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**GEF ID: 4477Mid Term Review (MTR) Final Report
United Nations Development Programme
Country: Pakistan
Project Title: Comprehensive Reduction and Elimination of Persistent Organic Pollutants in Pakistan
UNDP-**

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1. **Basic Report Information (for opening page or title page)**

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| --- | --- |
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 | Comprehensive Reduction and Elimination of Persistent Organic Pollutants in Pakistan |
| * UNDP PIMS#
* GEF project ID#
 | 46004477 |
| * MTR time frame
* Date of MTR report
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 | Persistent Organic Pollutants |
| * Executing Agency/ Implementing Partner and other project partners
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1. **Acronyms and Abbreviations**

APR Annual Progress Report / Annual Project Review

AWP Annual Work Plan

AJK Azad Jammu Kashmir

APA Agricultural Pesticides Act

APO Agricultural Pesticide Ordinance

APTAC Agricultural Pesticides Technical Advisory Committee

BAT Best Available Technique

BEP Best Environmental Practice

BHC Benzene Hexachloride

CEO Chief Executive Officer

CIPAC Collaborative International Pesticides Analytical Council

COP Conference of the Parties

DDT Dichlorodiphenyltrichloroethane

DISCO Distribution Company

DPRU Development Policy Research Unit

EC European Commission

EDB Engineering Design Bureau

EPA Environmental Protection Agency

EU European Union

FAO Food and Agriculture Organization

FESCO Faisalabad Electric Supply Company

GEF Global Environment Facility

GENCO Generation Company

GESCO Gujranwala Electric Supply Company

GHS Globally Harmonized System

GOP Government of Pakistan

HESCO Hyderabad Electric Supply Company

HW Hazardous Waste

HWM Hazardous Waste Management

IESCO Islamabad Electric Supply Company

IGR Insect Growth Regulator

INC Intergovernmental Negotiating Committee

KE Karachi Electric

KPK Khyber Pakhtunkhwa

LESCO Lahore Electric Supply Company

M&E Monitoring and Evaluation

MEPCO Multan Electric Power Company

MOCC Ministry of Climate Change

MONHS R&C Ministry of National Health Services, Regulations and Coordination

MT Metric ton

N/A Not applicable

NARC National Agricultural Research Canter

NEP National Environment Policy

NEPRA National Electric Power Regulatory Authority

NEQS National Environmental Quality Standards

NIFA Nuclear Institute of Food and Agriculture

NIP National Implementation Plan

NPM National Project Manager

NPSL National Physical and Standard Labs

NTDC National Transmission and Power Dispatch Company

PAC Public Accounts Committee

PARC Pakistan Agricultural Research Council

PBDE Polybrominated Diphenyl Ethers

PCB Polychlorinated biphenyl

PCRWR Pakistan Council of Research in Water Resources

PCSIR Pakistan Council of Scientific and Industrial Research

PEPA Pakistan Environmental Protection Agency

PESCO Peshawar Electric Supply Company

PMU Project Management Unit (PMU)

POPs Persistent Organic Pollutants

POPRC Persistent Organic Pollutants Review Committee

PPD Plant Protection Department

PPG Planning Policy Guidance

ProDoc Project Document

PVC Polyvinyl Chloride

QESCO Quetta Electric Supply Company

R&D Research and Development

SAICM Strategic Approach to International Chemicals Management

SC Stockholm Convention on POPs

SESCO Sukkur Energy Supply Company

TEQ Toxic Equivalency

TESCO Tribal Electric Supply Company

UN United Nations

UNDP United Nations Development Programme

UNEP United Nations Environment Programme

USD United States Dollar

WAPDA Water and Power Distribution Authority

WHO World Health Organization

# **Executive Summary**

The Midterm Review (MTR) of the project titled the “Comprehensive reduction and elimination of Persistent Organic Pollutants (POPs) in Pakistan**”** has been conducted in accordance with the Terms of Reference (ToR) for the Midterm Review (MTR) of the medium-sized project (POP project)*,* following the “Guidance for conducting MTR of UNDP supported, GEF Financed projects” as well as the approved MTR Mission Plan and Inception Report. The Mid-Term Review was conducted through a review of the documents and reports provided by the PMU team, as well as through the MTR team’s mission to Peshawar, Muzafarabad, Gilgit, Quetta, Islamabad, Lahore & Karachi as well as interviews with the main project stakeholders and partners.

In summary the project is well behind schedule with less than 15 months of project time remaining at the beginning of the MTR, having expended less than 30% of the budget and with only an estimated 30% of project activities having been implemented. MoCC has struggled to initially build the team, suffered from high team turnover which has hampered meaningful progress until the last 12 months. Out of the four project components, three have been partially started, though quality has been compromised in some areas due to insufficient expertise from international technical backstopping. Such support is urgently needed to ensure activities meet BEP and BAT, are integrated between the components, to ensure quality reporting for contracts, activities and project progress are conducted in accordance with the ProDoc.

On the positive side the efforts of the last 12 months have resulted in critical positions in the PMU being filled, the primary budget item (component 3) successfully being launched and efforts made to push other elements along as well. While improvements even to these activities are required it has left a solid basis for implementing the project. But for this to happen serious improvements are required including tightly following the ProDoc with quality reporting to verify this, addressing deficiencies identified in the MTR as well as in other reports (Independent Audits), develops detail plans with time bound activities, enlisting the international expertise required to ensured decision making is informed and quality outcomes are achieved.

A time extension to the project would also need to be approved, as well as a budget revision to give the PMU enough time and resources to make such changes and implement all activities. Moreover another review is recommended before starting the extension period to evaluate the progress of remaining 15 months of the existing period.

 **1.1 Project Information Table**

|  |  |
| --- | --- |
| Project Duration: | 60 months  |
| Atlas Award ID:  | 00081936 |
| Output ID:  | 00091045 |
| PIMS #:  | 4600 |
| Start date: End Date:  | 20 March 201520 March 2020  |
| Management Arrangements: | National Implementation Modality (NIM) |
| PAC Meeting Date:  | 28 August 2014 |
| Total resources required: | USD 39,384,822 |
| Total allocated resources:  | * GEF USD 5,150,000
* Co-financing USD 34,234,822
* Government USD 11,570,000
* UNDP USD 300,000
* Private Sector USD 22,364,822
 |

 **Table 1 – Project Information Table**

**1.2 Project Description**

The objectives of the project “**Comprehensive Reduction and Elimination of Persistent Organic Pollutants in Pakistan”** are to reduce human health and environmental risks by enhancing management capacities and disposal of POPs in Pakistan through:

1. The development and implementation of a regulatory, policy and enforcement system to reduce POPs releases and to regulate POPs waste disposal;
2. Capacity building to reduce exposure to and releases of POPs;
3. Collection, transport and disposal of 300MT of PCB and 1200MT of POPS Pesticides; and
4. Improved monitoring, evaluation, learning and adoption of the project.

The elimination of POPs pesticide stockpiles became more urgent after the 2010 floods damaged some of the storage sites of hazardous chemicals and pesticides resulting in a greater risk to human and environmental health. To ensure environmentally sound disposal of POPs, a facility to be upgraded, tested and permitted in compliance with Stockholm Convention BAT/BEP. As an alternative, the project will however keep open the option of shipment of POPs waste abroad for disposal, in compliance with the Basel Convention, if at an early stage it will result evident that the POPs cannot be disposed of using the technologies available in the country.

**1.3 Project Progress Summary**

The MTR team found the Project Document to be essentially sound except for the following three areas of concern which have seriously impacted the project:

i. No time bound activities were provided by objective for each year (only a total cumulative objective exists), this was evident in the annual Project Implementation Reviews (PIR) stated the Mid term target level was ‘not set or not applicable’ for any of the 4 project components;[[1]](#footnote-1)

ii. No indicators for monitoring and evaluation have been provided in the results framework and this seems to have further impacted the actual structure of the PIRs which also include no reference at all to Component 4 and objectives 4.1 and 4.2;[[2]](#footnote-2) and

iii. No provision for appropriate international expert backstopping (such as a project Chief Technical Advisor or consultants) in POPs management was included which has seriously impacted the project from writing appropriate TORs, hiring suitable consultants and assessing/guiding on BAT/BEP and product and technology suitability[[3]](#footnote-3).

These deficiencies have negatively impacted project progress, which is delayed in terms of budget expenditure, actual activity progress and quality and efficiency of action on the 4 project components. Despite concerted action by the PMU in the last 12 months only 30.94% (1,593,619.38 USD) of the budget was reportedly expended in June 2018 with 36 months (67%) of the project having passed and only 18 months (33%) of project time remaining compared to the planned budget expenditure of 65.34% (USD $3,365,202.00) for this stage of the project.

**Table 2 – Cumulative Disbursements – (**Refer to: UNDP-GEF Guidance Manual, Project and Budget Formulation in Atlas). Agreed to be deleted



The MTR team estimates approximately 30% of the 4 Components have been implemented, with few activities for Component 4 (Monitoring & Evaluation) having been recorded in the PIR or annual reports though it is evident informal monitoring has been conducted by UNDP and MOCC. This is illustrated in Table 8 in section 4 of the MTR report (Findings), which shows only 4 of the 12 Objective/Outcomes have started (31%) and only 7 of the 25 activities have been progressed (28%).

Reporting against progress needs to be improved with some reports missing (no 3 monthly reports) and others with a flawed structure (the PIR reports against 11 ‘outcomes’ compared to the ‘4 components, 13 Objectives and 25 Activities’ that are identified in the ProDoc. This results in misalignment of reporting of PIR ‘outcomes’ to the ProDoc ‘objectives’ (see Table 8). This may contribute to some reports being incomplete (PIRs contain no information on Component 4 and defers reporting on objectives/activities not started) or are inaccurate (2018 PIR reports all activities are started and mentions products (PCB Guidance) that can’t be located).

Detailed information on actual budget expenditure for each of the project activities was not provided to the MTR team.[[4]](#footnote-4) (Reason referred in the footnote, provided Dec. 12, 2018) This was noted in the 2017 Independent Audit which noted this information was not provided (section 2.2.4) and identified it as a high risk with recommended remedial action to be taken by UNDP to ensure (through accurate reporting) that expenditure matches the detailed budget given in the letter of agreement (i.e. ProDoc).

Project progress is further summarised in the following table:

**1.4 MTR Ratings & Achievement Summary Table for (Comprehensive Reduction and Elimination of Persistent Organic Pollutants in Pakistan)**

|  |  |  |
| --- | --- | --- |
| **Measures** | MTR Rating  | Achievement Description |
| 1. **Project Strategy:** Project Design
 | **NA** |  |
| If there are major areas of concern, recommend areas for improvement: 1. POPs Pesticides and PCBs were considered of similar nature while the status is not similar, PCB Management plan to be developed, non-thermal treatment to be explored with mobile facility for onsite treatment.
2. KPIs to be highlighted and hierarchy to be developed according to the priority of the activity with specified time. (planning of activities may be three prong 1. Short Term (6 months) 2. Medium Term (12 Months) 3. Long Term (15 months + Extension period)
3. International technical expertise on POPs management needs to be secured and integrated within the PMU
 |
| 1. **Progress Towards Results:** To what extent have the expected outcomes and objectives of the project been achieved thus far?
 | **MU** Moderately Unsatisfactory | Approximately 30% of the indicator targets were on track[[5]](#footnote-5) (SS4)Table 8 and narrative in findings details progress towards outcomes.  |
| Outcome-1: Progress towards Outcomes Analysis: Review the logframe indicators against progress made towards the end-of-project targets,  |
| Review aspects that have already been successful, identify ways in which the project can further expand these benefits. Many of the outcomes either initiated or yet to be initiated. While arrangements for the disposal of POPs Pesticides and PCBs has been identified and 475MT of Obsolete POPs pesticide and suspected PCBs have been reportedly disposed of through a cement kiln. |
| 1. **Project Implementation & Adaptive Management**: Has project been implemented efficiently, cost-effectively, and been able to adapt to any changing conditions so far? To what extent project-level monitoring, evaluation systems, reporting & project communications supporting the project’s implementation?
 | **MU** Moderately Unsatisfactory | Approximately 15% of the indicator targets were on track (SS5) |
| Outcome-1 Management Arrangements:  |
| Outcome-2 Work Planning: Review any delays in start-up and implementation, identify the causes and examine if they have been resolved.  | **MU** Moderately Unsatisfactory | Severe delays in start up related to recruitment and retention of PMU Staff.Planning needs to be improved and appropriate expertise has not been secured. |
| Outcome-3 Finance and co-finance: Consider the financial management of the project, with specific reference to the cost-effectiveness of interventions.  | **MU** Moderately Unsatisfactory | Proper utilization of finance is lacking including reconciliation of expenditure against activities. Co-financing not yet initiated |
| Informed by the co-financing monitoring table, provide commentary on co-financing: is co-financing being used strategically to help the objectives of the project? Is the Project Team meeting with all co-financing partners regularly in order to align financing priorities and annual work plans?1. Co-financing table is attached separately, but so far there is no evidence/quantification of co-financing has been utilized although letters has been sent by PMU.
2. It is recommended to utilize the facilities of Co-financer for sampling and characterization of the pesticides and venues/facilities could be utilized for trainings/workshops.
 |
| **Outcome-4: Project-level Monitoring and Evaluation Systems**: Review the monitoring tools currently being used:  | **HU** Highly Unsatisfactory | Not yet started |
| Examine financial management of the project monitoring and evaluation budget. Are sufficient resources being allocated to monitoring and evaluation? Are these resources being allocated effectively?A. This activity is not yet initiated. B. A monitoring and evaluation plan needs to be developed based on the ProDoc’s requirements |
| Outcome-5 Stakeholder Engagement: Has the project developed and leveraged the necessary and appropriate partnerships with direct and tangential stakeholders? Participation and country-driven processes: Do local and national government stakeholders support the objectives of the project?  | **MS** Moderately Satisfactory | Not fully involved according to their role and responsibility |
| Outcome-6 Reporting: Assess how adaptive management changes have been reported by the project management and shared with the Project Board.  | **MS** Moderately Satisfactory | Reporting system needs to better identify budget expenditure to activities based on the ProDoc format. |
| Outcome-7 Communications: Review internal project communication with stakeholders: Review external project communication:  | **MU** Moderately Unsatisfactory | Communication gap among the stakeholders |
| 1. Sustainability: To what extent are there financial, institutional, socio-economic, and/or environmental risks to sustaining long-term project results?
 | **ML** Moderately Likely | At this stage of project where approx. 30% of the activities has been completed, prediction of sustainability is not possible but it is obvious that if awareness is created and capacity is built properly the project could be sustainable |
| Outcome-1 Financial risks to sustainability: What is the likelihood of financial and economic resources not being available once the GEF assistance ends |
| Outcome-2 Socio-economic risks to sustainability: Are there any social or political risks that may jeopardize sustainability of project outcomes? What is the risk that the level of stakeholder ownership (ownership by govt./other key stakeholders) will be insufficient to allow for the project outcomes/ benefits to be sustained?  |
| Outcome-3 Institutional Framework and Governance risks to sustainability:  | **ML** Moderately Likely | Depending upon the legislation and its implementation |
| Outcome-4 Environmental risks to sustainability:  |

 **Table 3 – MTR Ratings**

**1.5 Concise summary of conclusions**

* 1. **Project Strategy and Design**: The project design is sound except it lacks time bound indicators.(SS6:No MTR targets available in ProDoc) Indicators and targets appear to have been Specific, Measurable, Achievable and Relevant, but were not Time bound. Time lost due to incomplete project teams and turnover of ministry staff is a critical problem.
	2. **Progress Towards Results:** Overall project progress is more or less tracking overall budget expenditure with approximately 30% of the project achieved to date. SS7&8: No consistent AWPs available)
	3. **Project Implementation and Adaptive Management:** Inability to hire, maintain and develop a full strength PMU and NPD has caused considerable delays and needs to be improved. Expert backstopping has been lacking in some areas and needs to be improved and further development in the PMU team skills could also be conducted. Work planning needs to be multiyear and include year-to-year specific indicators matched (SS9: Output not Year to year) to specific budget allocations to allow project progress to be tracked. Needs to identify priorities to ensure the most critical elements of the project are progressed. Needs to identify timelines, sequential and concurrent actions and ensure overall plans are developed for each target area. Finance needs to be tracked through a matrix against the achievement of each specific indicator as a % and as a multi-year target (cumulative) and not just as an end-of-project cumulative Targets. Project Level M&E System is not comprehensive and systematic and needs to be strengthened in all facets of the project. This includes % and quality tracking that TORs, contracts and deliverables are giving the products required by the project indicator and that BAT and BEP are verified as being met for all legislative, regulatory and physical project components. Reporting provided has been fragmented due to fragmented PMU/NPD and perhaps poor progress (not much to report on). Higher level reporting (PIRs[[6]](#footnote-6) has been provided but has lacked detailed information due to slow progress and lack of specific yearly targets. Some reporting has not been provided and appears to not exist [[7]](#footnote-7) and reports on BAT and BEP are inadequate. Reporting on effectiveness/relevance of training and consultancies in addressing specific project objectives needs to be improved. There is no project communications plan and this needs to be developed both as an agreed way to communicate with stakeholders, communicate project message and develop agreed products. There are some fragmented communications products including a website but further attentions and resources are required and a clear priority of time bound actions. This needs to be integrated with other project elements and become a living document which is monitored, evaluated and updated with progress included in reporting
	4. **Sustainability.** Government focus and ability to enact measures to reduce POPs may change overtime. Stakeholders with little means to address POPs issues at contaminated sites, in warehouses or in poorer sectors of business may not be able to afford BAT/BEP required to meet NIP targets. There is a risk that government departments are unable to commit to introducing enabling legislation developed in this project and to address this industry management plans/guideline can be developed as interim voluntary agreements. There is a risk that EPAs are unable to develop to the point of effective regulation/monitoring required but the project can still demonstrate BAT/BEP required and develop and introduce SOPs. There is a risk that an effective baseline is not developed, which will identify where framework efforts need to be concentrated (i.e. industry wide POPs management plan).

**1.6 Recommendation Summary Table**

|  |  |  |  |
| --- | --- | --- | --- |
| **No** | **Activity** | **Recommendation** | **Responsible Party** |
| **1** | Timeframe: | 1. Extension of the project time period by 12 to 18 months: approximately 30% of the project implemented so more time is needed, need to also consider other technologies (i.e. PCB specific) that may be more suitable /sustainable in Pakistan (as mentioned in the Pro Doc which mentions de-halogenation technologies.
2. PMU to develop activities, better planned, integrated and time bound. Aim is to develop an integrated ‘POPs management system.
3. To reinstate quality in activities which are currently rushed with minimal matching to project indicators and lack of verification to BAT/BEP and to specific ProDoc activities.
4. A budget revision (recognizing the 5% PMU budget cap in GEF projects) would be required for this to fund the PMU for the longer period with activities being specifically lined to the ProDoc and strictly time bound. Agreed
 | GEF –UNDPPMUPMUGEF-UNDP |
| **2** | Baseline: | * + 1. POPs types, quantities and locations are poorly quantified for pesticides and virtually unknown for PCBs with repeated confusion that all obsolete pesticides are POPs and that it can be assumed older transformers contain PCBs[[8]](#footnote-8)
		2. The project needs to reverify assumed POPs pesticides, which are mixed with non-POPs and start to establish what PCBs exist (locations and quantities). This needs to be done through professional inventory practices including extensive laboratory analysis.
		3. This should be done through integrating international and local expertise which would better develop informed (revised) decision making on quantity of POPs accessible for treatment and technology to be used.
		4. Reverification of POPs pesticides and the contaminated sites would allow POPs contaminated sites to be documented and would permit comparison between Pakistan and international lab standards . The activities have already been completed in three provinces and in progress in Punjab, it will provide a new baseline for the destruction of remaining target of POPs pesticides that is approximately 760 M Tons. (While actually is far less as reverified).
 | PMUPMUUNDP/PMUPMU |
| **3** | Expert Backstopping: | 1. Appropriate international and national backstopping is required as the MTR has found multiple examples where technical expertise is lacking (i.e. identifying what is or is not a POP), in process (M/E, Reporting) and standards (BAT/BEP). This needs to be done in an integrated way so that provision of this expertise is also used to concurrently build capacity in stakeholders who will have specific roles in ongoing POPs management.
2. Work planning should identify where and when such expertise should be applied and who the beneficiaries from such capacity building will be.
 | UNDPUNDP/PMU |
| **4** | Regulatory Framework Development: | 1. Consideration should be given on legislation and non-legislative approaches that could achieved the project goals in the most straightforward manner.
2. It is recommended to separate National Management Plans for PCBs/OPCPs/uPOPs, which could initially be voluntary industry approaches (Australian example) if legislation is delayed.
3. Legislation can target updates of hazardous waste provisions for premise, activities and emissions that duplicate BAT/BEP in Stockholm. This would then capture different sectors (agriculture, electricity, other thermal industries, ship breaking) but using an existing framework. Regulators and industry need to be consulted to have a workable plan (timelines/resources/responsibilities)
 | PMUPMUPMU |
| **5** | Reporting | 1. Reports need to be reformatted to make sure they include all of the components, objectives and activities in the ProDoc and that the same numbering of objectives/activities is then used in the PIR. AWP and other such reports to ensure consistency.
2. Narrative and financial reporting needs to be both more regular (with 3 monthly reports to be provided and needs to be of sufficient detail, accuracy and alignment with the ProDoc
3. Reporting needs to include an exact break down of budget expenditure compared to individual activities to ensure the project team is accurately following the detailed budget plan provided in the ProDoc expenditure Reporting.
 | PMUPMUPMU |
| **6** | POPs Disposal | 1. It is recommended the resources for treating 1500 tonnes of POPs should be reprogrammed to identify, test and cost seperate treatment options for (a) pesticide POPs and (b) PCB contaminated transformer oil

For pesticide POPs international experts should be hired to (i) do a rapid POPs inventory assessment to identify pesticide POPs in accordance with BAT/BEP; Reverification activities have already been completed in three provinces and in progress in Punjab. But methods falls short of international best practice (actual quantification/ chemical analysis). It will provide a 'baseline' for the destruction of remaining target of POPs pesticides that is approximately 760 M Tons but with the same uncertainty regarding what is being treated.1. (b) to identify, package and transport POPs pesticides in accordance with BAT/BEP so it is acceptable for receipt at a national treatment facility and for international export
2. New facilities for disposal to be considered or the existing incinerators to be upgraded for enhancing the country capacity and future facility. Facility under Govt is recommended
3. For PCB contaminated transformer oil international experts technology providers are engaged to trial mobile dehalogenation treatment technologies at electricity substations
 | PMUPMU/Transportation ContractorPMUPMU |
| **7** | Other: | 1. Existing contracts to be renewed should be retrofitted in light of the previous comments or other actions taken to meet these needs (ie supervision contracts) so that independent expert opinion ensures BAT/BEP are met.
2. The PMU is academically well qualified but will benefit from further training to improve their capability and formal courses (Prince 2) and integration with expert consultants should be considered (especially with M/E, BAT/BEP)..
3. Testing of Pakistan Laboratory capabilities for project analytical needs should be combined with international lab testing (at least initially) to act as a ‘field split’ and test performance on timely delivery of results and quality. Active measures should be made so that UNDP and PMU components are harmonized as a team.
 | PMUUNDP/PMUPMU |

**Table 4 – Recommendations Summary Table**

# **Introduction**

This report presents the Mid‐Term Review (MTR) of the UNDP project entitled “**Comprehensive reduction and elimination of Persistent Organic Pollutants in Pakistan”** The project is funded by the Global Environment Facility (GEF), implemented by the United Nations Development Programme (UNDP), and executed by the Ministry of Climate Change of Pakistan, Islamabad. The project is planned for five years, starting in May 2015, and planned to be finalised in December 2019. The MTR was conducted in line with the GEF- UNDP MTR Policy, by an International consultant and a National consultant in the period from August to September 2018. The present report covers the period of 2015 to August 2018. The full Terms of Reference (TOR) for the MTR are attached as Annex 1.

