GLOBAL ENVIRONMENT FACILITY
INVESTING IN OUR PLANET

Naoko Ishii
CEO and Chairperson

July 31, 2014

Dear Council Member:

FAO as the Implementing Agency for the project entitled: ***Benin: Disposal of POPs and Obsolete Pesticides and Strengthening Life-cycle Management of Pesticides***, has submitted the attached proposed project document for CEO endorsement prior to final approval of the project document in accordance with FAO procedures.

The Secretariat has reviewed the project document. It is consistent with the proposal approved by Council in February 2012 and the proposed project remains consistent with the Instrument and GEF policies and procedures. The attached explanation prepared by FAO satisfactorily details how Council's comments and those of the STAP have been addressed. I am, therefore, endorsing the project document.

We have today posted the proposed project document on the GEF website at www.TheGEF.org. If you do not have access to the Web, you may request the local field office of UNDP or the World Bank to download the document for you. Alternatively, you may request a copy of the document from the Secretariat. If you make such a request, please confirm for us your current mailing address.

Sincerely,

Naoko Ishii
Chief Executive Officer and Chairperson

Attachment: GEFSEC Project Review Document
Copy to: Country Operational Focal Point, GEF Agencies, STAP, Trustee

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REQUEST FOR CEO ENDORSEMENT

Project Type: Full-sized Project
Type of Trust Fund: GEF Trust Fund

PART I: PROJECT INFORMATION

Project Title: Disposal of POPs and Obsolete Pesticides and Strengthening Life-Cycle Management of Pesticides in Benin			
Country	Benin	**GEF Project ID**	4756
GEF Agency	FAO	**GEF Agency Project ID:**	613308
Other Executing Partner(s)	Ministries of Agriculture, Environment and Health	**Submission Date:**	July 10, 2014
GEF Focal Area(s):	Chemicals – POPs	**Project Duration (Months)**	48 months
Name of Parent Program (if applicable):		**Agency Fee ($):**	183,000

A. Focal Area Strategy Framework

Focal Area Objectives	Expected FA Outcomes	Expected FA Outputs	Trust Fund	Grant Amount ($)	Cofinancing ($)
CHEM-1	Outcome 1.4 POPs waste prevented, managed and disposed of, and POPs contaminated sites managed in an environmentally sound manner.	Output 1.4.1 Strategies for the disposal of POPs and obsolete pesticides, and for the remediation of contaminated sites developed and implemented.	GEFTF	1,830,000	10,580,625
		Total Project Costs		**1,830,000**	**10,580,625**

B. Project Framework

Project Objective: To eliminate existing obsolete pesticides, including POPs and associated wastes, and to strengthen the capacity for sound pesticide management in order to prevent future accumulation.

Project Component	Grant Type	Expected Outcomes	Expected Outputs	Trust Fund	Grant Amount ($)	Confirmed Co-financing ($)
Component 1: Safe disposal of POPs and other obsolete pesticides and remediation of heavily contaminated sites	TA	Outcome 1: Identified risks from existing obsolete stocks eliminated and risks from heavily pesticide-contaminated sites reduced *Main indicators:* *a) Up to 200 tonnes of POPs and other obsolete pesticides disposed of in an*	1.1 Up to 200 tonnes of POPs pesticides and other obsolete pesticides safely destroyed in line with the Basel Convention 1.2 Risks from 2 highly contaminated sites quantified, remediation strategies developed and implemented.	GEFTF	852,500	2,728,500

		environmentally sound manner. *b) 2 contaminated sites with reduced risk of exposure/ contamination level (50% reduction).*				
Component 2: Development and implementation of empty pesticides containers management system	TA	Outcome 2 Risks to the environment and human health from empty pesticide containers used in cotton production areas reduced *Main indicators:* a) *Number of empty containers triple rinsed, collected and stored awaiting recycling (Target: 75,000 in PY3; 150,000 in PY4.)*	2.1 Design and validation of a management scheme for empty pesticide containers completed. 2.2 The empty pesticide container management scheme piloted in Alibori and Borghou Departments.	GEFTF	254,000	500,000
Component 3: Strengthening the regulatory framework and institutional capacity for the sound management of pesticides	TA	Outcome 3: Regulatory framework and institutional capacity for the sound management of pesticides throughout their lifecycle strengthened Main indicators: *a) Revised national legislation in compliance with international and regional obligations adopted by PY4.* b) *National Pesticide Management Committee (NPMC) and a national system for inspection and quality control of pesticides operational by PY3.*	3.1 National legislation and regulations for registration and control of pesticides revised in line with international obligations and the regional CILSS-ECOWAS-UEMOA common system and submitted to Government for approval. 3.2 A national strategy, workplan and budget for inspection and quality control of pesticides developed, and a National Pesticide Management Committee established. 3.3 National capacity for pesticide inspections and post-registration control increased – Two key pesticide import entry points equipped and operational – About 20 inspectors/ relevant staff trained.	GEFTF	183,500	4,720,125
Component 4: Promotion of alternatives to POPs and other	TA	Outcome 4 IPM alternatives to conventional pesticides successfully promoted	4.1 Potential alternatives to endosulfan, POPs and other obsolete pesticides identified and	GEFTF	313,500	1,982,000

hazardous chemical pesticides		and the use of chemical pesticides and highly hazardous pesticides reduced. Main indicators: *a) number of farmers trained on IPM alternatives through Farmer Field Schools (FFS)* *b) % Reduction in pesticide use on cotton and other crops among trained farmers* *(specific targets to be determined in PY1.)*	an action plan for field testing, registration and promotion agreed. 4.2 Identified alternatives to endosulfan, POPs and other obsolete pesticides tested for their technical and economic feasibility at farm level. 4.3 Viable alternatives to endosulfan, POPs and other obsolete pesticides promoted – training sessions of extension agents, farm advisers, agricultural training providers, conducted; – # female and male farmers trained through FFS. – Communication strategy developed and implemented.			
Component 5: Monitoring and Evaluation	TA	Outcome 5.1: Project monitored and evaluated effectively and best practices disseminated.	5.1 Project monitoring system providing six-monthly reports on progress in achieving project outputs and outcomes. 5.2 Midterm and final evaluation reports 5.3 Project "best-practices" and "lessons-learned" disseminated via publications, project website and others.	GEFTF	122,916	300,000
				Subtotal	**1,726,416**	**10,230,625**
				Project management Cost (PMC)	**103,584**	**350,000**
				Total project costs	**1,830,000**	**10,580,625**

C. Sources of Confirmed Co-financing for the Project by Source and by Name ($)

Sources of Co-financing	Name of Co-financier (source)	Type of Co-financing	Co-financing Amount ($)
Government	Ministry of Agriculture (ABSSA)	In-kind	**300,000**
Government	Ministry of Agriculture (ABSSA)	Grant	**4,250,000**
Government	Ministry of Agriculture (DAGRI)	In-kind	**500,000**
Private Sector	Croplife International	Grant	**868,500**
Private Sector	Croplife International	In-kind	**60,000**
Civil society	OBEPAB	Grant	**500,000**
Civil society	OBEPAB	In-kind	**500,000**

Research Institute	IITA	Grant	**300,000**
GEF Agency	FAO	Grant	**3,152,125**
GEF Agency	FAO	In-kind	**150,000**
Total Co-financing			**10,580,625**

D. Trust Fund Resources Requested by Agency, Focal Area and Country

GEF Agency	Type of Trust Fund	Focal Area	Country Name/Global	(in $)		
				Grant Amount (a)	Agency Fee (b)	Total C=A+B
FAO	GEFTF	POPs	Benin	1,830,000	183,000	2,013,000
Total Grant Resources				1,830,000	**183,000**	**2,013,000**

F. Consultants Working for Technical Assistance Components:

Component	Grant Amount ($)	Co-financing ($)	Project Total ($)
International Consultants[4]	**348,000**	**522,000**	**870,000**
National/Local Consultants	**201,800**	**343,000**	**544,800**

G. Does the Project Include a "Non-Grant" Instrument? NO

Part II: Project Justification

A. Describe any changes in alignment with the project design of the original PIF[5]

The following changes have been made:

Component 1. The original PIF budget for Component 1 ($950k) was based on the estimated cost of removing 250 tonnes of obsolete pesticides to be removed. Based on the PPG data analysis, it is now estimated that the total gross weight of existing public and private sector stocks will be 200 tonnes. The budget has been revised down accordingly.

Component 2. The PIF included four outputs for container management. The outputs have been streamlined into just two (design of scheme; and establishment of a pilot), since the original four included two that are just part of an effective pilot system establishment (network of farmers and training). The initial proposal for a national network for empty container management was also reviewed. It has been decided to pilot the container management scheme in 2 cotton production regions before rolling out to other regions.

