different partners involved in execution of the project.</p>
	<p>Output 1.2: Organization of a sub-regional workshop prepare a detailed workplan for project implementation</p>	<p>The first and second Regional Workshops were attended by representatives of 12 countries of the region, technicians and staff responsible for the reference laboratories and UNEP. For the first workshop, the Secretariat invited representatives of three countries as observers (Argentina, Colombia and Costa Rica).</p> <p>The submission of samples, samplers, standards and other consumables was coordinated via email And by phone.</p> <p>The conditions for sending the samples were explained. It also collaborated with the coordination of the training courses provided by the CSIC in different countries. Assistance was also provided for customs proceedings, and documents and endorsement letters were sent, etc.</p> <p>Brazil and Uruguay project team were satisfied in the way that the two regional workshop organized, and during these workshops, they present and discuss the project workplan and time line for the different project activities</p>

	Output 1.3: At the same workshop develop protocols and manuals for sampling and analysis of the core matrices	<p>The design, development and maintenance of the Geographical Information System, which includes data of the monitoring of POPs in air and human milk of the GMP project, were completed.</p> <p>Data were processed and different charts were developed per substance, country, matrix, as well as comparative charts per group of substances in different countries.</p> <p>The site will be open to incorporate information on future results of POPs monitoring in different matrices.</p> <p>Brazil and Uruguay were involved in discussion about developing protocols and manuals for sampling and analysis of the core matrices</p>
	Output 1.4: Assignment of responsible staff for air monitoring, mothers' milk monitoring, and POPs analysis	Brazil and Uruguay were assigned the responsible staff for air monitoring, mother milk monitoring, and POPs analysis, in the mother's milk sampling part, both countries have a strong previous experience, where both of them just started air monitoring regarding POPs.
	Output 1.5: Inspection of the POPs laboratory and identification of needs	At the beginning each country assign a local POPs related laboratory, and identification of their needs, Brazil has a strong infra-structure to conduct all POPs analysis, where Uruguay has a limited capability which can cover the basic POPs, and at the beginning of the project, they identified a huge list of their needs then UNEP minimize that list to short list of consumables, standards and glassware that needed during the execution of the project
	An over all comments for component I, both country, sampling and analysis are performed according to international standard	
<u>Component II</u>	Output 2.1: Training of responsible personnel to establish and run the network for air samples and mothers' milk sampling	All parties involved in this project received a adequate training for air samples, where both countries has a good previous experience regarding mother milk sampling, and all parties were satisfied with the project training.
	Output 2.2: Identification of sampling sites including length of sampling periods and frequency (air matrix)	This project support all related issues to air sampling, starting from identification of sampling sites, length of sampling period and frequency, and all involved partners are satisfied with the support of RC to conduct these activities.

	Output: 2.3: Identification of potential donors of mothers' milk in the six countries	All involved countries in LAC were having previous experience in identification of potential donors of Mother's milk, and they have their own centers which they can get their mother's milk samples through them and they didn't faced any trouble during execution of this task.
	Lab personnel are trained to high standard and sampling in both countries according to international standards.	
<u>Component III</u>	Output 3.1: Identification and supply of spares consumables, standards to the laboratories to equip them for POPs analysis in the relevant matrices	Both countries looking for more supplies of spares consumables, standards to the laboratories for POPs analysis, what they got from this project is the minimal support that can implement the different activities of GMP project,
	Output 3.2: Training of laboratory personnel on core matrices in developing country laboratory	Both countries are satisfied in the way they received the training during this project and they are looking for more detailed and specialized training to sustain their work and knowledge
	Output 3.3: Participation in international intercalibration study	Both countries are satisfied of their participation in the international intercalibration study, and they considered this task as one of the project strengthen points
	In both countries, QA protocols are in place and used and Participation in proficiency tests	
<u>Component IV</u>	Output 4.1.: Collection of national air and mothers' milk samples and preparation of pools where applicable	Both countries are fully satisfied in collection of air and mother's milk samples

	Output 4.2.: Exchange of national samples for POPs analysis in developing country laboratory and mirror analysis in experienced back-up laboratory	For Brazil case they had some difficulties in getting an answer regarding the different in result between their lab and the reference lab in the basic POPs analysis, and they still not getting the answers for their required clarifications
	Output 4.3.: Evaluation of analytical data and interpretation of results	RC faced some difficulties in the way the involved countries evaluate of analytical data and interpretation of results, which it may occurred due to low skills of the involved staff in these topics
	In both countries, there are increase in regional awareness of POPs exposures and provide Baseline for later effectiveness evaluation	
<u>Component V</u>	Output 5.1.: Organization of a workshop to evaluate the project outcomes and communicate the results and lessons learned	The final workshop which held in Barcelona was to discuss the project finding, but due to some delay in some activities, some of the analysis was not ready, so they discuss the ready results only during that workshop
	Output 5.2.: Development of long-term strategies for future contributions to the Global Monitoring of POPs	All involved countries received a capacity building and technical support during this project, but for Brazil case, they are working to implement a long term strategy as they are planning to start some air sampling in the coming monitoring program, where in Uruguay, they stopped all related activities to GMP project, as they don't have a budget and personnel to conduct such activities
	Output 5.3.: Diffusion of results and strategies	The main objectives of the GMP project were achieved in both countries, there were some delay for certain reasons, but all the expected results were achieved

- (b) *Relevance*: in both countries, the project's objectives and implementation strategies were consistent with: i) Sub-regional environmental issues and needs; ii) the UNEP

mandate and policies at the time of design and implementation; and iii) the relevant GEF focal areas, strategic priorities and operational programme(s).

- (c) *Effectiveness*: Table 2 present the degree of achievement for the different project objectives and scoring rates,

Objectives and Outcomes/Outputs	Objectively Verifiable Indicators	Means of Verification	Assumptions	Evaluation comments	Scoring Rate
Development Objective					
<ul style="list-style-type: none"> Countries in LAC have the capacity to contribute with national POPs analysis to the reporting under the Global Monitoring of POPs 	<ul style="list-style-type: none"> Sampling programs in place in each country; Data generated in local POPs laboratories submitted for inclusion into the regional GMP report 	<ul style="list-style-type: none"> Report to the Conference of the Parties to the Stockholm Convention 	<ul style="list-style-type: none"> Decisions SC-2/13 and SC-3/16 remain unchanged in its main objectives 	Objectives achieved	BC
Immediate Project Objective					
<ul style="list-style-type: none"> To build regional capacity on analysis and data generation for POPs in core matrices for the Global POPs Monitoring (GMP) to enable LAC countries to contribute to the global report submitted to the Conference of the Parties 	<ul style="list-style-type: none"> POPs laboratories feed data into the global database for core matrices 	<ul style="list-style-type: none"> National POPs data sent to regional coordination group for inclusion into global report. 	<ul style="list-style-type: none"> Financial and human resources available to implement the sub-regional component of the GMP for LAC 	<ul style="list-style-type: none"> For Brazil case, they achieved this objective in term of human resources but they just started to allocate the financial resources. For Uruguay 	BB

Objectives and Outcomes/Outputs	Objectively Verifiable Indicators	Means of Verification	Assumptions	Evaluation comments	Scoring Rate
				case, they didn't achieve this objective as they didn't have human and financial resources to sustain this objective	
Outcomes					
6. Sampling and analysis are performed according to international standard by all partners	<ul style="list-style-type: none"> • SOPs available and accessible three months after project start 	<ul style="list-style-type: none"> • Information exchange within LAC countries and international contacts; 	<ul style="list-style-type: none"> • GMP component reflected in NIP 	<ul style="list-style-type: none"> • Objectives achieved 	<ul style="list-style-type: none"> • AB
7. Technical personnel is able to carry out sampling in participating countries and analysis in designated laboratories;	<ul style="list-style-type: none"> • Procurement of spares, consumables, standards, and small equipment carried out to enable analysis of GMP relevant compounds and matrices 	<ul style="list-style-type: none"> • Laboratory logbook updated and proof of ongoing activities on a monthly basis. 	<ul style="list-style-type: none"> • Stability in personnel and provision of spares and consumables to maintain operation of POPs laboratory 	<ul style="list-style-type: none"> • Objectives achieved 	<ul style="list-style-type: none"> • BB

Objectives and Outcomes/Outputs	Objectively Verifiable Indicators	Means of Verification	Assumptions	Evaluation comments	Scoring Rate
<p>8. High quality data on presence of POPs in LAC countries available;</p>	<ul style="list-style-type: none"> • Participation of up to 5 laboratory staff each in two thematic training courses; • Inscription in up to 2 international intercalibration studies; 	<ul style="list-style-type: none"> • Reports on results of intercalibration studies 	<ul style="list-style-type: none"> • Successful participation in international intercalibration studies; 	<ul style="list-style-type: none"> • Objectives achieved 	<ul style="list-style-type: none"> • AB
<p>9. High quality data on presence of POPs in LAC countries available;</p>	<ul style="list-style-type: none"> • Chromatograms and results tables contribute to regional GMP cooperation plan and are available for interpretation 	<ul style="list-style-type: none"> • Reports and publications authored 	<ul style="list-style-type: none"> • Implementation of national programs on sampling of core matrices possible financially and with human resources 	<ul style="list-style-type: none"> • Objectives achieved 	<ul style="list-style-type: none"> • AB
<p>10. Governments and stakeholders aware on details in implementation of the GMP issue in their national implementation plan and reporting to Conference of the Parties.</p>	<ul style="list-style-type: none"> • Long-term strategy developed for future evaluations of GMP data by end of project; • Cooperation at international level through the COP established Regional Coordination Group 	<ul style="list-style-type: none"> • Governments' participation documented in Regional Reports 	<ul style="list-style-type: none"> • Governments and stakeholders willing to cooperate and share data 	<ul style="list-style-type: none"> • Objectives achieved 	<ul style="list-style-type: none"> • BC

Objectives and Outcomes/Outputs	Objectively Verifiable Indicators	Means of Verification	Assumptions	Evaluation comments	Scoring Rate
Outputs for Outcome 1:					
1.1 Set-up the management structure for the project	<ul style="list-style-type: none"> • Institutional arrangements with University of Nairobi, Chemistry Department in Kenya made; • Consultants/Institutions identified and contracted 	<ul style="list-style-type: none"> • MoU with University of Nairobi, Chemistry Department in Kenya signed 	<ul style="list-style-type: none"> • GEF funding and co-financing readily available; • Personnel with necessary qualifications available 	<ul style="list-style-type: none"> • Objectives achieved 	<ul style="list-style-type: none"> • BC
1.2 Organization of a sub-regional workshop prepare a detailed workplan for project implementation	<ul style="list-style-type: none"> • Stakeholders and UNEP to meet and agree on main issues 	<ul style="list-style-type: none"> • Detailed workplan prepared and published at project's Web 	<ul style="list-style-type: none"> • All funds available and stakeholders committed 	<ul style="list-style-type: none"> • Objectives achieved 	<ul style="list-style-type: none"> • AA
1.3 At the same workshop develop protocols and manuals for sampling and analysis of the core matrices	<ul style="list-style-type: none"> • Guidance documents from SSC and WHO available; • Workshop held 	<ul style="list-style-type: none"> • Report of workshop, <i>i.e.</i>, list of participants; • SOPs drafted; • WHO ethical commitment signed 	<ul style="list-style-type: none"> • GMP Guidance document applicable to LAC sub-region; • WHO guidelines available and can be adapted to 	<ul style="list-style-type: none"> • Objectives achieved 	<ul style="list-style-type: none"> • AB

Objectives and Outcomes/Outputs	Objectively Verifiable Indicators	Means of Verification	Assumptions	Evaluation comments	Scoring Rate
			local conditions; • POPs laboratories operational		
1.4 Assignment of responsible staff for air monitoring, mothers' milk monitoring, and POPs analysis	<ul style="list-style-type: none"> • Informed and trained staff 	<ul style="list-style-type: none"> • Contracts for responsible staff in all 8 countries 	<ul style="list-style-type: none"> • Country willingness to explore this option 	<ul style="list-style-type: none"> • Objectives achieved 	<ul style="list-style-type: none"> • AB
1.5 Inspection of the POPs laboratory and identification of needs	<ul style="list-style-type: none"> • Visit to the POPs laboratory 	<ul style="list-style-type: none"> • Inspection protocols filled out 	<ul style="list-style-type: none"> • Cooperation of the POPs laboratories 	<ul style="list-style-type: none"> • Objectives achieved 	<ul style="list-style-type: none"> • BC
Outputs for Outcome 2:					
2.1 Training of responsible personnel to establish and run the network for air samples and mothers' milk sampling	<ul style="list-style-type: none"> • Training program developed • Training of sampling teams held 	<ul style="list-style-type: none"> • Contract with training laboratories; • Report by training laboratory 	<ul style="list-style-type: none"> • Cooperation at national level; • Access to samples; • Provision of in-kind contribution 	<ul style="list-style-type: none"> • Objectives achieved 	<ul style="list-style-type: none"> • AA
2.2 Identification of sampling sites including length of sampling periods and	<ul style="list-style-type: none"> • Shortlist of potential sampling locations; • List of needs for sampling 	<ul style="list-style-type: none"> • Report demonstrating location of sampling sites; 	<ul style="list-style-type: none"> • Access to sampling sites; • Air samplers 	<ul style="list-style-type: none"> • Objectives achieved 	<ul style="list-style-type: none"> • AB