## **2.1 Purpose of the MTR and objectives:**

The MTR was conducted in line with the Terms of Reference (ToR) for the Midterm Review (MTR) of the medium-sized project titled “Comprehensive reduction and elimination Persistent Organic Pollutants in Pakistan”, the “Guidance for conducting Mid-Term Reviews of UNDP supported, GEF financed projects” and following the MTR Mission plan detailed within the MTR Inception report. The MTR was carried out by an independent team comprised of a National and an International consultant in co-ordination with the POPs PMU staff. The MTR was conducted between August and September 2018 to assess progress towards the achievement of the project objectives and outcomes as specified in the Project Document, and assess early signs of project success or failure with the goal of identifying the necessary changes to be made in order to set the project on-track to achieve its intended results.

The MTR effort focused heavily on analyzing project progress for each of the outcomes and activities while examining expectations for successful meeting the project objectives. The MTR mission assessed the progress through an examination of the available project documentation combined with extensive meetings with national counterparts, experts and stakeholders to objectively understand to what degree the project activities have been progressed.

The purpose of mid-term review was to assess project activities from its starting date to the start of the MTR in August 2018 to assess the likelihood of the project achieving its intended outcomes and impacts, including their sustainability. Analysed the project performance against the key criteria: relevance, effectiveness, efficiency, (likelihood of) sustainability and impact. The MTR provides an analysis of the likelihood of attainment of the project objective(s) and the technical components or outputs. Through its assessments, the review will enable the Government, counterparts, the GEF, UNDP and other stakeholders to:

(a) Provide evidence of results to date and of the likelihood of outcomes and impact in the future. The assessment includes a re-examination of the relevance of the objectives and other elements of project design according to the project review parameters.

(b) Identify the challenges and risks to the achievement of the project objectives and to derive improving actions needed for the project to achieve maximum impact and sustainability.

(c) Enhance project relevance, effectiveness, efficiency and sustainability by proposing a set of recommendations and/or corrective actions with a view to ongoing and future activities until the end of project implementation.

Pakistan has signed the Stockholm Convention on Persistent Organic Pollutants (POPs) on December 6th 2001 and ratified the Convention on April 14th 2008. The National Implementation Plan (NIP) was submitted on July 16th 2010, to provide a policy framework, and lay out the priorities for addressing the specific issues of POPs pesticides and PCBs in Pakistan. To support Pakistan in meeting its obligations under the Stockholm Convention, the NIP priorities that were selected by the GEF UNDP project to be addressed are:

1. The development and implementation of a regulatory, policy and enforcement system to reduce POPs releases and to regulate POPs waste disposal;
2. Capacity building to reduce exposure to and releases of POPs;
3. Collection, transport and disposal of 300t of PCB and 1200t of POPs/Obsolete pesticides.

Objectives of this project are reducing human health and environmental risks by enhancing management capacities and disposal of POPs in Pakistan through the following four components:

Component 1: Development and implementation of a Regulatory, Policy and enforcement system to reduce POPs releases.

Component 2: Capacity building of local communities, public and private sector stakeholders to reduce exposure to and releases of POPs.

Component 3: Collection, Transport and Disposal of PCBS and POPS Pesticides.

Component 4: Monitoring and evaluation.

The MTR team have assessed the progress of the project components, output/activities along with following four categories of project progress in accordance with the Guidance For Conducting Midterm Reviews of UNDP-Supported, GEF-Financed Projects for extended descriptions as well as the UNDP handbook on Planning, Monitoring and Evaluation for Development Results, and this guidance material will be used in the course of the MTR exercise.

1. Project Strategy

2. Progress towards Results

3. Project Implementation and Adaptive Management

4. Sustainability

## **2.2 Scope & Methodology:**

A combination of two types of primary data collection and review techniques used in the MTR process: [[9]](#footnote-9) stakeholder interviews, and site visits/observations. The MTR team reviewed key project documents of the preparation and implementation phase, listed in Annex and shared by the project team, as the main sources of information, as well as some other documentation presented in the site visits by the stakeholders and project team

### **Principles of design and execution of the MTR,**

Under the Guidance for Conducting Midterm Reviews of UNDP-GEF projects, the aim of the MTR was to provide a systematic and comprehensive review and evaluation of the performance of the project to date by assessing its design, processes of implementation, achievement relative to its objectives. Under this overarching aim, its objectives were:

1. To promote accountability and transparency for the achievement of GEF objectives through the assessment of results, effectiveness, efficiency, relevance, sustainability and impact of the partners involved in the project, and
2. To promote learning, feedback and knowledge sharing on the results and lessons learned from the project and its partners as a basis for adjusting the course of the project to improve its performance in the remaining implementation period and as a basis for decision-making on policies, strategies, programme management and projects, and to improve knowledge and performance.

### **MTR approach and data collection methods,**

The approach for the MTR was determined by the Terms of Reference (Annex A) and the Guidance for Conducting Midterm Reviews of UNDP-Supported, GEF-Financed projects. Both documents outline four focus areas:

1. Project Strategy

2. Progress Towards Results

3. Project Implementation and Adaptive Management

4. Sustainability.

The MTR team concentrated on assessing:

1. The concept and design of the project,
2. Its implementation in terms of quality and timeliness of inputs, financial planning, and monitoring and evaluation,
3. The efficiency, effectiveness and relevance of the activities that are being carried out,
4. Whether the desired outcomes and objectives are being achieved,
5. The likelihood of sustainability of the results of the project, and
6. The involvement of stakeholders in the project’s processes and activities.

The MTR team conducted interviews with key stakeholders and visits to relevant project field-based activity sites, as appropriate and feasible. The MTR team interviewed and visited sites according to the detailed MTR mission plan in the MTR Inception report in accordance with UNDPs agreement. The interviews and field visits were conducted using a matrix of detailed evaluation questions, indicators and following an evidential approach in identifying sources of verification. In general, interview questions were distilled from the ToRs of this evaluation and arranged around the evaluation criteria. Where possible, indicators from the results framework were included. Questions were also developed that apply to the specific context of the project.

The MTR team used semi-structured interviews with a wide representation of project staff, partners and stakeholders. Responses from the interviews and field visits were analysed using the projects own reporting mechanisms and identified guidance materials, using as much as possible quantitative and qualitative data, validated through revision of documents and products and cross checked during different interviews and with all available evidence.

### **Limitations to the MTR**

The MTR was conducted as an in‐depth evaluation using a participatory approach. The UNDP-POPs Project Manager & Technical Advisor were present and regularly consulted throughout the MTR. Due to the early stages of the RAF implementation, with the first work program approved by the GEF. it was too early to provide evidence on the impact of the RAF on global and country environmental benefits. However, it was possible to identify and address preliminary effects, related to country-divines, predictability, transparency; organizational, institutional arrangements, and project and portfolio changes. When countries have not been able to access RAF resources, the review addressed the reasons for this. This limitation is usual for a mid-term review or formative evaluation with a focus on system activities and processes that are under implementation.[[10]](#footnote-10) The evaluation was based on the project document which is primarily focused on the:

1. Development and implementation of a regulatory, policy and enforcement system to reduce POPs releases, the consultant hired but deliverables were not fully submitted except a review of the existing regulations of the country that already exist. The PMU informed that the consultant has submitted some suggestions.
2. Capacity building of local communities and public and private sector stakeholders to reduce exposure to and releases of POPs, specific trainings yet to be started
3. Collection, Transport and Disposal of PCBS and POPS Pesticides. Pesticides inventory was not consistent; therefore reverification in three provinces was completed, while inventory for PCBs was almost not available.
4. Formal reporting and tracking of the Evaluation and Monitoring objective is absent.

The MTR Team, composed of a National Consultant and an International consultant in general terms, has observed no critical limitation for conducting the MTR, in line with the ToR. The predominant issue with project progress and quality observed was the relatively late start of the project activities, the high turnover of management within the government (MOCC) as well as with project staff (PMU), combined with a lack of expert backstopping throughout the project.

##

## **2.3 Structure of the MTR report**

The structure of the MTR report follows that prescribed in *Annex B of Contract Terms of Reference (ToR) for the Midterm Review (MTR)* (Annex X) which in turn is based on *Annex 3 (TOR Annex B) “Guidance for conducting Mid-Term Reviews of UNDP supported, GEF financed projects”*.

# **Project Description and Background Context**

## **3.1 Development context:**

The Comprehensive reduction and elimination of Persistent Organic Pollutants Program in Pakistan aims at reducing human health and environmental risks by enhancing management capacities and disposal of POPs in Pakistan through:

1. Development and implementation of a regulatory, policy and enforcement systems to reduce POPs releases and to regulate POPs waste disposal;
2. Capacity building of stakeholders to reduce exposure to and releases of POPs;
3. Collection, transport and disposal of 300t of PCB and 1200t of POPS Pesticides; and
4. Improved monitoring, evaluation, learning and adoption of the project.

The Objectives of the project is the environmentally safe disposal of POPs (1200 tons of pesticide-POPs and 300 tons of PCBs) while enhancing capacities and disposal capabilities of POPs in Pakistan. Although the project is unable to dispose of all pesticide POPs and PCBs that exist in Pakistan (the exact quantification of these stockpiles is not completely known and an ongoing process which will continue after the project closes) it will contribute to BAT and BEP by aiming to establish an improved regulatory and monitoring system and enhancing the disposal capabilites within the country. The project will also contribute to the improved management of future POPs stockpiles, through enabling them to be more effectively and safely managed, stored and disposed of by the country as soon as they are identified.

**Country Context:** Pakistan is located at the crossroads of South Asia, Central Asia, China and the Middle East and is thus at the fulcrum of a regional market with a vast population, large and diverse resources, and a large trade potential. Pakistan is a country of extremes. On one side, the country displays some of Asia’s most magnificent landscapes as it stretches from the Arabian Sea, its southern border, to some of the world’s most spectacular mountain ranges in the north. Pakistan is also home to sites that date back to world’s earliest settlements matching those of ancient Egypt and Mesopotamia On the other side, the country faces significant economic, governance and security challenges that are currently hindering its development perspectives. The sharp rise in international oil and food prices, combined with recurring natural disasters like the earthquake in 2005 and the floods of 2010 and 2011 had a devastating impact on the economy.

The slow development of the hydroelectric projects of the electric grid system still exposes several areas of the county to electric outages. There has been a persistent downward trend in poverty over the past decade with the percentage of population below the poverty line falling from 34.5% in 2001/02 to 12.4% in 2010/11 (interim figures) putting Pakistan on track to achieve the MDG target with regard to poverty.

In the recent years, authority for greater decision-making has been delegated to provincial governments. The Eighteenth Constitutional Amendment has devolved a number of key functions to the provinces. In total, functions in seventeen federal ministries have been devolved, including Agriculture, Education, Environment, and Health. In addition to this, a greater share of revenues has been passed to the Provinces through the National Finance Commission (NFC) award in order to enable them to perform these functions. As expected, the devolution has posed institutional and capacity challenges at the provincial level, and meeting these challenges will require concerted efforts to enhance sub-national capacity and institutional development, which varies across provinces. Therefore under the current project, institutional arrangements have to be carefully worked out at the provincial level so that provinces may also equally take the responsibility during preparation of the chemical inventories as well as disposal of the POPs pesticides and PCBs in accordance with the newly developed strengthened legislation with due provincial representation. Special endeavors have also to be made for development of a viable implementation and enforcement mechanism with sound basis of monitoring and evaluation.

**The Stockholm Convention:** The Stockholm Convention on Persistent Organic Pollutants is a global treaty to protect human health and the environment from chemicals that remain intact in the environment for long periods, become widely distributed geographically, accumulate in the fatty tissue of humans and wildlife, and have harmful impacts on human health or on the environment. Exposure to [Persistent Organic Pollutants (POPs)](http://chm.pops.int/TheConvention/ThePOPs/tabid/673/Default.aspx) can lead to serious health effects including certain cancers, birth defects, dysfunctional immune and reproductive systems, greater susceptibility to disease and damages to the central and peripheral nervous systems. Given their long-range transport, no single government acting alone can protect its citizens or its environment from POPs. In response to this global problem, the Stockholm Convention, which was adopted in 2001 and entered into force in 2004, requires its parties to take measures to eliminate or reduce the release of POPs into the environment. Initially 12 chemicals, commonly known as the ‘dirty dozen’, were covered under the Stockholm Convention. This was extended and by 2017 a further 16 other POPs have been added by 181 Parties following an extensive period of review.

**Pakistan and the Stockholm Convention:** The Stockholm Convention on Persistent Organic Pollutants (POPs) was signed by Pakistan on December 6th, 2001, ratified on April 14th, 2008 and entered into force on July 16, 2008 which covered the initial 12 POPs included in the Stockholm Convention. Between 2010 and 2016 Pakistan additionally ratified amendments to Annex A, B and C of the Stockholm Convention for 14 of the 16 new POPs. In the context of enabling activities, the National Implementation Plan (NIP) was submitted on July 16th, 2010. This document provides a policy framework, which lays out the guidelines for addressing the specific issues of POPs pesticides and PCBs (the original 12 POPs listed) in Pakistan. Continuing efforts are being made to improve the existing policy and regulatory systems under the National Implementation Plan (NIP) ‐ POPs, and to strengthen enforcement, monitoring & compliance. The project is in line with the national priorities and interests as defined in the NIP on Persistent Organic Pollutants. The strategy of the Government of Pakistan is to have a sound POPs management system established and operational as soon as possible. The project proposes a series of activities to strengthen the existing legal and regulatory framework for POPs management and build technical, enforcement & monitoring capacity of local communities, concerned governmental departments and relevant stakeholders.

**POPs “Chemicals Targeted – The Dirty Dozen”**: The “Dirty Dozen” is the nickname for the 12 particularly nasty cancer causing POPs initially targeted by the Stockholm Convention. While many countries have banned the pesticides on the list, urgent action is still needed to tackle the industrial chemicals, by-products and stockpiles of such chemicals listed below.

1. **Aldrin**: Pesticide used to protect crops from soil insects.
2. **Chlordane**: Pesticide used to protect crops from termites.
3. **DDT**: Pesticide used on crops for vector control. Used on troops during WWII to stop malaria, typhus and other diseases.
4. **Dieldrin**: Pesticide used to control of insects and disease vectors.
5. **Endrin**: Pesticide used on field crops and to control rodents.
6. **Heptachlor**: Pesticide used against soil insects and termites.
7. **Hexachlorobenzene(HCB)**: Pesticide/industrial by-product released at plastics manufacturing.
8. **Mirex**: Pesticide used against various ants, termites, wasps and bugs. Also used as a fire retardant in plastics, rubber, paint paper and electrical goods.
9. **Toxaphene**: Pesticide used on cotton, grains, fruits, nuts and vegetables, and to control ticks and mites in livestock.
10. **Polychlorinated biphenyls (PCBs)**: Industrial chemical used in heat exchange fluids, paint additives, carbonless copy paper, plastics and various other industrial applications. Released as by-product.
11. **Dioxins**: Chemicals produced unintentionally due to incomplete combustion, as well during the manufacture of pesticides and other chlorinated substances. They are emitted mostly from the burning of hospital waste, municipal waste, and hazardous waste, and also from automobile emissions, peat, coal, and wood.
12. **Furans**: Persist in the environment for long periods, and are classified as possible human carcinogens. Food, particularly animal products, is the major source of exposure for humans.

The initial 12 POPs covered by the Stockholm Convention included mostly pesticides, some industrial chemicals and certain industrial by-products and are listed below.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| S. # | POPs – The Dirty Dozen | Pesticides | Industrial chemicals | By-products |
| 1 | Aldrin | X |  |  |
| 2 | Chlordane | X |  |  |
| 3 | DDT | X |  |  |
| 4 | Dieldrin | X |  |  |
| 5 | Endrin | X |  |  |
| 6 | Heptachlor | X |  |  |
| 7 | Mirex | X |  |  |
| 8 | Toxaphene | X |  |  |
| 9 | Hexachlorobenzene (HCB) | X | X | X |
| 10 | Polychlorinated biphenyl (PCBs) |  | X | X |
| 11 | Chlorinated dioxins |  |  | X |
| 12 | Chlorinated furans  |  |  | X |

**Table 5 – Stockholm Convention “Dirty Dozen”**

**Requirements for different kinds of POPs:** The Stockholm requires parties to the Convention to take the following actions for POPs under each Annex.

**ANNEX A** - Each Party shall prohibit and/or take the legal and administrative measures necessary to **ELIMINATE**:

* Its production and use of chemicals in Annex A;
* Its import and export of chemicals in Annex A.

**ANNEX B** - Production and use of chemicals in Annex B should be **ELIMINATED**, **EXCEPT FOR** “acceptable purposes”:

* Currently listed: only DDT is used for disease vector control.
* Industry must cease production of new PCBs immediately;
* Industry must eliminate use of in-place PCB equipment by 2025;
* Industry must achieve the environmentally sound management of PCB wastes as soon as possible and latest by 2028.

**ANNEX C** - Parties are to take measures to **MINIMIZE** or **ELIMINATE** releases of the unintentionally produced POPs.

**Unintentionally produced POPs**

* Manufacturing process where use of chlorine-containing materials is essential:
	+ Pulp & paper (bleaching)
	+ Chlorinated chemical productions (synthesis of chlorinated aromatic chemicals, chlorinated solvents, PVC, ..)
	+ Oil refining and catalyst generation
* Production application/use with chlorine-containing materials:
	+ Preservation of wood, leather, textiles
	+ Textile and leather dying
	+ Industrial bleaching processes
	+ Processes which involves solvents
	+ Water and wastewater disinfection
* Thermal processes with chlorine-containing materials incidentally present
* Other thermal processes
	+ Metallurgical process, primary and secondary processes (Cu, Fe, Al, Zn)
	+ Coke production and carbo-chemical processes
	+ Mineral processing; especially cement kilns
* Controlled combustion processes:
	+ Waste incineration
	+ Coal and oil combustion
	+ Landfill gas/biogas

**Legislative analysis**

**a.** Environmental legislation and its links with legislation on POPs. Pakistan has banned use of all severely toxic and hazardous pesticides included in the PIC and POP list in the early 1990s. In addition to PIC / POP pesticides, several other pesticides have also been banned. Recently the government is considering to ban all formulations of monocrotophos and methamidophos. Practically no pesticide falling in the WHO Category I is used. Due to availability of comparatively safe new chemistry molecules and IGRs at competitive prices, the use of pesticides falling into WHO Category II is also declining. The Agricultural Pesticides Rules provides that the destruction and removal of the empty packages and pesticides remains shall be treated in such a manner that sources of water supply are not contaminated. The unclean packages shall be destroyed in a way as to preclude the possibility of their being reused for any purpose other than as base material. Further procedures for disposal of surplus pesticides and pesticides containers have been notified in 1984 encompassing small use, commercial and municipal use, in situ-disposal; organized disposal and landfill disposal sites. National legislation exists in the form of Agricultural Pesticides Ordinance 1971 which is supported.

**Agricultural Pesticides Rules 1973**. The Rules are amended from time to time with the approval of Agricultural Pesticides Technical Advisory Committee (APTAC). APTAC is at liberty to nominate sub committees and can entrust them specific duties. Liberalization of pesticide trade had been welcomed as it had given benefit to the farmers. Unfortunately, this has not been entirely problem free. In some cases, unethical activities such as: formulating pesticides using active ingredient in substandard quantity and adulteration at supply chain, packing, distribution and marketing level were reported. These malpractices are affecting the plant protection quality and causing damage to the environment.

The list of the main relevant legislation in Pakistan follows.