Component 3. The project has reinforced post-registration control in component 3 compared to the greater focus in the PIF on the registration phase. The PIF contained two component outcomes relating to legislation and joining the CILSS regional registration system, which have now been combined and enhanced to address the full life cycle aspects.

The additional post-registration support better reflects national roles required of CILSS common registration system members, and includes Output 3.2 on an inspection and quality control strategy and a new National Pesticide Management Committee.

The PIF outputs 3.2.1 (*A list of banned and registered pesticides updated, consistent with that of CILSS, and uploaded into Pesticides Stock Management System)* and 3.2.2 *(National network for PSMS to support data collection on registered and banned pesticides, import, distribution and use established*)

[4] International consultants include regional consultants.

[5] For questions A.1 – A.7 in Part II, if there are no changes since the PIF and if not specifically requested in the review sheet of the PIF stage, then no need to respond, please enter "NA" after the respective question.

have been combined into the current Output 3.2 on the national strategy for inspection and quality control, which will cover information collection and exchange.

Component 4. The four outputs of the PIF Component 4 have been redefined with PIF output 4.1.1 being split into two separate outputs on identification and testing of alternatives (4.1 and 4.2 respectively); and PIF outputs 4.1.2 (promotion strategy) and 4.1.4 (rollout communications) being combined into a single Output 4.3 on promoting alternatives. The budget for this output has increased by about $60k reflecting the importance to work on alternative to prevent future build up of obsolete stocks.

A.1 National strategies and plans or reports and assessment under relevant conventions, if applicable, i.e., NAPAs, NBSAPs, national communications, TNAs, NCSA, NIPs, PRSPs, NPFE, Biennial Update Reports, etc.

N/A

A.2 GEF focal area and/or fund(s) strategies, eligibility criteria and priorities

The project contributes to the implementation of the GEF-5 Chemicals Strategy. It focuses on: CHEM-1, specifically the management, prevention and disposal of POPs wastes and sound environmental management of contaminated sites. The project will dispose of about 200 tonnes of existing obsolete pesticides and remediate two heavily contaminated priority sites. To prevent future mismanagement, focus will also be on strengthening institutional capacity to improve and enforce pesticide regulations.

A.3 The GEF Agency's comparative advantage

N/A

A.4 The baseline project and the problem it seeks to address

Following the PPG data collection and analyses, the description of the problem and the baseline has been improved. Please see section 1.2 in the FAO project document.

A.5 Incremental/Additional cost reasoning: describe the incremental (GEF Trust Fund/NPIF) or additional (LDCF/SCCF) activities requested for GEF/LDCF/SCCF/NPIF financing and the associated global environmental benefits (GEF Trust Fund) or associated adaptation benefits (LDCF/SCCF) to be delivered by the project

The incremental reasoning has been refined based on PPG analyses. Please see section 1.2 b and c in the FAO project document.

A.6 Risks, including climate change, potential social and environmental risks that might prevent the project objectives from being achieved, and measures that address these risks

General project risks		
Risk	Ranking	Mitigation measures
Insufficient funds dedicated to the safeguarding of high-priority sites, and the disposal of POPs.	Low	Cost estimates are based on ongoing disposal activities under the Japan-funded project. If there is a need for additional co-financing, it will be sought from project partners and related projects during project execution.
Institutional arrangements pose challenges to project execution.	Low	Consultation meetings with stakeholders were held and implementation arrangements agreed during the preparation of the project. Institutional arrangements, including the roles and responsibilities of stakeholders will be confirmed again at the start of project implementation.

Likelihood of political instability	Low	Although there are currently no signs of unrest which could affect the project, this will be closely monitored during project implementation.
Extreme weather conditions such as torrential rain and floods	Low to medium	Emergency sites will be primarily safeguarded during the driest months (from November to May) with a view to reducing risks associated with torrential rainfall. Contingency plans, especially targeting removal of excess water accumulated in the holding areas, will be implemented in the event of torrential rains.
Component specific risks		
Component 1		
Environmental contamination from leakage of POPs and other obsolete pesticides due to poor conditions of containers	High	Management measures to be included in the Environmental Management Plan (EMP) include field procedures to ensure no further leakage occurs during project activities. Chemical stores will be ranked according to leakage risk at the beginning of the project, and will be safe-guarded as a matter of priority.
Continued government centralised procurement of pesticides through parastatal companies will give rise to re-accumulation of obsolete stocks	High	As part of component 3, government stakeholders will be engaged to develop pesticide policies that are more responsive to user demands and avoid large-scale procurements.
Lack of appropriate storage for safeguarded stocks	Medium	Application of FAO guideline Environmental Management Tool Kit (EMTK 2) will facilitate the identification of possible locations which can act as interim collection points based on a combination of environmental and logistical criteria. Refurbishment of stores will be based on budget availability. This will be included in the national EA and EMP to be developed. Société Nationale pour la Promotion Agricole (SONAPRA) has agreed to its central store in Cotonou to be used as the central collection centre.
Incidents during safeguarding	High	All staff / enterprise of the project engaged in safeguarding operations will have been trained and will be provided with protection gear by the international contractor. Strict application of measures included in Environmental Management Plan (EMP) and Health and Safety Plans.
Delays in the procurement of equipment necessary for the disposal	Low	Equipment to be supplied as part of international contract. Contractor to provide all necessary documents to Government of Benin to allow timely import.
Government authorities disagree with the strategy for the reduction of risks posed by contaminated sites	Medium	Strategy will be developed based on objective data and options presented to government for endorsement.
Delays in administrative procedures / decisions as regards transport of obsolete stocks	Medium	Capacity-building / guidance of the competent Government authority as regards procedures of the Basel Convention.
Component 2		
Technical staff being exposed to pesticides during collection and repacking of empty containers	Low to medium	Training modules on collection techniques for the safe collection, repackaging and storage of wastes will be executed, and Personal Protection Equipment (PPE) provided for all personnel involved in container collection.
Lack of stakeholder involvement in proper disposal of empty containers and in the establishment of a sustainable system for the management of wastes.	Low	An awareness campaign and communication strategy will be put in place on safe disposal of empty containers
Component 3		
Delayed adoption of updated legislation. Law making (including promulgation of regulations) is a prerogative of the State and will depend on the will of the legislature or law-making	Medium	Continued sensitization will be conducted during project execution including national training sessions.

authority to enact legislation		
Component 4		
Low interest in adopting alternative technologies by producers	Low	Consultations with Benin's Government identified the need to find alternatives to endosulfan as a result of the ban on this product. A large-scale information and awareness-raising campaign about the modes of application and effectiveness of the proposed alternatives will be undertaken to help promote uptake of alternatives.
Climate Change Changes in the climate will impact on pest distribution, activity, seasonal appearance, as well as impact on the behaviour of chemicals in the environment	Medium	The project has forged a link with OBEPAB, an organic cotton producers network, and with the previous FAO project which established the farmer typology network. Both these links will allow the project to learn directly from farmers about the specific climate impacts on production, and the project will document and encourage sharing of knowledge on climate resilient forms of pest control.

A.7 Coordination with other GEF financed initiatives

The project is going to be closely coordinated with a regional project "Disposal of obsolete pesticides including POPs and strengthening pesticide management in the Permanent Interstate Committee for Drought Control in the Sahel (CILSS) member states" as Benin is a member state. Coordination with this project is particularly important because the CILSS project has a component on the development of a regional regulation and common pesticide registration system. The revision of pesticide legislation and regulations in Benin has to be done in line with the CILSS-ECOWAS-UEMOA common system. The possibility to have the Chief Technical Advisor for the CILSS project allocate a small portion of his/her time to support implementation of activities in the Benin project in order to facilitate sharing of lessons, best practices and tools, will be explored.

The project will also be closely coordinated with two similar GEF-financed initiatives in Cameroon and Morocco, mainly through the FAO Lead Technical Unit (the Pesticide Risk Reduction Group in the Plant Production and Protection Division (AGP) who will be providing technical oversight and guidance to all these projects.

B. Additional information not addressed at the PIF stage

B.1 Describe how the stakeholders will be engaged in project implementation

Stakeholders and their specific role in the project are described in section 1.4 and section 4.1 in the FAO project document.

A project steering committee (PSC) will be established to provide high level consultation and oversight to overall project implementation. The committee will be chaired by the Ministry of Agriculture Livestock and Fisheries (MAEP), and will include representatives from all implementation partners including the Ministry of Health, the Ministry of Environment, the Customs Office, and key civil society organisations representing farmers/producers organizations. The committee will meet annually or more frequent as necessary. The PSC will be supported by the Project Management Unit (PMU) which will be responsible for the day to day management of the project.