Objectives and Outcomes/Outputs	Objectively Verifiable Indicators	Means of Verification	Assumptions	Evaluation comments	Scoring Rate
frequency (air matrix)	equipment developed	<ul style="list-style-type: none"> • Sampling equipment deployed 	prepared for deployment		
2.3 Identification of potential donors of mothers' milk in the six countries	<ul style="list-style-type: none"> • List of potential donors 	<ul style="list-style-type: none"> • Signed agreements 	<ul style="list-style-type: none"> • Hospitals and mothers willing for cooperation 	<ul style="list-style-type: none"> • Objectives achieved 	<ul style="list-style-type: none"> • AA
Outputs for Outcome 3:					
3.1 Identification and supply of spares consumables, standards to the laboratories to equip them for POPs analysis in the relevant matrices	<ul style="list-style-type: none"> • List of needs prepared • Procurement carried out 	<ul style="list-style-type: none"> • Procurement documents authorized 	<ul style="list-style-type: none"> • Infrastructure sufficiently developed so that only minor components are needed 	<ul style="list-style-type: none"> • Objectives achieved 	<ul style="list-style-type: none"> • BB

Objectives and Outcomes/Outputs	Objectively Verifiable Indicators	Means of Verification	Assumptions	Evaluation comments	Scoring Rate
3.2 Training of laboratory personnel on core matrices in developing country laboratory	<ul style="list-style-type: none"> • Training sessions for laboratory personnel held; • Training matrices available 	<ul style="list-style-type: none"> • Training programmes available 	<ul style="list-style-type: none"> • Developing country laboratory willing to be trained; • Back-up laboratory prepared and having access to developing country laboratory 	<ul style="list-style-type: none"> • Objectives achieved 	<ul style="list-style-type: none"> • BD
3.3 Participation in international intercalibration study	<ul style="list-style-type: none"> • Developing country laboratory inscribes to the intercalibration study and submits data within the timeframe 	<ul style="list-style-type: none"> • Results letter from organizer of intercomparison study 	<ul style="list-style-type: none"> • Relevant international intercalibration study existing; • Participation fee be paid 	<ul style="list-style-type: none"> • Objectives achieved 	<ul style="list-style-type: none"> • BC
Outputs for Outcome 4:					
4.1 Collection of national air and mothers' milk samples and preparation of pools where applicable	<ul style="list-style-type: none"> • Cartridges from air samplers collected and shipped to the laboratories; • Mothers' milk sample containers collected; pools prepared, and 	<ul style="list-style-type: none"> • Sample shipment documents and receipt at laboratories 	<ul style="list-style-type: none"> • Samples will be available; <i>i.e.</i>, no damage to air samplers and sufficient number of 	<ul style="list-style-type: none"> • Objectives achieved 	<ul style="list-style-type: none"> • AB

Objectives and Outcomes/Outputs	Objectively Verifiable Indicators	Means of Verification	Assumptions	Evaluation comments	Scoring Rate
	shipped to the laboratories		participating pregnant mothers		
4.2 Exchange of national samples for POPs analysis in developing country laboratory and mirror analysis in experienced back-up laboratory	<ul style="list-style-type: none"> • Samples analyzed at subregional POPs laboratory and in back-up laboratories 	<ul style="list-style-type: none"> • Table of results from developing country laboratory • Table of results from back-up laboratory 	<ul style="list-style-type: none"> • POPs laboratories operational at required quality • Data will be made available by all parties 	<ul style="list-style-type: none"> • Objectives achieved 	<ul style="list-style-type: none"> • BB
4.3 Evaluation of analytical data and interpretation of results	<ul style="list-style-type: none"> • Meeting to discuss the results (possibly by teleconference and electronic means) 	<ul style="list-style-type: none"> • Consolidated data report • Publication including comparison with data from other regions or time trends 	<ul style="list-style-type: none"> • Quantifiable amounts of POPs found in the samples to allow for comparison with other data 	<ul style="list-style-type: none"> • Objectives achieved 	<ul style="list-style-type: none"> • BC
Outputs for Outcome 5:					
5.1 Organization of a workshop to evaluate the project outcomes and communicate the results and	<ul style="list-style-type: none"> • Good representation at subregional workshop (<i>i.e.</i>, letters of invitation and confirmation, participants list); • Draft reports available 	<ul style="list-style-type: none"> • Workshop report prepared and published; • Issues for lessons learned reflected in report 	<ul style="list-style-type: none"> • Necessary funds available to organize the sub-regional workshop; 	<ul style="list-style-type: none"> • At the time of the workshop, not all the project analysis 	<ul style="list-style-type: none"> • CB

Objectives and Outcomes/Outputs	Objectively Verifiable Indicators	Means of Verification	Assumptions	Evaluation comments	Scoring Rate
lessons learned			<ul style="list-style-type: none"> • Adequate coverage in all participating countries 	result were available, Objectives partially achieved	
5.2 Development of long-term strategies for future contributions to the Global Monitoring of POPs	<ul style="list-style-type: none"> • All countries and stakeholders actively contributing in discussions 	<ul style="list-style-type: none"> • Bulleted list of future actions at national/sub-regional level published 	<ul style="list-style-type: none"> • Countries not capable to implement the components of the NIP; • Change in policy priorities 	<ul style="list-style-type: none"> • In Brazil case, they start achieving this objective, where in Uruguay case, nothing achieved 	<ul style="list-style-type: none"> • CD
5.3 Diffusion of results and strategies	<ul style="list-style-type: none"> • Information materials prepared 	<ul style="list-style-type: none"> • Reports and publications available 	<ul style="list-style-type: none"> • Results obtained or of good quality 	<ul style="list-style-type: none"> • Both country improved a lot in preparing the technical report 	<ul style="list-style-type: none"> • BC

- (d) *Efficiency*: the project succeeds in executing all its activities within programmed budget, where some delay and extension for the project occurred due to many reasons, for example, delay in signing the MOU with different nominated institutions in the different countries due to administration procedures, changing of involved personnel during implementing the project.

7. Sustainability and catalytic role

- (e) Sustainability is understood as the probability of continued long-term project-derived results and impacts after the external project funding and assistance ends.

In the case of Brazil, the different involved partner of GMP project are willing to sustain this project, and they start having a good level of the national ownership to allow the project results to be sustained, and they are planning to sustain this project within their monitoring program and future planning. They have some sort of financial support through some ongoing monitoring activities, and they are trying to allocate adequate financial resources to implement more activities to cover all different regions in Brazil, and to increase the number of collected samples for analysis. They have a strong institutional framework to sustain the project activities, as they have their own POPs monitoring programs, and they have the resources in terms of equipments and trained personnel to conduct such activities. Based on the result they achieved from GMP project on the POPs level in the environment, their result considered within the logic range, but they just had the baseline data on all POPs level in the environment and they increase their capability as they are getting a good result comparing with the reference lab, which this will encourage them to conduct more similar monitoring program in the nation level and try to conduct some regional program also.

- (f) For the case of Uruguay, Social-political sustainability considered very poor, as they stopped all related activities as soon as they project budget and activities ended, also their institutional framework are fair, as they can't conduct all POPs analysis locally, they achieved level of POPs are considered within the expected range.

8. Processes affecting attainment of project results

The project's objectives and components was not clear in the case on Brazil, they remark that the project was without detailed activities with timeframe, it was a general project activities with no details about it, and unclear roles and responsibilities, and there were some unclear roles for some activities in national level, regional level and involved international labs, without clear timeframe for some activities, due to that reasons, the project delayed during the implementation, where for Uruguay Case, the project was clear and they didn't have any troubles with the preparation and readiness of the project,

During the project implementation, the project document was unclear to enable effective and efficient implementation, but during the inception workshop they covered with point by preparing a clear workplan with time plan. And during that workshop, the partnership arrangements properly identified and the roles and responsibilities negotiated. Both country (Brazil and Uruguay) were facilitate the agreed resources (funding, staff, and facilities) to implement the GMP project, with adequate project management arrangements, in the case of Uruguay they get other relevant projects related to PCBs assist in implementing this project.

During the implementation of GMP project, there were no main changes in the project components except timing. The involved stakeholder were limited in this project, only the main partners were involved in this project, and both countries conduct a public awareness at the end of the project to present the project achievements.

9. Stakeholder⁹⁵ Participation and Public Awareness.

The stakeholder participation and public awareness with GMP project was limited, the main stakeholder in both countries was ministry of environment and ministry of health, and analysis institutes, they have informal meeting between them to coordinate the implementation of different activities, they invited some government sectors, universities and research centre during different project activities and involved them during presenting and discussing of the project activities at the beginning and the project finding at the end of the project.

10. Country Ownership and Driven-ness.

Both countries got adequate support to project execution from the governments, they nominate all related institutes in the project activities, for sampling and analysis, and they both country provide a great support for the counter-part funding to project activities. The project increases the cooperation inside the same country especially between public sector and universities and research centres,

Regarding responsive of both government to national executing agencies and UNEP supervision, in Brazil case, there were some unclear roles and responsibilities between ministry of environment and ministry of health during the implementation of the different activities of the project, for example POPs issues were a responsibility of ministry of environment and milk sampling were the responsibility of ministry of health, both activities were a part of the GMP project, another issue is the administration procedures for approving nominating personnel, this resulting in some delay in the project timing, and until the evaluation visit, the human milk report were not submitted to the NC, where in Uruguay case, the implementation of the GMP project were executed smoothly without any conflict or delay

⁹⁵ Stakeholders are the individuals, groups, institutions, or other bodies that have an interest or stake in the outcome of the project. The term also applies to those potentially adversely affected by the project.

11. Financial Planning and Management.

The project has some financial reporting problems, as the project has two payment only, the first payment after they sign the MOU with the different institutions in the different involved countries, where the final payment, after they finish all project activities and submit their report, both country faced trouble with the second payment and the financial report, both country were reported some activities as executed activities where it was not implemented yet, and they will implement it after they will receive the second payment, both country does not have other financial resources to cover the delay in getting the GEF funding to conduct the project activities.

Another issue, the RC has to transfer money to one institute which they signed the MOU with them in each country, then that institute will transfer to the other involved partner of the project in the country, this all resulting in some delay for the project execution

12. UNEP Supervision and Backstopping.

Both country confirm that they had adequate of project supervision plans, inputs and processes, there are some unclear points in the project documents, but UNEP work very closely with the RC and different NC and support them through the execution of the project activities

Annex 7: Tabulation of summary of achievements

Component 1: Development of Standard Operating Procedures		
Activities / Outputs	Status	Comments / Remarks
1.1 Set-up the management structure for the project	100%	<ul style="list-style-type: none"> • PCA (MoA) with regional coordinator was made only on 18 August 2010. The administrative issues delayed the project by nine months, which cannot be recovered. For PI, the project had an early start due to the transfer of USD 93,000 to USP/IAS in January 2009 from the Australian cofinance through SSC.
1.2 Organization of a sub-regional workshop prepare a detailed workplan for project implementation	100%	<ul style="list-style-type: none"> • Workshop held in January 2010; WS report prepared by UoN, Webaccessible from UNEP WebSite (ESA) • WS, 7 – 9m Oct 2009. See website. Note: Subregional coordinator exceeded allocated WS budget by 80% (WA) • WS held in November 2009 - GRULAC • WS held on 21 – 23 Sept 2009, Suva, Fiji (PI)
1.3 At the same workshop develop protocols and manuals for sampling and analysis of the core matrices	100%	<ul style="list-style-type: none"> • Finalized and distributed to participating countries • No comment from WA • Diffusion started after the inception workshop, Nov 2009
1.4 Assignment of responsible staff for air monitoring, mothers' milk monitoring, and POPs analysis	100%	<ul style="list-style-type: none"> • No additional countries participating in the mothers' milk study: Ethiopia delays with Ministry of Public Health and ethical clearance; Egypt did not accept the shipment of glassware; Zambia fears HIV infection after having made this experience in a previous study (notUNEP/WHO) • Nigeria's situation unclear; staff assigned but obviously not familiar and lack of communication in MoE. Some slow responses.
1.5 Inspection of the POPs laboratory and identification of needs	100% 100% 100%	<ul style="list-style-type: none"> • Done on long-distance through check-list via teleconference via Skype or other means to identify needs and existing modes of operation. IVM VU University served Kenya, Mauritius, Uganda, Zambia; MTM Oerebro Egypt (ESA) • Operational laboratories only exist in Ghana, Mali, and Senegal (WA) • In contrast to initial assumptions, Antigua and Barbuda does not have an operational POPs lab. Dioxin laboratories with HRMS that were listed by countries are either not existing (Chile) or not operational (Peru). GRULAC
Component 2: Training of Sampling Teams and Identification of Sampling Sites		
Activities	Status	Comments / remarks
2.1 Training of responsible personnel to establish and run the network for air samples and mothers' milk sampling	100%	<ul style="list-style-type: none"> • Protocols available; all countries familiar with the air samplers • Protocols for air sampling network, handling of PAS, etc. and protocol for mothers' milk distributed. All except Togo have experiences with PAS and mothers' milk sampling • No comment from GRULAC • Marshall Islands was added to mother's milk study with extra-budgetary funds from SSC
2.2 Identification of sampling sites including length of sampling periods and frequency (air matrix)	100%	<ul style="list-style-type: none"> • After initial confusion over Recetox/SSC sampling and UNEP/GEF sampling, all samplers deployed since 1 April 2010; expected final collection to take pGRULACe on 31 March 2011-ESA • Same comment as for ESA. Ghana started one quarter later • All sites identified; deployment of samplers will start on 1 July 2010 and last for one year – GRULAC
2.3 Identification of potential donors of mothers' milk in the 6 countries	100%	<ul style="list-style-type: none"> • No new countries could be recruited due to difficulties in cooperation at national level (ETH), fear of infection (ZMB) or political changes (EGY). Glassware was shipped to