**National Environmental Policy (NEP-2005).**The National Environment Policy provides an overarching framework for addressing the environmental issues facing Pakistan, particularly pollution of fresh water bodies and coastal waters, air pollution, lack of proper waste management, deforestation, loss of biodiversity, desertification, natural disasters and climate change. It also gives directions for addressing the cross sector issues as well as the underlying causes of environmental degradation and meeting international obligations. NEP-2005 goal is to protect, conserve and restore Pakistan’s environment in order to improve the quality of life of the citizens through sustainable development. NEP-2005 objectives are:  Conservation, restoration and efficient management of environmental resources  Integration of environmental consideration in policy making and planning processes.  Capacity building of government agencies and other stakeholders at all levels for better environment management  Meeting international obligation effectively in line with the national aspirations.  Creation of a demand for environment through mass awareness and community mobilization The NEP is a framework policy and does not contain direct reference to POPs. The only direct reference on chemicals is made under section 3.8 (Agriculture and Livestock) where is stated that “To achieve sustainable agricultural and livestock development, the government may promote integrated pest management and discourage indiscriminate use of agrochemicals” The only law having direct significance with respect to POPs in Pakistan is the Agricultural Pesticides Ordinance, 1971. This law was promulgated in 1971 with the purpose of regulating the import, manufacture, formulation, sale, distribution and use of Pesticides in Pakistan. The provisions of this law are supposed to be applied parallel to other laws. Eight POPs are included in the Agricultural Pesticides Ordinance. This ordinance has to be updated with the new pesticidal POPs. Agricultural Pesticides Rules, 1973. Pursuant to the above enactment, rules were made by the GOP in 1973. The rules give the detailed procedures for complying with the provisions of the main law. They contain provisions giving details of registration procedure and grounds for refusal to register. Certain pesticides including some POPs need to be labelled as POISON. In January, 2004 rule 12-A was added which makes it incumbent upon the importers, manufacturers and formulators to themselves supervise the packing of pesticides. They are also required to certify that the pesticides are not on the negative list in the developed countries like those of the European Union, as well as other chemicals producing countries such as China and India. The penalty for violating provisions of this law range with imprisonment between 1 and 3 years and with fine up to Rs.500.000. In Pakistan the Globally Harmonized System (GHS) for the classification and labelling of chemicals is not implemented. There is currently no information available on future plans for the implementation of GHS. PCBs and Hazardous Waste. While sections 13 and 14 of the Environmental Act 1997 dealt with hazardous waste substances, there are no operating rules and regulations developed that was why the importers used the loopholes to their advantage.

According to **Pakistan Environmental Protection Act - 1997**, "waste" means any substance or object which has been, is being or is intended to be, discarded or disposed of, and includes liquid waste, solid waste, waste gases, suspended waste, industrial waste, agricultural waste, nuclear waste, municipal waste, hospital waste, used polyethylene bags and residues from the incineration of all types of waste. Pakistan Environmental Protection Act 1997 defines " Hazardous substance" as (a) a substance or mixture of substance, other than a pesticide as defined in the Agricultural Pesticide Ordinance, 1971 (II of 1971), which, by reason of its chemical activity is toxic, explosive, flammable, corrosive, radioactive or other characteristics causes, or is likely to cause, directly or in combination with other matters, an adverse environmental effect; and (b) any substance which may be prescribed as a hazardous substance. There is no specific law on Polychlorinated biphenyls (PCBs).The production, supply & use of PCBs is not specifically regulated in any way in Pakistan. More importantly, Pakistan completely lacks of any norm regulating the inventory and management of PCB containing equipment and wastes. However, the National Implementation Plan of Pakistan 2004-05 highlights the need for such legislation and underlines the year 2025 by which the country has to dispose of all PCBs contaminated equipment. This description forms the basis for primary legislation related to PCBs management in the country. Sections 13 & 14 of PEPA 97 deal, in general, with prohibition of import of hazardous wastes & handling of hazardous substances. PEPA-1997, Section 11 sets the National Environmental Quality Standards (NEQS) for specific pollutants. Although PCBs are in the list of hazardous substance under the “Hazardous Substances Rules 2003, as the majority of other POPs these substances have not been specifically included in the list of NEQS. In addition, PCBs are not classified as “Banned Items” (Negative List) or “Restricted Items” in the “Import Trade and Procedures Order, 2000.” Provincial environmental regulation. As the power on environmental affairs has been delegated to the Provinces, each province issued its own Environmental Protection Act and the relevant downstream regulation. In general, these are based or reflect the National Environmental Policy and the Pakistan Environmental Protection Act. Based on delegation of powers to the provincial environment ministries, they will have to play active role in pesticides related legislation, disposal of POPs & PCBs, institutional capacity building and M&E arrangements.

**The situation of POPs Stockpiles in Pakistan:** Based on the inventory survey conducted during the NIP preparation, there are approximately 6033 MT of obsolete stocks of POPs pesticides (3800 MT Punjab, 2016 MT Sindh, 48 MT KPK, 135 MT Baluchistan, 31.5 MT AJK and 0.5 MT Northern areas). Large stocks of obsolete pesticides are situated in areas of intensive cash crops/ agricultural activities. Since stockpiles are located in towns or villages and near water bodies, there are potential human health and environmental risks. In 2010, a disastrous flood affected some of the areas where pesticide stockpiles are located, therefore the existence of these stockpiles has been subject to recent reconfirmation by site surveys. Initial information provided through media reports had advised that some of the pesticide stocks in Baluchistan (Pasni), Punjan (District Muzaffargarh) and Sindh (Khairpur) were washed away during the floods. Currently most of the warehouses and stores of pesticides have very old and poorly developed infrastructure that is in a very poor conditions, which was confirmed during site visits conducted under PPG activities to District Rahim Yar Khan, Bahawalpur and parts of Sindh province. This confirmed that a large proportion of the pesticides were leaking into soil during heavy rain periods and causing environmental pollution. As explained in other parts of this document, the site surveys carried out during PPG activities were independently conducted by UNDP to verify the current situation for endorsement by the government. The surveys confirm the risk of these hazardous chemicals entering the environment because of further floods is significant and destruction of these stockpiles in an environmentally sound way is an extremely urgent task.

The inventory survey of POPs stockpiles carried out in 2004-2005 – mainly based on information dated back to 1970s and 1980s - during NIP preparation delineated the following situation:

* In Punjab a total of 167 stock piles have been reported which contain 3800 tons of POPs pesticide;
* In Sindh, 2016 tons of POPs pesticides are reported.[[11]](#footnote-11) The biggest dump was reported to be in Provincial Store, located in Malir city, Karachi that contained about 400 tons of obsolete pesticides; however Hyderabad holds largest stock pile of POP pesticides;
* In KPK, presence of Dieldrin is reported in the custody of Agriculture Officer Nawagai Circle Store, contained in two iron drums about 25 km away from Daggar;
* In Balochistan, the presence of large quantity of the POPs pesticides has been reported in the stores of the public sector Departments at Quetta. The stock piles mainly contain Eldrin, Dieldrin, Endrin, Heptaclor, Chlordane and BHC. However, few small quantities of BHC & Dieldrin are reported at Loralai, Ziarat and Dera Murad Jamali. The exact quantity of the B.H.C has not been measured as it is very difficult to do so due to poor storage conditions;
* DI Khan District works as transportation route of POPs pesticides smuggled items from Iran via tribal areas through Afghanistan due to its geographical location; and
* In Azad Jammu and Kashmir (AJK) 31.5MT and in the Northern areas 0.5MT of POPs pesticides have been reported.

**Comparison of the POPs pesticide stockpiles between 2018, 2014 and 2004-05**:[[12]](#footnote-12) in Pakistan: In the course of project preparation activities, site visits to the pesticide stockpile areas were conducted by UNDP consultants to verify the status of the stockpiles and update – on the basis of visual inspection and collection of data and records – the amount of POPs and obsolete pesticides still stored. During site visits, it was found that a large part of pesticide dumps were displaced from 1994-97. However, some of the major sites in Sindh, Punjab and KPK have been visited to reconfirm this. These sites still contain major stocks of POPs pesticides as well as PCBs contaminated equipment due to agro-industrial activities that have been and are currently taking place in these areas. The pesticides stocks visited in KPK are intact but a large part was also either leaked or stolen. The condition of stocks is highly dilapidated. DPP has assured to provide some quantitative data that is still awaited. These data may not be accurately available except the best estimates as made by the Department of Plant Protection. Due to financial as well as management issues, DPP has not been able to update the data. The data available was mostly collected during 1970s and 1980s and very little could be updated of only some of the sites.

In the summary table reported below, the outcome of this survey is summarized. Some of stocks were reduced in volume or disappeared altogether due to poor storage infrastructure, leakage in the soil, intermittent theft for relabeling and resale for control of household pests and also due to planned transportation and dumping in the desert areas of Cholistan, Mianwali and Dera Ghazi Khan. During recent site surveys, some of these sites have also been located. In few cases, the survey found larger amount of chemicals compared to the previous estimates, either because of likely underestimation on the previous survey, or because of actual increase of chemicals collected and stored in these sites.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Province** | **District/Location** | **Evaluation of sites**  | **Evaluation of sites by UNDP** | **POPs Inventory by GOP-MOCC** |
| **Reverification\*** | **Reported Quantity** |
| **2018** | **2014** | **2004-05** |
| **Punjab** | Lahore (Walton & Dharampura), PPD | Not Finalized | 100 MT | 43 MT (different surveys) |
| Rawalpindi PPD | N.A (The store could not be opened) | (No data inventory) |
| Bahawalpur, PPD | 1,000+ MT | 42.1 MT  |
| Rahim Yar Khan PPD | 500+ MT | 10.8 MT |
| **Baluchistan** | Federal PPD | Obs Pesticide 49.085 MT |  |  |
| Killa Saifullah | Obs Pesticide 0.5798 MTDieldrin 20EC. 1 Liter |  |  |
| Ziarat | Obs Pesticide 1.333 MTDieldrin 20EC. 15 Liters |  |  |
| Loralai | Obs Pesticide 1.575 MT |  |  |
| Dalbandin | Obs Pesticide 0.7258 MTHeptachlor 40 Liters |  |  |
| Kharan, Kohlu, Jhal Magsi, Noshki | Obs Pesticide 1.03 MT |  |  |
| Quetta,  | Obs Pesticide ARI=45 MTHeptachlor 10 Liters | obs pesticides BHC stocks. 2 trucks of Malathion (non POP) added | Quetta 49 Tons,  |
| Pasni | 0.00 | Few Kgs, mostly BHC  | NA |
| Gawadar, Turbat, Panjgur | Obs Pesticide Turbat 0.082 MT | 15 tons. Stores are still intact | (Pangur 102 Tons)(Turbat 94 Tons) |
| **Total in Baluchistan** | **Ob Pesticide** **99.4106 MT****POPS = 66 Liters** |  |  |
| **KPK** | AED Tarnab Farms, Peshawar | Obs Pesticide 2.154MT + POPs 3622Liters | 6.3 tons still intact in the store | 400 Ltr. |
| Nowshera at DDT  |  | Site demolished  | NA (No data  |
| PPD, Jamrud Road, Peshawar |  | Obsolete pesticides available  | NA (No data  |
| AED, KPK |  | Dumped at barren sites; some along Kabul River and Nizam pur area. | N.A  |
| Charsadda | Obs Pesticide 6.833MT + POPs 1004Liters | N.A | N.A |
| Dir Lower | Obs Pesticide 0.810MT + POPs 12Liters | N.A | N.A |
| Kohat | Obs Pesticide 38.0 MT+ POPs 198 Liters | N.A | N.A |
| Bunir | Obs Pesticide 0.189 MT+ POPs 0.0 Litres | N.A | N.A |
| Malakand | Obs Pesticide 0.049 MT+ POPs 330 Litres | N.A | N.A |
| **Total Quantity in KPK** | **Obs Pesticide 48.03 MT****+ POPs 5166 Litres** | N.A | N.A |

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Gilgit Baltistan** | Skardu | Obs Pesticide 0.704 MTPOPs 318 Litres | N.A | N.A |
| Gilgit | Obs Pesticide, NAPOPs Nil | N.A | N.A |
| **Total quantity** | **Obs Pesticide** **0.704 MT****POPs - 318 Litres** | N.A | N.A |
| **AJK** | Muzaffarabad | Obs Pesticide 0.016 MTPOPs – 0.00 Litres | N.A | N.A |
| **Total quantity** | **Obs Pesticide** **0.016 MT****POPs – 0.00 Litres** | N.A | N.A |
|  **SINDH** | Karachi (Malir Halt) | 0.00 | Shifted to Thatta (Gharo) 1994-97 | 20 MT and 15,425 L |
| Hyderabad |  | Official infrastructure raised on the store site | 2 Tons |
| Nowshero Feroze, Kandiaro, Benazirabad, Sukkur, Larkana (AED) | Obs Pesticide, 11.90 MT+POPs 3075 Liters | 800 Tonsstill intact stores with obsolete pesticides of the Provincial AEDs | Nowshero Feroz 78.3 MTKandiaro1.2MT Benazirabad /Nawabshah 22.6 MT Sukkur 9.4 MT, Larkana 7.3 MT |
| Tando Allahyar | Obs Pesticide, 0.6 MTPOPs Nil | N.A | N.A |
| Sanghar | Obs Pesticide, 0.0 MTPOPs 1500 Liters | N.A | N.A |
| Jacobabad proper | Obs Pesticide, 7.81 MTPOPs 27546 Litres | N.A | N.A |
| Thull/Jacobabad | Obs Pesticide, 3.25 MTPOPs 2922 Litres | N.A | N.A |
| Garhi Yaseen/ Shikarpur | Obs Pesticide, 0.0 MTPOPs 13000 Litres | N.A | N.A |
| Dalli / Bhiria (N.Feroz) | Obs Pesticide, 0.075 MTPOPs 214 Litres | N.A | N.A |
| Jalbani Goth / Bhiria (N.Feroz) | Obs Pesticide, 0.05 MTPOPs 135 Liters | N.A | N.A |
| Chanari A.O Office / N. Feroz | Obs Pesticide, 0.540 MTPOPs 0.0 Litres | N.A | N.A |
| Moro proper / N.Feroz | Obs Pesticide, 0.20 MTPOPs 6520 Litres | N.A | N.A |
| DD agri. Ext . Office Nawabshah | Obs Pesticide, 1.480 MTPOPs 1700 Litres | N.A | N.A |
| DD agroi. Fruit Farm M.P.K | Obs Pesticide, 17.738 MTPOPs 10500Litres | N.A | N.A |
| Kot Ghulam Mohd./ M.P.K | Obs Pesticide, 11.625 MTPOPs 4905 Litres | N.A | N.A |
| Degree/ M.P.K | Obs Pesticide, 1.325 MTPOPs 2675 Litres | N.A | N.A |
| DD.Agri.Jamshero at Kotri | Obs Pesticide, 3.50 MTPOPs 0.0 Litres | N.A | N.A |
| **Total quantity** | **Obs Pesticide, 60.02 MT****POPs 74,692 Litres** | N.A | N.A |

**Table 6 – POPS Inventory Comparison in Pakistan**

**The situation of PCBs in Pakistan [[13]](#footnote-13)**

The initial survey reports quoted in the NIP from Sindh, Punjab and KPK have indicated that about 80% of the samples tested (45 samples) in the provinces had PCB levels higher than the safe limits (> than 50 ppm). The samples were taken in containers of drained oil, in transformers and in soil located within the “transformer reclamation facilities“, and analysed with test kits (Clor-N-oil). The overall number of transformers installed in Pakistan (on the side of electricity production and distribution) exceeds 470000 units. Most of the issues listed in the NIP were reconfirmed during the Project Preparation stage, namely:

1. There is no PCB management in place either at national or at any electric power company level, although in many cases pure PCB transformers have been found based on their label;
2. Damaged transformers or end of life transformers are usually sent to reclamation centers without any checking of PCBs. At the reclamation centres, these transformers are either reclaimed, auctioned as a whole, or disposed off as scrap material after being drained and dismantled;
3. reclamation centers operate without significant protection of the worker’s health or the environment;
4. auctioned transformers may easily cross the Pakistan border with Afghanistan; and
5. Meetings with Electrical Companies (IESCO, K-E) revealed that in some cases, electrical companies are carrying out identification of PCB equipment limited to the power transformers. Distribution transformers are not tested because of their large numbers.

The distribution of power has been assigned to 11 electricity distribution companies known as DISCOs with their autonomous institutional status. These companies include: Islamabad Electric Supply Company (IESCO), Lahore Electric Supply Company (LESCO); Gujranwala Electric Supply Company (GESCO); Peshawar Electric Supply Company (PESCO), Quetta Electric Supply Company (QESCO), Multan Electric Power Company (MEPCO); Faisalabad Electric Supply Company (FESCO); Sukkur Electric Supply Company (SESCO), Tribal Electric Supply Company (TESCO), Karachi Electric (KE), Hyderabad Electric Supply Company (HESCO). In addition to WAPDA, Hub Power Company and Kot Addu Power Company are also established. Each of the company takes care of its power transformers and manages the reclamation centres that are also called as reclamation workshops for repair and disposal of the outdated transformers but with insufficient health & environmental safeguards. Under the new management arrangements in power sector of Pakistan WAPDA is only responsible for hydropower projects while the tasks related to distribution of electricity has been assigned to the companies known as DISCOs.

**Pakistan National Implementation Plan on POPs**

* Phased elimination of 167 sites, with a total of 3,600 MT of obsolete POPs containing pesticides, with immediate action given to sites causing public nuisance.
* In coordination with the Federal authorities and other Provincial governments, undertake a market survey of illegal POPs pesticides, with a view to identifying: (i) the pesticides involved in illegal use; (ii) the extent of the problem of illegal use; and (iii) the possible origin of illegal POPs pesticides.
* Undertake a survey of the PCBs content of (i) leaking transformers still in use, (ii) transformers in-service, (iii) contaminated sites, including transformer reclamation workshops.
* Establish environmentally sound and safe storage facilities for used PCB oils and PCB contaminated equipment.
* Develop and implement an environmentally sound management plan for (i) domestic waste, (ii) medical/hospital waste, and (iii) industrial waste.
* Develop and implement POPs issues awareness programmes for the public and relevant sectors.
* In consultation with Federal authorities, consider if any Provincial or Local Authority legal action is required in relation to regulatory action to implement the Stockholm Convention.
* Collaborate with Federal and other Provincial authorities, in implementing harmonized data collection and management as required under action plan.
* Promote the development of human resources required at Provincial level to implement the NIP
* Actions for the Medium term (5 to 10 years).
* Phased implementation of BAT and BEP for specific industrial processes, initially for (a) production of chemicals and consumer goods, (b) Electricity Generation + Transmission & (c) Steel melting & Rerolling.
* Actions for the long term (10 years and beyond).
* Decontamination and rehabilitation of sites contaminated with POPs, particularly PCBs and POPs pesticides.

**Provincial Level Actions:**

* PUNJAB: Phased elimination of 167 sites, with a total of 3,600 MT of obsolete POPs containing pesticides, with immediate action given to sites causing public nuisance.
* KPK: Phased elimination of 3 sites, with a total of 49 MT of obsolete POPs.
* SINDH: Phased elimination of 205 sites, with a total of 2016 MT of obsolete POPs.
* BALOCHISTAN:Phased elimination of 5 sites, with a total of 136 MT of obsolete POPs.

* 1. **Problems that the project sought to address**: threats and barriers targeted
1. Legal documents, policy, guidelines and procedures not developed: Environmental and chemical regulations are incomplete and not compliant with SC requirements. In Pakistan, a set of environmental related regulation does exist both on the side of environmental protection and pesticide management. However part of the regulation is not yet compliant with SC requirements, with specific reference to the list of restricted chemicals, the management of hazardous waste, including waste containing POPs or PCBs.
2. Capacity building and awareness trainings for specific groups were not conducted in past. However, the process to conduct specific trainings for energy/waste management /custom/ports & shipment sectors have already been initiated by POPs PMU to be held in November 2018. Limited awareness on POPs pesticides issue. Although efforts have been carried out, awareness on the safe use of pesticides is lacking. There is the concrete risk that POPs pesticides or obsolete pesticides are illegally traded, as there is still the perception that these pesticides are “very effective”.
3. Awareness of the PCBs issue. The current management of end of life equipment by the electric power companies demonstrate the almost complete lacking of awareness of the PCB issue, with specific reference to mineral oil transformers possibly contaminated by PCB. Electric power companies are not clear about their liability and the extent of the PCB issue in their companies.
4. Importance of preventive actions, including the use of Personal Protective Equipment. Visit to PCB reclamation facilities confirmed that there are no measures in place to prevent the contact of the workers with PCBs, and to prevent leaking of PCB contaminated oil in the environment.
5. Control of POPs and PCBs across borders of the country. Reportedly, near end of life transformers are auctioned and very often sold to neighbouring countries without any checking on their PCB content. The traffic of POPs chemicals across some Pakistan borders has been also documented
6. Lack of disposal facilities and of procedures for testing and permitting the disposal of hazardous waste. Up to now, only one facility fulfilling SC and Basel requirements for the disposal of POPs waste has been identified. There are no official rules for permitting and testing disposal facilities in the country, therefore this capacity has to be developed.
7. No midterm targets developed for the project implementation
8. Objectives, Outcomes and activities were not time bound
9. Delay in the progress of project
10. Non Availability of the Project staff
11. List of stockpiles for POPs Pesticide not consistent
12. List of PCB Contaminated oils and Equipment not available
13. POPS pesticides and PCB contaminated oils were considered similar in the Project Document while practically it was different
14. No characterization was done for the material before collection, Non POPS pesticide were disposed under the project activity.
15. Standard Operating Procedures (SOPs) were not available for Change of Custody (collection, packaging, transportation, unloading
16. Standard Operating Procedures (SOPs) were not available for quantification with the feed for Disposal through Incineration in a cement kiln
17. No SOP for the disposal of packing drums and contaminated transformers.
18. Gap of communication among the stakeholders
19. Proper and regularly updated Monitoring and Evaluation plan is lacking

## **3.3 Project** **Description and Strategy**:

The project has been arranged in four components as follows:

|  |  |  |  |
| --- | --- | --- | --- |
| **Component** | **Outcome** | **Output / ActivityProject Targets/Results[[14]](#footnote-14)** | **Expected Results** |
| **1.** Development and implementation of a Regulatory, Policy and enforcement system to reduce POPs releases. | 1.1 Strengthened POPs regulatory and policy instruments adopted and POPs management systems for controlling and reducing releasesof POPs: | 1.1.1 .Key POPs related national legislation developed***:***Gap analysis to comply with the Stockholm and Basel Convention requirements, a specific set of secondary law and norms on the following aspects:* PCBs inventory and management;
* HWM with specific reference to waste containing POPs;
* Emission standards for HW disposal;
* Integration of the existing legislation with new POPs.