A number of Task Teams under the responsibility of different partners (Croplife, ABSSA, SONAPRA and IITA/OBEPAB) will contribute to the execution of specific components/outputs through MoUs or Letters of Agreement. These teams will enhance engagement of key stakeholders, access to a variety of skills needed to implement the components, and capitalize on networks and channels of communication already established.

At local community/farmer level the project will work with the Beninese Organisation for the Promotion of Organic Agriculture, OBEPAB, who will raise awareness of their members about project activities and contribute towards the execution of component 4 on alternatives.

B.2 Describe the socioeconomic benefits to be delivered by the Project at the national and local levels, including consideration of gender dimensions, and how these will support the achievement of global environmental benefits (GEF Trust Fund/NPIF) or adaptation benefits (LDCF/SCCF)

The project will generate community health benefits through decreased exposure to highly hazardous pesticides, by a) removing sources of these chemicals from stockpiles and contaminated sites, b) removing contaminated containers from communities, c) promoting and encouraging availability and uptake of non-toxic alternatives, and d) enhancing the quality of products through better control of pesticides in their life cycle, ultimately reducing pesticide residues.

Due to the traditional roles and responsibilities of women, women are more vulnerable to the adverse effects of pesticide exposure than men. Women constitute the bulk of the labor force in cotton and fruit and vegetable agricultural holding and processing units and are exposed to high pesticide residues in handling produce. Women may also produce food for family consumption but use pesticides intended for other crops, not in accordance with the intended uses and conditions, exposing themselves and their families to high levels of inappropriate residues. Project activities will take the gender dimensions into account, through consulting women, identifying specific needs and concerns, especially through the Farmer Field School approach and the typology of agricultural production studies which will explicitly include crops that are primarily cultivated by women. The project will ensure that: women are represented in project component activities, thus increasing opportunities for professional women in the agriculture sector; and specifically target women through partnerships with civil society organizations in training and awareness-raising activities, to ensure women are aware of the risks posed by pesticides, and empty pesticide containers, which are used to harvest fruit and vegetables and for domestic purposes, often by women.

This project will promote sustainable intensification of farming systems, contributing to the financial and economic sustainability of farmers. To reduce demand for POPs and highly hazardous pesticides, the project will research, pilot and promote viable alternatives for key crops, in an effort to drive long-term uptake of such non-toxic alternatives. Agricultural production carried out in compliance with IPM approach contributes to high quality crops that are highly competitive within the international marketplace – particularly given that cotton is such an important export commodity for Benin.

B.3 Explain how cost-effectiveness is reflected in the project design

Cost effectiveness will be achieved through: (i) building on existing capacity developed under previous and on-going initiatives implemented by FAO and other partners; (ii) exploring the opportunity to include the disposal of all obsolete stocks under the regional disposal contract for CILSS countries to reduce transaction costs and the actual cost of disposal; and (iii) employment of local or regional expertise when available.

For component 2, in designing the container management scheme, it has been proposed to use existing infrastructure for recycling plastic containers from public health pesticides. The pilot will be set up in two regions where previous FAO work has already established farmer networks, so delivery of training and education on triple rinsing and participation in the scheme will be very efficient. This network, as well as the OBEPAB organic cotton producers network, will similarly make the component on alternatives more cost effective, as the project builds on existing work.

As mentioned, there are three other GEF-funded POPs projects in CILSS, Cameroon, and Morocco for which FAO is the GEF agency. Through the FAO Lead Technical Unit and Project Task Forces, these will be closely coordinated and opportunities to implement some activities, such as training, could be combined (depending on the pace of implementation of these projects).

C. Describe the budgeted M&E Plan

Oversight and reviews

Project oversight will be carried out by the Project Steering Committee and FAO. Project oversight will be facilitated by: (i) documenting project transactions and results through traceability of related documents throughout the implementation of the project; (ii) ensuring that the project is implemented within the planned activities applying established standards and guidelines; (iii) continuous identification and monitoring of project risks and risk mitigation strategies; and (iv) ensuring project outputs are produced in accordance with the project results framework. At any time during project execution, underperforming subcomponents may be required to undergo additional assessments, implementation changes to improve performance or be halted until remedies have been identified and implemented.

Monitoring responsibilities

Monitoring and evaluation (M&E) of progress in achieving project results and objectives will be done based on the targets and results indicators established in the project results framework and annual work plans and budgets. M&E activities will follow FAO and GEF monitoring and evaluation policies and guidelines. The M&E plan, which has been budgeted at USD 122,916 will be reviewed and updated during the project inception phase. This will involve: (i) review of the project's results framework; (ii) refining of outcome indicators, as necessary; (iii) identification of missing baseline information and action to be taken to collect the information; and (iv) clarification of M&E roles and responsibilities of project stakeholders. The project's M&E system will be put in place within the first 6 months of project implementation.

The day-to-day monitoring of project implementation will be the responsibility of the Project Management Unit led by a full-time National Project Coordinator and driven by the preparation and implementation of annual work plans and budgets (AWP/B) and six-monthly project progress reports (PPRs). The preparation of the AWP/B and six-monthly PPRs will represent the product of a unified planning process between main project partners. As tools for results-based-management (RBM), the AWP/B will identify activities for the coming project year and provide the necessary details on output targets to be achieved. The PPRs will report on the monitoring of the implementation of activities and the achievement of output targets. An annual project progress review and planning meeting should be organized by the Project Management Unit with the participation of representatives from key executing partners prior to the Project Steering Committee Meeting. The AWP/B and PPRs will be submitted to the PSC for approval (AWP/B) and Review (PPRs) and to FAO for approval. The AWP/B will be developed in a manner consistent with the project's Results Framework to ensure adequate fulfilment and monitoring of project outputs and outcomes.

Indicators and information sources

To monitor project outputs and outcomes including contributions to global environmental benefits, specific indicators have been established in the Results Framework (see Appendix 1 in the FAO project document). The framework's indicators and means of verification will be applied to monitor both project performance and impact. Following FAO's monitoring procedures and progress reporting formats, data collected will be of sufficient detail to be able to track specific outputs and outcomes and flag project risks early on. Output target indicators will be monitored on a six-monthly basis and outcome target indicators will be monitored on an annual basis if possible or as part of the mid-term and final evaluations.

Monitoring information sources will be evidence of outputs (reports, website, farmer surveys, lists of participants in training activities, manuals etc.). To assess and confirm the congruence of outcomes with project objectives, physical inspection and/or surveying of activity sites and participants will be carried out. This latter task would often be undertaken by the PMU supported by the FAO Lead Technical Officer (LTO) and Lead Technical Unit (LTU).

The network of farmers established by the Japan funded project to research farmer practices (Typology Study) will also be an important source of information for the M&E system. Data collected

from the network on participation in the container management system, on knowledge, attitudes and practices (KAP) and knowledge and opinions on communications activities will be important inputs for the relevant indicators in the Results Framework.

Reports and their schedule

Specific reports that will be prepared under the M&E program are the: project inception report; Annual Work Plan and Budget (AWP/B); Project Progress Reports (PPRs); annual project implementation review (PIR); technical reports; co-financing reports; and a terminal report. In addition, assessment of the GEF POPs tracking tool against the baseline will be required at mid-term and final evaluation.

Project Inception Report: After FAO approval of the project and signature of the FAO/Government Cooperative Programme (GCP) Agreement, the project will initiate with a six month inception period. An inception workshop will be held and immediately after the workshop, the National Project Coordinator will prepare a project inception report in consultation with the FAO LTO and other project partners. The report will include a narrative on the institutional roles and responsibilities and coordinating action of project partners, progress to date on project establishment and start-up activities and an update of any changed external conditions that may affect project implementation. It will also include a detailed First Year Annual Work Plan and Budget (AWP/B) and a supervision plan with all monitoring and supervision requirements. The draft report will be circulated to FAO and the Project Steering Committee for review and comments before its finalization. The report should be cleared by the FAO Budget Holder (FAO Benin), Lead Technical Officer, Lead Technical Unit and the FAO GEF Coordination Unit and uploaded in FPMIS by the BH.

Annual Work Plan and Budget (AWP/B): The National Project Coordinator will submit to the FAO LTO, LTU, and BH a draft Annual Work Plan and Budget. The AWP/B, divided into monthly timeframes, should include detailed activities to be implemented and outputs (targets and milestones for output indicators) to be achieved during the year. A detailed project budget for the activities to be implemented during the year should also be included together with all monitoring and supervision activities required during the year. The draft AWP/B should be further discussed at annual planning meetings with key executing partners. The National Project Coordinator will incorporate eventual comments and the final AWP/B will be sent to the PSC for approval and to FAO BH for final no-objection and upload in FPMIS by the GEF Coordination Unit.