	100%	<p>Egypt (not accepted) and is stored in Zambia.</p> <ul style="list-style-type: none"> • 5 countries have already pools collected and shipped in 2009; Togo delivered in August 2010 to Freiburg lab • Done for six countries by Jun 2011; Brazil and Ecuador (RC had communication pb with this country) were unable to implement the sampling during project implementation. Brazil plans to collect samples for two or three pools at the end of 2012. They will utilize the UNEP/WHO reference laboratory and pay for analysis from their own funds.
Component 3: Quality Enhancement		
Activities	Status	Comments / remarks
3.1 Identification and supply of spares consumables, standards to the laboratory to equip them for POPs analysis in the relevant matrices	100%	<ul style="list-style-type: none"> • Was finalized in October 2010 ; all labs were provided with the materials before the hands-on training in the developing country laboratories and before the start of the intercalibration study. • All procurement undertaken in 2nd half of 2010; i.e., delayed but materials arrived before the training and before the start of the intercalibration study • Finalized in Dec 2010. Delays due to difficulties with customs and rejection at recipient address (Ecuador, Mexico). Countries with multiple labs have received sets for both labs (BRA, PER, CHL, URU)
3.2 Training of laboratory personnel on core matrices in developing country laboratory	100%	<ul style="list-style-type: none"> • All trainings – total of five – were undertaken between August and November 2010 • All trainings – total of three – were undertaken between August and November 2010 (ODL: Dec 2009) • Seven training sessions undertaken by CSIC until Oct 2010 GRULAC • Training took place 12-30 July 2010; which was longer than usually as it necessary to startup the new GC/micro-ECD and to adjust the lab procedures-(The laboratory was able to purchase a new HC with micro-ECD from their funds (with the advice of this UNEP project); the setup took longer than anticipated (due to safety clearance for operation of the electron source) PI
3.3 Participation in international intercalibration study	100%	<ul style="list-style-type: none"> • Inscription until 31 Mar 2010, samples were distributed in Sep/Oct 2010 (after training of labs), submission of results until 15 Jan 2011; evaluation of results available in Apr 2011 (laboratories were given the chance to make corrections where obviously transfer or transformation errors occurred); final report available in July 2011. The final results are incorporated into the report on Bi-ennial interlaboratory assessment of POPs http://www.chem.unep.ch/Pops/GMP/Global/Biennial%20Global%20Interlaboratory%20Assessment%20on%20POPs-Round%201.pdf (ESA + WA + GRULAC) • USP/IAS had participated in the UNEP Intrcalibration Study for Asia Rgion and participated at the final workshop in Hongkong SAR, China, in Feb 2010. It might be a disadvantage that the lab already participated BEFORE the new instrument had been installed and before the training.
Component 4: Analysis of National GMP Samples		
Activities	Status	Comments / remarks
4.1 Collection of national air and mothers' milk samples and preparation of pools where applicable	100%	<ul style="list-style-type: none"> • Last PAS exposures terminated on 31 March 2011; PUFs were collected and distributed to national, international basic POPs and international dioxin lab-ESA • Last PAS exposures terminated on 31 March 2011 (GHA on 30 June 2011); PUFs were collected and distributed to national, international basic POPs and international dioxin

		<p>lab – WA</p> <ul style="list-style-type: none"> • Collection of mothers milk achieved in six out of the eight countries; ECU and BRA unable to implement during project period; air sampling started on 1 July 2010 and lasted until 30 Jun 2011; all countries participated according to schedule. GRULAC • All eight countries have collected mothers' milk samples. Shipment went throughout 2011 and did not go well since in two shipments, a total of three bottles did break. The sample from Samoa could not be retrieved until Jun 2011. Accidentally, one sample was pooled and analyzed but consisted of samples from three countries.
4.2 Exchange of national samples for POPs analysis in developing country laboratory and mirror analysis in experienced back-up laboratory	100%	<ul style="list-style-type: none"> • The majority of the samples were shipped in April 2011 to IVM VU University; only Egypt sent mirror samples to MTM Oerebro since no other dioxin lab in the project. Samples have been analyzed by the expert laboratory; however, only a small number of developing country laboratories submitted their results for comparison. Where available, they are shown in the reports by the back-up laboratories, which are available on the project's website. • All samples available were shipped to the reference laboratory CSIC (Barcelona, Spain) until September 2011 and being analyzed by CSIC and the national labs until 31 December 2011. The sample exchange between national laboratories and expert laboratory was completed; results will be reported in the CSIC-authored national reports and the national reports authored by the participating country by the end of 2011 – GRULAC • Despite several efforts and reminders, most countries did not send national samples to the back-up labs for analysis of basic POPs or dioxin-like POPs. The number of national samples was lower than expected. The offer expired in December 2011. (PI)
4.3 Evaluation of analytical data and interpretation of results	100%	<ul style="list-style-type: none"> • Analysis of the samples has been completed in national developing country laboratory and in expert back-up lab. The number of matrices and results for mirror analysis were less than expected. Actual completion date end of 2011. - ESA + WA • Expert back-up lab in close cooperation with the national labs exchanged samples and results on analytical data; the results are exported in both the national reports from the participating developing country and the expert laboratory. It needs to be highlighted that only a small portion of samples were analysed in both laboratories; assessment to be done in final report – GRULAC
Component 5: Development of Long-term Strategy for GMP under Effectiveness Evaluation		
Activities	Status	Comments / remarks
5.1 Organization of a workshop to evaluate the project outcomes and communicate the results and lessons learned	100%	<ul style="list-style-type: none"> • The WS took place in Amsterdam, Feb/Mar 2011 and was jointly organized for the two GEF MSP projects in Africa. The WS was held earlier than anticipated to organize the final work and close gaps. In addition, a brainstorming meeting for all executing institutions and experts was held in Geneva, 14-15 July 2011 • Regional results and training workshop (21-23 March 2011) undertaken in Barcelona with eight GEF and three SAICMQSP countries present together with all expert labs. Report finalized and published • Held 9-10 June 2011 in Suva, Fiji. Solomon Islands unable to attend for unknown reasons

<p>5.2 Development of long-term strategies for future contributions to the Global Monitoring of POPs</p>	<p>90%</p>	<ul style="list-style-type: none"> • Plans for follow up including national and regional strategies were developed at the final results' WS in Amsterdam, Feb/Mar 2011, and underlined during SC COP-5, Apr 2011. At the global meeting of coordinators in July 2011, it was agreed that four FSP projects on POPs monitoring including assistance to POPs laboratories in developing countries being developed and submitted to the GEF for consideration of funding. It was suggested to combine the two African projects (under GEF-4 there were one for West Africa and one for East-Southern Africa) into one African project. There is still a need to improve the capacity of African countries to sample and measure all POPs in the environment and in humans. With such capacity generated, it is expected that the POPs monitoring issue be of higher priority in African countries. For 2013/2014, the next round of mothers' milk sampling is planned through a joint project by UNEP/WHO and with the support of multiple donors such as GEF, European Commission, UNEP and WHO. (ESA + WA) • Started with national reports and Barcelona workshop; In addition, a brainstorming meeting for all executing institutions and experts was held in Geneva, 14-15 July 2011. Final report expected to be completed by 31 March 2012. Plans for follow up including national and regional strategies were developed at the final results' WS in Barcelona, Mar 2011, and underlined during SC COP-5, Apr 2011. At the global meeting of coordinators in July 2011, it was agreed that four FSP projects on POPs monitoring including assistance to POPs laboratories in developing countries being developed and submitted to the GEF for consideration of funding. There is still a need to improve the capacity in GRUGRULAC to sample and measure all POPs in the environment and in humans. With such capacity generated, it is expected that the POPs monitoring issue be of higher priority in GRUGRULAC countries. For 2013/2014, the next round of mothers' milk sampling is planned through a joint project by UNEP/WHO and with the support of multiple donors such as GEF, European Commission, UNEP and WHO.
<p>5.3 Diffusion of results and strategies</p>	<p>90%</p>	<ul style="list-style-type: none"> • Publications and presentations in preparation, developing country participants presented a large number of results at the international conference, Dioxin2011, Brussels, Belgium; August 2011. The national institutions' and the UNEP webpages are updated regularly. (ESA + WA + GRULAC)

Annex 8: Review of Project Design

Table 2: Assessment of the Quality of the Project Design			
Relevance		Evaluation Comments	Prodoc reference
Are the intended results likely to contribute to UNEPs Expected Accomplishments and programmatic objectives?		Yes. This whole project is about building capacity in 28 countries of 4 sub-regions in order to produce/contribute quality data for GMP of POPs as per COP3 decision SC-3/19. POPs are classified as harmful substances (and hazardous wastes), one of the priority area of UNEP.	Section 2.1
Does the project form a coherent part of a UNEP-approved programme framework?		Yes. There is no explicit mention in project document about approved framework but management of POPs, harmful substances and hazardous wastes, is a priority area of UNEP.	Section 2.1
Is there complementarity with other UNEP projects, planned and on-going, including those implemented under the GEF?		Yes. Linkages with the two following GEF/UNEP projects: “Regionally based Assessment of Persistent Toxic Substances (PTS)” (2001-2003) and “Assessment of existing capacity and capacity building needs to analyse POPs in developing countries”(2005 – 2008)	Sections 2.3, 2.6 and 2.7
Are the project’s objectives and implementation strategies consistent with:	i) Sub-regional environmental issues and needs?	Yes. Regional approach justified for cost effectiveness as countries of the sub-regions have similar gaps and needs as reported in the two previously mentioned projects: Regionally based assessment and Assessment of existing capacity and capacity needs	Sections 2.6 and 2.7
	ii) the UNEP mandate and policies at the time of design and implementation?	Yes. Priority area of UNEP. COP3 Decision SC-3/19	Section 2.1
	iii) the relevant GEF focal areas, strategic priorities and operational programme(s)? (if appropriate)	Yes. It is not explicitly mentioned in the project document, but POPs, as chemicals, is one of the GEF focal areas.	
	iv) Stakeholder priorities and needs?	Yes. One of the obligations of Parties to the	Sections 2.1

		Stockholm Convention is the monitoring of POPs.	and 2.4
Overall rating* for Relevance			HS
Intended Results and Causality			
Are the objectives realistic?		<p>The goal of the project is to build regional capacity on analysis and data generation for POPs in core matrices for the Global POPs Monitoring (GMP) to enable participating countries in these four sub-regional projects to contribute to the global report to be submitted to the Conference of the Parties (COP).</p> <p>Yes. This goal is realistic as some capacity for POPS analysis already exists in some of the participating countries. For example, the Department of Chemistry of University of Nairobi has a Tier 3 laboratory for analysis of POPs.</p>	<p>Section 3.2</p> <p>Section 3.6</p>
Are the causal pathways from project outputs [goods and services] through outcomes [changes in stakeholder behaviour] towards impacts clearly and convincingly described? Is there a clearly presented Theory of Change or intervention logic for the project?		<p>Yes. The intervention logic (Project Logical Framework) for the project is clear and coherent. The impact of the project to build capacity in order to produce quality data for GMP is well described.</p> <p>The proposed indicators and means of verification are adequate for each of the expected outcomes to occur.</p> <p>All of the assumptions made are realistic except for one “<i>POPs laboratories are operational</i>” for Output 1.3 in Appendix 1. At this stage, most of the POPs laboratories are not operational for POPs analysis as most of them require capacity building in terms of personnel training, training on SOPs, etc. and these are planned at a later stage of the project.</p>	<p>Appendix 1</p> <p>Sections 2.5, 3.3; and Appendix 1</p> <p>Appendix 1</p> <p>Appendix 1</p> <p>Appendix 2</p>
Is the timeframe realistic? What is the likelihood that the anticipated project outcomes can be achieved within the stated duration of the project?		<p>Yes, the timeframe provided is adequate if the project is run in only one sub-region. However, given that the same project is run in parallel in 4 sub-regions (same period of implementation: March/April 2009 to Aug/Sept 2010) involving a</p>	<p>Appendix 2</p>