1.1.2 Technical guidance documents:Document for implementation of new regulation, (identification, labeling, transport, storage and disposal) of POPs chemicals and POPs waste, alternatives to POPs in industry and agriculture, BAT/BEP for minimization of U-POPs releases from waste treatment. | * Pakistan environmental regulation improved to ensure aligned with the Stockholm and Basel conventions.
* Specific norms and rules regulating HWM, PCBs, and integration of the existing provisions on POPs with the provisions on new POPs.
* Guidance documents for the specific needs of management and disposal of POPs
* Complete set of guidelines for POPs, inclusive of PCBs, management and Emission standards for HW disposal;
* alternatives to POPs in industry and agriculture
 |
| 1.2 Government enforcement agencies/other organizations involved in regulating POPs management are able to use tools developed for POPs management and network with/regulate main agencies handling POPs. | 1.2.1 Roles and administrative procedures, enforcement tools for POPs management at federal/ provincial/municipal levels:1.2.2 POPs management and enforcement stakeholders trained to their tasks. The training modules will concern both technical and legal aspects:Training will be preceded by a proper Training Need Assessment, as well preliminary evaluation of the trainees to check their knowledge of the matter and emerging needs, and will be followed by a test to measure the effectiveness of the training.  | * Roles and administrative procedures established.
* Responsibilities will be assigned and offices for the enforcement of POPs management at provincial and municipal level established.
* At least 400 officers in charge of POPs management (PCBs, POPs stockpile, hazardous waste) will be trained to their tasks and responsibility.
 |
| 1.3 Governance and enforcement particularly on illegal imports framework for controlling POPs improved. | 1.3.1 Procedures, responsibilities and offices for enforcement of provisions related to illegal import or exports established: These procedures will concern both POP pesticides/ PCBs.1.3.2 Custom administration and officers trained on POPs related issues: The training modules will concern technical and legal aspects, and will be integrated with the specific training for custom officers. | * Procedures, responsibilities and offices for the enforcement of provisions related to import/exports of POPs substances or POPs containing or contaminated articles will be established.
* Custom officers and managers will be trained on POPs issues and strategies.
 |
| 1.4 National Chemicals Profile updated. | 1.4.1 Data compilation and elaboration of an updated Chemicals Profile for Pakistan: The Pakistan Chemicals Profile, drafted in 2009, will be updated. | * Update Chemical Profile for Pakistan
 |
| 2.Capacity building of local communities, public/private stakeholders to reduce exposure to releases of POPs. | 2.1 Stakeholders aware of sources and prepared to mitigate POPs exposure and releases with specific reference topesticide stockpiles. | 2.1.1 Development of awareness and training programs on POPs sources on cost effective POPs exposure and release reduction steps as well as alternatives to POPs;2.1.2 Professional and community level training sessions on POPs exposure mainly for PCBs and release undertaken as well as risks with unauthorized products reduction covering 30 institutes and 50 communities; and2.1.3 Training of PCB holders in safe PCB handling during maintenance Stakeholders will be properly identified and involved in raising awareness initiatives. | * Awareness and training on POPs sources / cost effective POPs exposure and release reduction steps as well as alternatives to POPs;
* Professional and community level training on POPs exposure mainly for PCBs
* risks with unauthorized products reduction covering 30 institutes and 50 communities
* Awareness and training gaps for each stakeholders properly identified and addressed.
 |
| 2.2 Cost effective POPs exposure mitigation undertaken focusing mainly on PCBs. | 2.2.1 Specific guidance documents developed and training for PCB holders in safe PCB handling during maintenance undertaken. | * Identification/labeling of PCB contaminated equipment;
* Screening and laboratory analysis of PCBs;
* Maintenance, handling, transportation/storage of PCB contaminated equip
* Disposal / treatment of PCB contaminated equipment.
 |
| 2.3 POPs awareness for target groups, decision makers, high/risk occupations | 2.3.1 Professional and community level training sessions on exposure to POPs pesticides and release undertaken as well as risks associated with unauthorized products covering  | * 30 institutes and 50 communities, trained
* specific training activity for addressing gender issue,
 |
| 2.4 Reduced POPs exposure in occupational setting. | 2.4.1 Guidance for exposure reduction to POPs in priority areas, including indirect exposure/ gender-related exposure;2.4.2 Training on POPs, PPEs, RiskManagement Measures and Exposure Scenarios for workers and control authorities in specific industrial sectors; and2.4.3 specific training activity for women addressing POPs issue | * Guidance for exposure reduction to POPs
* Training on POPs, PPEs, Risk Management Measures for workers
* specific training activity for women addressing POPs issue
* control improper use of recycled container
 |
| 3. Collection, Transport and Disposal of PCBS and POPS Pesticides. | 3.1 Capacity to undertake POPs disposal projects at provincial level established.Two separate lines of activities will be carried out, for PCBs & pesticide POPs, same disposal technology can be considered.  | 3.1.1 National Inventory of POPs stockpile upgraded, including map for identifying priority sites:3.1.2 Storages upgraded and logistic plan developed; to minimize the risk for transportation and the number of storage facilities to be upgraded, to prevent leakage or dispersion of POPs in the environment. 3.1.3 Pilot inventory of PCBs (testing of at least 5000 equipment) carried out in one Province; Monitoring activities for PCBs will be planned in coordination with the power distribution companies3.1.4 At least 2 PCB storage and dismantling facility upgraded. A site for the dismantling and storage of PCB containing equipment will be upgraded for ensuring environmentally sound operation,  | * Complete system of POPs storage, transport, packaging, and disposal will be established, with the relevant procedures.
* National Inventory of POPs stockpile
* map identifying priority sites
* Storages upgraded and logistic plan developed
* testing of 5000 equipmentt in one province
* Monitoring for PCBs
* 2 PCB storage and dismantling facility upgraded for ensuring environmentally sound operations
 |
| 3.2 Environmentally Sound Disposal of POPs. Removal of risky POPs stockpiles and the sound disposal of up to 1200 tons of POP pesticides and of 300 tons of PCB. | 3.2.1 Identification, procurement and testing of suitable disposal facility for POPs in Pakistan. The facility will have to be compliant with the BAT/BEP” .3.2.2. Up to 1200 tons of obsolete POPs stockpile from Punjab andSindh province safely disposed;The environmentally sound packaging, transport and disposal to the selected facility from Punjab and Sindh province will be carried out.3.2.3. Environmentally Sound Management and disposal of PCBs.so that these can be recycled without harming the environment and the human health. | * disposal facility in Pakistan will be identified and tested to prove its compliance with the BAT/BEP requirement under the Stockholm convention for the disposal of 1200 tons of POPs and 300 tons of PCB contaminated equipment.
* End of life PCB contaminated transformers will be safely dismantled and their carcasses decontaminated
* proper technology (either a dehalogenation mobile technology, or disposal services for PCB oil and PCB contaminated waste) will be identified, tested and procured
 |
| 3.3 National POPs management and disposal scheme and replication plan developed. | 3.3.1. National scheme for obsolete POPs pesticide disposal as a part of hazardous waste management scheme developed;3.3.2 National management plan for PCBs based on the inventory and disposal of priority PCBs developed; 3.3.3 Personnel and offices in charge of management and disposal of POPs appointed. | * National POPs management plan developed as part of HWM scheme
* National management plan for PCBs
* Personnel and offices in charge of management and disposal of POPs appointed.
 |
| 4. Monitoring and evaluation**.** | * 1. M&E and adaptive management are applied to provide feedback to the project coordination process to capitalize on the project needs; and
	2. Lessons learned and best practices are accumulated, summarized and replicated at the country level and disseminated internationally.
 | * improve the implementation of the project and disseminate lessons learnt domestically and internationally
* Lessons learned and best practices are accumulated, summarized and replicated at the country level and disseminated internationally
 |

**Table 7 Project Description**

**3.4 Project Implementation Arrangements:** short description of the Project Steering

Committee, key implementing partner arrangements, etc.

**Project Steering Committee:** Composition of the PSC

1. Secretary Ministry of Climate Change Islamabad (Chair)
2. Secretary Ministry of Food Security and Research Islamabad or representative not below the rank of Joint Secretary
3. Secretary Ministry of Industries and Production Islamabad or representative
4. Chairman NEPRA Islamabad or representative not below the rank of member
5. National Project Director
6. Representative of UNDP
7. Representative of Economic Affairs Division Islamabad not below the rank of Joint Secretary.
8. Director General Federal Environment Protection Agency Islamabad
9. Director Environment Policy, Ministry of Climate Change Islamabad
10. National Project Manager (to serve as secretary to the Committee)

**TOR’s of the** **Project Steering Committee:**

1. **Initiating the project;**
2. Delegate any project assurance function as appropriate
3. Review and approve detailed project plan and AWP includes ATLAS reports covering activities, definition, quality criteria, issue log, updated risk log and the monitoring & communication plan
4. **Running the project;**
5. Provide overall guidance and direction to the project, ensuring it remains within any specified constraints
6. Address project issues as raised by the project manager
7. Provide guidance and agree on possible countermeasures/management actions to address specific risks
8. Conduct quarterly meetings to review project’s quarterly progress reports at the end of each quarter and provide directions and recommendations to ensure that the agreed deliverables are produced satisfactorily according to plans
9. Review combined deliver reports (CDR) prior to certification by the implementing partner.
10. Appraise the project annual review report, make recommendations for the next AWP and inform the joint steering committee about the results
11. Review and approve end project report, make recommendations on follow on actions
12. Provide ad-hoc directions and advice for exception situations when project manger’s tolerances are exceeded
13. Access and decide on project changes through revisions

**Project Management Unit:**

Ms. Nusrat Shaheen, National Project Manager

Mr. Aman Ahmed Qureshi, National Technical Advisor

Mr. Majid Rasheed, Admin and Finance Officer

**Implementing Partner:** Ministry of Climate Change Government of Pakistan is the implementing partner for this project. During the project’s implementation, the Implementing Partner is accountable for:

* Managing UNDP resources to achieve the expected results specified in the project document, in accordance with the government financial rules and regulations to the extent that they do not contravene the principles of the Financial Regulations and Rules of UNDP;
* Maintaining an up-to-date accounting system to ensure accuracy and reliability of financial reporting; and,
* Providing expenditure reports to UNDP on a quarterly basis (or more frequently as appropriate).
	1. **Main stakeholders:** summary list
1. Government Counterparts (the GEF Operational Focal Point);
2. UNDP Country Office(s);
3. UNDP-GEF Regional Technical Advisors;
4. Ministry of Climate Change (MOCC)
5. Project Team
6. Federal and Provincial EPAs
7. Ministry of National Food Security & Research;
8. Ministry of National Health Services, Regulation and Coordination;
9. Pakistan Agriculture Research Council
10. NARC Laboratories;
11. NARC Eco-toxicological Lab;
12. PCRWR;
13. Kala Shah Kaku Pesticides Residue Labs;
14. Pesticides Lab Karachi;
15. PPD (Plant Protection Departments);
16. Agriculture Extension Department
17. National Electric Power Regulatory Authority (NPERA)
18. Electrical Power Companies: FESCO, GESCO, HESCO, IESCO, KE, LESCO, MEPCO, PESCO, QESCO, SESCO and TESCO;
19. Disposal Facilities (Bestway Cement);
20. Transporting Co Bizxpert

# **4. Findings**

## **4.1 Project Strategy**

### **Project Design:**

The project design is mostly sound in that it is completely aligned wth the Country priorities as identified within the NIP. It does have serious problems in lacking any time bound indicators[[15]](#footnote-15) which is reflected in the review of all of the PIRs which show no MTR targets[[16]](#footnote-16) for any of the project components. Another serious flaw is the failure of the project to identify the need for international expert backstopping in the formal positions (only except that it lack time bound indicators which is reflected in the PIRs.[[17]](#footnote-17). It has been ambitious in aiming to completely introduce a fully regulated POPs management system. The strategy is relevant and fully aligned with the Country priorities as identified within the NIP.[[18]](#footnote-18)

However the project design is mostly sound and is completely aligned with the Country priorities as identified within the NIP. As the MPU staff was changed frequently therefore there was no opportunity to incorporate the lessons from relevant projects, however Ministry of Climate Change is working on NIP update project supported by UNEP so the overall lessons were incorporated into the project results.

**Results Framework/Log frame:**

Indicators and targets appear to have been Specific, Measurable, Achievable and Relevant, but were not Time bound (multiyear budget timeline but no multiyear indicators[[19]](#footnote-19)) by year. Time lost due to incomplete project teams and lack of progress means many objectives may no longer be feasible within the remaining time limits; the project has potential to catalyze beneficial development (public/private sector) in improving the overall hazardous waste management system.

Local companies were engaged for transportation and disposal of the POPs pesticides and female project Manager was hired that is an example of woman’s empowerment. Also health impact assessment of the communities was planned which is also focusing on the health of females as most females work in the agricultural fields and exposed to the harmful nature of obsolete pesticides.

## **4.2 Progress Towards Results**

**Progress towards outcomes analysis**

Overall project progress is more or less tracking overall budget expenditure with approximately 30% of the project achieved to date[[20]](#footnote-20). [[21]](#footnote-21)

|  |  |  |  |
| --- | --- | --- | --- |
| **PIR Outcomes#** | **Rec #** | **Recommendation** | **Status** |
|  | **Component 1** | Component 1 Development & Implementation of a Regulatory, Police & Enforcement system to reduce POPs releases | Commenced but only 10% completed (90% remains to be implemented). Expert backstopping is required. |
| Outcome 1 | O1.1 | Outcome 1.1 Strengthened POPs regulatory, policy instruments adopted and POPs management systems for controlling and reducing releases of POPs functional | Started |
|  | O1.1.1*(Activity 1)* | Key POPs related national legislation developed | Commenced but only modest progress and not yet an integrated approach with other project components and lack of expert backstopping on POPs (which is missing). |
|  | O1.1.2*(Activity 2)* | Technical guidance documents  | Not Started |
| Outcome 4 | O1.2 | Outcome 1.2 Government enforcement agencies and other organisations involved in regulating management are able to use tools developed for POPs management and network with/regulate main agencies handling POPs | Not Started |
|  | O1.2.1*(Activity 3)* | Roles and administrative procedures, enforcement tools for POPs management at federal/provincial level and municipal level established  | Not Started |
|  | O1.2.2*(Activity 4)* | POPs management and enforcement stakeholders trained to their tasks. The training modules will concern both technical and legal aspects | Not Started |
| Outcome 5 | O1.3 | Outcome 1.3 Governance and enforcement particularly on illegal frameworks for controlling POPs improved  | Not Started |
|  | O1.3.1*(Activity 5)* | Procedures, responsibilities and offices for enforcement of provisions related to illegal import or exports established  | Not Started |
|  | O1.3.2*(Activity 6)* | Custom administration and officers trained on POPs related issues | Not Started |
| Outcome 6 | O1.4 | Outcome 1.4 National Chemicals Profile Updated | Not started but relates to O3.1.1 and is duplicated by NIP update |
|  | O1.4.1*(Activity 7)* | Data compilation and elaboration of an updated Chemicals Profile for Pakistan | Not Started though data could be collected under properly conducted baseline studies |
|  | **Component 2** | Capacity Building of local communities, public and private stakeholders to reduce exposure to and releases of POPs | Commenced but generic awareness raising only |
| Outcome 7 | O2.1 | Stakeholder groups aware of sources and prepared to mitigate POPs exposure and releases with specific reference to pesticide stockpiles | Not started |
|  | O2.1.1*(Activity 8)* | Development of awareness and training programmes on POPs sources on cost effective POPs exposure and release reduction steps as well as alternatives to POPs | Not started specifically but included to some extent in the initial trainings |
|  | O2.1.2*(Activity 9)* | Professional and community level training session on POPs exposure mainly for PCBs and release undertaken as well as risks with unauthorised products reduction covering 30 institutes and 50 communities | Not started |
|  | O2.1.3*(Activity 10)* | Training of PCB holders in safe PCB holders in safe PCB handling during maintenance. Stakeholders will be properly identified and involved in raising awareness initiatives | Not Started |
| Outcome 8 | O2.2 | Cost effective POPs exposure mitigation undertaken focusing on PCBs | Not Started |
|  | O2.2.1*(Activity 11)* | Specific guidance documents developed and training for PCB holders in safe PCB handling during maintenance undertaken | Not Started |
| Outcome 9 | O2.3 | POPs awareness among key target groups, such as decision makers, high/risk occupations etc raised.  | Started |
|  | O2.3.1*(Activity 12)* | Professional and community level training sessions on exposure to POPs pesticides and release undertaken as well as risks associated with unauthorized products covering 30 institutes and 50 communities, including a specific training activity for addressing gender issue, carried out.  | Started |
| Outcome 10 | O2.4 | Reduced POPs exposure in occupational setting  | Not started |
|  | O2.4.1*(Activity 13)* | Guidance for exposure reduction to POPs in priority areas, including indirect exposure and gender-related exposure developed  | Started |
|  | O2.4.2*(Activity 14)* | Training on POPs, Personal Protective Equipment, Risk Management Measures and Exposure Scenarios for workers and control authorities in specific industrial sectors  | Not started |
|  | O2.4.3*(Activity 15)* | Specific training activity for women addressing POPs issues implemented | Not started |
|  | **Component 3** | Collection, Transport and disposal of PCBs and POPs Pesticides | Commenced (30%) with a good framework for collection, transport and disposal successfully started. But needs to verify POPs are treated (not ineligible non POP pesticides), needs verification BAT/BEP is applied and needs expert backstopping on POPs (which is missing).  |
| Outcome 11 | O3.1 | Capacity to undertake POPs disposal projects at provincial level established | Trial and commercial disposal for obsolete pesticides and transformer oil conducted and proven with ESM for destruction, But adherence to BAT/BEP and verification POPs are being treated (not other chemicals) is missing. |
|  | O3.1.1*(Activity 16)* | National Inventory of POPs stockpile upgraded, including map of identifying priority sites | Re-verification in 3 provinces completed but misidentification of non-POPs pesticides as POPs shows serious lack of expertise. Needs to be repeated. |
|  | O3.1.2*(Activity 17)* | Storages upgraded and logistic plan developed  | Not started |
|  | O3.1.3*(Activity 18)* | Pilot inventory of PCBs (testing of at least 5000 equipment) carried out in one province | . A widespread program using Chor-N-Oil as recommended in the Pro Doc needs to be commenced. Testing by COMSATs Laboratory for 50 samples has occurred, but this was only qualitative and with unknown QA/QC and does not substitute for a formal PCB project Inventory which is also missing from baseline document, National Implementation plan of Pakistan. |
|  | O3.1.4*(Activity 19)* | At least 2 PCB storage and dismantling facilities upgraded | Not started |
| Outcome 2 | O3.2 | Environmentally Sound Disposal of POPs. Removal of particularly risky POPs stockpiles and sound disposal of up to 1200 tons of POP pesticides and 300 tons of PCB | Commenced with 475 tonnes of obsolete pesticides destroyed successfully (not verified it this contained any POPs). |
|  | O3.2.1*(Activity 20)* | Identification, procurement and testing of suitable disposal facility  | Commenced and successful with full independent emissions testing but no full test burn report. Reluctance to take further pesticides due to poor packaging and odour issues/OHS reports. other technology options may be better for PCBs |
|  | O3.2.2*(Activity 21)* | Up to 1200 tons of obsolete POPs stockpile from Punjab and Sindh province safely disposed  | 475 tonnes of obsolete successfully collected, transported and destroyed which forms a good basis for continued treatment.  |
|  | O3.2.3*(Activity 22)* | Environmentally Sound Management and disposal of PCBs  | O4.71 Tonnes of suspected PCBs has been destroyed (no testing to verify PCB content). NOC and destruction certificates provided for oil and steel carcasses (16.93 Tonnes). Access and inventory problems exist for PCBs which make this target problematicthat need to be managed. Other mobile de-halogenation technology may be more suitable. |
| Outcome 3 | O3.3 | National POPs management and disposal scheme and replication plan developed  | Not started |
|  | O3.3.1*(Activity 23)* | National scheme for obsolete pesticide disposal as a part of hazardous waste management scheme developed | Not started  |
|  | O3.3.2*(Activity 24)* | National management plan for PCBs based on the inventory and disposal of priority PCBs developed | Not started |
|  | O3.3.3*(Activity 25)* | Personnel and officer in charge of management and disposal of POPs appointed, | Not started |
|  | **Component 4** | Monitoring & Evaluation Framework | Not started |
| *(Outcome 12)**Not reported in PIR* | O4.1 | M&E and adaptive management are applied to provide feedback to the project coordination process to capitalise on the project needs  | Not started |
| *(Outcome 13)**Not reported in PIR* | O4.2 | Lessons learned and best practices are accumulated, summarised and replicated at the country level and disseminated internationally  | Not started |

**Table 8. Progress Towards Results Table**

**Component-1 Development of a regulatory, policy and enforcement systems to reduce POPs releases and to regulate POPs waste disposal:** The 2018 PIR reports this component (which it refers to as ‘Outcomes’ 1, 4, 5 & 6) as ‘on track’. The MTR team does not agree this component is on track with progress evident (since early 2018) for objective O1.1/activity O1.1.1 (through a single consultancy), no more than 10% of the entire component progressed and less than 12 months of project time remaining. With the exception of the above-mentioned consultancy there is no evidence of significant activity 3 other objectives (O1.2, O1.3, O1.4) and 6 activities (O1.1.2, O1.2.1, O1.2.2, O1.3.1, O1.3.2, 01.4.1). There are concerns the legal consultancy is not backstopped with POPs experts, is not integrated with other components and is behind contract targets by 3 to 6 months. There are also concerns no agreed plan with the PMU, consultant and the government on how draft legislation would actually be introduced as law, consultation on details with the EPA’s (federal and provincial) needs improvement and no apparent consultation with industry (agriculture, electricity and thermal industries) on impacts, concerns and planning for such new legislation.