Project Progress Reports: One month before the mid-point of each project year, the National Project Coordinator will prepare a semi-annual Project Progress Report (PPR). The report will contain the following: (i) an account of actual implementation of project activities compared to those scheduled in the AWP/B; (ii) an account of the achievement of outputs and progress towards achieving project objectives and outcomes (based on the indicators contained in the results framework); (iii) identification of any problems and constraints (technical, human, financial, etc.) encountered in project implementation and the reasons for these constraints; (iv) clear recommendations for corrective actions in addressing key problems resulting in lack of progress in achieving results; (iv) lessons learned; and (v) a revised work plan for the final six months of the project year. The report will also include an estimate of cofinancing received from all co-financing partners.

The PPR will be submitted by the National Project Coordinator to FAO no later than one month after the end of each six-monthly reporting period (30 June and 31 December). The draft PPR will be reviewed and cleared by FAO (BH and LTO). The LTO will submit the PPR to the GEF Coordination Unit for final clearance. The final PPR will be circulated by the BH to the PSC.

Project Implementation Review: The LTO supported by the FAO LTU, with inputs from the National Project Coordinator will prepare an annual Project Implementation Review (PIR) covering the period July (the previous year) through June (current year). The PIR will be submitted to the GEF Coordination in TCI for review and approval no later than 31 July. The GEF Coordination will submit

the final report to the GEF Secretariat and Evaluation Office as part of the Annual Monitoring Review report of the FAO-GEF portfolio.

Technical Reports: Technical reports will be prepared to document and share project outcomes and lessons learned. The drafts of any technical reports must be submitted by the Project Coordinator to the FAO BH in Benin who will share it with the LTO for review and clearance, prior to finalization and publication. Copies of the technical reports will be distributed to the Project Steering Committee and other project partners as appropriate. These will be posted on the FAO FPMIS by the LTO.

Co-financing Reports: The National Project Coordinator will be responsible for collecting the required information and reporting on in-kind and cash co-financing provided by all co-financing partners. The National Project Coordinator will provide the information in a timely manner and will transmit such information to FAO. The co-financing reports should be completed as part of the semi-annual PPRs and annual PIRs.

GEF-5 Tracking Tools: Following the GEF policies and procedures, the tracking tools for POPs will be submitted at three moments: (i) with the project document at CEO endorsement; (ii) at project mid-term evaluation; and (iii) at final evaluation. These should be completed by Project Coordinator with support from the LTO at mid-term and final evaluation.

Terminal Report: Within two months of the project completion date the National Project Coordinator will submit to FAO a draft Terminal Report, including a list of outputs detailing the activities taken under the Project, "lessons learned" and any recommendations to improve the efficiency of similar activities in the future. This report will specifically include the findings of the final evaluation.

Monitoring and evaluation plan summary

Type of monitoring and evaluation activity	Responsible parties	Time frame	Budget
Inception Workshop	National Project Coordinator (NPC), Project Steering Committee, FAO (FAO Benin as Budget Holder - BH, FAO Lead Technical Officer and Technical Unit- LTO and LTU, FAO GEF Coordination Unit)	Within first two months of project inception	USD 30,000
Inception report	NPC with inputs from project partners. Cleared by FAO LTO, LTU, BH and the FAO GEF Coordination Unit, and the Project Steering Committee.	Immediately after the project inception workshop	-
Design and implementation of monitoring and evaluation system, including staff training as required.	NPC with support from FAO LTO and LTU.	Within the first six months after the project inception	USD 2,000
Field-based impact monitoring	NPC with support from other project partners – local NGOs, farmers/producers associations.	Continually	USD 3,000
Technical support and backstopping missions	FAO LTO/LTU.	Annual or as required.	Paid by GEF Agency fee

Type of monitoring and evaluation activity	Responsible parties	Time frame	Budget
Supervision missions	Independent missions organized by TCI/GEF Coordination Unit	Annual or as required.	Paid by GEF Agency fee
Project progress reports (PPRs)	NPC. Submitted to the BH and LTU for clearance. Finalized reports submitted to the FAO GEF Unit by the LTO, and to the PSC by the NPC.	Six- monthly	USD 3,000
Project Implementation Review (PIR)	FAO LTO with inputs from the NPC, BH and LTU. Submitted by the FAO GEF Coordination Unit to the GEF Secretariat. Final report also submitted to the PSC and the GEF Operational Focal Point.	Annually	Paid by GEF Agency fee
Reports on co-financing	NPC with information from all co-financing partners.	Six monthly and annually as part of PPR and PIR.	USD 1,500
PSC meetings	NPC, PSC Chair, FAO Budget Holder	At least once a year	USD 1,916
Technical reports	NPC, Consultants, FAO LTO/LTU	As appropriate	from component budgets
Mid- term evaluation	External consultant(s), arranged by the FAO independent evaluation unit in consultation with the project partners, the FAO BH, LTO, LTU and the FAO GEF Coordination Unit.	At mid-point of project implementation	USD 40,000
Final evaluation	External consultant(s), arranged by the FAO independent evaluation unit in consultation with the project partners, the FAO BH, LTO, LTU and	At the end of project implementation	USD 40,000
Terminal report	NPC, FAO LTO	At least one month before end of project	USD 1,500
			USD 122,916

PROVISION FOR EVALUATIONS

An independent Mid-Term Evaluation (MTE) will be undertaken at project mid-term (end of second or beginning of third year) to evaluate progress and effectiveness of implementation in terms of achieving the project objective, outcomes and outputs. Findings and recommendations of this evaluation will be instrumental for bringing improvement in the overall project design and execution strategy for the remaining period of the project's term if necessary. The FAO Evaluation Office will arrange for the MTE in consultation with the project partners. The evaluation will, *inter alia:*

(i) review the effectiveness, efficiency and timeliness of project implementation;
(ii) analyze effectiveness of partnership arrangements;
(iii) identify issues requiring decisions and remedial actions;
(iv) propose any mid-course corrections and/or adjustments to the implementation strategy as necessary; and
(v) highlight technical achievements and lessons learned derived from project design, implementation and management.

An independent Final Evaluation (FE) will be carried out three months prior to the terminal review meeting of the project partners. The FE, which will be organized by the FAO Evaluation Office, would aim to identify the project impacts and sustainability of project results and the degree of achievement of long-term results. This Evaluation would also have the purpose of indicating future actions needed to sustain project results and disseminate products and best-practices within and outside the region.

Part III: Approval/Endorsement by GEF Operational Focal Point(s) and GEF Agency(ies)

A. **Record of endorsement of GEF operational point(s) on behalf of the government(s):** (Please attach the Operational Focal Point endorsement letter with this form. For SGP, use the OFP endorsement letter).

NAME	POSITION	MINISTRY	DATE *(MM/dd/yyyy)*
Mr. Delphin AIDJI Operational Focal Point Email address: ecartype@yahoo.fr	Secretaire General Adjoint du Ministere Ministere de l'Environnement et de la Protection de la Nature	MINISTERE DE L'ENVIRONNEMENT ET DE LA PROTECTION DE LA NATURE 01 B.P. 3621COTONOU COTONOU BENIN TEL: +229 2131 8045 / 97 128975 FAX: + 229 2131 5081	03/29/2011

B. **GEF Agency(ies) Certification**

This request has been prepared in accordance with GEF/LDCF/SCCF/NPIF policies and procedures and meets the GEF/LDCF/SCCF/NPIF criteria for CEO endorsement/approval of project

Agency Coordinator, Agency Name	**Signature**	**Date** (month, day, year)	**Project Contact Person**	**Telephone**	**Email Address**
Gustavo Merino Director, Investment Centre Division Technical Cooperation Department FAO Viale delle Terme di Caracalla 00153, Rome, Italy		July 10, 2014	Richard Thompson	+3906 5705 2725	Richard.Thompson@fao.org
Jeffrey Griffin Officer-in-Charge for daily matters FAO GEF Coordination Unit Investment Centre Division FAO				+3906 57055680	GEF-Coordination-Unit@fao.org

Annex A: **Project Results Framework**. (either copy and paste the framework from the Agency document, or provide reference to the page in the project document where the framework could be found)

Please see Appendix 1 in the FAO Project Document on page 44. A detailed results budget is presented in Appendix 3 on page 59.