	total of 28 countries, and the overall management/supervision and technical assistance being provided by the same project management team, this timeframe is no longer realistic . Just to identify the needs for participating laboratories (done by the same team/unit) would require more than 3 months). So there is limited time allowed for start-up / contingencies / procurement and there is high likelihood of delays in project delivery.	
Are the activities designed within the project likely to produce their intended results	Yes. The activities laid out in the work plan are adequate and likely to produce intended results. However, while these activities are mentioned (not adequately detailed or described though) in Section 2.5 (Stakeholder mapping and analysis), they are not at all mentioned in Section 3.3 (Project Components and expected results). Giving a detailed description of activities in this section would have definitely improved the project document.	Appendix 2 Sections 2.5 and 3.3
Are activities appropriate to produce outputs?	Yes. The activities are appropriate but not necessarily sufficient (e.g. duration of training for personnel) and well enough specified (detailed) to produce quality outputs: producing quality data in POPs analysis requires expertise, experience and skill.	Appendix 2 Section 2.5
Are activities appropriate to drive change along the intended causal pathway(s)	The activities, although not adequately described in the project document, are appropriate to drive change along the intended causal pathways.	Appendix 2 Sections 2.5
Are impact drivers, assumptions and the roles and capacities of key actors and stakeholders clearly described for each key causal pathway?	Yes. The roles of the key actors/stakeholders for project implementation at global level (implementation agency) and sub-regional level are clearly defined. But at national level, the roles are not well defined in the project document. In Section 5 (Stakeholder participation), it is mentioned key stakeholders and major beneficiaries of the project but the roles of these key stakeholders are not clearly defined. For example, there is no clear	Sections 2.5 Section 4 Section 5

	mention about the identity of the national coordinator or lead institution of the project.	
Overall rating* for Intended Results and causality		S
Efficiency		
Are any cost- or time-saving measures proposed to bring the project to a successful conclusion within its programmed budget and timeframe?	Yes. It is mentioned in the project document that for cost effectiveness, only laboratories that have at least the basic analytical equipment and that have staff trained in basic analytical procedures will participate in the project.	Section 6.3
Does the project intend to make use of / build upon pre-existing institutions, agreements and partnerships, data sources, synergies and complementarities with other initiatives, programmes and projects etc. to increase project efficiency?	Yes. It is envisaged to build upon experiences gained in the UNEP/GEF project on “ <i>Assessment of Existing Capacity and Capacity Building Needs to analyse POPs in Developing Countries</i> ”. Some participating laboratories of the GMP project participated in this project: e.g. Department of Chemistry University of Nairobi, Kenya; LATU, Uruguay. For the GMP project, the ETQCL laboratory in Mali is the sub-regional coordinator for the West Africa sub-region. ETQCL was previously selected as regional hub for the POPs analysis training activities in the sub- region in the context of the global UNEP/GEF Laboratory Project.	Section 4 Section 3.6 of project document for ESA and Section 3.6 for LAC Section 3.5 of project document for WA
Overall rating* for Efficiency		S
Sustainability / Replication and Catalytic effects		
Does the project design present a strategy / approach to sustaining outcomes / benefits?	No. No sustainability strategy is developed in the project document. It is assumed that as the participating countries are Parties to the Stockholm Convention, they will have included sustainability measures into their national planning and budgeting processes for compliance. Planning/proposing for POPs monitoring activities in countries where capacity for POPs analysis would be built would have ensured sustainability of benefits of the project.	Sections 3.8 and 3.10

<p>Does the design identify the social or political factors that may influence positively or negatively the sustenance of project results and progress towards impacts? Does the design foresee sufficient activities to promote government and stakeholder awareness, interests, commitment and incentives to execute, enforce and pursue the programmes, plans, agreements, monitoring systems etc. prepared and agreed upon under the project?</p>	<p>No. No potential social or political factor that may influence the impact of the project has been identified in the project document. No specific activity to raise awareness of Governments or national stakeholders at national level is planned. Only sub-regional workshops are planned.</p>	<p>Appendix 2</p>	
<p>If funding is required to sustain project outcomes and benefits, does the design propose adequate measures / mechanisms to secure this funding?</p>	<p>No. Measures / mechanisms to secure funding to sustain project outcomes are not mentioned in the project document. It is assumed that for compliance, the participating countries, Parties to the Stockholm Convention, will have included sustainability measures into their national planning and budgeting processes.</p>	<p>Section 3.8</p>	
<p>Are there any financial risks that may jeopardize sustenance of project results and onward progress towards impact?</p>	<p>No. No financial risks have identified in the project document that may jeopardize sustenance of project results. However, availability of financial resources is mentioned as assumption in the project logical framework.</p>	<p>Appendix 1</p>	
<p>Does the project design adequately describe the institutional frameworks, governance structures and processes, policies, sub-regional agreements, legal and accountability frameworks etc. required to sustain project results?</p>	<p>No. The institutional frameworks, governance structures and processes to sustain project results are not explicitly mentioned in the project document. However, the project anticipates that the structures and frameworks established for the development of the National Implementation Plan (NIP) for POPs will be used for follow up on project activities on a longer term to serve national efforts to comply with the Stockholm Convention.</p>	<p>Section 3.10</p>	
<p>Does the project design identify environmental factors, positive or negative, that can influence the future flow of project benefits? Are there any project outputs or higher level results that are likely to affect the environment, which, in turn, might affect sustainability of project benefits?</p>	<p>No. No environmental factor that can influence the future flow of project benefits has been identified. And, there do not appear to be any output or result that could affect the environment and, consequently, sustainability of project benefits.</p>		
<p>Does the project design foresee adequate measures to catalyze behavioural changes in terms of use and application by the relevant stakeholders of (e.g.):</p>	<p>i) technologies and approaches show-cased by the demonstration projects; ii) strategic programmes and plans developed</p>	<p>No. No demonstration project is planned in the project. Yes. This laboratory capacity building project is to enable participating countries to contribute quality</p>	<p>Sections 2.1, 3.1, 3.7</p>

		data to the GMP report	
	iii) assessment, monitoring and management systems established at a national and sub-regional level	No. POPs monitoring systems/plans at national level are not explicitly planned in the project document. However, the project document mentions that strengthening the analytical performance and international acceptance of the analytical data will significantly increase the monitoring and analytical capacity of the countries and thus, they will become more active contributors to the GMP.	Sections 3.1, 3.7
Does the project design foresee adequate measures to contribute to institutional changes? [An important aspect of the catalytic role of the project is its contribution to institutional uptake or mainstreaming of project-piloted approaches in any regional or national demonstration projects]		No. No measures that will contribute to institutional changes are planned in the project document. The project anticipates that those countries that will have built capacity for POPs analysis will follow up on project activities on a longer term (after the project) for compliance with regards to POPs monitoring and reporting.	Section 3.10
Does the project design foresee adequate measures to contribute to policy changes (on paper and in implementation of policy)?		No. No measures that will contribute to policy changes are planned in the project document.	
Does the project design foresee adequate measures to contribute to sustain follow-on financing (catalytic financing) from Governments, the GEF or other donors?		No. No measures to contribute to sustain follow-on financing (catalytic financing) from Governments, the GEF or other donors are planned in the project document. It is mentioned, however, that following this project (first phase of GMP) under evaluation, the GMP will be further developed and respective global follow-up concepts and projects will build on the capacity developed and lessons learned during this project. It is therefore anticipated that follow-up GEF funded projects are to be developed.	Section 3.9
Does the project design foresee adequate measures to create opportunities for particular individuals or institutions (“champions”) to catalyze change (without which the project would not achieve all of its results)?		Yes. The whole project is about laboratory capacity building for POPs analysis. Expert laboratories from Free University Amsterdam-IVM, the Netherlands, and Örebro University-MTM Centre, Sweden, have been identified for training and mirror analysis of samples, and organization of intercalibration studies. The WHO Reference laboratory for mothers’ milk at Chemisches Untersuchungsamt Freiburg (CVUA Freiburg),	Section 4

	Germany, will assist in matters related human milk analysis. The RECETOX laboratory, Czech Republic will be involved in the coordination of air monitoring activities.	
Are the planned activities likely to generate the level of ownership by the main national and regional stakeholders necessary to allow for the project results to be sustained?	<p>Yes. In the text (Section 3.3: <i>Project components and expected results</i>), the activities to achieve those results are not mentioned. However, they are given in Appendix 2 (<i>Work plan and timetable</i>).</p> <p>Some inconsistencies are noted, for example, in the Section 3.3, the title for Component 5 is “<i>Governments and stakeholders are aware on details in implementation of the GMP issue in their national implementation plan and reporting to the COP</i>” while the title for the same component in the Work plan (Appendix 2) reads “<i>Development of Long-term Strategy for GMP under Effectiveness Evaluation</i>”.</p> <p>Section 5 (<i>Stakeholder participation</i>) mentions that the key stakeholders and beneficiaries Governmental Ministries and Agencies including national focal points for the Stockholm Convention, research institutions and to a lesser extent private institutions. However, according to planned activities, only participating laboratories and officers of ministries of environment and health will be directly involved in project activities. Planning a national steering committee would have ensured higher level of ownership of the project.</p>	<p>Section 3.3 Appendix 2.</p> <p>Sections 2.5 and 5</p>
Overall rating* for Sustainability / Replication and Catalytic effects		S
Risk identification and Social Safeguards		
Are critical risks appropriately addressed?	Yes. Two risks have been identified in the project document in the Section 3.5 (<i>Risk analysis and risk management measures</i>). These concern logistical risks and the ability to perform laboratory work.	Section 3.5

	These risks have not been rated however, but they are adequately addressed by measures described in the text. The evaluation considers that “ <i>stability of personnel</i> ” (or movement of trained personnel), mentioned as assumption in the logical framework (assumption for Outcome 2 in logical framework) also constitutes a risk.	Appendix 1
Are assumptions properly specified as factors affecting achievement of project results that are beyond the control of the project?	Yes. Some of the assumptions mentioned in the logical framework can also be considered as impact drivers in that the project will influence these factors. Most of the assumptions are not within the control of the project.	Appendix 1
Are potentially negative environmental, economic and social impacts of projects identified?	No. However, it is mentioned that countries participating in the mothers’ milk study will sign the statement of interest by both, health and environment sector as required by WHO. Otherwise, no potentially negative impacts are identified in the project documents	Section 3.11
Overall rating* for Risk identification and Social Safeguards		S
Governance and Supervision Arrangements		
Is the project governance model comprehensive, clear and appropriate?	No. The overall governance model is not well presented in the project document. While in Section 4, it is mentioned that UNEP/DTIE Chemicals Branch, is the executing agency and will provide administrative and technical supervision in the implementation of the project, it is only in Section 6 that there is mention that a project Steering Committee will receive periodic reports on progress and will make recommendations to UNEP concerning the need for revision on any aspects of the Results Framework. And the role, responsibility and composition of this project Steering Committee is given in Appendix 4. All this information could have been given in the same section for better comprehension of the document.	Section 4 Section 6 Appendix 4
Are roles and responsibilities clearly defined?	Yes. Role and responsibility of the project Steering Committee is briefly mentioned in the project	Appendix 4

	document. But terms of reference are not provided.	
Are supervision / oversight arrangements clear and appropriate?	Yes. It is mentioned in project document that project supervision / oversight of activities including management of funds will be done by a Task Manager (TM) at UNEP/GEF. The role and responsibilities of the TM is briefly described.	Section 6
Overall rating* for Governance and Supervision Arrangements		S
Management, Execution and Partnership Arrangements		
Have the capacities of partner been adequately assessed?	Yes. The capacities of the laboratories (expert and participating country laboratories) have not been explicitly assessed but, either these laboratories (expert ones) are well-established and reputable, and have been chosen for their expertise in POPS analysis. Or others (participating laboratories) have participated in UNEP/GEF project on “ <i>Assessment of Existing Capacity and Capacity Building Needs to analyse POPs in Developing Countries</i> ”.	Section 4 Sections 2.5 and 3.6
Are the execution arrangements clear?	No. The execution arrangement given in the project document is not properly described in the project document For these four sub-regional projects, the overall coordination and supervision will be provided by UNEP/DTIE Chemicals Branch, the executing agency, and will liaise closely with WHO, responsible for coordination of human milk activities. It is mentioned that the day-to-day project monitoring is the responsibility of the project management team. But this project management team has not been defined and its composition not mentioned in the project document. Similar, a Project Manager is mentioned in the same section and is responsible to inform UNEP DGEF of any delays or difficulties faced during implementation. But this Project Manager, nor its role and responsibilities have not been defined anywhere in	Section 4 Section 6 Section 6

	<p>the project document. It is also not mentioned how and under what terms of reference this Project Manager would be recruited or nominated.</p> <p>At sub-regional level the mechanism proposed is considered adequate. A sub-regional coordinator will be contracted to coordinate project activities (e.g. University of Nairobi for ESA sub-region). A regional team comprised of the sub-regional coordinator, local experts of participating countries is also planned.</p> <p>However, coordination and supervision at national level is not clearly defined in the project document. It is only mentioned that the partner laboratories of participating countries will identify and assign a national coordinator that will liaise with the sub-regional coordinator.</p>	<p>Section 4</p> <p>Appendix 4</p> <p>Section 2.5 (page 7)</p>
Are the roles and responsibilities of internal and external partners properly specified?	Yes. Detailed responsibilities of sub-regional coordinator, participating laboratories and expert laboratories are given. But the role and responsibilities of WHO are not given.	Section 2.5
Overall rating* for Management, Execution and Partnership Arrangements		S
Financial Planning / budgeting		
Are there any obvious deficiencies in the budgets / financial planning?	<p>No. The financial planning is detailed including a breakdown of GEF funding and co-finance by component and yearly in the UNEP budget format. For GEF funds, there is a detailed breakdown of budget allocation by component for detailed planned activities, which are likely to be realistic. For the four sub-regional projects, the ratio of co-finance (in-kind and cash) to GEF funds is nearly 1:1 (Table 1 of this report).</p> <p>Letters of endorsement dated 2008 from the participating countries are annexed to the project documents.</p> <p>Letters of commitment for co-finance from partners/bilateral donors (e.g. Secretariat of the Stockholm Convention, Environment Canada or</p>	<p>Appendix 6</p> <p>Appendix 8</p> <p>Appendix 7</p>