**Component-2 Capacity building of stakeholders to reduce exposure to and releases of POPs:**

The 2018 PIR reports this component (which it refers to as ‘Outcome 7, 8, 9 & 10) as ‘on track’. The MTR team does not agree that this component is on track with progress evident only through a large number of training activities (almost 1000 people) focused only on a single objective O2.3/activity O2.3.1 with 10% of component 2 progressed and less than 12 months of project time remaining. With the exception of the above-mentioned consultancy there is no evidence of activity on the other 3 objectives (O2.1, O2.2 and O2.4) and 7 activities (O2.1.1, O2.1.2, O2.1.3, O2.2.1, O2.4.1, O2.4.2, O2.4.3). Implementation of most of the targeted capacity building is therefore yet to occur (industry/regulator specific training resulting in increased skills to manage POPs etc). While a large number of ‘general capacity building’ activities have been provided (almost 995 people) to wide range of stakeholders in multiple locations it is unclear how effective this capacity building has been in giving the right skills to the right people to achieve the objective. The MTR team was not provided with training materials or evidence on training impact (pre and post training surveys) and training organized in short time span due to limited remaining project time. More specific capacity building is apparently planned (PCB awareness raising) for multiple locations with an international firm from the Netherlands). But there is a lack of specific integration of capacity building with other components (regulation, assessment, packaging, storage, transport, treatment etc) to ensure the objective outcome is met and improved technical backstopping expertise is needed through international expertise in POPs to have confidence that processes and products are of appropriate quality.

**Component-3 Collection, transport and disposal of 300MT of PCB and 1200MT of POPS Pesticides:** The 2018 PIR reports this component (which it refers to as ‘Outcomes 11, 2 & 13) as ‘on track’ and it is the most progressed component. The MTR team agrees it is close to being on track hampered only by a large number of improvements to ensure BAT/BEP, verification that POPs are being treated (not non POP chemicals) and the need to start the other remaining activities with only a little more than 12 months. Current efforts are focused on objective O3.1/activity O3.1.1 and objective 3.2/activity 3.2.1, 3.2.2 and 3.2.3 with 30% of component 2 progressed. There is no evidence of activity on 1 other objective (O3.3) and 6 activities (O3.1.2, O3.1.3, O3.1.4, O3.3.1, O3.3.2, O3.3.3). The progress in successfully packaging, transporting and securing a facility to destroy POPs within Pakistan is a major achievement that needs to be built on for project success. A reported total of approximately 475MT of suspected POPs has been collected from various storage locations, packaged and transported by M/s Bizxpert and destroyed through incineration at the Bestway Cement Kiln. The identification of such a treatment facility within Pakistan is an excellent outcome with appropriate certificates for movement/treatment (NOCs – ‘No Objection Certificates provided) as well as destruction certificates at the two treatment facilities (the Bestway Cement Kiln for the POPs and the Um Steel works for the transformer shells), which included reference to weight.

But considerable uncertainty exists on the nature of the chemicals destroyed and whether any of it actually contained POPs chemicals and the reported quantities as no chemical testing or actual weighing of the POPs pesticides is evident (no manifest was provided to the MTR team) by Bizxpert, Bestway or any other parties prior to the pesticides being packaged transported and destroyed and no independent verification occurred. Labels of the pesticides transported by Bizxpert and recorded in the initial trial burn report actually identify only non POPs pesticides including dimethoate (an obsolete organophasphate pesticides) and deltamethrin (a modern pesticide) in the drums, while interviews with the NARC, PARC and PPD all advise that most of the so called ‘POPs pesticide’ stores in Pakistan (also identified in the NIP) contain mostly non POP pesticides. Even the project draft report ‘reconfirming the amount and location of POPs stockpiles in AJK, GB and KP, Pakistan’ mistakenly identifies a photo of the pesticide Monocrotophos as POPs pesticide when it is not a POP but a modern pesticide (organophosphate) and again appears to inaccurately consider all obsolete pesticides as POPs. The MTR team also observed that pesticide contaminated soil was also treated as POPs while the reported 31.23 MT of PCB POPs was also not tested for PCB content before being treated and most of the actual weight was the steel casing of the transformer shell with only 4.71 MT of actual transformer oil (ie suspected PCBs) was actually tested.

For identification, packaging and transportation there is a complete lack of independent expert verification that BEP and BAT requirements are practiced and a lack of formal chain of custody reporting. Though it was evident that Bizxpert has tried to minimise spillage from the information provided it was clearly not done well as interviews with Bestway Cement Kiln confirmed Poor packaging caused operational/OHS problems for disposal to such an extent that they are refusing to accept anymore POPs pesticides and only offered to receive transformer oils. Bestway Cement Kiln have upgraded POPs storage (though there is no bunding and can be improved) and introduced systems to effectively introduce both liquid and solid wastes (when packaged correctly) and independent emission monitoring but need further expert help (as does Bizxpert) to ensure BAT/BEP is met in packaging and transport, to control fugitive emissions, conduct full treatment trials/reporting residual waste management and establishment of full SOPs in accordance with the Stockholm Convention requirements.

**Component-4 Improved monitoring, evaluation, learning and adoption of the project:**  The 2018 PIR makes no reference to this component of the project while there is also no reference to component 4 in the in the ProDoc results framework. The MTR team is therefore highly concerned that no apparent action, reporting or even acknowledgment of this component exists for component 4s 2 objectives (O4.1& O4.2). Monitoring and evaluation needs to be formally introduced in the project to ensure TORs, contracts and deliverables are meeting project requirements as presented in the ProDoc. There is a lack of monitoring of BAT and BEP for the physical actions in the project and that capacity building activities are meeting specific requirements of the ProDoc. The provision of complete proof of performance reports, test reports, supervision reports, and manifests needs to be improved though no objection certificates, disposal certificates and some air monitoring has been provded. No monitoring has been provided demonstrating that gender and crosscutting issues are integrated in project elements.

### **Barriers to progress includes:**

* Having sufficient time;
* Maintaining the PMU at full strength;
* Having an accurate baseline (inventory) of POPs based an analytical testing and quantification of pesticide POPs and PCBs not on verbal reporting;
* Effective expert backstopping (including international consultants) to establish true baseline, construct appropriate TORs, ensure adherence to BAT/BEP and best practices in POPs management;
* Accurately implementing all of the activities identified in the ProDoc and regularly reporting on these through 3 monthly, annual and other reports using the same numbering system for all components, objectives and activities;
* Government commitment to the project (MOCC, EPAs, Energy Sector) and integration into relevant project elements; and
* Introducing Independent, effective and timely monitoring and evaluation.

## **4.3 Project Implementation and Adaptive Management**

**Management Arrangements**

* A programme officer and associate were designated who were responsible to ensure quality assurance of the project at various stages and worked in close collaboration with the project team and government partners. UNDP has been providing timely and required technical support to the project and even the regional technical advisor and associate have been closely working with the country office team in addressing various issues pertaining to the project. Also remained involved in the procurement of services as and when required.
* The focus has remained mainly on the overall results but due to initial time loss due to frequent turn overs at the government level and at the project level, the timelines have been disturbed. However, the project is back on the track and started to deliver as envisaged earlier. The annual reporting was done timely and quality was ensured and the risks were also realized and some mitigation measures were taken. Mostly, it required continuous follow up with the relevant government departments for early decision making, issuance of No objection certificates to execute tasks etc.
* Also the Ministry of Climate Change was involved in the procurement processes less than 30k USD and procurement committee was notified and the documentation was available. For any procurements above 30k USD, UNDP was the responsible party and has carried out the major procurements themselves. The Ministry has been proactive in developing a consensus among the various government departments to finalize legislation processes for POPs and also convening technical review committee meetings on the behalf of the project in order to discuss various issues pertaining to the project.

Inability to hire, maintain and develop a full strength PMU and NPD has caused considerable delays and needs to be improved. UNDP/PMU interface could be strengthened through ensuring joint engagement in all procurement/contract management where feasible. Expert backstopping has been lacking in some areas and needs to be improved and further development in the PMU team skills could also be conducted (i.e. PMP/Prince 2).

**Work planning**

Work planning needs to be multi year and include year Response 65: The MTR team has not been provided with an M&E Plan and this should be developed to ensure Component 4 of the project is being met and progress against it is included in all reporting.

-to-year specific indicators matched to specific budget allocations to allow project progress to be tracked. Needs to identify priorities to ensure the most critical elements of the project are progressed. Needs to identify timelines, sequential and concurrent actions and overall plans are developed for each target area. Should be conducted to see what can be pragmatically achieved in current timelines and with a further project time extension (12 months).

**Finance and co-finance**

Yes, strong financial controls are in place and there is yearly audit exercise conducted from a third party being monitored by UNDP HQ. So far there haven’t been any serious observations on the project. Overall, due diligence has been ensured for all procurements.

Finance needs to be tracked through matrix against the achievement of each specific indicator as a % and as a multi-year target (cumulative) and not just as an end-of-project Targets); A draft budget revision should be conducted to determine the finances needed to support a potential 12 month extension; It is unclear what co-financing has been delivered and it seems that little has been delivered as co-financing and again this also needs to be tracked as a % and multi-year (cumulative) target; Concern that a lack of delivery of co-finance may indicate low stakeholder commitment.

**Project-level monitoring and evaluation systems**

This is not comprehensive and systematic and needs to be strengthened in all facets of the project. This includes % and quality tracking that TORs, contracts and deliverables are giving the products required by the project indicators. That BAT and BEP are verified as being met for all legislative, regulatory and physical project components. That appropriate expertise needs to be used to develop this to BAT/BEP level and ensure verifiable evidence is being provided / collected.

**Stakeholder engagement**

There are regular project meetings and engagement via awareness raising and many are aware of the project, but based on interview feedback some sectors seem patchy (EPAs) though it’s recognized this requires two way engagement (i.e. PMU needs to be pro-active but stakeholders need to be engaged). Agreed project communications plan needs to be developed, with different subcomponents, identified focal points (project and stakeholder) can improved this Needs to be continuously evaluated, monitored and included in reporting.

**Reporting**

Reporting provided has been fragmented due to fragmented PMU/NPD and perhaps poor progress. Higher level reporting (PIRs/AWPs) has been provided but has lacked detailed information due to slow progress and lack of specific yearly targets. Some reporting has not been provided and appears to not exist (quarterly reports) and reports on BAT and BEP are inadequate, Reporting on effectiveness/relevance of training and consultancies in addressing specific project objectives needs to be improved. Needs to include all crosscutting project elements.

**Communications**

There is no project communications plan and this needs to be developed both as an agreed way to communicate with stakeholders, communicate project message and develop agreed products. There are some fragmented communications products including a website but further attentions and resources are required and a clear priority of time bound actions. This needs to be integrated with other project elements and become a living document, which is monitored, evaluated and updated with progress included in reporting.

## **4.4 Sustainability**

**Financial risks to sustainability**

The government would need to commit to sustaining EPAs so they could continue to maintain an effective regulatory and monitoring role after this project. The project should seek to assist EPAs to develop their capability and identify ongoing costs for them to act in an expanded role to govern POPs so that government can consider funding mechanisms (industry/waste levies) . Owners of POPs waste (and other obsolete pesticides) would need funds to continue to be able to send use developed consultancy services to identify, store, transport and destroy POPs. The most cost effective transport and disposal techniques (BAT/BEP compliant) need to be identified.

**Socio-economic risks to sustainability**

Government focus and ability to enact measures to reduce POPs may change overtime. Stakeholders with little means to address POPs issues at contaminated sites, in warehouses or in poorer sectors of business may not be able to afford BAT/BEP required to meet NIP targets. This should be addressed through development of funding mechanisms, negotiated phase outs and treatment timelines that enable costs to be spread. Poorer communities may be at greater risk and should be given greater levels of assistance to mitigate harmful impacts.

**Institutional framework and governance risks to sustainability**

There is a risk that governments are unable to commit to introducing enabling legislation developed in this project and to address this industry management plans/guideline can be developed. There is a risk that EPAs are unable to develop to the point of effective regulation/monitoring required but the project can still demonstrate BAT/BEP required and develop and introduce SOPs. There is a risk that an effective baseline is not developed, which will identify where framework efforts need to be concentrated (ie industry wide PCB management plan.

**Environmental risks to sustainability**

It is unclear what environmental risks exist for sustainability at this time.

**5 Conclusions and Recommendations**

## **5.1 Conclusions**

1. **Regulatory, policy and enforcement systems to reduce POPs releases and to regulate POPs waste disposal**:
	1. Existing legislation reviewed and potential areas where gaps can be addressed identified, Legislation/guideline options but no agreed plan to introduce legislation/no agreed plan with EPA or industry (PCBs/uPOPs) which is needed. Lack of experienced international expertise (i.e. POPs management) to backstop the project. According to the ToRs of the individual consultant, six deliverables has to be submitted by the consultant by 31st August 2018 that includes:
		1. Presentation on the action plan and submission of the Inception report
		2. Overview of existing national legislation on POPs and Hazardous waste
		3. Preliminary report on improvement of existing regulatory base on POPs and Hazardous waste
		4. Address Senate and National standing Committee regarding the POPs Legislation process
		5. Develop local laws on POPs that will be brought in conformity with international laws, and in complete compliance with the Stockholm Convention incorporation of comments from different stakeholders from national and provincial departments
		6. Approval of Final Report from UNDP and MOCC.

No products developed yet, late and slow progress (15%), no finalized circulars, no specific training or profile update except the 1st Deliverable “Inception Report” in which the following timeline was given which is not met so far:

* 2nd Deliverable: Preliminary Report: This report shall be issued by 1st June 2018 and will incorporate the views of the stakeholder with whom we had meetings and will outline the salient features of the national level legislative/regulatory work on the POP/PCBs management and implementation mechanism of their emission and elimination.
* 3rd Deliverable: Final Draft of the legislation on POP/PCBs: This draft will be presented by the 31st July 2018 and will incorporate all the legal, technical, monitoring and enforcement mechanism and institutional outline of the management of the POP/PCB.

Legal consultancy (from 1st March, 2018 to 31st August, 2018) also behind the schedule timeline, needs better focus and priority of actions.

1. **Capacity building of stakeholders to reduce exposure to and releases of POPs:** Six Training/Awareness workshops were organized in the last quarter of 2017 for sensitizing the stakeholders about POPs, with target audience from academia, Government, laboratories, Chamber of Commerce & Industries and NGOs. Participants 995 (772 men and 223 women). Large number of ‘general capacity building’ provided to wide range of stakeholders at the following locations.
	1. Karachi: 4 days
	2. Lahore: 4 days
	3. Quetta: 2 days
	4. Peshawar: 2days
	5. Muzaffarabad: 2 days and
	6. Gilgilt: 2 days

More specific capacity building is planned (PCBS) for multiple locations and will be completed in November 2018. Lack of specific integration of capacity building with other activities (regulation, assessment, storage, transport, treatment etc), which is yet to occur.

1. **Collection, transport and disposal of 300t of PCB and 1200t of POPS Pesticides**: 443.77MT of suspected POPs pesticide and 31.23MT of PCBs were successfully, collected, transported by the transport contractor M/S Bizxpert and destroyed in (Bestways Cement Kiln) Pakistan from the following locations:

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| No | **Province** | **POPs collection point (Location)** | **Stockpile Type (POPs Pesticide/PCB)** | **Proposed Disposal** | **Quantity collected MT** | **Disposal status** |
| **1.** | KPK | Peshawar | Pesticides | 1200 | 40.07 | Done |
| **2.** | Sindh | Sukkur (Larkana Warehouse) | Pesticides | 116.60 | Done |
| **3.** | Mirpur Khass | Pesticides | 72.83 | Done |
| **4.** | Punjab | Lahore | Pesticides | 10.74 | Done   |
| **5.** | Bahawalpur | Pesticides | 85.80 | Done   |
| **6.** |  | Quetta | Pesticides | 117.73 | Done   |
|  |  |  |  | **Pesticides** | 443.77 | 37.0%36.98% |
| **1.** |  | K Electric Karachi | PCBs | 300 | 18.59 | Done   |
| 2. |  | Mangla Power Station | PCBs | 12.64 | Done   |
|  |  | **PCBs** | 31.23 | 10.3%10.41% |
|  | **TOTAL MT** |  | 475  | 31.7% |

**Table 9. Obsolete Pesticides and suspected POPs transported collected and destroyed[[22]](#footnote-22)**

The disposal of obsolete pesticides 443.77MT (37% of the proposed disposal of 1200MT), while disposal of 31.23MT PCBs (10.41% of the proposed 300MT). But the accuracy of this number is in doubt (at some locations) due to lack of characterization of non POPs pesticide and suspected PCBs as well as the inclusion of contaminated soil, packaging, drums and transformer casings which were included in the weight. Due to this lack of verification, baselines have not accurately established the quantity and type of POPs (some non-POP pesticides mistakenly destroyed – deltamethrin/dimethoate). For transport BEP was not verified, quantity, packaging and transport were not independently \monitored/reported. Poor packaging caused additionally caused operational/OHS problems at the disposal site . Disposal sites have upgraded, POPs storage and systems to introduce waste and independent emission monitoring, need further expert help for controlling fugitive emissions, residual waste management and establishment of full SOPs. Just for presentation, removed.

**Verification of stockpiles of all pesticide POPs and PCBs that exist in Pakistan:**

As stated elsewhere In the MTR verification is still needed as the actual stockpiles of POPs pesticides and PCBs are not established and has not been conducted in the project. The MTR found repeated misidentified of non-POPs pesticides as POPs and lack of testing for PCBs in transformer oil, which was destroyed. This was identified by the MTR team in;

* 1. The initial trial of 6MT burn report at Bestway submitted by Rodrigo Romero where the report incorrectly identifies the photographed label of deltamethrin as a POP pesticide when it is not a POP but is a modern pesticide (pyrethroid);
	2. The Bizxpert photos of few of the drums of POPs transported for commercial destruction to Bestway for destruction as POPs pesticides when the label of drums in the Bizxpert PPT are labels as dimethoate which is not a POP pesticide but is a modern pesticide (organophosphate);
	3. The draft report ‘reconfirming the amount and location of POPs stockpiles in AJK, GB and KP, Pakistan’ which incorrectly identifies a photo of the pesticide Monocrotophos as POPs pesticide when it is not a POP but is a modern pesticide (organophosphate);
	4. Destruction of transformer oil at Bestway which was not tested (before destruction) to confirm it actually contained any PCBs;[[23]](#footnote-23)
	5. Re verification is needed for stockpiles of POPs pesticides and PCBs as this has not been conducted in accordance with BAT/BEP requirements. For POPs pesticides no recent chemical testing has been conducted to see what remains after recent clean ups (Punjab). For PCBs detailed baseline studies have never been conducted though the project has recently tested 50 transformers with plans for 5000 more. Obsolete pesticides of all types are stored together in government warehouses, though POPs seem to be much less in quantity.

The recent validation of POPs pesticide has been completed by the individual consultants in KPK, Baluchistan, AJK, G&B and Sindh, and still indicates that most of the available stock are obsolete pesticides (non-POPs) and not POPs pesticides. However, the validation was done through visual inspection and interviews only, and not with analytical testing or quantification. The details are given in the following table:

**Province-wise Summary of POPs Stockpiles (Sindh, AJK, GB, KPK and Baluchistan)**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **No.** | **Province** | **Store** | **POPs pesticides Litres** | **Obsolete/expired pesticides MT** |
| 1 | **Baluchistan** | ARI Store 1&2+open store,Quetta | Heptachlor = 10.0 | 45.0000 |
| 2 | Killa Saif Ullah | Dieldrin 20 EC. = 1.0 | 0.5798 |
| 3 | Ziarat | Dieldrin 20 EC. = 15.0 | 1.3330  |
| 4 | Loralai | Nil | 1.5750 |
| 5 | Kharan | Nil | 0.4960 |
| 6 | Kohlu | Nil | 0.2840 |
| 7 | Turbat | Nil | 0.0820 |
| 8 | Jhal Magsi | Nil | 0.1040 |
| 9 | Noshki | Nil | 0.1460 |
| 10 | Dalbandin | Heptachlor = 40.0 | 0.7258 |
| 11 | Federal PPD, Quetta | Nil | 49.0850 |
|  | **Total quantity** | **66.0** | **99.4106** |
| 12 | **Gilgit Baltistan** | Skardu | 318.0 | 0.7040  |
| 13 | Gilgit | Nil | To be confirmed  |
|  | **Total quantity** | **318.0** | **0.7040** |
| 14 | **KPK** | Peshawar | 3622.0 | 2.1540 |
| 15 | Charsadda | 1004.0  | 6.8330 |
| 16 | Dir Lower | 12.0 | 0.8100 |
| 17 | Kohat | 198.0 | 38.000  |
| 18 | Bunir | 0.0 | 0.1890 |
| 19 | Malakand | 330.0 | 0.0490 |
|  |  | **Total Quantity** | **5166.0** | **48.0300** |
| 20 | **AJK** | Muzaffarabad | 0.0 | 0.0160 |
|  | **Total quantity** | **0.0** | **0.0160** |
| 21 |  |  |  |  |
| 22 |  **SINDH** | Tando Allahyar | 0.0 | 0.6000 |
| 23 | Sanghar | 1500.0 | 0.0000 |
| 24 | Jacobabad proper | 27546.0 | 7.8100 |
| 25 | Thull/Jacobabad | 2922.0 | 3.2500 |
| 26 | Garhi Yaseen/ Shikarpur | 13000.0 | 0.0000 |
| 27 | Rice Res. Station Larkana | 1975.0 | 10.2500 |
| 28 | Rathodera/ Larkana | 1100.0 | 0.0000 |
| 29 | Naudero / Larkana | 0.0 | 1.0000 |
| 30 | Kandyaro/ Naushero Feroz | 0.0 | 0.6509 |
| 31 | Dalli / Bhiria (N.Feroz) | 214.0 | 0.0750 |
| 32 | Jalbani Goth / Bhiria (N.Feroz) | 135.0 | 0.0500 |
| 33 | Chanari A.O Office / N. Feroz | 0.0 | 0.5400 |
| 34 | Moro proper / N.Feroz | 6520.0 | 0.2000 |
| 35 | DD agri. Ext . Office Nawabshah | 1700.0 | 1.4800 |
| 36 | DD agroi. Fruit Farm M.P.K | 10500.0 | 17.7380 |
| 37 | Kot Ghulam Mohd./ M.P.K | 4905.0 | 11.6250 |
| 38 | Degree/ M.P.K | 2675.0 | 1.3250 |
| 39 | DD.Agri.Jamshero at Kotri | 0.0 | 3.5000 |
| 40 | **Total quantity** | **74,692.0** | **60.0200** |

 **Table 10. Project Towards Results Table**

|  |
| --- |
| **Overall Total In Pakistan** |
| **POPs pesticides in Litres** |  **80242 Litres (Approx 80MT)**  |
| **Obsolete/expired pesticides in MT** | **208.17** |
| **TOTAL (including Liters + MT)**  | **288.41**  |

The visual reverification of the stockpiles indicates that only about 80MT of POPs pesticides are available for disposal, while the remaining 208.41 tons are Non POPs obsolete pesticides. For PCBs detailed baseline studies have never been conducted though the project has recently tested 50 transformers (only with a qualitative test) with plans for 5000. Obsolete pesticides of all types and ages are stored together in the government warehouses, though POPs seem to be much less in quantity.