Annex B: **Responses to Project Reviews** (from GEF Secretariat and GEF Agencies and Responses to Comments from Council at work program inclusion and the Convention Secretariat and STAP at PIF)

STAP Review – comments at PIF	Response
a) The document recognises the important role of women in agriculture. It is hoped that training and outreach activities will take into consideration any gender related sensitivities and targeting of messages as local conditions warrant. For example, men may have had a larger voice in identifying barriers etc that are specific to their specific roles in agriculture, and in chemicals use. However, one can see issues specific to women. Their role in the agricultural cycle may be different from men. For example, they may do more weeding and gathering of crops after pesticide treatments have been carried out, increasing their exposure, and calling for specific guidance on how best to protect themselves, and any juveniles that may accompany them in the fields. This latter comment is only offered as a thought-starter, as the STAP does NOT have a social scientist onboard, and so does not claim authority on gender roles in Benin. Still, extension training should consider these things. Also, the dangers of informal, repurposed use of POPs containing containers should be included in any targeted awareness in communities; and there may be a large gender component to this (eg if women do water collection and other gathering of food etc using repurposed containers).	Specific difference in the roles of men, women and children in the cropping cycle, and their related exposure to chemicals is addressed in **component 4**. Field data on farming and pest control practices have already been collected from a representative farmers network in the cotton basin of North Benin, based on agro-ecological zones, size of the farm and production factors (access to agricultural inputs, equipment and labour), and type of farmer. The project will thus identify pest control practices and the respective roles of men and women in prescription, purchase, transport storage, preparation , application and conditions of application of pesticides, other farming practices, containers management and disposal of remaining stocks throughout the cropping cycle. Analysis of this data will identify best farming practices for reducing exposure to pesticides by men, women and children involved in or impacted by farming. Farmer Field Schools will be organised for male and female farmers to further adapt these best practices to local needs and promote conservation of ecosystem services through an adaptive management. FFSs are a community-based, gender-sensitive approach to farmer empowerment. The role of women will be addressed in all training activities including the management of containers and risk reduction strategies. The farmer training and awareness programme will take gender roles into account.
b) A fuller consideration of climate resilience especially as relates to IPM needs to be considered, as the climate and climate projections for the country are highly variable, and will impact on pest distribution, activity, seasonal appearance, as well as impact on the behaviour of chemicals in the environment.	As STAP notes, climate projections for the country are highly variable. At that scale it is difficult to make reliable (high confidence) predictions on the impact on pest distribution etc. The evidence-based approach to selection of suitable alternatives (which must be relevant to the climatic and ecological conditions of Benin) under component 4 will include consideration and documentation of climate factors as far as possible, in relation to agricultural timings and pest pressures. Any templates developed to co-

	monitor climate with agricultural and agronomic practices would be adaptable and shared widely.

Annex C: Status of implementation of project preparation activities and the use of funds[6]

PPG GRANT APPROVED AT PIF: USD 50 000			
Project Preparation Activities Implemented	*GEF/LDCF/SCCF/NPIF Amount ($)*		
	Budgeted Amount	*Amount Spent To date*	*Amount Committed*
1. First multi-stakeholder consultation	**5 000**	**13 688**	**0**
2. Design of a draft strategy for the disposal of POPs and **obsolete pesticides stocks; and identification of priority** contaminated sites	**10 000**	**0**	**0**
3. Preparation of **a draft container** management strategy	**5 000**	**0**	**0**
4. Identification of gaps in existing **legislation and capacity building needs for sound pesticide** management	**5 000**	**0**	**0**
5. Preparation of a strategy for the **promotion of alternatives to POPs** pesticides including endosulfan	**10 000**	**5 196**	**0**
6. **Detailed design of project components based** on incremental reasoning, risk analysis, financing plan and institutional and implementation arrangements	**10 000**	**3 524**	**6 476**
7. Final multi-stakeholder consultations	**5 000**	**0**	**2 830**
8. Translation			**5 000**
Total	**50 000**	**22 408**	**14 306**

[6] Some of the PPG activities, such as design of a draft disposal strategy, were funded through the Japan-funded project.

Annex D: Calendar of expected reflows (if non-grant instrument is used)

N/A

PROJECT TITLE: DISPOSAL OF POPS AND OBSOLETE PESTICIDES AND STRENGTHENING LIFE-CYCLE MANAGEMENT OF PESTICIDES in Benin
PROJECT SYMBOL: GCP/BEN/056/GEF

Recipient Country: Benin

Resource Partner: Global Environment Facility

FAO project ID: 613308 **GEF Project ID:** 4756

Executing Partner(s): Ministries Of Agriculture, Environment and Public Health

Expected EOD (starting date): 01 October 2014

Expected NTE (End date): 30 September 2018

Contribution to FAO's Strategic Framework	Strategic Objective 2: Increase and improve provision of goods and services from agriculture, forestry and fisheries in a sustainable manner

GEF Focal Area: Chemicals (Persistent Organic Pollutants – POPS)

GEF Strategic Objectives: CHEM-1 Outcome 1.4 POPs waste prevented, managed and disposed of, and POPs contaminated sites managed in an environmentally sound manner

Environmental Impact Assessment Category: B

Financing Plan:	GEF allocation:	USD 1,830,000
	Co-financing:	
	ABSSA (In kind)	USD 300,000
	ABSSA (Grant)	USD 4,250,000
	DAGRI (In kind)	USD 500,000
	OPEBAB (In kind)	USD 500,000
	OPEBAB Grant	USD 500,000
	IITA (Grant)	USD 300,000
	Croplife (Grant)	USD 868,500
	Croplife (In kind)	USD 60,000
	FAO (In kind)	USD 150,000
	FAO Grant	USD 3,152,125
	Subtotal Co-financing:	10,580,625
	Total Budget:	**12,410,625**

EXECUTIVE SUMMARY

The economy of Benin is mainly dependent on the agricultural sector which contributes almost 30% of GDP. Cotton production represents about 80% of official export receipts. Cotton is a crop prone to several pests causing significant economic damage. Therefore, effective pest control is important to cotton production and overall agricultural productivity.

In Benin, preventive pesticide applications have so far been the primary approach to pest control. Consequently, the use of pesticides has increased from 1,972,764 liters in 1993 to 2,453,880 liters in 2010. Obsolete stocks have built up to over 650 tonnes due to import excess, the recent ban on endosulfan (2009) and improper use.

The country has ratified all international conventions on chemical management to ensure sound management of pesticides and hazardous chemicals. Nevertheless, problems caused by pesticide mismanagement persist with severe impacts. Several factors have contributed to the accumulation of POPs and obsolete pesticides, the circulation of highly hazardous poor quality pesticides, and the contamination of soil and water in Benin. These include poor stock management and inaccurate assessment of needs, and weak import and regulatory controls which allow poor quality and illegal pesticides to enter local markets. In addition, the use of substandard pesticides combined with intensive application frequencies have contributed to the emergence of increased pest resistance.

The objective of the project is to eliminate up to 200 tonnes of remaining inventoried POPs and obsolete pesticides stocks, and to strengthen the capacity for sound pesticide management in order to prevent future accumulation. The project has been structured into four technical components. The specific objectives of the technical components are to: safely destroy POPs and obsolete pesticides and remediate pesticide-contaminated sites (Component 1); implement a system of management of empty pesticide containers (Component 2); strengthen the regulatory framework and bolster the Government of Benin's institutional and technical capacity to ensure sound management of pesticides (Component 3); and to increase the successful uptake of alternatives to chemical pesticides for key crops, especially cotton (Component 4). These four components will be supported by horizontal project Monitoring & Evaluation (Component 5), Project Management (Component 6) and communication strategies which will inform project execution decisions and create the necessary conditions for beneficiary knowledge and participation in project activities.

Institutional and implementation arrangements for this project are based on the mandates and experience of key institutions involved in the management of pesticides in Benin. The Ministry of Agriculture, Livestock and Fisheries will be the main executing agency responsible for the coordination and management of project activities through a Project Management Unit that will be established and hosted within the Directorate of Agriculture. The Ministries of Public Health and Environment will also be fully involved in project execution.

The project will work with a number of NGO and private sector partners who will contribute to the execution of specific components. The partners will be part of component task teams set-up to enhance engagement of key stakeholders, to access a variety of skills needed to implement the components, and to capitalize on resources, networks and channels of communication already established.

FAO will be the GEF Agency responsible for the supervision and provision of technical guidance during the implementation of the project.

The project has a duration of four years and a budget of 12,410,625 USD million, of which 1,830,000 USD million is GEF financing and 10,580,625 USD is co-financing.