	Swedish Chemical Agency) were submitted in 2008 and correspond to amounts indicated in the Table 1 of this report.	
Cost effectiveness of proposed resource utilization as described in project budgets and viability in respect of resource mobilization potential	The budget appears to be activity-based and is adequate with the aim to build capacities for POPs analysis in 8 and 6 countries of the LAC & Pacific sub-regions and ESA & WA sub-regions respectively (Table 1 of this report). In terms of immediate resource mobilisation, the ratio of GEF budget to co-finance is approximately 1:1 (Table 1 of this report).	Sections 1, 2 and 7 Appendix 6
Financial and administrative arrangements including flows of funds are clearly described	Yes. The flow of funds is clearly described in the detailed UNEP format budget lines provided in Appendix 6 of the project document. In particular, the project budget includes sub-contracts with sub-regional coordinators that will provide coordination at regional level and technical partners (expert laboratories) that will build technical capacities of participating laboratories. UNEP DTIE, Chemicals branch is described as GEF executing agency and also the international coordinator. Although not explicitly mentioned in the project document, it will receive and manage GEF funds. There is limited reference to administrative arrangements related to co-executing agencies/partners, for example no mention is made about the role of WHO, who is implementing a global mother's milk survey. The coordination and supervisory roles of the project management team, the task manager, and the project manager are not properly defined. Terms of reference for same are not given.	Appendix 6 Section 4 Section 4 Section 6
Overall rating* for Financial Planning / budgeting		S
Monitoring		
Does the logical framework: <ul style="list-style-type: none"> capture the key elements in the Theory of Change for the project? 	Yes. The logical framework given as Appendix 1 of the project document captures key elements of the	

<ul style="list-style-type: none"> • have ‘SMART’ indicators for outcomes and objectives? • have appropriate 'means of verification' • adequately identify assumptions 	<p>theory of change (TOC) and is coherent. However, misuse of the term “<i>outputs</i>” instead of “<i>activities</i>” used in the logical framework, which should read “<i>Activities for Outcome</i>” instead of “<i>Outputs for Outcome</i>” is noted in the logical framework.</p> <p>The objectively verifiable indicators given in the logical framework are adequate to monitor progress. Some like training of laboratory personnel and laboratories participating in intercalibration studies can be considered to be SMART indicators. In some cases, the evaluation feels a quantified indicator would have improved the logical framework. For example, indicating the number of countries contributing to GMP would have ensured impact and effectiveness of the project.</p> <p>The means of verification mentioned in the logical framework are appropriate.</p> <p>Many of the assumptions relate to the engagement of stakeholders, in particular preparedness and readiness of participating laboratories to receive training for POPs analysis, willingness of countries to implement NIP components, and commitment of resources.</p> <p>The logical framework is complemented by a project workplan (Appendix 2) which includes timing for activities (and indirectly, for outputs) and timing for key deliverables after start of project (Appendix 3).</p> <p>The logical framework is further complemented by a costed monitoring plan that gives the timing and responsible parties for a number reports that include inception report, Project Implementation Review (PIR) reports and the terminal report.</p>	<p>Appendix 1</p> <p>Appendix 1</p> <p>Appendix 1</p> <p>Appendix 2</p> <p>Appendix 3</p> <p>Appendix 4</p>
<p>Are the milestones and performance indicators appropriate and sufficient to foster management towards outcomes and higher level objectives?</p>	<p>Yes. The performance indicators in the logical framework are largely process/activity based and are considered adequate to foster management</p>	<p>Appendix 1</p>

	<p>towards intended outcomes.</p> <p>There are no milestones as such but timing of key deliverables is given.</p> <p>The approach to management seems to be activity-based rather than outcome-based but as mentioned in the project document (5th Paragraph of Section 6) <i>“Project supervision will take an adaptive management approach, the Task Manager will develop a project supervision plan at the inception of the project which will be communicated to the project partners during the inception report”</i>.</p>	<p>Appendix 3</p> <p>Section 6</p>
Is there baseline information in relation to key performance indicators?	<p>No. No baseline information is provided in the project document for the key performance indicators. However some baseline information is given in Section 2.6 (Baseline analysis and gaps) regarding levels of POPs in the environment in Sub-Saharan countries. More detailed information regarding the existing capacities and needs of the participating countries for POPs analysis is given in Section 3.6 (Consistency with national priorities or plans) of the project document.</p>	<p>Appendix 1</p> <p>Section 3.6</p>
Has the method for the baseline data collection been explained?	<p>No. However, as explained in the project document, the information regarding existing capacities and needs of countries for POPs analysis was gathered during the regional organization group inception workshop held for each sub-region (Nairobi, 29 – 31 October 2007 for ESA & WA; Beijing, 17-19 September 2007 for Pacific; Mexico City, 14 – 16 January 2008 for LAC)</p>	<p>Section 3.6</p>
Has the desired level of achievement (targets) been specified for indicators of Outcomes and are targets based on a reasoned estimate of baseline?	<p>As mentioned just before, no baseline information is given in the logical framework. Some baseline information regarding existing capacities and needs is given in Section 3.6.</p> <p>Yes. The desired level of achievement for the indicators has been specified for most Outcomes. Most are descriptive but some are quantified, for example up to 5 laboratory staff to participate in</p>	<p>Appendix 1</p>

	two thematic training courses.	
Has the time frame for monitoring activities been specified?	Yes. The timeframe for progress monitoring includes day to day monitoring, and periodic reporting according to the standard requirements for GEF projects: half-yearly progress reports including, financial report and workplan, and annual Project Implementation Review (PIR). At sub-regional level, the day to day management and monitoring is done by the coordinator of the regional team and submit technical and financial reports to DTIE Chemicals half-yearly.	Appendix 4 Appendix 4
Are the organisational arrangements for project level progress monitoring clearly specified?	Yes. The organisational arrangements are clear as given in the Table of Appendix 4. However as mentioned previously, the role and responsibilities of the Project Coordinator have not been clearly defined in the project document. An independent financial audit is planned at the end of project implementation.	Table of Appendix 4 Table of Appendix 4
Has a budget been allocated for monitoring project progress in implementation against outputs and outcomes?	Yes. US\$ 30,000 is planned for terminal evaluation. Workshop costs are held jointly with lessons Learned and good practices meetings.	Appendix 4
Overall, is the approach to monitoring progress and performance within the project adequate?	Yes. The overall approach to monitoring progress in terms of activities and deliverables is adequate and clearly linked to project reporting, oversight and governance. However, as pointed out previously, the roles and responsibilities of Task Manager, Project Manager, Project Coordinator and Steering Committee have not been clearly defined in the project document. Terms of reference for same are not given.	Appendix 4 Section 6
Overall rating* for Monitoring		HS
Evaluation		
Is there an adequate plan for evaluation?	Yes. The project document anticipates an independent terminal independent evaluation that will be managed by the Evaluation and Oversight Unit (EOU) of UNEP. No midterm review is mentioned in the project document.	Last Para. Section 6 Appendix 4

	A detailed of the terms of reference for this terminal evaluation is given in Appendix 5 of the project document.	
Has the time frame for Evaluation activities been specified?	Yes. The terminal evaluation will take place at the end of project implementation. A review of the quality of the evaluation report will be done by EOU and submitted along with the report of the terminal evaluation to the GEF Evaluation Office not later than 6 months after the completion of the evaluation.	Section 6, last para.
Is there an explicit budget provision for mid term review and terminal evaluation?	Yes. A budget of US \$30,000 is planned in each of the project documents of the four sub-region	Table of Appendix 4
Is the budget sufficient?	Yes. An international consultant is planned to evaluate the four sub-regional projects, \$ 120,000 is largely sufficient.	Section 6 of Appendix
Overall rating* for Evaluation		HS

Annex 9: Evaluation Framework

Evaluation Criteria	Definition	Key Evaluation Questions
1. Attainment of Objectives and Planned Results		
A. Outputs Achieved	Extent to which the project succeeded in producing planned outputs	How successful were the projects in producing the planned outputs? What were the factors that facilitated / affected the achievements of the planned outputs and outcomes?
B. Relevance	Extent to which the projects' objectives and implementation were consistent with (i) Sub-regional environmental issues and needs (ii) the UNEP mandate and policies at the time of design and implementation (iii) the relevant GEF focal areas, strategic priorities and operational programmes	To what extent do the projects' objectives consistent to (i) countries' needs for POPs analysis (ii) UNEP's mandate and policies and (iii) GEF focal areas?
C. Effectiveness	Extent to which the projects have achieved their main objective to objective to improve the capacity of the participating countries to contribute to national POPs analysis to the reporting under the Global Monitoring of POPs.	To what extent have the capacities of the participating countries been built to contribute to GMP? What were the factors that affected the achievements of the planned objectives?
D. Efficiency	Assessment of cost-effectiveness and timeliness of project execution.	Are there any cost- or time-saving measures put in place for implementation of project activities? What the factors that caused delays and have affected project execution, costs and effectiveness?
E. Review of Outcomes to Impacts (ROtI)	Reconstruction of the logical pathways from project outputs over achieved objectives towards impacts In particular, extent to which the project has to date contributed, and is likely in the future to further contribute to changes in stakeholder behaviour as a result of i) laboratory personnel trained to high and international standard, ii) improved regional awareness of POPs exposures, iii) increased knowledge of POPs presence in the countries at government and stakeholders level and the likelihood of those leading to changes in the global system for monitoring of the effectiveness of the implementation of the Stockholm convention: a) countries enabled to strengthen the monitoring capacities at national level and to contribute national data to the GMP in a regionally and internationally agreed and harmonized approach.	How successful were the projects in supporting partners in 27 countries in the four sub-regions to perform sampling and analysis of POPs in relevant matrices according to standard operating procedures (SOPs) and international standards? Did the projects assist the countries in training laboratory personnel to high standards, including adequately equipping laboratories and training personnel to undertake sampling and analysis? To what extent did the projects assist the countries to improve their experiences in participation in international inter-calibration studies, in the establishment and consolidation of a functional national system for handling requests, carry out risk assessment decision-making and administrative tasks? How successful were the projects in assisting their partners to make available high quality data on presence of POPs in participating countries? Did the projects assist the countries to increase awareness of governments and stakeholders on details in implementation of the GMP issue in their national implementation plan and reporting to the COP?

Evaluation Criteria	Definition	Key Evaluation Questions
2. Sustainability and catalytic role		
A. Sustainability	Probability that countries of the four sub-regions will continue to contribute to GMP after the project.	<p>To what extent is the continuation of project impact dependent on continued financial support?</p> <p>To what extent is the continuation of project benefits dependent on socio-economic factors?</p> <p>To what extent is the sustenance of the results and onward progress towards impact depend on issues relating to institutional frameworks and governance of, e.g. national policies, donor support policies, etc?</p>
B. Catalytic role	Extent to which the projects have led to other benefits and possible replication in other regions	<p>To what extent has the project catalysed changes in terms of use and application for example establishing POPs monitoring plans at national level?</p> <p>To what extent has the project provided incentives (social, economic, market based, competencies etc.) to contribute to catalyzing changes in stakeholder behaviour?</p> <p>To what extent has the project contributed to institutional changes?</p> <p>To what extent has the project contributed to policy changes (on paper and in implementation of policy)?</p> <p>To what extent has the project contributed to sustained follow-on financing (catalytic financing) from Governments or other donors?</p> <p>To what extent has the project created opportunities for particular individuals or institutions (“champions”) to catalyse change (without which the project would not have achieved all of its results)?</p> <p>To what extent has the project’s lessons and experiences been replicated or scaled up in other regions?</p>
3. Process affecting attainment of project results		
A. Preparation and readiness	Adequate project design	<p>Were the project’s objectives and components clear, practicable and feasible within its timeframe? Were the capacities of executing agencies properly considered when the project was designed? Was the project document clear and realistic to enable effective and efficient implementation?</p> <p>Were the partnership arrangements properly identified and the roles and responsibilities negotiated prior to project implementation? Were</p>