**Contribute to BAT and BEP by aiming to establish an improved regulatory and monitoring system**: Currently BAT and BEP still need to be integrated into the regulatory system and monitoring has not been systematic with low engagement of the regulator (EPAs) and insufficient expert backstopping. The regulatory system improvements need to be integrated with legislation, best practices (guidelines/management plans/SOPs) and physical activities. This needs to integrate EPAs, with experts, the project management team and consultants to enable a graduated handover of monitoring in accordance with best practice. There is no clear stepwise plan to systematically achieve this at the moment.

**Enhance the disposal capabilities within the country**: For POP Pesticides capabilities for cement kilns to receive and destroy these in solid, sludge and liquid form needs to be enhanced. Fugitive emissions from poorly packaged and transported wastes have resulted in a refusal to accept further quantities. This needs to be addressed through improvements in transport and packaging that can contain fugitive emissions and allow disposal with minimal or no opening of packaged materials. As other viable treatment technologies exist specifically for lower cost de - chlorination of PCBs these should be investigated in the project. There is a specific reference in the ProDoc recommending this kind of treatment for PCBs (Dehalogenation).

1. **Improved monitoring, evaluation, learning and adoption of the project**: Nothing is included in the ProDoc results framework for monitoring and evaluation. Monitoring and evaluation needs to be strengthened in the project to ensure TORs, contracts and deliverables are meeting project requirements as presented in the ProDoc. There is a lack of monitoring of BAT and BEP for the physical actions in the project and that capacity building activities ae meeting specific requirements of the ProDoc. There is a lack of provision of complete proof of performance reports, test reports, supervision reports, manifests, disposal certificates. No monitoring that gender and crosscutting issues are integrated in project elements is provided either.
2. **Assessment of the following four categories of project progress**:
	1. **Project Strategy**; i. **Project Design**; The project design is mostly sound except that it lack time bound indicators, has been too ambitious in aiming to completely introduce a fully regulated POPs management system through a single project. The strategy is relevant and fully aligned with the Country priorities as identified within the NIP. **ii. Results Framework/Logframe;** Indicators and targets appear to have been Specific, Measurable, Achievable and Relevant, but were not Time bound (multiyear budget timeline but no multiyear indicators) by year. Time lost due to incomplete project teams and lack of progress means many objectives would not be feasible achieved within the remaining time limits; the project has potential to catalyze beneficial development (public/private sector) in improving the overall hazardous waste management system.
3. **Progress Towards Results**; **Progress Towards Outcome Analysis**; Overall project progress is more or less tracking overall budget expenditure with not more than 30% of the project achieved to date. Barriers to progress includes: Having sufficient time; maintaining the PMU at full strength; effective expert backstopping (including international consultants); and Government commitment to the project (MOCC, EPAs, Energy Sector), accurate reporting and launching a full monitoring and evaluation program.
4. **Project Implementation and Adaptive Management**; i. **Management Arrangements**; Inability to hire, maintain and develop a full strength PMU and NPD has caused considerable delays and needs to be improved. UNDP/PMU interface could be strengthened also through ensuring joint engagement in all procurement/contract management where feasible. Expert backstopping has been lacking in some areas and needs to be improved and further development in the PMU team skills could also be conducted (ie PMP/Prince 2) ii. **Work Planning**; Work planning needs to be multi year and include year to year specific indicators matched to specific budget allocations to allow project progress to be tracked against all ProDoc activities. Priorities need to be establishes to ensure the most critical elements of the project are progressed. Needs to identify timelines, sequential and concurrent actions and overall plans are developed for each target area. Planning should establish what can be pragmatically achieved in current timelines and also with a project time extension (12 months). iii. **Finance/Co-Finance**; Finance needs to be tracked through matrix against the achievement of each specific component/objective/activity as a % and as a multi-year target (cumulative) and not just as an end-of-project Targets); A draft budget revision should be conducted to determine the finances needed to support a potential 12 month extension; It is unclear what co-financing has been delivered and it seems that little has been delivered from co-financers and again this also needs to be tracked as a % and multiyear (cumulative) target; Concern that a lack of delivery of co-finance may indicate low stakeholder commitment. Iv. **Project Level Monitoring/Evaluation System**; this is not comprehensive and systematic and needs to be strengthened in all facets of the project. This includes % and quality tracking that TORs, contracts and deliverables are giving the products required by the Pro Doc activities. That BAT and BEP are verified as being met for all legislative, regulatory and physical project components. That appropriate expertise needs to be used to develop this to BAT/BEP level and ensure verifiable evidence is being provided / collected. v. **Stakeholder Engagement;** There are regular project meetings and engagement via awareness raising and many are aware of the project, But based on interview feedback some sectors seem patchy (EPAs?) though its recognized this is a two way (ie PMU needs to be pro-active but stakeholders need to be engaged), Agreed project communications plan needs to be developed, with different subcomponents, identified focal points (project and stakeholder) can improved this Needs to be continuously evaluated, monitored and included in reporting. **Reporting**; Reporting provided has been fragmented due to fragmented PMU/NPC and perhaps poor progress. Higher level reporting (PIRs/AWPs) has been provided but has lacked detailed information due to slow progress and lack of specific yearly targets and has been inaccurate in many cases and not aligned in format with the ProDoc. Some reporting has not been provided and appears to not exist (quarterly reports/monitoring and evaluation) and reports on BAT and BEP are inadequate, Reporting on effectiveness/relevance of training and consultancies in addressing specific project objectives needs to be improved. Needs to include all crosscutting project elements. iv**. Communications**; There is no project communications plan and this needs to be developed both as an agreed way to communicate with stakeholders, communicate project message and develop agreed products. There are some fragmented communications products including a website but further attention and resources are required and a clear priority of time bound actions. This needs to be integrated with other project elements and become a living document, which is monitored, evaluated and updated with progress included in reporting.
5. **Sustainability**. i. Financial Risks To Sustainability; The government would need to commit to sustaining EPAs so they could continue to maintain an effective regulatory and monitoring role after this project, The project should seek to assist EPAs to develop their capability and identify ongoing costs for them to act in an expanded role to govern POPs so that government can consider funding mechanisms (industry/waste levies). Owners of POPs waste (and other obsolete pesticides) would need funds to continue to be able to use developed consultancy services to identify, store, transport and destroy POPs, The most cost effective transport and disposal techniques (BAT/BEP compliant) need to be identified. Ii. **Socio-economic Risks To Sustainability**; Government focus and ability to enact measures to reduce POPs may change overtime. Stakeholders with little means to address POPs issues at contaminated sites, in warehouses or in poorer sectors of business may not be able to afford BAT/BEP required to meet NIP targets. This should be addressed through development of funding mechanisms, negotiated phase outs and treatment timelines that enable costs to be spread. Poorer communities may be at greater risk and should be given greater levels of assistance to mitigate harmful impacts. iii. **Institutional Framework and Governance Risks to sustainability**; There is a risk that governments are unable to commit to introducing enabling legislation developed in this project and to address this industry management plans/guideline can be developed. There is a risk that EPAs are unable to develop to the point of effective regulation/monitoring required but the project can still demonstrate BAT/BEP required and develop and introduce SOPs. There is a risk that an effective baseline is not developed, which will identify where framework efforts need to be concentrated (i.e. industry wide PCB management plan). iv. **Environmental Risk to sustainability**: It is unclear what environmental risks exist for sustainability at this time.

## **Recommendations**

* + 1. **Timeframe:** With approx. 20% of the project implemented, and only 15 months remaining, more time is needed to complete the remaining activities of the project. An extension of 12-18 month is recommended, this would also allow other technologies to be considered (i.e. PCB specific) that may be more suitable/sustainable in the Pakistan context. Moreover another review is recommended before starting the extension period to evaluate the progress of remaining 15 months of the existing period. GEF –UNDP is responsible for it.
		2. **PMU:** Allows new PMU to develop activities to be better planned and integrated to develop a ‘POPs management system’ that will allow quality to be reinstated in activities which are currently rushed with minimal matching to project indicators and lack of verification to BAT/BEP. **Capacity building**: The PMU are academically well qualified though with varied Project Management experience and expertise with the subject matter would benefit from further training to improve their capability and formal courses (Prince 2), through training and working with expert consultants (especially with M/E, BAT/BEP) and participation in relevant international events including study tours. PMU is responsible
		3. **Characterization through Labs**: Testing of Pakistan Laboratory capabilities for project analytical needs should be combined with international lab testing (at least initially) to act as a ‘field split’ and test performance on timely delivery of results and quality. Active measures should be made so that UNDP and PMU components are harmonized as a team. PMU is responsible for the activity
		4. **Budget Revision:** A budget revision would be required to fund the PMU for the longer period and activities strictly time bound and in accordance with the Project Document Outcomes. This could be through a reduction in the planned destruction of 1500 Tonnes of POPs which will anyway be difficult to achieve as the actual quantity of pesticides POPs appears to be small and poor access to PCB contaminated transformer oil (most of it is in working transformers) in any case appears to be insufficient. A proper planning in Coordination with NEPRA and concerned authorities will ease the implementation and meeting the target. GEF-UNDP is responsible for budget revision.
		5. **Baseline stockpiles:** POPs types, quantities and locations are poorly quantified for pesticides and virtually unknown for PCBs. The project needs to reverify assumed POPs pesticides which are mixed with non-POPs and start to establish the detail inventory of PCBs i.e. what PCBs exist (locations and quantities). This should be done through integrated international and local expertise which would allow the project to make an informed (revised) decision on quantity of POPs accessible for treatment and technology to be used. Reverification would allow POPs contaminated sites to also start to be documented and would permit comparison between Pakistan and international lab standards. PMU is responsible for it.
		6. **Expert Backstopping**: Appropriate international and national backstopping is required as the MTR has found many instances were lacking in technical expertise (i.e. identifying what is or is not a POP), in process (M/E, Reporting) and standards (BAT/BEP). This needs to be done in an integrated way so that provision of this expertise is also used to build capacity in stakeholders who will have specific roles in ongoing POPs management. Work planning should identify where and when such expertise should be applied and who the beneficiaries from such capacity building will be. UNDP is responsible for it.
		7. **Regulatory Framework Development**: This should consider legislation and non-legislative approaches in the most straightforward manner. Legislation can target updates of hazardous waste provisions for premise, activities and emissions, which duplicate BAT/BEP in Stockholm. This would then capture different sectors (agriculture, electricity, other thermal industries, ship breaking) but using an existing framework. Regulators and industry need to be consulted to have a workable plan (timelines/resources/ responsibilities). PMU is responsible for it.
		8. **National Management Plans for PCBs:** It is recommended separate National Management Plans (PCBs/OCPs/uPOPS) or addendum to the project for the alternate treatment of PCBs to be considered which could initially be voluntary (Australian example). This is already identified in the ProDoc but has not been properly followed up in current consultancies. PMU is responsible.
		9. **Occupational safety working environment measures**: Activities under the project are not yet started, but it is important during the disposal activities to take into account general safety measures already in place, (the training for creating the awareness among the end user/communities is important). Disposal activities are now to be implemented and strict risk management measures should be applied. Guidelines are expected to be developed and used, but also available for any other potential users handling hazardous waste. PMU is responsible for it.
		10. **Reporting, Monitoring and Evaluation:** Reporting needs to be greatly improved in frequency, accuracy and completeness so that its reliably represents progress and lack of progress in the project. Report formats need to also align with the ProDoc structure as the PIR ‘Objective’ at the moment are numbered differently which is confusing and does not cover all activities (i.e. Component 4 objectives are missing). Monitoring and evaluation needs to also be formally launched as it is missing in all areas of the project. PMU is responsible for it.
		11. **Other:** Existing or contracts to be renewed should be retrofitted in light of the previous comments or other actions taken to meet these needs (i.e. supervision contracts). Alternate disposal facilities to be explored, not relying on one company. The incinerators available in the country may be upgraded to build the capacity in the country. It is the responsibility of the PMU.

# **6.** **Annexes**

## **Annex-1: MTR ToR**

1. **INTRODUCTION:**

This is the Terms of Reference (ToR) for the UNDP-GEF Midterm Review (MTR) of the medium-sized project titled “Comprehensive reduction and elimination of Persistent Organic Pollutants in Pakistan” (PIMS# 4600) implemented through Ministry of Climate Change, which is to be undertaken in2018. The project started on June 2015 and is in its third year of implementation. In line with the UNDP-GEF Guidance on MTRs, this MTR process was initiated before the submission of the second Project Implementation Report (PIR). This ToR sets out the expectations for this MTR. The MTR process must follow the guidance outlined in the document Guidance For Conducting Midterm Reviews of UNDP-Supported, GEF-Financed Projects.

1. **PROJECT BACKGROUND INFORMATION**

Programme Period: 60 months

Total resources required: USD 39,384, 822

Total allocated resources:

* GEF USD 5,150,000
* Co-financing USD 34,234,822
* Government USD 11,570,000
* UNDP USD 300,000
* Private Sector USD 22,364,822

The Objectives of the project are the environmental safe disposal of POPs (1200 tons of pesticide POPs and 300 tons of PCBs) enhancing at the same time management capacities and disposal of POPs in Pakistan. Although the project could not likely dispose all the pesticide POPs and PCBs existing in Pakistan (also because the exact quantification of these stockpiles is a continuous process which will continue even after project closure) by establishing a proper regulatory and monitoring system and enhancing the disposal capability of the country, the project will ensure that further POPs stockpiles can be effectively and safely disposed by the country as soon as they are identified. The project intend to achieve this objective improving the regulatory system, enhancing its enforcement, raising awareness on POPs, and by establishing the capacity for POPs monitoring, handling, transport and disposal. This will contribute to the broader Goal, which is to reduce risk for the human health and the environment by avoiding the release of POPs in the environment and preventing people exposure to POPs. The project has been arranged in four components (including Monitoring and Evaluation) as following:

* + Component 1. Development and implementation of a Regulatory, Policy and enforcement system to reduce POPs releases
	+ Component 2. Capacity building of local communities and public and private sector stakeholders to reduce exposure to and releases of POPs
	+ Component 3.Collection, Transport and Disposal of PCBS and POPS Pesticides
	+ Component 4. Monitoring and evaluation.

The following is a description of Outcomes under each component

Outcome 1.1. Strengthened POPs regulatory and policy instruments adopted and POPs management systems for controlling and reducing releases of POPs functional.

Outcome 1.2. Government enforcement agencies and other organizations involved in regulating POPs management are able to use tools developed for POPs management and network with/regulate main agencies handling POPs

Outcome 1.3. Governance and enforcement particularly on illegal imports framework for controlling POPs improved.

Outcome 1.4. National Chemicals Profile updated

Outcome 2.1. Stakeholder groups aware of sources and prepared to mitigate POPs exposure and releases with specific reference to pesticide stockpiles.

Outcome 2.2. Cost effective POPs exposure mitigation undertaken focusing mainly on PCBs. Outcome 2.3. POPs awareness among key target groups, such as decision makers, high/risk occupations etc. raised.

Outcome 2.4 Reduced POPs exposure in occupational setting.

Outcome 3.1. Capacity to undertake POPs disposal projects at provincial level established. Outcome 3.2. Environmentally Sound Disposal of POPs. Removal of particularly risky POPs stockpiles and the sound disposal of up to 1200 tons of POP pesticides and of 300 tons of PCB Outcome 3.3. National POPs management and disposal scheme and replication plan developed.

Outcome 4.1. M&E and adaptive management are applied to provide feedback to the project coordination process to capitalize on the project needs; and

Outcome 4.2. Lessons learned and best practices are accumulated, summarized and replicated at the country level and disseminated internationally.

1. **OBJECTIVES OF THE MTR**

The MTR will assess progress towards the achievement of the project objectives and outcomes as specified in the Project Document, and assess early signs of project success or failure with the goal of identifying the necessary changes to be made in order to set the project on-track to achieve its intended results. The MTR will also review the project’s strategy, its risks to sustainability.

1. **MTR APPROACH & METHODOLOGY**

The MTR must provide evidence-based information that is credible, reliable and useful. The MTR person will review all relevant sources of information including documents prepared during the preparation phase (i.e. PIF, UNDP Initiation Plan, UNDP Environmental & Social Safeguard Policy, the Project Document), project reports (including Annual Project Review/PIRs, project budget revisions, lesson learned reports), national strategic and legal documents, and any other materials that the team considers useful for this evidence-based review. The MTR person will review the baseline GEF focal area Tracking Tool submitted to the GEF at CEO endorsement, and the midterm GEF focal area Tracking Tool that must be completed before the MTR field mission begins.

The MTR person is expected to follow a collaborative and participatory approach ensuring close engagement with the Project Team, government counterparts (the GEF Operational Focal Point), the UNDP Country Office(s), UNDP-GEF Regional Technical Advisers, and other key stakeholders.

Engagement of stakeholders is vital to a successful MTR. Stakeholder involvement should include interviews with stakeholders who have project responsibilities, including but not limited to Ministry of Climate Change, Ministry of National Food Security and Research, Ministry of National Health Services, Regulations and Coordination, Pakistan Agriculture Research Council , National Agriculture Research Council , Ecotoxicological Lab, PCRWR, Kala Shah Kaku Pesticides Residue Labs and PPD Pesticides Lab Karachi, Plant protection Departments, Electrical Power Companies etc.; executing agencies, senior officials and task team/ component leaders, key experts and consultants in the subject area, Project Board, project stakeholders, academia, local government and CSOs, etc. Additionally, the MTR team is expected to conduct field missions to all provinces.

The final MTR report should describe the full MTR approach taken and the rationale for the approach making explicit the underlying assumptions, challenges, strengths and weaknesses about the methods and approach of the review.

1. **DETAILED SCOPE OF THE MTR**

The MTR team will assess the following four categories of project progress. See the Guidance For Conducting Midterm Reviews of UNDP-Supported, GEF-Financed Projects for extended descriptions, and this guide should be used in the course of the MTR exercise.

i. Project Strategy

Project design: • Review the problem addressed by the project and the underlying assumptions. Review the effect of any incorrect assumptions or changes to the context to achieving the project results as outlined in the Project Document. • Review the relevance of the project strategy and assess whether it provides the most effective route towards expected/intended results. Were lessons from other relevant projects properly incorporated into the project design? • Review how the project addresses country priorities. Review country ownership. Was the project concept in line with the national sector development priorities and plans of the country (or of participating countries in the case of multi-country projects)? • Review decision-making processes: were perspectives of those who would be affected by project decisions, those who could affect the outcomes, and those who could contribute information or other resources to the process, taken into account during project design processes? • Review the extent to which relevant gender issues were raised in the project design. See Annex 9 of Guidance For Conducting Midterm Reviews of UNDP-Supported, GEF-Financed Projects for further guidelines. • If there are major areas of concern, recommend areas for improvement.

Results Framework/Logframe: • Undertake a critical analysis of the project’s logframe indicators and targets, assess how “SMART” the midterm and end-of-project targets are (Specific, Measurable, Attainable, Relevant, Time-bound), and suggest specific amendments/revisions to the targets and indicators as necessary. • Are the project’s objectives and outcomes or components clear, practical, and feasible within its time frame? • Examine if progress so far has led to, or could in the future catalyse beneficial development effects (i.e. income generation, gender equality and women’s empowerment, improved governance etc...) that should be included in the project results framework and monitored on an annual basis. • Ensure broader development and gender aspects of the project are being monitored effectively. Develop and recommend SMART ‘development’ indicators, including sex-disaggregated indicators and indicators that capture development benefits.

ii. Progress Towards Results

Progress towards Outcomes Analysis: • Review the logframe indicators against progress made towards the end-of-project targets using the Progress Towards Results Matrix and following the Guidance For Conducting Midterm Reviews of UNDP-Supported, GEF-Financed Projects; colour code progress in a “traffic light system” based on the level of progress achieved; assign a rating on progress for each outcome; make recommendations from the areas marked as “Not on target to be achieved” (red).