GLOSSARY OF ACRONYMS

ABSSA	Benin Food Safety Agency
ABE	Agence Béninoise pour l'Environnement
ASP	African Stockpiles Programme
BH	Budget Holder
CEO	Chief Executing Officer (GEF)
CILSS	Comité permanent Inter-Etats de Lutte contre la Sécheresse dans le Sahel
CLI	CropLife International
CNAC	National Committee for the Registration and Control of Phytopharmaceutical Products
CNE	Centre d'Achats d'Engrais
EIA	Environmental Impact Assessment
EMP	Environmental Management Plan
EMTK	Environmental Management Tool Kit (series of FAO guidance documents)
EP	Executing Partner
FAO	Food and Agriculture Organization of the United Nations
FFS	Farmer Field School
FPMIS	Field Project Management Information System
GEBs	Global Environmental Benefits
GEF	Global Environment Facility
IITA	International Institute for Tropical Agricultural
INRAB	National Institute of Agricultural Research of Benin
IPM	Integrated Pest Management
IPPM	Integrated Production and Pest Management
LCSSA	Central Laboratory for Food Health Safety
LDCs	Least Developed Countries
LOA	Letter of Agreement
LTO	Lead Technical Officer
LTU	Lead Technical Unit
MAEP	Ministry of Agriculture, Livestock and Fisheries
M&E	Monitoring and Evaluation
NIP	National Implementation Plan
NPMC	National Pesticide Management Committee
OBEPAB	Beninese Organization for the Promotion of Organic Agriculture
OED	FAO's Office of Evaluation
PAN	Pesticide Action Network
PIF	Project Identification Form (GEF)
PIR	Project Implementation Review
PMU	Project Management Unit
POPs	Persistent Organic Pollutants
PPE	Personal Protective Equipment
PPG	Project Preparation Grant (GEF)
PPPs	Plant Protection Products
PPR	Project Progress Report
PRODOC	Project Document
PSC	Project Steering Committee
PSMS	Pesticide Stocks Management System
PY	Project Year
QPIRs	Quarterly project implementation reports
SONAPRA	Société Nationale pour la Promotion Agricole 8
SPVCP	Service Protection des Végétaux et du Contrôle Phytosanitaire
STAP	Scientific and Technical Advisory Panel
TCI	Investment Centre Division (FAO)
TOR	Terms of Reference
UEMOA	West African Economic and Monetary Union

USD	United States Dollar
WAPRC	West African Pesticides Registration Committee

TABLE OF CONTENTS

1 RELEVANCE

1.1 GENERAL AND POLICY CONTEXT

a) General Context

In Benin agriculture covers about 5 million hectares of arable land and contributes almost 30% to the country's GDP. Agriculture employs over 60% of the male workforce and 36% of the female workforce.

Climatic conditions vary from subtropical in the south to tropical in the north allowing the production of a wide range of crops. The commercial agricultural sector is dominated by cotton production which represents about 80% of official export receipts. Other agricultural products such as palm products, cocoa beans, maize, beans, rice, peanuts, cashews, pineapples, cassava, yams and other tubers are grown for local subsistence.

The tropical climatic conditions are not only favorable to the production of the various crops but also to a wide range of pests and diseases causing significant crop losses during production and post-harvest. Therefore, effective pest control is central to increase and stabilize agricultural productivity. Preventive pesticide applications have so far been the primary approach to pest control. Consequently, the use of pesticides has increased from 1,972,764 liters in 1993 to 2,453,880 liters in 2010. Obsolete stocks have built up to over 650 tonnes.

Several factors, described in detail in the next section, have contributed to the accumulation of POPs and obsolete pesticides, and the circulation of highly hazardous and spurious pesticides. These include poor stock management, inaccurate assessment of needs, and weak import and regulatory controls which allow poor quality and illegal pesticides to enter local markets. The accumulation of POPs pesticide stocks and contamination of sites close to human settlements and water bodies have led to adverse effects on human health, with documented cases of human poisonings. An investigation in 2000 identified at least 37 deaths attributable to endosulfan after the reintroduction of the chemical in cotton growing areas of the country[1].

In addition, the use of substandard pesticides combined with intensive application frequencies have contributed to the emergence of increased pest resistance with detrimental effects on crop productivity.

b) Institutional, Policy and Legal Context

In Benin, pesticide management falls under the remit of the Ministry of Agriculture and the Ministry of Public Health. Pesticide wastes are the responsibility of the Ministry of Environment (MoE).

Regulations on pesticides are based primarily on Law No. 91-004 (1991) on Plant Protection in the Republic of Benin and its Decree[2]. There is no common legal text regulating pesticide management taking account of non-agricultural pesticides such as those used for health and public hygiene purposes. Furthermore, the legal texts do not cover the entire life cycle management of pesticides – for example they do not include provisions pertaining to empty pesticide containers. Policy guidelines on phytosanitary issues are scattered across a variety of documents and do not highlight the country's pest management strategy with enough eloquence and coherence.

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1 Ton P, Tovignan S and Davo Vodouhê S, Endosulfan deaths and poisonings in Benin, Pesticides News, 2000, Vol 47, pp12-14.

[2] Decree N° 92-258 of 18 September 1992

Under the law covering phytosanitary regulations in the country, the National Committee for the Registration and Control of Phytopharmaceutical Products (CNAC) was created. In 1997, CNAC members were appointed through an inter-ministerial application order. Chaired by the Ministry of Agriculture, Livestock and Fisheries (MAEP), which also serves as the Permanent Secretariat, the members of CNAC are drawn from:

- Ministry of Agriculture, Livestock and Fisheries;
- Ministry of Higher Education and Scientific Research;
- Ministry of Industry, Commerce and Small and Medium Scale Enterprises;
- Ministry of Health, the Ministry of Environment, Housing and Urbanism.

The body is responsible for the registration of pesticides and draws up the list of pesticides that require import and use authorization. CNAC's functions include, inter alia: i) Proposing the principles and general guidelines of the regulation of phytopharmaceutical products; ii) Assessing toxicity risks associated with these products to human health and the environment; iii) Proposing to the Minister of Agriculture the list of active ingredients prohibited for use in agriculture; iv) Proposing to the Minister of Agriculture all the measures that can contribute towards standardizing, defining and establishing the terms and conditions of application of the products under the Plant Health Act as regards to their effectiveness and all their drawbacks; v) Identifying the control of phytosanitary products which are submitted for approval; vi) Reviewing applications for authorization for testing and approval to ensure that the products are in conformity with the standards for non-toxicity and biological effectiveness accepted internationally; vi) Keeping a public register of phytopharmaceutical products approved by the Minister of Agriculture; vii) Providing advice on the drafting of specifications for calls for public tenders and making useful proposals on the technical analysis of tenders to the Ministry of Agriculture. CNAC performs a basic function of pesticide registration and does not currently engage in any post-registration control activities such as inspections, awareness raising, monitoring health and environmental impact assessment.

The Service Protection des Végétaux et du Contrôle Phytosanitaire (SPVCP) is the agency tasked with pesticide inspection and control. SPVCP's supervision activities are currently limited to the control of imported pesticides. In a recent reform this responsibility has been transferred to the Benin Food Safety Agency (ABSSA). Its specific powers, duties and responsibilities connected with pesticide control are however not properly defined.

The parastatal company "Société Nationale pour la Promotion Agricole" (SONAPRA) and the "Centre d'Achats d'Engrais" (CNE) are responsible for the procurement and distribution of pesticides, on behalf of the government as the only licensed importer and distributor - the government has withdrawn the licences for private sector pesticide importers and distributors.

Additional national efforts to resolve problems associated with the management of pesticides include the adoption of a multi-sector action plan to combat pesticide food poisoning under the leadership of the Technical Group of Food, Nutrition and Food Security.

Benin became a member of the Comité Inter Etats de Lutte contre la Sécheresse au Sahel (CILSS) in 2013 and has adopted the current Common Regulation for the Registration of Pesticides in CILSS Member States. The common registration system is undergoing revision to be harmonized across the CILSS-ECOWAS-UEMOA member states. The revision of the common pesticide registration and post-registration system will continue under a GEF-funded regional project: "*Regional Pests And Pesticides Management And Capacity Building Of The Comité Permanent Inter-Etats De La Lutte Contre La Secheresse Dans Le Sahel (CILSS) Member States (FSP)*" . The entry into force of the regional system for the harmonization of pesticide registration in CILSS countries will require a refocusing of the national registration system and control of pesticides. There is, consequently, a need to adapt the national structures, organs and instruments of pesticide management to a new regional environment.

1.2 RATIONALE

a) Issues and barriers to proper pesticides management in Benin

A national inventory of obsolete stocks and associated wastes carried out in 2012 has shown that there were 504 tonnes of obsolete pesticides, (including 380 tonnes of endosulfan, 15 tonnes of dieldrin, 12 tons of lindane) plus 150 tonnes of other wastes contaminated with pesticides in the country. Pesticide stocks are located in 115 sites distributed throughout the 12 departments of Benin. These stocks are stored in poor conditions - deteriorating or leaking containers-- and pose a considerable risk to public health and the environment. Some of the stocks are located in urban areas with high population densities e.g. the dieldrin stock in Porto-Novo. There is an ongoing risk that these chemicals will be stolen from the stores, resold and reused illegally.

The contaminated wastes include a significant amount of dieldrin-contaminated soils averaging 118 tonnes requiring remediation and 12 tonnes (equivalent to 30,000 units) of empty containers. The amount of empty containers inventoried points to a lack of a system for collecting and safeguarding these wastes. Containers are very often reused to keep liquid foods such as milk, oil, honey and drinking water or abandoned or incinerated in the fields.