		<p>counterpart resources (funding, staff, and facilities) and enabling legislation assured? Were adequate project management arrangements in place? Were lessons from other relevant projects properly incorporated in the project design? Were lessons learned and recommendations from Steering Committee meetings adequately integrated in the project approach?</p>
B. Implementation approach and adaptive management	<p>Analysis of approaches used by the project, its management framework, the project's adaptation to changing conditions (adaptive management), the performance of the implementation arrangements and partnerships, relevance of changes in project design, and overall performance of project management</p>	<p>To what extent did the project management adapt to changes (of any kind during implementation) during implementation? To what extent were the project implementation mechanisms of the project document followed? To what extent did the project implementation address stakeholder participation and public awareness? To what extent was the steering committee effective in providing supervision and guidance to the project? How did the units and committees set up at national and sub-regional levels perform? To what extent were the project's monitoring plan applied and evaluation tools effective?</p>
C. Stakeholder participation and public awareness	<p>Level of (1) information dissemination between stakeholders, (2) consultation between stakeholders, and (3) active engagement of stakeholders in project decision making and activities.</p>	<p>What was the approach used to identify stakeholders? What was the degree and effectiveness of public awareness activities? How the results of the project engaged key stakeholders in building regional capacity on analysis and data generation for POPs to enable participating countries to contribute to the global report submitted to the COP.</p>
D. Country Ownership and Driven-ness	<p>Performance of the Governments of the countries involved in the project</p>	<p>Did the Governments assumed responsibility for the project and provided adequate support to project execution? Were the political and institutional frameworks of the participating conducive to project performance? Did the Governments promote participation of communities and non-governmental organisations? How responsive were the Governments were to the National Executing Agencies' coordination and guidance and to UNEP supervision?</p>
E. Financial planning and management	<p>Assessment of financial planning: quality and effectiveness of financial planning and control of financial resources</p>	<p>Were the standards applied and timeliness of financial planning, management and reporting adequate? Were standard procedures for recruitment of staff or procurement of</p>

		<p>goods and services followed? To what extent has expected co-financing materialized during project implementation? Have any irregularities in procurement, use of financial resources and human resource management, occurred? Were adequate measures taken by the EA or IA to prevent such irregularities?</p>
<p>F. Monitoring and evaluation</p>	<p>Assessment of the quality, application and effectiveness of project monitoring and evaluation plans and tools, including an assessment of risk management based on the assumptions and risks identified in the project document.</p>	<p>Was the logical framework an adequate planning and monitoring instrument for project implementation? Were the indicators given in the logical framework to follow and measure progress of project? Was baseline information on performance indicators been presented in a clear manner? Have the responsibilities for M&E activities been clearly defined? Have specific targets been specified for project outputs? Has the desired level of achievement been specified for all indicators of objectives and outcomes? Were there adequate provisions in the legal instruments binding project partners to fully collaborate in evaluations? Has the M&E plan been adequately budgeted? Was M&E operational and facilitated timely tracking of results and progress?</p>

Annex 10: Summary of Project Expenditures

Project: GFL/2328-2760-4A80 Rev.03		Supporting the POPs Global Monitoring Plan in the Eastern and Southern African Region				
Executing Agency: UNEP/DTIE		UNEP/DTIE				
Source of funding (noting whether cash or in-kind):		GEF Funding - Cash				
		2009	2010	2011	2012	Total
		Actual	Actual	Budget	Budget	
UNEP BUDGET LINE/OBJECT OF EXPENDITURE		US\$	US\$	US\$	US\$	US\$
10	PROJECT PERSONNEL COMPONENT					
1100	Project Personnel w/m					
	(Show title/grade)					
1101	Project coordinator (UNEP)	-	20,001.00			20,001.00
1199	Sub-Total	-	20,001.00	-	-	20,001.00
1200	Consultants w/m					
	(Give description of activity/service)					
1202	Consultants w/m			13,099.50	4,400.00	17,499.50
1299	Sub-Total	-	-	13,099.50	4,400.00	17,499.50
1600	Travel on official business (above staff)					
1601	Project coordinator (UNEP)		4,603.36		(438.62)	4,164.74
1699	Sub-Total	-	4,603.36	-	(438.62)	4,164.74
1999	Component Total	-	24,604.36	13,099.50	3,961.38	41,665.24
20	SUB-CONTRACT COMPONENT					
2200	Sub-contracts (MoU's/LA's for non-profit supporting organizations)					
2201	Local lab for POPs analysis	179,000.00	(44,750.00)	44,750.00	65,755.00	244,755.00
2202	Expert labs for regional training/inspection		70,600.00		6,000.00	76,600.00
2203	Expert labs for mirror analysis/intercalibration		13,200.00			13,200.00
2204	Expert lab for mothers' milk analysis		13,650.00			13,650.00
2299	Sub-Total	179,000.00	52,700.00	44,750.00	71,755.00	348,205.00
2999	Component Total	179,000.00	52,700.00	44,750.00	71,755.00	348,205.00
30	TRAINING COMPONENT					
3300	Meetings/conferences (give title)					
3301	National travel for air/mothers' milk monitoring (6)			-		-
3302	Regional participants to training WS			-		-
3303	Expert labs travel to training and WS		31,000.00	8,227.41	(136.71)	39,090.70
3304	Steering group members to meetings		-	12,073.65	(149.51)	11,924.14
3399	Sub-Total	-	31,000.00	20,301.06	(286.22)	51,014.84
3999	Component Total	-	31,000.00	20,301.06	(286.22)	51,014.84
40	EQUIPMENT & PREMISES COMPONENT					
4100	Expendable equipment (items under \$1,500 each, for example)					
4102	Spares and consumables		10,000.00			10,000.00
4103	Reference materials and standards		20,000.00			20,000.00
4104	Air samplers and containers for milk sampling		12,500.00			12,500.00
4199	Total	-	42,500.00	-	-	42,500.00
4199	Sub-Total	-	42,500.00	-	-	42,500.00
4999	Component Total	-	42,500.00	-	-	42,500.00
5200	Reporting costs (publications, maps, newsletters, printing, etc)					
5201	National reports (incl. data reporting)			-		-
5202	Final report		-			-
5203						-
5299	Sub-Total	-	-	-	-	-
5500	Evaluation (consultants fees/travel/DSA, admin support, etc. internal projects)					
5501	Final evaluation		-	-		-
5581	Final Evaluation		-	-		-
5599	Sub-Total	-	-	-	-	-
5999	Component Total	-	-	-	-	-
	TOTAL COSTS	179,000.00	150,804.36	78,150.56	75,430.16	483,385.08

Project No: GFL/2328-2760-4A76/Rev.03
 Project Name: Medium Size Project Supporting the POPs Global Monitoring Plan in the West Africa Region
 Executing Agency: UNEP/DTIE
 Source of funding (noting whether cash or in-kind): GEF Funding - Cash

UNEP BUDGET LINE/OBJECT OF EXPENDITURE		ALLOCATION BY CALENDAR YEAR **				Total US\$
		2009 ACTUAL US\$	2010 ACTUAL US\$	2011 BUDGET US\$	2012 BUDGET US\$	
10	PROJECT PERSONNEL COMPONENT					
1100	Project Personnel w/m (Show title/grade)					
1101	Project coordinator (UNEP)	-	25,239.86	-	4,350.00	29,589.86
1199	Sub-Total	-	25,239.86	-	4,350.00	29,589.86
1200	Consultants w/m (Give description of activity/service)					
1202				18,500.00		18,500.00
1299	Sub-Total	-	-	18,500.00	-	18,500.00
1600	Travel on official business (above staff)					
1601	Project coordinator (UNEP)	3,796.93	(10.00)	6,421.46	10,822.02	21,030.41
1699	Sub-Total	3,796.93	(10.00)	6,421.46	10,822.02	21,030.41
1999	Component Total	3,796.93	25,229.86	24,921.46	15,172.02	69,120.27
2200	Sub-contracts (MoU's/LA's for non-profit supporting organizations)					
2201	Mali for regional delivery	237,000.00	(59,250.00)	67,850.00	19,800.00	265,400.00
2202	Expert labs for regional training/inspection	-	59,600.00			59,600.00
2203	Expert labs for mirror analysis/intercalibration	-	47,500.00			47,500.00
2204	Expert lab for mothers' milk analysis	-	23,200.00			23,200.00
2299	Sub-Total	237,000.00	71,050.00	67,850.00	19,800.00	395,700.00
2999	Component Total	237,000.00	71,050.00	67,850.00	19,800.00	395,700.00
3300	Meetings/conferences (give title)					
3301	National travel for air/mothers' milk monitoring (6)	-	-			-
3302	Regional participants to training WS	-	-	-		-
3303	Expert labs travel to training and WS	-	24,500.00	3,748.83	(13.32)	28,235.51
3304	Steering group members to meetings	-	-	6,861.00	(601.04)	6,259.96
3399	Sub-Total	-	24,500.00	10,609.83	(614.36)	34,495.47
3999	Component Total	-	24,500.00	10,609.83	(614.36)	34,495.47
40	EQUIPMENT & PREMISES COMPONENT					
4100	Expendable equipment (items under \$1,500 each, for example)					
4101	Office supplies (6 computers)	-				-
4102	Spares and consumables	-	15,000.00			15,000.00
4103	Reference materials and standards	-	22,500.00			22,500.00
4104	Air samplers and containers for milk sampling	-	12,500.00			12,500.00
4199	Total	-	50,000.00	-	-	50,000.00
4999	Component Total	-	50,000.00	-	-	50,000.00
5200	Reporting costs (publications, maps, newsletters, printing, etc)					
5201	National reports (incl. data reporting)	-				-
5202	Final report	-	-			-
5203		-				-
5299	Sub-Total	-	-	-	-	-
5500	Evaluation (consultants fees/travel/ DSA, admin support, etc. internal projects)					
5501	Final evaluation	-	-	-		-
5581	Final Evaluation	-	-		34,139.86	34,139.86
5599	Sub-Total	-	-	-	34,139.86	34,139.86
5999	Component Total	-	-	-	34,139.86	34,139.86
	TOTAL COSTS	240,796.93	170,779.86	103,381.29	68,497.52	583,455.60

Project No:	GFU/2328-2760-4A37/Rev 3, GEF Project ID 3663
Project Name:	Supporting the POPs Global Monitoring Plan in the Pacific Islands Region
Executing Agency:	UNEP/DTIE
Source of funding (noting whether cash or in-kind):	GEF Funding - Cash

UNEP BUDGET LINE/OBJECT OF EXPENDITURE		ALLOCATION BY CALENDAR YEAR				
		2009	2010	2011	2012	Total
		ACTUAL US\$	ACTUAL US\$	BUDGET US\$	Budget US \$	US\$
10	PROJECT PERSONNEL COMPONENT					
1100	Project Personnel w/m (Show title/grade)					
1101	Project coordinator (EA)		30,000.00			30,000.00
1199	Sub-Total	-	30,000.00			30,000.00
1200	Consultants					
1201	OPAS Experts			14,000.00		14,000.00
1202	OPAS Experts			6,367.35		6,367.35
1299	Sub-Total			20,367.35		20,367.35
1600	Travel on official business (above staff)					
1601	Project coordinator (EA)		1,682.84	15,533.92	(517.84)	16,698.92
1699	Sub-Total	-	1,682.84	15,533.92	(517.84)	16,698.92
1999	Component Total	-	31,682.84	35,901.27		67,066.27
2200	Sub-contracts (MoU's/LA's for non-profit supporting organizations)					
2201	Local lab for POPs analysis	230,010.10	(57,500.00)	57,500.00		230,010.10
2202	Expert labs for regional training/inspection		35,000.00	20,000.00		55,000.00
2203	Expert labs for mirror analysis/intercalibration		39,550.00			39,550.00
2204	Expert lab for mothers' milk analysis		10,000.00	-		10,000.00
2299	Sub-Total	230,010.10	27,050.00	77,500.00		334,560.10
2999	Component Total	230,010.10	27,050.00	77,500.00		334,560.10
3300	Meetings/conferences (give title)					
3301	National travel for air/mothers' milk monitoring (7)					-
3302	Regional participants to training WS					-
3303	Expert labs travel to WS		15,000.00	30,000.00		45,000.00
3304	Steering group members to meetings		-	3,000.00		3,000.00
3399	Sub-Total	-	15,000.00	33,000.00		48,000.00
3999	Component Total	-	15,000.00	33,000.00		48,000.00
40	EQUIPMENT & PREMISES COMPONENT					
4100	Expendable equipment (items under \$1,500 each, for example)					
4101	Office supplies (7 computers)		-			-
4102	Spares and consumables		20,000.00			20,000.00
4103	Reference materials and standards		5,000.00	15,000.00		20,000.00
4104	Air samplers and containers for milk sampling		15,000.00			15,000.00
4199	Total	-	40,000.00	15,000.00		55,000.00
4999	Component Total	-	40,000.00	15,000.00		55,000.00
5200	Reporting costs (publications, maps, newsletters, printing, etc)					
5201	National reports (incl. data reporting)					-
5202	Final report	-	-	12,000.00		12,000.00
5299	Sub-Total	-	-	12,000.00		12,000.00
5400	Hospitality and entertainment					
5401	Hospitality		-			-
5499	Sub-Total	-	-	-		-
5500	Evaluation (consultants fees/travel/DSA, admin support, etc. internal projects)					
5501	Final evaluation		-	-		-
5599	Sub-Total	-	-	-		-
5999	Component Total	-	-	12,000.00		12,000.00