Table. Progress Towards Results Matrix (Achievement of outcomes against End-of-project Targets)

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Project Strategy | Indicator | Baseline Level | Level in 1st PIR (self- reported) | Midterm Target | End of project Targets | Midterm Level & Assessment | Achievement Rating | Justification for Rating |
| Objective: | Indicator (if applicable): |  |  |  |  |  |  |  |
| Outcome 1: | Indicator 1:  |  |  |  |  |  |  |  |
| Indicator 2:  |  |  |  |  |  |  |  |
| Outcome 2: | Indicator 3:  |  |  |  |  |  |  |  |
| Indicator 4:  |  |  |  |  |  |  |  |
| Etc. |  |  |  |  |  |  |  |
| Etc. |  |  |  |  |  |  |  |  |

Indicator Assessment Key

|  |  |  |
| --- | --- | --- |
| Green= Achieved | Yellow= On target to be achieved  | Red= Not on target to be achieved  |

In addition to the progress towards outcomes analysis:

• Compare and analyse the GEF Tracking Tool at the Baseline with the one completed right before the Midterm Review.

• Identify remaining barriers to achieving the project objective in the remainder of the project.

• By reviewing the aspects of the project that have already been successful, identify ways in which the project can further expand these benefits.

**iii. Project Implementation and Adaptive Management**

**Management Arrangements**: • Review overall effectiveness of project management as outlined in the Project Document. Have changes been made and are they effective? Are responsibilities and reporting lines clear? Is decision making transparent and undertaken in a timely manner? Recommend areas for improvement. • Review the quality of execution of the Executing Agency/Implementing Partner(s) and recommend areas for improvement. • Review the quality of support provided by the GEF Partner Agency (UNDP) and recommend areas for improvement.

**Work Planning**: • Review any delays in project start-up and implementation, identify the causes and examine if they have been resolved. • Are work-planning processes results-based? If not, suggest ways to re-orientate work planning to focus on results?

Examine the use of the project’s results framework/ logframe as a management tool and review any changes made to it since project start.

**Finance and co-finance**: • Consider the financial management of the project, with specific reference to the cost-effectiveness of interventions. • Review the changes to fund allocations as a result of budget revisions and assess the appropriateness and relevance of such revisions. • Does the project have the appropriate financial controls, including reporting and planning, that allow management to make informed decisions regarding the budget and allow for timely flow of funds? • Informed by the co-financing monitoring table to be filled out, provide commentary on co-financing: is co-financing being used strategically to help the objectives of the project? Is the Project Team meeting with all co-financing partners regularly in order to align financing priorities and annual work plans?

**Project-level Monitoring and Evaluation Systems**: • Review the monitoring tools currently being used: Do they provide the necessary information? Do they involve key partners? Are they aligned or mainstreamed with national systems? Do they use existing information? Are they efficient? Are they cost-effective? Are additional tools required? How could they be made more participatory and inclusive? • Examine the financial management of the project monitoring and evaluation budget. Are sufficient resources being allocated to monitoring and evaluation? Are these resources being allocated effectively?

**Stakeholder Engagement**: • Project management: Has the project developed and leveraged the necessary and appropriate partnerships with direct and tangential stakeholders? • Participation and country-driven processes: Do local and national government stakeholders support the objectives of the project? Do they continue to have an active role in project decision-making that supports efficient and effective project implementation? • Participation and public awareness: To what extent has stakeholder involvement and public awareness contributed to the progress towards achievement of project objectives?

**Reporting**: • Assess how adaptive management changes have been reported by the project management and shared with the Project Board. • Assess how well the Project Team and partners undertake and fulfil GEF reporting requirements (i.e. how have they addressed poorly-rated PIRs, if applicable?) • Assess how lessons derived from the adaptive management process have been documented, shared with key partners and internalized by partners.

**Communications:** • Review internal project communication with stakeholders: Is communication regular and effective? Are there key stakeholders left out of communication? Are there feedback mechanisms when communication is received? Does this communication with stakeholders contribute to their awareness of project outcomes and activities and investment in the sustainability of project results? • Review external project communication: Are proper means of communication established or being established to express the project progress and intended impact to the public (is there a web presence, for example? Or did the project implement appropriate outreach and public awareness campaigns?) • For reporting purposes, write one half-page paragraph that summarizes the project’s progress towards results in terms of contribution to sustainable development benefits, as well as global environmental benefits.

**iv. Sustainability**

• Validate whether the risks identified in the Project Document, Annual Project Review/PIRs and the ATLAS Risk Management Module are the most important and whether the risk ratings applied are appropriate and up to date. If not, explain why. • In addition, assess the following risks to sustainability:

**Financial risks to sustainability**: • What is the likelihood of financial and economic resources not being available once the GEF assistance ends (consider potential resources can be from multiple sources, such as the public and private sectors, income generating activities, and other funding that will be adequate financial resources for sustaining project’s outcomes)?

**Socio-economic risks to sustainability**: • Are there any social or political risks that may jeopardize sustainability of project outcomes? What is the risk that the level of stakeholder ownership (including ownership by governments and other key stakeholders) will be insufficient to allow for the project outcomes/benefits to be sustained? Do the various key stakeholders see that it is in their interest that the project benefits continue to flow? Is there sufficient public / stakeholder awareness in support of the long term objectives of the project? Are lessons learned being documented by the Project Team on a continual basis and shared/ transferred to appropriate parties who could learn from the project and potentially replicate and/or scale it in the future?

**Institutional Framework and Governance risks to sustainability**: • Do the legal frameworks, policies, governance structures and processes pose risks that may jeopardize sustenance of project benefits? While assessing this parameter, also consider if the required systems/ mechanisms for accountability, transparency, and technical knowledge transfer are in place.

**Environmental risks to sustainability**: • Are there any environmental risks that may jeopardize sustenance of project outcomes?

**Conclusions & Recommendations**

The MTR team will include a section of the report setting out the MTR’s evidence-based conclusions, in light of the findings.

Recommendations should be succinct suggestions for critical intervention that are specific, measurable, achievable, and relevant. A recommendation table should be put in the report’s executive summary. See the Guidance For Conducting Midterm Reviews of UNDP-Supported, GEF-Financed Projects for guidance on a recommendation table.

The MTR team should make no more than 10 recommendations total.

**Ratings**

The MTR team will include its ratings of the project’s results and brief descriptions of the associated achievements in a MTR Ratings & Achievement Summary Table in the Executive Summary of the MTR report. See Annex E for ratings scales. No rating on Project Strategy and no overall project rating is required.

Table. MTR Ratings & Achievement Summary Table for (Comprehensive reduction and elimination of Persistent Organic Pollutants in Pakistan)

|  |  |  |
| --- | --- | --- |
| **Measure**  | **MTR Rating**  | **Achievement Description** |
| Project Strategy  | N/A |  |
| Progress Towards Results | Objective Achievement Rating: (rate 6 pt. scale)  |  |
| Outcome 1 Achievement Rating: (rate 6 pt. scale)  |  |
| Outcome 2 Achievement Rating: (rate 6 pt. scale)  |  |
| Outcome 3 Achievement Rating: (rate 6 pt. scale)  |  |
| Etc |  |
| Project Implementation & Adaptive Management | (rate 6 pt. scale) |  |
| Sustainability | (rate 4 pt. scale) |  |

 **6. TIMEFRAME**

 The total duration of the MTR will be approximately 24 days over a time period of 3 months starting from 22nd March 2018, and shall not exceed four months from when the consultant(s) is hired. The tentative MTR timeframe is as follows

**7. MIDTERM REVIEW DELIVERABLES**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| # | Deliverable | Description  | Timing  | Responsibilities |
| **1** | MTR Inception Report  | MTR team clarifies objectives and methods of Midterm Review | No later than 2 weeks before the MTR mission: 22-03-2018 | MTR team submits to the Commissioning Unit and project management |
| **2** | Presentation  | Initial Findings | End of MTR mission: 07-042018 | MTR Team presents to project management and the Commissioning Unit |
| **3** | Draft Final Report | Full report (using guidelines on content outlined in Annex B) with annexes | Within 3 weeks of the MTR mission: 16-04-2018 | Sent to the Commissioning Unit, reviewed by RTA, Project Coordinating Unit, GEF OFP |
| **4** | Final Report\* | Revised report with audit trail detailing how all received comments have (and have not) been addressed in the final MTR report | Within 1 week of receiving UNDP comments on draft: 22-04-2018 | Sent to the Commissioning Unit |

\*The final MTR report must be in English. If applicable, the Commissioning Unit may choose to arrange for a translation of the report into a language more widely shared by national stakeholders.

**8. MTR ARRANGEMENTS**

The principal responsibility for managing this MTR resides with the Commissioning Unit. The Commissioning Unit for this project’s MTR is UNDP Country Office.

The commissioning unit will contract the consultants and ensure the timely provision of per diems and travel arrangements within the country of Pakistan for the MTR team. The Project Team will be responsible for liaising with the MTR team to provide all relevant documents, set up stakeholder interviews, and arrange field visits.

**9. TEAM COMPOSITION**

A team of two independent consultants will conduct the MTR – one team leader (with experience and exposure to projects and evaluations in other regions globally) and one will be the team expert, usually from the country of the project. The consultants cannot have participated in the project preparation, formulation, and/or implementation (including the writing of the Project Document) and should not have a conflict of interest with project’s related activities.

The selection of consultant will be aimed at maximizing the overall qualities in the following areas: • Work experience in relevant technical areas for at least 10 years including recent experience with result based management evaluation methodologies; • Experience applying SMART indicators and reconstructing or validating baseline scenarios; • Competence in adaptive management, as applied to one of the five GEF Thematic Areas, i.e. Persistent Organic Pollutants ; • Experience working with the GEF or GEF-evaluations; • Experience working in Pakistan; Demonstrated understanding of issues related to gender and Persistent Organic Pollutants; experience in gender sensitive evaluation and analysis. • Excellent communication skills; • Demonstrable analytical skills; • Project evaluation/review experiences within United Nations system will be considered an asset; • A Master’s degree in Environmental Science, Chemicals, Industrial chemistry, or other closely related field.

**10. PAYMENT MODALITIES AND SPECIFICATIONS**

10% of payment upon approval of the final MTR Inception Report; 30% on presentation of findings; 30% upon submission and acceptance of the draft MTR report; 30% upon finalization of the MTR report;

## **Annex-2: MTR evaluative matrix**

**(Comprehensive Reduction and Elimination of Persistent Organic Pollutants in Pakistan)**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Component | Outcomes | Output/Activity | MT Targ | End of Project Targets | Source of data and methodology | Findings of MTR |
| 1. Develop & impl. a **Regulatory Policy and enforcement system to reduce POPs releases** | 1.1. Strengthened POPs regulatory and policy instr | 1.1.1 POPs related national legislation developed1.1.2 Technical guidance documents | Not Specified | * Key POPs related national legislation developed.
* National Tech POPs managt Guidelines develop
 | Visit to Peshawar, Muzaffarabad, Gilgit, Quetta, Islamabad, Lahore and Karachi to meet with the potential stakeholders like EPAs, PPD, AED, DESCO and conducting interviews based om the questionnaires developed. | 30% legal consultant deliver 3/6 deliverables/gap analysis of exis leg. No guidance material provided |
| 1.2. Enforcement agencies/ other org. regulating POPs able to use tools for POPs management | 1.2.1. Roles/admin proced, enforcement tools for POPs managt at federal/provincial/municipal levels1.2.2 POPs management and enforcement stakeholders trained to their tasks. |  | * 60 staff central/provincial level admin. trained on enforcement of POPs related provisions
* Guidance/circulars on POPs/PCBs identification inventory labelling and disposal issued
 | No Progress |
| 1.3. Governance and enforcement on illegal imports for controlling POPs improved | 1.3.1 Procedures, responsibilities and offices for enforcement established. POP pesticides and PCBs. 1.3.2 Custom administration and officers trained on POPs related issues.  |  | * Procedures, responsibilities and offices for the enforcement of import/exports of POPs estabd.
* Custom officers and managers trained on POPs issues and strategies.
 | No Progress |
| 1.4. National Chemicals Profile updated  | 1.4.1. Data compilation and elaboration of an updated Chemicals Profile for Pakistan  |  | * Data compilation and elaboration of an updated Chemicals Profile for Pakistan
 | No Progress |
| 2. **Capacity building** of local communities. Public, private stakeholders to reduce exposur to POPs | 2.1. Stakeholder groups aware of sources and to mitigate POPs exposure and releases to stockpiles | 2.1.1. Develop awareness/training programs on POPs sources exposure and release reduction 2.1.2 Professional/community level training on POPs exposure for PCBs (30 inst/50 communities. 2.1.3 Training of PCB holders in safe PCB handling during maintenance  |  | * Develop awareness/training of sources & POPs exposure and release reduction steps.
* Professional/ommunity level training sessions on POPs exposure for PCBs(30 inst,50 commun).
* Training of PCB holders in safe PCB handling during maintenance
 | Visit to Peshawar, Muzaffarabad, Gilgit, Quetta, Islamabad, Lahore and Karachi to meet with the potential stakeholders like EPAs, PPD, AED, DESCO and conducting interviews based om the questionnaires developed. | organized 6 workshops (2 for 4-days at Karachi/Lahore and 4 for 2-days at Peshawar, Quetta, Muzaffarabad and Gilgit for sensitizing the stakeholders about POPs, with target audience from academia, Government, laboratories, Chamber of Commerce & Industries and NGOs. Participants 995 (772 men and 223 women) |
| 2.2. Cost effective POPs exposure mitigation PCBs. | 2.2.1 Sp guidance doc & training for PCB holders in safe PCB handling during maintenance |  | * Guid doc/ training for PCB holders in safe PCB handling during maint. (50 gene/dist+ 50 cons).
 | No Progress |
| 2.3.awareness for gr. Dec. makers, high/risk occup etc | 2.3.1 Prof./comm level training on exposure POPs pesticides (30 institutes and 50 communities) |  | * 30 inst&50 comm areas (agr manuf districts, power sector, WM) trained
 | No Progress |
| 2.4 Reduced POPs exposure in occupational setting. | 2.4.1 Guidance for exposure reduction to POPs in areas, indirect exposure, gender-related exposure2.4.2 Training on POPs, PPE, Risk Managt Measures, Exposure Scenarios for workers, control authorities in industrial sectors.  2.4.3 Sp training activity for women (POPs issue)  |  | * Guidance for exposure reduction to POPs in priority areas, including gender-related expo.
* Operators from at least 5 sp ind sectors (WM, rec. tex manuf. electric power sector, agr, iron & steel, ship-breaking, plastic) and control authorities trained on POPs red, BAT/BEP, PPE . 5 ind/control authorities have integrated POPs issues into their managt and sup. structures
* training for women addressing POPs issues
 | No Progress |
| 3.Collection, Transport and Disposal of PCBS and POPS Pesticides | 3.1 Capacity to undertake POPs disposal projects at provincial level established. To achieve this outcome, a complete system of POPs storage, transport, packag, & disposal will be estabd. With relevant procedures. Two separate lines of one for PCBs and one for pesticidal POPs, (same disposal technology).  | 3.1.1 National Inventory of POPs stockpile upgraded, including map for identifying priority sites. There is the clear need to identify and secure POPs stockpiles for storage and disposal. 3.1.2 Storages upgraded and logistic plan developed Based on the optimum transportation plan which at the same time can minimize the risk for transportation and the number of storage facilities to be upgraded, 3.1.3 Pilot inventory of PCBs (testing of at least 5000 equipment) carried out in one Province. Monitoring activities for PCBs will be planned in coordination with the power distribution companies.3.1.4 At least 2 PCB storage and dismantling facility upgraded.  |  | * National Inventory of POPs stockpile upgraded, including map for identifying priority sites
* Storages upgraded and logistic plan developed
* Pilot inventory of PCBs (testing of atleast 5000 equipment) carried out in one Province
* At least 2 PCB storage and dismantling facility upgraded
 | Visit to Peshawar, Muzaffarabad, Gilgit, Quetta, Islamabad, Lahore and Karachi to meet with the potential stakeholders like EPAs, PPD, AED, DESCO and conducting interviews based om the questionnaires developed. | Reconfirmation of POPs pesticides done in three provinces.NOCs from respective departments for disposal acquired.No ProgressNo ProgressNo Progress |
| 3.2. Environmentally Sound Disposal of POPs. Removal of particularly risky POPs stockpiles and the sound disposal of up to 1200 tons of POP pesticides and of 300 tons of PCB  | 3.2.1 Identification, testing of suitable disposal facility. A disposal facility be identified and tested to prove its compliance with the BAT/BEP requirement under the SC for the disposal of 1200 tons of POPs and 300 tons of PCB contaminated equipment3.2.2. Up to 1200 tons of obsolete POPs stockpile from Punjab and Sindh province safely disposed. The environmentally sound packaging, transport and disposal to facility. 3.2.3. Environmentally Sound Management and disposal of PCBs. End of life PCB contaminated transformers will be safely dismantled and their carcasses decontaminated so that these can be recycled without harming the environment and the human health. An amount of at least 300 tons PCBs contaminated oil and solid waste contaminated by PCB will be packaged and sent for final destruction to the selected facility.  |  | * Identification, testing of disposal facilities or services.
* Up to 1200 tons of obsolete POPs stockpile from Punjab and Sindh province safely disposed.
* Up to 300 tons PCB equipment safely disposed.
 | Facility developed at Bestway cement. POPs pesticides for disposal were transported from (Peshawar, Sukkur, Mirpur Khas, Lahore, Bahawalpur and Quetta) using environmentally safe transportation protocols. 443.77 T of POPs pesticide disposed through cement kiln at Kalar Kahar. progress 40%. PCBs phased out is 31.23T( K.Elec. Karachi 18.59TMangla Power Station 12.64T) progress to target is approx. 10%.  |
|  | 3.3. National POPs managt/ disposal scheme and replication plan developed. Based on the experience gathered on the disposal of POPs, a national POPs managt plan be developed. | 3.3.1. National scheme for obsolete POPs pesticide disposal as a part of hazardous waste management scheme developed. 3.3.2 National managt plan for PCBs based on inventory & disposal priority PCBs developed. 3.3.3 Personnel and offices in charge of managt and disposal of POPs appointed. |  | * National scheme for POPs disposal as a part of hazardous waste management scheme developed.
* Nationwide PCB management strategy developed
* Management / staff appointed
 |  | No Progress |
| 4. M and E. Aims at M&E of results achieved to improve the implementation of the project & disseminate lessons learnt domestically & internationally. | 4.1. M&E and adaptive managt are applied to provide feedback to the project coord process to capitalize on project needs 4.2. Lessons learned and best practices are accumulated, summarized, replicated at the country level and disseminated internationally.  | APR/PIR: Annual Project Review/Project Implementation Reports This key report is prepared to monitor progress made since project start and in particular for the previous reporting period (30 June to 1 July). The APR/PIR covers both the UNDP and GEF reporting requirements. |  | * The Mid-Term Evaluation will determine progress being made toward the achievement of outcomes and will identify course correction if needed.
* It will focus on the effectiveness, efficiency and timeliness of project implementation; will highlight issues requiring decisions and actions; and will present initial lessons learned about project design, implementation and management
 | Visit to Peshawar, Muzaffarabad, Gilgit, Quetta, Islamabad, Lahore and Karachi to meet with the potential stakeholders like EPAs, PPD, AED, DESCO and conducting interviews based om the questionnaires developed. | APR/PIR: Annual Project Review/Project Implementation Reports incomplete, inaccurate and confusing format. |