There are a number of factors that have contributed to the buildup of the POPs obsolete pesticide stocks and contamination of soil in Benin. These include gaps and weaknesses in the legal and institutional framework, and weak technical capacity for the sound management of pesticides at key segments of pesticide lifecycle, including inspections, container management and use of alternatives.

Gaps and weaknesses in the legal and institutional framework

An assessment of the current legal framework for the management and control of pesticides highlighted weakness in the regulations on pesticide management. Even though Benin is party to the main international conventions including the Stockholm, Rotterdam and Basel, the national legal framework in not in line with the requirements of these conventions. The lack of a legal text that covers the entire pesticide life cycle is the source of many of the problems described below.

The CNAC currently serves the limited function of registering pesticides, despite the lack of a technical service providing the basis for decisions. In any case, the new regional registration arrangement proposed by the CILSS-UEMOA-ECOWAS would relieve the CNAC of this obligation. The model proposed by ECOWAS of National Pesticide Management Committees would expand the responsibility of such a committee to include pesticide controls through the lifecycle that are currently very sparse in Benin and uncoordinated between different ministries.

Weak capacity for quality control and inspection

Inspection and control of pesticides are mainly under the responsibility of the Plant Protection Service created in 1991 and placed under the Department of Agriculture. Supervision and control of pesticides are only systematically carried out on imported pesticides at the official points of entry into the national territory (a total of eight between maritime, air and land borders).

With regard to quality analysis, pesticide samples are often sent to different laboratories abroad, generally in Belgium, France or the United States of America. This is because the laboratory of the Regional Institute of Industrial Engineering, Biotechnology and Applied Sciences (IRGIB -Africa) in Cotonou, is unaccredited for pesticide quality testing. Other public laboratories, namely the Central Laboratory for Food Health Safety and the Soil Science Water and Environment Laboratory at the National Institute of Agricultural Research (INRAB) are not functional with respect to the analysis of pesticide formulations. Due to the high cost of quality analysis abroad, the number of samples is often reduced in order to stay within the limits of available funding. At times, there are delays in obtaining the analysis results which delay decision making before the distribution of pesticides.

Inspection at other stages of the pesticide lifecycle are done only sporadically usually as a result of indications of poisoning or complaints from farmers about the effectiveness of a product. One of the main problems is that there are no procedures or policies in place to guide inspection and quality control of pesticides. Available tools and equipment used for the control of pesticides are inadequate and the majority of agents in charge of inspections lack technical capacity.

Ultimately, the inadequate quality control and inspection is allowing the illegal traffic and circulation of banned and substandard pesticides in the country.

No system for the management of empty pesticide containers.

There are more than 12 tonnes of empty containers consisting of 30,000 bottles of 170 to 500 ml and one-liter cans which need to be disposed of. This volume is expected to grow over time as Benin imports on average per year almost 2.5 million liters of pesticides. Containers are very often reused to keep liquid foods such as milk, oil, honey and drinking water. Another practice is incinerating them in open fields or simply abandoning them into nature. There is no comprehensive system in place to ensure the adequate management of empty pesticide containers used for agricultural, and public health purposes.

Limited access to alternatives to chemical pesticides.

The agricultural sector relies heavily on conventional chemical pesticides to control crop pests and diseases. Since the 2009 ban on endosulfan imports, alternatives to endosulfan are yet to be made widely available and taken up by cotton farmers. As a result, illegal trade in endosulfan is rife. There is an urgent need to identify and promote viable alternatives to endosulfan and other highly hazardous pesticides.

In the country there are 23 national and international institutions involved in the development and promotion of alternatives, including 14 research institutes: 1 international (International Institute of Tropical Agriculture, IITA), 10 national under INRAB, and 3 national in the private sector. BioPhytoCollines produces and commercializes biological control agents and biopesticides; while various national and international institutions are involved in the dissemination of alternatives (INRAB, OBEPAB, IITA, GIZ, CTB and Helvetas). Some measures have already been taken, such as the registration and commercialization of alternative products, the development of resistant varieties by the IITA and the International Crops Research Institute for the Semi-Arid Tropics (ICRISAT). Several field projects have focused on building farmers capacity to better manage their crop with a minimal use of pesticides.

Despite the good results from pilot projects, there are challenges to scaling up. These challenges include lack of dissemination of information on alternatives and clear direction on who takes the responsibility and how to scale up the results. Several alternatives developed by different institutions are not widely known by users, they remain limited to where they were tested and promoted. There is therefore need for a coherent and effective evidence-based national approach to promote Integrated Pest Management (IPM).

b) Baseline and co-financing projects

Beginning in 2010, FAO assisted the Government of Benin in the inventory and central storage of the stock of endosulfan to prevent its illegal use while awaiting safe disposal. This was done under the project on "**Capacity Building related to Multilateral Environmental Agreements (MEAs) in African, Caribbean and Pacific (ACP) countries - Clean-up of obsolete pesticides, pesticides management and sustainable pest management**" funded by the EU. FAO organized an initial training on inventory and on inspection and quality control of pesticides. The inventoried endosulfan stocks were centralized in Cotonou, Paracou, Adomoungon and Togon.

These activities were followed up by the FAO project on **"Disposal of POPs and other obsolete pesticides, strengthening of the life cycle management of pesticides and promotion of alternatives**

in Benin" funded by the Government of Japan. The Japan-funded project is the key baseline co-financing project that the GEF funded activities will complement. The project was designed primarily to: thoroughly evaluate the scope of the obsolete pesticides problem in Benin; address the immediate problem of endosulfan stocks; remediate at least one severely contaminated site; and institutionalize the Pesticide Stocks Management System (PSMS) to ensure the Government of Benin has in place a centralized system to manage pesticides throughout their life cycle, from importation, to distribution, use, security and eventual elimination.

A national team has been trained on pesticide inventory methods and on the use of PSMS. The national team carried out a complete inventory of obsolete stocks and associated waste in 2012. The results of the inventory are summarized in section 1.2a. The entire amount of endosulfan (380 tonnes) is currently being disposed of in compliance with the Basel and Stockholm Conventions and international safety standards. The Japan-funded project has also generated a first assessment of the contamination of rural sites in four departments namely Djassin, Oganla, Malanville and Bohicon. Soils testing has confirmed contamination, and remediation options are currently under discussion.

With the aim of preventing further build up of obsolete stock and misuse of pesticides, the project has designed a pest monitoring and management system based on field data from a network of over 200 farms in several Departments, including Alibori and Borgou[1]. The system is based on the agro-ecological characterisation of the farms and their agronomic practices. The first data collection on farm profiles (e.g. cropping patterns, holding size etc) was completed in September 2013. Summary statistics of farm profiles are available and lay the ground for the collection of the supplementary data on agricultural inputs usage by the farmers. By the end of the next farming season 2014, statistics on farmers' usage of agricultural inputs, agronomic practices, and pest problems are expected to be available. Observing farmers' practices allows the project to identify examples of alternative practices that are already in use (and are therefore feasible for other farmers to adopt) as well as generating a very specific picture of the agronomic and pest management conditions and needs of farmers. Both these will help the project prioritize viable alternatives to further experiment with and adapt, among the many possible chemical, biological and cultural alternatives that have been described by researchers and farmers both in Benin and internationally. Farmers in the network will participate in Farmer Field Schools (FFSs) to test and adapt these alternative options, products and practices, to the agro-ecological context of their farms. FFSs are recognised to be very effective in encouraging behaviour change toward more sustainable practices. Component 4 on identification, testing and dissemination of alternatives under the GEF project will exploit the information and farmer network for a quick start of the activities.

The promotion of alternative practices also finds a strong foundation in the FAO coordinated Integrated Production and Pest Management (IPPM) programme in West Africa established in 2001. The programme initially covered Senegal, Mali and Burkina Faso and was extended to include Benin under the GEF regional project entitled "**Reducing Dependence on POPs and other Agro-Chemicals in the Senegal and Niger River Basins through Integrated Production, Pest and Pollution Management"**. The programme strengthened farming communities to improve their farming practices and promote alternative pest management approaches using the FFS approach. To date the FAO-IPPM programme has trained approximately 180,000 farmers in West Africa and more than 2,000 trainers from government extension, cotton companies, farmer organizations and NGOs. Impressive achievements were obtained in Mali where the pesticide use in more than 4,300 households of cotton farmers dropped by a staggering 92 percent.

[1] The two departments of Bougou and Alibori contain more than 45% of the national surface given to production of cotton, rice, niebe and horticultural crops: and account for 58% of total national pesticide use.