Project No:		GFL/2328-2760-4A77/Rev No.03					
Project Name:		Supporting the implementation of the Global Monitoring Plan of POPs in Latin America and Caribbean States					
Executing Agency:		UNEP/D/TE					
Source of funding (noting whether cash or in-kind):		GEF Funding - Cash					
		ALLOCATION BY CALENDAR YEAR **					
		2009	2010	2011	2012	2013	Total
		ACTUAL	ACTUAL	BUDGET	BUDGET	BUDGET	
		US\$	US\$	US\$	US\$	US\$	US\$
UNEP BUDGET LINE/OBJECT OF EXPENDITURE							
10	PROJECT PERSONNEL COMPONENT						
1100	Project Personnel w/m						
	(Show title/grade)						
1101	Project coordinator (UNEP)	-	35,000.00	-	-	-	35,000.00
1199	Sub-Total	-	35,000.00	-	-	-	35,000.00
1600	Travel on official business (above staff)						
1601	Project coordinator (UNEP)	206.08	8,230.96	2,244.93	(594.96)	-	10,087.01
1699	Sub-Total	206.08	8,230.96	2,244.93	(594.96)	-	10,087.01
1999	Component Total	206.08	43,230.96	2,244.93	(594.96)	-	45,087.01
2200	Sub-contracts (MoU's/LA's for non-profit supporting organizations)						
2201	Subcontract Stockholm Ctr Uruguay	389,000.00	(97,250.00)	117,250.00	-	-	409,000.00
2202	Expert labs for regional training/inspection	-	58,850.00	-	-	-	58,850.00
2203	Expert labs for mirror analysis/intercalibration	-	51,800.00	-	29,245.00	-	81,045.00
2204	Expert lab for mothers' milk analysis	-	33,850.00	-	-	-	33,850.00
2299	Sub-Total	389,000.00	47,250.00	117,250.00	29,245.00	-	582,745.00
2999	Component Total	389,000.00	47,250.00	117,250.00	29,245.00	-	582,745.00
3300	Meetings/conferences (give title)						
3301	National travel for air/mothers' milk monitoring (10)	-	-	-	-	-	-
3302	Regional participants to training WS	-	-	-	-	-	-
3303	Expert labs travel to training WS, regional conf	-	26,000.00	3,695.88	(2,012.44)	-	27,683.44
3304	Steering group members to meetings	-	-	6,999.65	(12.00)	-	6,987.65
3399	Sub-Total	-	26,000.00	10,695.53	(2,024.44)	-	34,671.09
3999	Component Total	-	26,000.00	10,695.53	(2,024.44)	-	34,671.09
40	EQUIPMENT & PREMISES COMPONENT						
4100	Expendable equipment (items under \$1,500 each, for example)						
4101	Office supplies (10 computers or software)	-	-	-	-	-	-
4102	Spares and consumables	-	40,000.00	5,000.00	-	-	45,000.00
4103	Reference materials and standards	-	50,000.00	-	-	-	50,000.00
4104	Air samplers and containers for milk sampling	-	40,000.00	-	-	-	40,000.00
4199	Total	-	130,000.00	5,000.00	-	-	135,000.00
4999	Component Total	-	130,000.00	5,000.00	-	-	135,000.00
5200	Reporting costs (publications, maps, newsletters, printing, etc)						
5201	National reports (incl. data reporting)	-	-	-	-	-	-
5202	Final report	-	-	15,000.00	-	-	15,000.00
5299	Sub-Total	-	-	15,000.00	-	-	15,000.00
5500	Evaluation (consultants fees/travel/DSA, admin support, etc. internal projects)						
5501	Final evaluation	-	-	-	-	-	-
5581	Final Evaluation	-	-	-	-	22,161.84	22,161.84
5599	Sub-Total	-	-	-	-	22,161.84	22,161.84
5999	Component Total	-	-	15,000.00	-	22,162.84	37,162.84
TOTAL COSTS		389,206.08	246,480.96	150,190.46	26,625.60	-	834,665.94

Annex 11: Summary of co-Finance

RECONCILIATION BETWEEN GEF ACTIVITY BASED BUDGET AND UNEP BUDGET BY EXPENDITURE CODE (COFINANCE)								
Project No: GFL/2328-2760-4A76/Rev.03								
Project Name: Medium Size Project Supporting the POPs Global Monitoring Plan in the West Africa Region								
Executing Agency: UNEP/DTIE								
Source of funding (noting whether cash or in-kind):								
	Cofinance 2	Cofinance 3	Cofinance 4	Cofinance 5	Cofinance 6	Cofinance 7	Cofinance 8	Total
	Cash (SSC direct)	Cash (SSC)	Cash (Recetox)	Cash (Sweden)	In-kind countries	In-kind UNEP	In-kind donors	
UNEP BUDGET LINE/OBJECT OF EXPENDITURE	US\$	US\$	US\$	US\$	US\$	US\$	US\$	US\$
10 PROJECT PERSONNEL COMPONENT								
1100 Project Personnel w/m								
1101 Project coordinator (UNEP)						15,000		15,000
1102 Project coordinator (Mali)					9,000			9,000
1103 Country coordinators (6)	12,000				24,000			36,000
1199 Sub-Total	12,000	0	0	0	33,000	15,000	0	60,000
1200 Consultants w/m								
1201 National scientists for air monitoring (6)		7,000		10,000	9,000			26,000
1202 National scientists for mothers' milk (6)		7,000		10,000	9,000			26,000
1203 SOP writing					30,000	5,000	9,000	44,000
1299 Sub-Total	0	14,000	0	20,000	48,000	5,000	9,000	96,000
1300 Administrative support w/m								
(Show title/grade)								
1301 Administrative assistant (Mali)					10,000	10,000		20,000
1302								0
1399 Sub-Total	0	0	0	0	10,000	10,000	0	20,000
1600 Travel on official business (above staff)								
1601 Project coordinator (UNEP)								0
1602 Project coordinator (Mali)								0
1699 Sub-Total	0	0	0	0	0	0	0	0
1999 Component Total	12,000	14,000	0	20,000	91,000	30,000	9,000	176,000
2200 Sub-contracts (MoU's/LA's for NGOs)								
2201 Local lab for POPs analysis	12,000				50,000			62,000
2202 Expert labs for regional training/inspection				10,000				10,000
2203 Expert labs for mirror analysis/intercalibration				10,000				10,000
2204 Expert lab for mothers' milk analysis		20,000						20,000
2299 Sub-Total	12,000	20,000	0	20,000	50,000	0	0	102,000
2999 Component Total	12,000	20,000	0	20,000	50,000	0	0	102,000
3200 Group training (study tours, field trips)								
3201 National travel for air/mothers' milk monitoring (6)		15,000		10,000				25,000
3202 Regional participants to training WS								0
3203 Expert labs travel to training and WS	10,000							10,000
3204 Steering group members to meetings		6,000					10,000	16,000
3299 Sub-Total	10,000	21,000	0	10,000	0	0	10,000	51,000
3300 Meetings/conferences (give title)								
3301 Start-up conference+1st training**					10,000			10,000
3302 Final conference**					10,000		10,000	20,000
3303 National meetings (2*6)**		10,000			20,000			30,000
3304 Steering group mtgs**					3,000		10,000	13,000
3399 Sub-Total	0	10,000	0	0	43,000	0	20,000	73,000
3999 Component Total	10,000	31,000	0	10,000	43,000	0	30,000	124,000
40 EQUIPMENT & PREMISES COMPONENT								
4100 Expendable equipment (items under \$1,500 each, for example)								
4101 Office supplies (6 computers)								0
4102 Spares and consumables				10,000				10,000
4103 Reference materials and standards							20,000	20,000
4104 Air samplers and containers for milk sampling		10,000	10,000	10,000				30,000
4199 Sub-Total	0	10,000	10,000	20,000	0	0	20,000	60,000
4300 Premises (office rent, maintenance of premises, etc)								
4301 Office space					20,000	15,000		35,000
4399 Sub-Total	0	0	0	0	20,000	15,000	0	35,000
4999 Component Total	0	10,000	10,000	20,000	20,000	15,000	20,000	95,000
50 MISCELLANEOUS COMPONENT								
5100 Operation and maintenance of equip. (example shown below)								
5101 Rental & maint. of computer equip.					6,000			6,000
5102 Rental & maint. of copiers					6,000			6,000
5103 Repair & maint. of vehicles & insurance					6,000			6,000
5104 Rental & maint. of other office equip.					6,000			6,000
5105 Rental of meeting rooms & equip.					6,000			6,000
5199 Sub-Total	0	0	0	0	30,000	0	0	30,000
5200 Reporting costs (publications, maps)								
5201 National reports (incl. data reporting)		10,600		20,000	10,000			40,600
5202 Final report	6,000	5,000	10,000		10,000			31,000
5299 Sub-Total	6,000	15,600	10,000	20,000	20,000	0	0	71,600
5300 Sundry (communications, postage, freight, clearance charges, etc)								
5301 Communication, postage, freight, etc.					12,000			12,000
5399 Sub-Total	0	0	0	0	12,000	0	0	12,000
5400 Hospitality and entertainment								
5401 Hospitality								0
5499 Sub-Total	0	0	0	0	0	0	0	0
5500 Evaluation (consultants fees/travel/DSA, admin support, etc. internal projects)								
5501 Final evaluation								0
5599 Sub-Total	0	0	0	0	0	0	0	0
5999 Component Total	6,000	15,600	10,000	20,000	62,000	0	0	113,600
TOTAL COSTS	40,000	90,600	20,000	90,000	266,000	45,000	59,000	610,600

RECONCILIATION BETWEEN GEF ACTIVITY BASED BUDGET AND UNEP BUDGET BY EXPENDITURE CODE (COFINANCE)

Project No: GFL/2328-2760-4A80 Rev.03

Project Name: Medium Size Project Supporting the POPs Global Monitoring Plan in the Southern Eastern Region

Executing Agency: UNEP/DTIE

Source of funding (noting whether cash or in-kind):

		Cofinance 2	Cofinance 3	Cofinance 4	Cofinance 5	Cofinance 6	Cofinance 7	Cofinance 8	Total
		Cash (SSC dire	Cash (SSC)	Cash (Recetox	Cash (Sweden)	In-kind countrie	In-kind UNEP	Steering group	
UNEP BUDGET LINE/OBJECT OF EXPENDITURE		US\$	US\$	US\$	US\$	US\$	US\$	US\$	US\$
10	PROJECT PERSONNEL COMPONENT								
1100	Project Personnel w/m								
1101	Project coordinator (UNEP)						20,000		20,000
1102	Project coordinator								0
1103	Country coordinators (6)								0
1199	Sub-Total	0	0	0	0	0	20,000	0	20,000
1200	Consultants w/m								
1201	National scientists for air monitoring (6)								0
1202	National scientists for mothers' milk (6)								0
1203	SOP writing								0
1299	Sub-Total	0	0	0	0	0	0	0	0
1300	Administrative support w/m (Show title/grade)								
1301	Administrative assistant						17,000		17,000
1302									0
1399	Sub-Total	0	0	0	0	0	17,000	0	17,000
1600	Travel on official business (above staff)								
1601	Project coordinator (UNEP)								0
1602	Project coordinator								0
1699	Sub-Total	0	0	0	0	0	0	0	0
1999	Component Total	0	0	0	0	0	37,000	0	37,000
2200	Sub-contracts (MoU's/LA's for NGOs)								
2201	Local lab for POPs analysis								0
2202	Expert labs for regional training/inspection								0
2203	Expert labs for mirror analysis/intercalibration								0
2204	Expert lab for mothers' milk analysis								0
2299	Sub-Total	0	0	0	0	0	0	0	0
2999	Component Total	0	0	0	0	0	0	0	0
3200	Group training (study tours, field trips)								
3201	Regional training and assessment	40,000							40,000
3202	Specific sectoral assistance to countries		80,250	20,000	90,000				190,250
3203	Expert labs travel to training and WS								0
3204	Steering group members to meetings								0
3299	Sub-Total	40,000	80,250	20,000	90,000	0	0		230,250
3300	Meetings/conferences (give title)								
3301	Start-up conference+1st training**								0
3302	Final conference**								0
3303	National meetings (2*6)**								0
3304	Steering group mtgs**							55,000	55,000
3399	Sub-Total	0	0	0	0	0	0	55,000	55,000
3999	Component Total	40,000	80,250	20,000	90,000	0	0	55,000	285,250
40	EQUIPMENT & PREMISES COMPONENT								
4100	Expendable equipment (items under (\$1,500 each, for example)								
4101	Infrastructure (Offices, etc.)					199,000			199,000
4102	Spares and consumables								0
4103	Reference materials and standards								0
4104	Air samplers and containers for milk sampling								0
4199	Sub-Total	0	0	0	0	199,000	0	0	199,000
4300	Premises (office rent, maintenance of premises, etc)								
4301	Office space								0
4399	Sub-Total	0	0	0	0			0	0
4999	Component Total	0	0	0	0	199,000	0	0	199,000
50	MISCELLANEOUS COMPONENT								
5100	Operation and maintenance of equip. (example shown below)								
5101	Rental & maint. of computer equip.								0
5102	Rental & maint. of copiers								0
5103	Repair & maint. of vehicles & insurance								0
5104	Rental & maint. of other office equip.								0
5105	Rental of meeting rooms & equip.								0
5199	Sub-Total	0	0	0	0	0	0	0	0
5200	Reporting costs (publications, maps)								
5201	National reports (incl. data reporting)								0
5202	Final report								0
5299	Sub-Total	0	0	0	0	0	0	0	0
5300	Sundry (communications, postage, freight, clearance charges etc)								
5301	Communication, postage, freight, etc.								0
5399	Sub-Total	0	0	0	0		0	0	0
5400	Hospitality and entertainment								
5401	Hospitality								0
5499	Sub-Total	0	0	0	0	0	0	0	0
5500	Evaluation (consultants fees/travel/ DSA, admin support, etc. internal projects)								
5501	Final evaluation								0
5599	Sub-Total	0	0	0	0	0	0	0	0
5999	Component Total	0	0	0	0	0	0	0	0
TOTAL COSTS		40,000	80,250	20,000	90,000	199,000	37,000	55,000	521,250