## **Annex-3: Example Questionnaire or Interview Guide used for data collection**

**MTR Ratings & Achievement Summary Table**

**Comprehensive Reduction and Elimination of Persistent Organic Pollutants in Pakistan)**

|  |  |  |  |
| --- | --- | --- | --- |
| **Measures** | MTR Rating | MTR Rating | Achievement Description |
| 1. **Project Strategy:**
 | **NA** | **NA** |  |
| **If there are major areas of concern, recommend areas for improvement:** 1. Pesticides and PCBs considered similar while the status is not similar, PCB Management plan to be developed, non-thermal treatment to be explored with mobile facility for onsite treatment.
2. KPIs to be highlighted and hierarchy to be developed according to the priority of the activity with specified time. (planning of activities may be three prong 1. Short Term (6 months) 2. Medium Term (12 Months) 3. Long Term (15 months + Extension period)
 |
| 1. **Progress Towards Results: To what extent have the expected outcomes and objectives of the project been achieved thus far?**
 | **KPK** MS,MS,MS,MS**AJK** MS,MS,MS,MS**G&B** MS,MS,MS**Quetta** MS,MS**Fed** MS,MS,MS,MS,MS**Lahore** MS,MS,MS,MS**Karachi** MS,MS,MS, | **MS**Moderately Satisfactory | Approximately 20% of the activities were on track |
| **Outcome-1: Progress towards Outcomes Analysis:** * Review the logframe indicators against progress made towards the end-of-project targets,
* Compare/**analyse the GEF Tracking Tool** at the Baseline with one for MTR,
* Identify **barriers to achieving the project objective** in remainder of the project
 |
| **Review aspects that have already been successful, identify ways in which the project can further expand these benefits**. Most of the outcomes yet to be initiated. While arrangements for the disposal of POPs Pesticides and PCBs has been identifies and 475MT of Obsolete POPs pesticide and PCBs have been disposed off through a cement kiln. |
| 1. **Project Implementation & Adaptive Management:** Has project been implemented efficiently, cost-effectively, and been able to adapt to any changing conditions so far? To what extent project-level monitoring, evaluation systems, reporting & project communications supporting the project’s implementation?
 | **KPK** MS,MS,MS,MS**AJK** MS,MS,MS,MS**G&B** MS,MS,MS,**Quetta** MS,MS,**Fed** MS,MS,MS,MS,MS**Lahore** MS,MS,MS,MS**Karachi** MS,MS,MS, | **MS**Moderately Satisfactory | Approximately 20% of the activities were on track |
| **Outcome-1 Management Arrangements:** * Review effectiveness of management outlined in PD.
* Have **changes been made** and are they effective? Are **responsibilities and reporting** lines clear?
* Is decision-making transparent & undertaken in timely manner? **Recommend areas for improve.**
* Review the **quality of execution of the Executing agency**/Implementing Partner(s) **recommend areas for improvement.**
* Review the **quality of support provided by GEF-UNDP** & **recommend areas for improvement**
 |
| **Outcome-2 Work Planning:** * Review **any delays in start-up** and implementation,
* identify the causes and examine if they have been resolved.
* Are **work-planning processes results-based**? If not, suggest ways to re-orientate work planning to focus on results?
* Examine the **use of the project’s results framework/ logframe** as a management tool and review any changes made to it since project start.
 | **KPK** MU,MU,MU,MU**AJK** MU,MU,MU,MU**G&B** MU,MU,MU**Quet** MU,MU,**Fed** MU,MU,MU,MU,MU**Lahore** MU,MU,MU,MU**Karachi** MU,MU,MU, | **MU**Moderately Unsatisfactory | Proper planning is lacking |
| **Outcome-3 Finance and co-finance:** Consider the **financial management of the project, with specific reference to the cost-effectiveness** of interventions. * Review the **changes to fund allocations** as a result of budget revisions and
* assess the appropriateness and relevance of such revisions.
* Does the **project have the appropriate financial controls**, reporting/planning, that allow managt to make informed decisions regarding the budget for timely flow of funds?
 | **KPK** MU,MU,MU,MU**AJK** MU,MU,MU,MU**G&B** MU,MU,MU**Quet** MU,MU**Fed** MU,MU,MU,MU,MU**Lahore** MU,MU,MU,MU**Karachi** MU,MU,MU, | **MU**Moderately Unsatisfactory | Proper utilization of finance is lacking, while involving Co-financing not yet initiated |
| Informed by the **co-financing monitoring table to be filled** out, provide commentary on co-financing: is co-financing being used strategically to help the objectives of the project? Is the Project Team meeting with all co-financing partners regularly in order to align financing priorities and annual work plans?1. Co-financing table is attached separately, but so far no Co-financing has been utilized.
2. It is recommended to utilize the facilities of Co-financer for sampling and characterization of the pesticides and venues/facilities could be utilized for trainings/workshops.
 |
| **Outcome-4: Project-level Monitoring and Evaluation Systems:** * Review the monitoring tools currently being used:
* Do they provide the necessary information? Do they involve key partners?
* Are they aligned or mainstreamed with national systems?
* Do they use existing information? Are they efficient? Are they cost-effective?
* Are additional tools required? How could they be made more participatory/ inclusive?
 | **KPK** MU,MU,MU,MU**AJK** MU,MU,MU,MU**G&B** MU,MU,MU**Quet** MU,MU**Fed** MU,MU,MU,MU,MU**Lahore** MU,MU,MU,MU**Karachi** MU,MU,MU, | **MU**Moderately Unsatisfactory | Not yet started |
| Examine **financial management of the project monitoring and evaluation** budget. Are sufficient resources being allocated to monitoring and evaluation? Are these resources being allocated effectively?1. This activity is not yet initiated
2. A plan should be developed for the specific monitoring activities along with the list of stakeholders to be involved with frequency of monitoring period.
 |
| **Outcome-5 Stakeholder Engagement:** * Has the project developed and leveraged the necessary and appropriate partnerships with direct and tangential stakeholders? **Participation and country-driven processes**:
* Do local and national government stakeholders support the objectives of the project?
* Do they continue to have an active role in project decision-making that supports efficient and effective project implementation? **Participation and public awareness**:
* To what extent has stakeholder involvement and public awareness contributed to the progress towards achievement of project objectives?
 | **KPK** MS,MS,MS,MS**AJK** MS,MS,MS,MS**G&B** MS,MS,MS**Quetta** MS,MS**Fed** MS,MS,MS,MS,MS**Lahore** MS,MS,MS,MS**Karachi** MS,MS,MS, | **MS**Moderately Satisfactory | Not fully involved according to their role and responsibility |
| **Outcome-6 Reporting:** * Assess how adaptive management changes have been reported by the project management and shared with the Project Board.
* Assess how well the Project Team and partners undertake and fulfil GEF reporting requirements (i.e. how have they addressed poorly-rated PIRs, if applicable.
* Assess how **lessons derived from the adaptive management** process have been documented, shared with key partners and internalized by partners
 | **KPK** MU,MU,MU,MU**AJK** MU,MU,MU,MU**G&B** MU,MU,MU**Quet** MU,MU**Fed** MU,MU,MU,MU,MU**Lahore** MU,MU,MU,MU**Karachi** MU,MU,MU, | **MU**Moderately Unsatisfactory | Reporting system is not appropriate |
| The project has only just started (20% of activities) to establish an effective POPs management framework for Pakistan and while it is seriously behind in most components (legislative framework, capacity building, monitoring and evaluation) both in project time past, budget expended and activities achieved it has made significant progress in establishing the basis for an effective treatment systems for POPs and other organic chemicals in Pakistan. It has done this through successfully working wth the regulators (EPAs), the private sector (BestWay Cement) and the agricultural and power sector. This has now resulted in the successful treatment of up to 475 MT of suspected POPs using BAT treatment technologies in Pakistan which is an important achievement in building a sustainable treatment system for POPs and chemical waste treatment in Pakistan. In doing this it has started to develop a system that can meet the requirements of the Stockholm Convention and potentially assist in other areas such as SAICM , the Globally Harmonised System for chemicals. This has involved the engagement of multiple EPA’s to permit the transport of suspected POPs (No Objection Certificate (NOC)) or observe the treatment at Bestway that included verification by international experts that emissions meet the Stockholm BAT and therefore uPOPs were minimised and suspected POP were destroyed. While the system of identification, packaging, transport and destruction all need improvement as detailed in the MTR it is nevertheless and important start that can now be built on given better resources (international expertise) and a project time extension. While lacking quality or coherence with project activites there have also been efforts to develop the required legislatve framework and to launch the capacity building components of the project, while much work is needed on these components it has started the process which can be built on and improved. The Pakistan POPs project has much to progress before it can considered as having meet its national and international obligations but important components for a sustainable system that will minimise and reduce POPS have started.  |
| **Outcome-7 Communications:** * Review internal project communication with stakeholders: Review **external project communication**:
* Are proper means of communication established or being established to express the project progress and intended impact to the public
 | **KPK** MU,MU,MU,MU**AJK** MU,MU,MU,MU**G&B** MU,MU,MU**Quet** MU,MU**Fed** MU,MU,MU,MU,MU**Lahore** MU,MU,MU,MU**Karachi** MU,MU,MU, | **MU**Moderately Unsatisfactory | There are gaps of communication among the potential stakeholders |
| 1. **Sustainability:** To what extent are there financial, institutional, socio-economic, and/or environmental risks to sustaining long-term project results?
 | **KPK** ML,ML,ML,ML**AJK** ML,ML,ML,ML**G&B** ML,ML,ML**Quetta** ML,ML**Fed** ML,ML,ML,ML,ML**Lahore** ML,ML,ML,M**Karachi** ML,ML,ML | **ML**Moderately Likely | At this stage of project where only 30% of the activities has been completed, prediction of sustainability is not possible but it is obvious that if awareness is created and capacity is built properly the project could be sustainable |
| **Outcome-1 Financial risks to sustainability:*** What is the likelihood of financial and economic resources not being available once the GEF assistance ends
 |
| **Outcome-2 Socio-economic risks to sustainability:** * Are there any social or political risks that may jeopardize sustainability of project outcomes?
* What is the **risk that the level of stakeholder ownership** (ownership by govt./other key stakeholders) will be insufficient to allow for the project outcomes/ benefits to be sustained?
* Do various key **stakeholders see that it is in their interest** that project benefits continue to flow?
* Is there **sufficient public/stakeholder awareness** in support of long term objectives of the project?
* **lessons learned being documented by Project Team** on continual basis shared / transferred to appropriate parties who could learn and potentially replicate and/or scale it in future
 |
| **Outcome-3 Institutional Framework and Governance risks to sustainability:** * Do the **legal frameworks, policies, governance structures and processes pose risks** that may jeopardize sustenance of benefits?
* While assessing this parameter, consider if required systems/ mechanisms for accountability, transparency,& technical knowledge transfer are in place.
 | **KPK** ML,ML,ML,ML**AJK** ML,ML,ML,ML**G&B** ML,ML,ML**Quetta** ML,ML**Fed** ML,ML,ML,ML,ML**Lahore** ML,ML,ML,M**Karachi** ML,ML,ML | **ML**Moderately Likely | Depending upon the legislation and its implementation |
| **Outcome-4 Environmental risks to sustainability:** * Are there any environmental risks that may jeopardize sustenance of project outcomes?
 |

## **Annex-4: Ratings Scales**

Progress Towards Results Rating Scale

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

**Sustainability Rating Scale**

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

## **Annex-5: MTR mission itinerary**

|  |  |
| --- | --- |
| **Timeframe** | **Activity** |
| 24 July, 2018 | Briefing the MTR Consultant (handover of Project Documents) |
| 30 July, 2018 | Document review and preparing MTR Inception Report |
| 09 Aug, 2018 | Finalization and Validation of MTR Inception Report- |
| 09 Sep, 2018 | Arrival International Consultant (Team Leader) to Islamabad |
| 10 Sep, 2018 | Initial Meeting with UNDP, Project Team and National Consultant |
| 13 Aug-17 Sep, 2018 | MTR mission: stakeholder meetings, interviews, field visits20.08.2018 - Quetta27.08.2018 - Peshawar30.08.2018 - Muzaffarabad03.09.2018 – Gilgit06.09.2018 - Quetta09.09.2018 – International Consultant (Team Leader) arrival10.09.2018 – Islamabad: 11.09.2018 – Islamabad12.09.2018 – Lahore 14.09.2018 – Karachi 17.09.2018 – Bestway Cement Kalarkahar 19.09.2018 – UNDP Islamabad |
| 18 Sep, 2018 | Mission wrap-up meeting & presentation of initial findings- |
| 19 Sep, 2018 | Presenting findings and Recommendations of MTR1. Ms. Naoko Takasu, Deputy Country Director UNDP
2. Mr. Amanullah Khan, Asstt. Country Director UNDP
 |
| 24 Sep, 2018 | Preparing draft report |
| 01 Oct, 2018 | Incorporating audit trail from feedback on draft report/Finalization of MTR report  |
| 09 Oct, 2018 | Preparation & Issue of Management Response |
| 16 Oct, 2018 | Expected date of full MTR completion |

## **Annex-6: List of persons interviewed**

List of Stakeholders Met by the MTR Team

|  |  |
| --- | --- |
| Province | Name and Designation |
| Peshawar KPKMeetings on 27.08.18 | 1. Mr Sanauulah Director EPA, KPK
2. Mr Afsar Khan Dy Dir Climate Change
3. Mr Mohammad Ali DD EIA
4. Ms Zakia Javid DD MEAC
 |
| 1. Mr. Ziauddin Dir Agri Ext Plant Protection
2. Mr. Shukat Fed Plant Protection Department
 |
| 1. Mr. M Akbar Khan Chief PESCO
2. Mr Asad Iqbal Ex En
3. Mr Masood Shah AM Env
 |
| Muzaffarabad AJ&KMeetings on 30.09.18 | 1. Mr Shafiq Abbasi DD/Dir EPA,
2. Mr. S Rashid Shah DG Climate Change
 |
| 1. Engr. Abid Hussain Sec Electricity
2. Mr. Hayat DG
3. Mr. Danish DD PDO
 |
| 1. Dr Shelah Waqar Sec Agr.
2. Dr. M. Bashir Butt DG Agr.
3. Dir Pest Control
 |
| Gilgit G&BMeetings on 03.09.18 | 1. Mr Khadim Hussain AD EPA
 |
| 1. Mr. Mehmood Asghar Dir Agri
2. Mr. Mohammad Iqbal DD, IPM
 |
| 1. Engr. Ghulam Muraza, Cihief Engr, W&P
2. Mr. Mansoor Alam DS,
3. Engr Azmat Ali, Ex En
 |
| Quetta BaluchistanMeetings on 07.09.18  | 1. Col ® Mohammad Tariq, DG EPA
2. Mr. Fateh Khan AD Env.
 |
| 1. Mr. Inam ul Haq, Sec Agri
2. Dr. Arif Shah, Dir PPD Local
 |
| 1. Mr. Balig-uz-Zaman Siddique, CEO, QESCO
2. S. Uzair Ali Shah, DG HR&Admin
 |
| 1. Mr Mohammad Hanif, Dir PPD Fed
2. Mr. Mohammad Rahim Store Keeper
 |
| IslamabadMeetings on 10,11,17 & 19.09.2018 | 1. Mr. Muhammad Shakeel Malik, NPD POPs Project
2. Ms. Naoko Takasu, Deputy Country Director UNDP
3. Mr. Amanullah Khan, Asstt. Country Director UNDP
 |
| 1. Mr. Wajid Ali Kazmi GM IESCO
2. Mr. Mohammad Yasin DM
 |
| 1. Mr. Hasnain Zaigham, Sr Dir. NEPRA
2. Mr. Hasnain Gohar AD,
 |
| 1. Dr. Zaigham Abbas, Dir, MoCC
 |
| 1. Dr. S Wasim ul Hasan, Food Sec Coord, MoF&A
 |
| 1. Mr. Mohammad Aslam Chudhry, JS EAD
2. Ms. Huda Shah
 |
| Lahore, PunjabMeeting on 12,09,18 | 1. Ms Syeda Malaika, DG EPA
2. Ms Nusrat Naz Dir
3. Mr Shaheen Dir
4. Mr. Ali Abbas DD
5. Ms Pakeeza Bukhari. AD
 |
| 1. Mr. Atia Dastagir (Senior Ecologist) WAPDA
2. Dr. Mohammad Fayyaz
3. Mr.Ehsan Engineer
 |
| 1. Mr. Mahr Khalid Mehmood (Addl. Director General) NTDC
 |
| 1. Dr. Wasif Khurshid, Sec Agri
2. Dr. Ihsanul Haq Dir, Residue Lab
3. Mr Amanulla Cheema
4. Dr. Riaz Ahmad Dir QC
 |
| Karachi, SindhMeeting on 14.09.18 | 1. Mr. Farooq, CEO/CFO, K Elect
2. Mr. Manzoor Ahmad Dir HSE, KE
 |
| 1. Mr. Waqar Phulpoto, Dir, EPA Sindh
 |
| 1. Mr. Mohammad Tariq Khan Dir DPP
2. Mr. Umer Farooq, PPD
3. Dr. Muhammad Ishfaq, DD PP
4. Dr. Basit, DD
 |
| Bestway17.09.18 | 1. Mr. Muhammd Fahimul Hasan SMP
2. Mr. Syed Kamran Hassan, HoD,
3. Mr. Usman Ahmad, M HSE
4. Mr. Farukh Head of Environment
 |

## **Annex-7: List of documents reviewed**

1. Project Document
2. Project Identification Form (PIF)
3. National Implementation Plan (NIP) Pakistan
4. Scientific and Technical Screening
5. AWP POPs 2016 Approved-Signed
6. AWP POPs 2017 - Signed Copy
7. Annual Work Plan 2018 (Revised & Signed Copy)
8. 2018-GEF-PIR
9. POPs Inception Report Action Plan (20-Nov-2015)
10. Project Implementation Report – 2016
11. Project Implementation Report – 2017
12. Project Implementation Report - 2018
13. Annual Report 2017 last working (11-01-2018)
14. Targets and Results for 2015, 2016, 2017
15. Audit Report 2017 – POPs
16. Audit-Report-2016---POPS
17. GEF - POPs Tracking Tool Pakistan POPs 30 June 2014
18. GEF Tracking Tool POPs Project – 2018
19. PCOM Ver 4 0 Vol-II - April 2005
20. UNDP Country Doc
21. UNDP Strategic Plan 2018 – 2022
22. PI MTR verification Report – 2018
23. UNDP POP updated CONTACT LIST – Copy
24. Bestway disposal reports
25. Bizxperts Presentation final
26. SOP Bizxperts
27. Co Finance Breakdown
28. Eurofins Report - Batch II, III & IV
29. Lab Eurofins Report - Batch II, III, & IV
30. Lab Report 2-Bestway Cement Stack emission monitoring report- Mar 2017
31. Legislation 1st Deliverable inception report
32. Legislation Consultant-2nd Deliverable\_1st Draft Comments by Project 18th July
33. Legislation Contract Mohsin Kamal
34. Meeting Minutes-PSC meeting-FINAL
35. POPs-2018 List of Activities
36. PSC Approved Minutes
37. PSC Members Notification
38. Technical Review Committee Members
39. TRC Final Meeting Minutes -14 Dec 2017
40. Portfolio Indicators-15th August 2018
41. APR POPs- 2016
42. BTOR-POPs
43. Comprehensive Reduction and Elimination of POPs in Pakistan - APR (2015)
44. Comprehensive Reduction and Elimination of POPs in Pakistan - APR (2016)
45. Comprehensive Reduction and Elimination of POPs in Pakistan - APR (2017)
46. HACT Spot Check POPs Oct-16 00091045
47. POPs Monitoring report 2018

## **Annex-8: Co-financing table (if not previously included in the body of the report)**

|  |  |  |  |
| --- | --- | --- | --- |
| **Sr. No** | **Co-Financing Partner** | **Contribution Committed** | **Status** |
| 1 | Ministry of Climate Change | USD 2.07 Million | Not Provided |
| 2 | IESCO | USD 7.9 Million |
| 3 | NCPC Rawalpindi | USD 5000 |
| 4 | PARC | USD 4,500,00 |
| 5 | PCRWR | USD 597,600 |
| 6 | PESCO | USD 3.1 Million |
| 7 | Pesticide Residue Laboratory Kala Shah Kaku | USD 4,000,000 |
| 8 | ARI Tarnab | USD 1,000,000 |
| 9 | SDPI | In kind |
| 10 | BOND | USD 761222 |

##

## **Annex-9: Signed UNEG Code of Conduct form**

## **Annex-10: Signed MTR final report clearance form**

## **Annex-11: Response to comments on draft MTR**

**ToR ANNEX 11: Audit Trail Template**

*Note:* The following is a template for the MTR Team to show how the received comments on the draft MTR report have (or have not) been incorporated into the final MTR report. This audit trail should be included as an annex in the final MTR report.

**To the comments received on (*date*) from the Midterm Review of (*project name*) (UNDP Project ID-*PIMS #)***

*The following comments were provided in track changes to the draft Midterm Review report; they are referenced by institution (“Author” column) and track change comment number (“#” column):*

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Author** | **#** | **Para No./ comment location**  | **Comment/Feedback on the draft MTR report** | **MTR team****response and actions taken** |
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Comment 1:

The approved budget in ProDoc and in Atlas are not same, please confirm.

**ToR ANNEX 12: MTR Report Clearance Form**

*(to*

**Midterm Review Report Reviewed and Cleared By:**

**Commissioning Unit**

Name: \_\_Amanullah Khan, Assistant Country Director, Environment and Climate Change Unit\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Signature: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Date: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**UNDP-GEF Regional Technical Advisor**

Name: \_\_\_\_\_\_\_Christine Wellington Moore\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Signature: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Date: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

1. SS1: Year wise budget provided but activities not distributed accordingly [↑](#footnote-ref-1)
2. SS2: No indicators for M&E are mentioned in the ProDoc [↑](#footnote-ref-2)
3. SS3: The TORs has not clearly metioned the experts experience in POPs [↑](#footnote-ref-3)
4. Report of  activity-wise Budget & Expenditures (budget vs actual) was provided by the project to the NIM HACT auditors, as it was not requirement of NIM Auditors at the beginning of the HACT NIM audit, requirement was generated after the audit exit meeting  was already convened, with a very tight timeline to provide the said document/report,   The same report (Budget vs Actual) was provided to NIM Auditors by the project after review of UNDP. But due to submission of the report after the given deadline,  NIM Auditors, never changed the observation from HACT NIM Audit report.  Indeed, this is to confirm that  complete report (Budget vs Actual Expenditure)  was available with the project, which according to the POPs project, the requirement of MTR team is misunderstood and the project shared the system generated year-wise/activity-wise ATLAS generated expenditures for the whole period from 2015 till 2018 along with balance budget. [↑](#footnote-ref-4)
5. Approximately 30% of the indicators were on track

 [↑](#footnote-ref-5)
6. SS10: AWP deleted as not reporting tool [↑](#footnote-ref-6)
7. SS11: Deleted as not GEF demand and SS12: Not mentioning the BAT/BEP [↑](#footnote-ref-7)
8. SS13: Yes it was not considered at design stage [↑](#footnote-ref-8)
9. SS14: deleted [↑](#footnote-ref-9)
10. SS15: added a para on limitation [↑](#footnote-ref-10)
11. The figures has been taken from the NIP for Phasing out and Elimination of POPS from Pakistan under Stockholm Convention Article 7 (a) [↑](#footnote-ref-11)
12. In 2004-05 the figures were collected by the GoP for NIP. While in 2014 the survey was conducted by UNDP, both of these were prior to the project. In 2018 POPs project hired national experts for reverification, who has visited the sites by themselves and verified the stocks themselves in cooperation with the concerned departments without chemical testing and quantification in accordance with international best practice. [↑](#footnote-ref-12)
13. No data is available regarding PCBs in Pakistan. POPs PMU has signed a MOU with NEPRA to collect the data regarding the PCB contaminated oils in Pakistan. An IC can conduct collection and reverification of PCBs data. [↑](#footnote-ref-13)
14. [↑](#footnote-ref-14)
15. SS17: Objectives in the ProDoc are not distributed yearwise [↑](#footnote-ref-15)
16. SS18: MTR Targets are not given in the ProDoc [↑](#footnote-ref-16)
17. SS19: Already responded no MTR Targets, deleted due to repetition. [↑](#footnote-ref-17)
18. SS20: The plan itself is fulfilling country targets but the project targets are not time bound. [↑](#footnote-ref-18)
19. SS21&22: Team does not agree [↑](#footnote-ref-19)
20. SS23: Based on observations and record review [↑](#footnote-ref-20)
21. ##  SS24: Annex-2: MTR evaluative matrixattached

 [↑](#footnote-ref-21)
22. The colours were just for the presentation purpose, agreed to remove [↑](#footnote-ref-22)
23. It was not the responsibility of disposal facility owners but the client has to confirm [↑](#footnote-ref-23)