RECONCILIATION BETWEEN GEF ACTIVITY BASED BUDGET AND UNEP BUDGET BY EXPENDITURE CODE (TOTAL GEF & COFINANCE)

Project No:GFL/2328-2760-4A77/Rev No.03

Project Name:Supporting the implementation of the Global Monitoring Plan of POPs in Latin America and Caribbean States

Executing Agency: UNEP / DTIE

Source of funding (noting whether cash or in-kind): **Cash and In-kind**

UNEP BUDGET LINE/OBJECT OF EXPENDITURE	Cofinance 1	Cofinance 2	Cofinance 3	Cofinance 4	Cofinance 5	Cofinance 6	Total
	Cash (CB) US\$	Cash (EC) US\$	Cash (WHO+SSC) US\$	in-kind countries US\$	in-kind UNEP US\$	in-kind donors US\$	US\$
10 PROJECT PERSONNEL COMPONENT							
1100 Project Personnel w/m (Show title/grade)							
1101 Project coordinator (UNEP)	10,000				15,000		25,000
1102 Project coordinator (URU) + country coordinators				46,000			46,000
1199 Sub-Total	10,000	0	0	46,000	15,000	0	71,000
1200 Consultants w/m							
1201 National scientists for air monitoring (10)	8,000			20,000			28,000
1202 National scientists for mothers' milk (10)	5,000		28,000	20,000			53,000
1203 SOP writing	3,000	2,000		30,000	15,000		50,000
1299 Sub-Total	16,000	2,000	28,000	70,000	15,000	0	131,000
1300 Administrative support w/m							
1301 Administrative assistant (URU)				15,000	8,000		23,000
1302							0
1399 Sub-Total	0	0	0	15,000	8,000	0	23,000
1600 Travel on official business (above staff)							
1601 Project coordinator (UNEP)	4,000		7,000				11,000
1602 Project coordinator (URU)				5,000			5,000
1699 Sub-Total	4,000	0	7,000	5,000	0	0	16,000
1999 Component Total	30,000	2,000	35,000	136,000	38,000	0	241,000
2200 Sub-contracts (MoU's/LA's for non-							
2201 Local lab for POPs analysis	3,000		20,000	50,000			73,000
2202 Expert labs for regional training/inspection	12,000		5,000				17,000
2203 Expert labs for mirror analysis/intercalibration	6,000		12,000				18,000
2204 Expert lab for mothers' milk analysis	5,000		12,300				17,300
2299 Sub-Total	26,000	0	49,300	50,000	0	0	125,300
2999 Component Total	26,000	0	49,300	50,000	0	0	125,300
3200 Group training (study tours, field trips,							
3201 National travel for air/mothers' milk monitoring (10)	3,000		10,000				13,000
3202 Regional participants to training WS	3,000		10,000				13,000
3203 Expert labs travel to training WS, regional conf	9,000		15,000				24,000
3204 Steering group members to meetings							0
3299 Sub-Total	15,000	0	35,000	0	0	0	50,000
3300 Meetings/conferences (give title)							
3301 Start-up conference+1st training**				10,000			10,000
3302 Final conference**				10,000			10,000
3303 National meetings (2*10)**				20,000			20,000
3304 Steering group mtgs**				3,000		10,000	13,000
3399 Sub-Total	0	0	0	43,000	0	10,000	53,000
3999 Component Total	15,000	0	35,000	43,000	0	10,000	103,000
40 EQUIPMENT & PREMISES COMPONENT							
4100 Expendable equipment (items under							
4101 Office supplies (10 computers or software)	1,500						1,500
4102 Spares and consumables	2,000		2,000			20,000	24,000
4103 Reference materials and standards	2,000		6,000			20,000	28,000
4103 Air samplers and containers for milk sampling	10,000	20,000	20,000				50,000
4199 Total	15,500	20,000	28,000	0	0	40,000	103,500
4300 Premises (office rent, maintenance							
4301 Office space				50,000	15,000		65,000
4399 Sub-Total	0	0	0	50,000	15,000	0	65,000
4999 Component Total	15,500	20,000	28,000	50,000	15,000	40,000	168,500
50 MISCELLANEOUS COMPONENT							
5100 Operation and maintenance of equip.							
5101 Rental & maint. of computer equip.				30,000			30,000
5102 Rental & maint. of copiers				20,000			20,000
5103 Repair & maint. of vehicles & insurance				22,000			22,000
5104 Rental & maint. of other office equip				20,000			20,000
5105 Rental of meeting rooms & equip.				20,000			20,000
5199 Sub-Total	0	0	0	112,000	0	0	112,000
5200 Reporting costs (publications maps							
5201 National reports (incl. data reporting)	5,500		3,000	20,000			28,500
5202 Final report	6,000	2,000		20,000			28,000
5203 Translation	2,000			10,000			12,000
5299 Sub-Total	13,500	2,000	3,000	50,000	0	0	68,500
5300 Sundry (communications, postage,							
5301 Communication, postage, freight, etc.	2,000			15,000			17,000
5399 Sub-Total	2,000	0	0	15,000	0	0	17,000
5400 Hospitality and entertainment							
5401 Hospitality				10,000			10,000
5499 Sub-Total	0	0	0	10,000	0	0	10,000
5500 Evaluation (consultants fees/travel/							
5501 Final evaluation							0
5599 Sub-Total	0	0	0	0	0	0	0
5999 Component Total	15,500	2,000	3,000	187,000	0	0	207,500
TOTAL COSTS	102,000	24,000	150,300	466,000	53,000	50,000	845,300

UNEP Budget by Expenditure Code (Co-finance Only)									
Project No: GFL/2328-2760-4A37/Rev 3, GEF Project ID 3663									
Project Name: Supporting the POPs Global Monitoring Plan in the Pacific Islands Region									
Executing Agency: UNEP / DTIE									
UNEP BUDGET LINE/OBJECT OF EXPENDITURE	Cofinance 1	Cofinance 2	Cofinance 3	Cofinance 4	Cofinance 5	Cofinance 6	Cofinance 7	Cofinance 8	Total
	Cash (AUS)	Cash (SSC)	Kind (Reet)	Cash (E C)	Kind (W)	Kind counts	Kind UN	Kind donors	US\$
10 PROJECT PERSONNEL COMPONENT									
1100 Project Personnel w/m									
1101 Project coordinator (EA)							15,000		15,000
1102 Project coordinator (IAS)	17,000					10,000			27,000
1103 Country coordinators (7)	21,000					36,000			57,000
1199 Sub-Total	38,000	0	0	0	0	46,000	15,000	0	99,000
1200 Consultants w/m									
1201 National scientists for air monitoring (7)						9,000			9,000
1202 National scientists for mothers' milk (7)						9,000			9,000
1203 SOP writing						50,000	5,000		55,000
1299 Sub-Total	0	0	0	0	0	68,000	5,000	0	73,000
1300 Administrative support w/m									
1301 Administrative assistant (IAS)	10,000					10,000	15,000		35,000
1399 Sub-Total	10,000	0	0	0	0	10,000	15,000	0	35,000
1400 Volunteers w/m									
1402									0
1499 Sub-Total	0	0	0	0	0	0	0	0	0
1600 Travel on official business (above staff)									
1602 Project coordinator (IAS)	18,000								18,000
1699 Sub-Total	18,000	0	0	0	0	0	0	0	18,000
1999 Component Total	66,000	0	0	0	0	124,000	35,000	0	225,000
20 SUB-CONTRACT COMPONENT									
2100 Sub-contracts (MoU's/LA's for UN)									
2102									0
2199 Sub-Total	0	0	0	0	0	0	0	0	0
2200 Sub-contracts (MoU's/LA's for non-profit supporting organizations)									
2201 Local lab for POPs analysis	3,000					50,000			53,000
2203 Expert labs for mirror analysis intercalibration	6,000								6,000
2299 Sub-Total	9,000	0	0	0	0	50,000	0	0	59,000
2300 Sub-contracts (commercial purposes)									
2302									0
2399 Sub-Total	0	0	0	0	0	0	0	0	0
2999 Component Total	9,000	0	0	0	0	50,000	0	0	59,000
30 TRAINING COMPONENT									
3100 Fellowships (total stipend/fees, travel)									
3102									0
3199 Sub-Total	0	0	0	0	0	0	0	0	0
3200 Group training (study tours, field trips)									
3201 National travel for air/mothers' milk monitoring	3,000								3,000
3202 Regional participants to training WS	9,000								9,000
3204 Steering group members to meetings					10,000				10,000
3299 Sub-Total	12,000	0	0	0	10,000	0	0	0	22,000
3300 Meetings/conferences (give title)									
3301 Start-up conference+ 1st training**						10,000			10,000
3302 Final conference**						10,000			10,000
3303 National meetings (2*7)**						20,000			20,000
3304 Steering group mtgs**						2,000	10,000		12,000
3399 Sub-Total	0	0	0	0	0	42,000	10,000	0	52,000
3999 Component Total	12,000	0	0	0	10,000	42,000	10,000	0	74,000
40 EQUIPMENT & PREMISES COMPONENT									
4100 Expendable equipment (items under									
4103 Air samplers and containers for milk sampling	3,000		10,000	10,000					23,000
4199 Total	3,000	0	10,000	10,000	0	0	0	0	23,000
4200 Non-expendable equipment									
4202									0
4299 Sub-Total	0	0	0	0	0	0	0	0	0
4300 Premises (office rent, maintenance)									
4301 Office space						30,000	15,000		45,000
4399 Sub-Total	0	0	0	0	0	30,000	15,000	0	45,000
4999 Component Total	3,000	0	10,000	10,000	0	30,000	15,000	0	68,000
50 MISCELLANEOUS COMPONENT									
5100 Operation and maintenance of equip.									
5101 Rental & maint. of computer equip.						12,000			12,000
5102 Rental & maint. of copiers						6,000			6,000
5103 Repair & maint. of vehicles & insurance						12,000			12,000
5104 Rental & maint. of other office equip						6,000			6,000
5105 Rental of meeting rooms & equip.						6,000			6,000
5199 Sub-Total	0	0	0	0	0	42,000	0	0	42,000
5200 Reporting costs (publications, maps,									
5201 National reports (incl. data reporting)						10,000			10,000
5202 Final report		24,000				10,000			34,000
5299 Sub-Total	0	24,000	0	0	0	20,000	0	0	44,000
5300 Sundry (communications, postage,									
5301 Communication, postage, freight, etc.	8,500					12,000			20,500
5399 Sub-Total	8,500	0	0	0	0	12,000	0	0	20,500
5400 Hospitality and entertainment									
5401 Hospitality	1,500								1,500
5499 Sub-Total	1,500	0	0	0	0	0	0	0	1,500
5500 Evaluation (consultants fees/travel/									
DSA, admin support, etc. internal projects)									
5501 Final evaluation									0
5599 Sub-Total	0	0	0	0	0	0	0	0	0
5999 Component Total	10,000	24,000	0	0	0	74,000	0	0	108,000
TOTAL COSTS	100,000	24,000	10,000	10,000	10,000	320,000	50,000	10,000	534,000

Annex 12: The Consultants

Nee Sun (Robert) CHOONG KWET YIVE, PhD

Profile

Currently, associate professor in Chemistry at the University of Mauritius teaching Analytical and Physical Chemistry at under graduate and post graduate levels. Research interests include environmental pollution by heavy metals, POPs and PAHs. Expertise in project development and evaluation

Education

PhD Chemistry, University of Montpellier, France

Ziad Mahmoud ABU-KADDOURAH, PhD

Profile

Currently, Technical Director for Environmental Consultation Firm “ESCO” in Saudi Arabia since 2007, the main duties are to conduct, manage, and supervise a number of activities on different environmental projects. Expertise: in Environmental Impact Assessment (EIA) Studies and Environmental Consultations for industrial cities, and different industries, commercial, and agricultural activities. International consultant in a number of UNEP GEF funded projects on POPs.

Education

1997–2000: University of Putra, Malaysia, Ph.D. Environmental Engineering

1994–1996: University of Science, Malaysia, M.Sc. Mineral Processing Engineering

1990–1994: Al-Yarmouk University, Jordan, B.Sc. Earth and Environmental Science