At national level, robust work on IPM is led by IITA and ICRISAT. This includes the development of pest-resistant varieties and the use of biological control agents such as parasitoids and botanical extracts.

c) Incremental cost reasoning

The baseline initiatives deal with part of the issues and barriers. Some important barriers are not sufficiently addressed.

With the Japan-funded project disposing of 380 tons of endosulfan stock, there will be more than 200 tons of other POPs and obsolete pesticide stock and associated waste remaining in the public sector. Additional stocks may be held within the private sector. In addition to the contaminated sites that will be treated under the Japanese project there are two more highly contaminated sites in Bohicon and Paracou Departments that need to be remediated. The Government of Benin needs additional financial and technical assistance to deal with the remaining stock and contaminated sites. The bulk of the GEF funding will therefore be allocated to the disposal and remediation in order to reduce the existing risk to human health and the environment.

Incremental activities will also focus on: developing a system that deals with empty pesticide containers; the revision of the legislation and regulations to address existing gaps and align these with the CILSS-ECOWAS-UEMOA harmonized regional registration and post-registration system under development; and building the capacity for enforcement of the revised regulations. These activities are important for preventing future accumulation of obsolete stocks.

Additionally, the incremental funding will support the promotion of alternatives to chemical pesticides, particularly endosulfan. The network of farmers representing different types of farms developed under the Japan-funded project will be helpful in identifying available relevant technically and economically feasible alternatives. To promote the alternatives, the project will also build on the FFS network in Benin established by the previous GEF-funded regional project ”Reducing Dependence on POPs and other Agro-Chemicals in the Senegal and Niger River Basins through Integrated Production, Pest and Pollution Management”.

Without the GEF supported activities, the high danger posed by the existing POPs stocks and associated waste and contaminated sites will remain and most likely increase with future deterioration and accumulation due to weak institutional capacity and gaps in the legal framework.

1.3 FAO’s COMPARATIVE ADVANTAGE

FAO has an established and well recognized record in the development and implementation of a programme to reduce risks associated with the use of pesticides. The FAO programme for the prevention and disposal of obsolete pesticides has been underway since 1994. FAO hosted the GEF-funded Africa Stockpiles Programs (ASP) Technical Support Unit.

For over three decades, FAO has also advocated Integrated Pest Management (IPM) for a wide range of important agricultural crops. The organization has pioneered the use of innovative adult learning techniques such as participatory action research and FFSs to increase the effectiveness of farmer extension services and conventional research. The Global IPM Facility, established in collaboration with the World Bank in the 1990s, was hosted in the FAO Plant Production and Protection Division (AGP) and significantly boosted the dissemination and uptake of IPM in many countries.

FAO promotes sustainable crop production through the integration and coordination of appropriate crop production policies. AGP focuses its activities to incorporate ecosystem approaches into crop production, build national capacity to prevent and respond to pest outbreaks and develop national and/or regional policies to reduce negative impacts of pesticides. AGP sets international standards in these areas and facilitates collaboration among ongoing national IPM programmes. The presence of FAO's long-term technical expertise located in the region gives the agency strong comparative advantage to provide appropriate and culturally sensitive support for institutional capacity building and for partnership building at national and regional levels.

Finally, FAO has a legal office with extensive experience in assisting the country in related legal and regulatory aspects of pesticides.

FAO is therefore ideally and uniquely positioned to support its member states in the development and implementation of projects for the comprehensive, safe and effective management of pesticides, disposal of obsolete pesticides, and promotion of alternatives to hazardous pesticides.

1.4 PARTICIPANTS AND OTHER STAKEHOLDERS

The following stakeholders will be involved in the implementation of the project:

Policy-makers in the Ministries of Agriculture, Livestock and Fisheries, Environment and Health who will be directly involved in the implementation of project activities related to strengthening the regulatory framework and institutional capacity for sound management of pesticides throughout their lifecycle in the country. The policy-makers will facilitate the adoption of instruments necessary to comply with international commitments pertaining to pesticides management and with the new regional framework for the harmonization of pesticide registration and post-registration control (UEMOA and ECOWAS, CILSS).

The Benin Food Safety Agency (ABSSA) and more specifically the Pesticides Control Service, the **Plant Protection and Phytosanitary Control Service (SPVCP)** and **the National Committee for Approval and Control of Phytosanitary Products (CNAC)** whose mandates cover different aspects of the control of pesticides, will support the management and execution of the project. Technical staff from these agencies will be involved in training activities and implementation of project activities as part of technical task teams to be established for each component. **The Agence Béninoise pour l'Environnement (ABE)** will be involved in the execution of safe disposal of POPs and other obsolete pesticides and remediation of heavily contaminated sites**.**

Farming community: Farming communities are key participants and beneficiaries through reduced risks of exposure to pesticides, and will be engaged through the communication strategy, Farmer Field Schools and the typology study on alternatives. Women and children that work in the farms will benefit from reduced exposure to pesticides through improved pest and pesticide management and awareness-raising about the risk of pesticides. In particular, cotton producers will also benefit from discovering less harmful alternatives and be able to continue to control cotton pests without the use of hazardous products.

Local communities: citizens in both rural and urban areas, will benefit out of improved management of land, water and other natural resources. Beneficiaries will include the population living near rehabilitated obsolete pesticide stores and severely contaminated sites, consumers of food and water less contaminated by pesticides.

Research Institutes, including the National Institute of Agricultural Research (INRAB) whose role will be more clearly defined as part of pre-registration activities and the International Institute of Tropical Agriculture (IITA) whose role will be in promoting alternatives that they have tested.

National NGOs, including the **Beninese Organization for the Promotion of Organic Agriculture (OBEPAB)**, will be involved in project activities associated with promoting alternatives for pest control based on their experience, impact monitoring, awareness-raising, education and communication strategies in cotton producing areas. The 1500 farmers involved in the FFSs coordinated by OBEPAB will also benefit from the promotion of alternatives. OBEPAP will be a significant co-financer of Component 4.

Private sector, although the Government has withdrawn the licences for private sector pesticide importers and distributors, it is possible that they will retain some stocks of obsolete pesticides. These will be collected as part of the outreach/amnesty campaign co-financed by Croplife International. Currently the Government is the only licensed pesticide importer and distributor through the parastatal company "Société Nationale pour la Promotion Agricole" (SONAPRA) and the "Centre d'Achats d'Engrais" (CNE). Bulk procurement of pesticides by these institutions for distribution as subsidised inputs to farms is a major risk for continued accumulation of obsolete pesticides and excessive pesticide use in agriculture. Through institutional capacity building and revised pesticide policies, these risks will be reduced. SONAPRA will participate in the safeguarding of obsolete pesticides through the provision of pesticide stores and will coordinate the collection of empty pesticide containers in Component 2. Croplife International (CLI) will also be a significant collaborator in Component 2.

Recycling industry: Private sector stakeholders from the recycling industry are considered to be important stakeholders particularly in Component 2. Pesticide packaging from vector control is currently being recycled in Benin. The project will aim to work closely with these plastic recyclers and, through economies of scale, to build financially sustainable capacity for recycling pesticide containers.

1.5 LESSONS LEARNED FROM PAST AND RELATED WORK

Lessons have been learnt relating to sustainability of obsolete pesticide disposal projects based on the turn-key approach, involving the signing of a pesticide disposal contract with a specialized firm which then assumes full responsibility for organizing, planning and implementing security, transport, storage and safe disposal. Past and recent experience in Niger, Senegal, Mauritania, Cape Verde and Morocco demonstrate the need to highlight the economic impact of pesticide mismanagement. Effectively Governments pay twice, once for the pesticide, and once for its disposal after obsolete stocks are left unused. Regarding remediation of pesticide contaminated sites, land-farming, including the use of bio-remediation (using organic fertilizer) and phytoremediation (using local plants such as jatropha and vetiver), has produced promising results in Mali. This relatively low-cost approach has been found to offer a viable alternative to sending contaminated soils for high temperature incineration in Europe.

Lessons have also been learnt from recent research in West Africa which assessed pesticide ecological and health risks and concluded that "*This represents a failure of current regulatory and international development processes to consider health and environmental risks and to incorporate risk reduction and management within large-scale development programmes*[1]". This project responds to the recommendation to address long term regulatory and risk management priorities.

[1] Jepson PC, Guzy M, Blaustein K, Sow M, Sarr M, Mineau P, Kegley S. 2014 Measuring pesticide ecological and health risks in West African agriculture to establish an enabling environment for sustainable intensification. Phil. Trans. R. Soc. B 369: 20130491. http://dx.doi.org/10.1098/rstb.2013.0491

1.6 LINKS TO NATIONAL DEVELOPMENT GOALS AND PRIORITIES, AND GEF AND FAO's STRATEGIC OBJECTIVES

a) National goals and policies

This project will complement the country's commitment to improve agricultural performance through efficient production and sustainable farm management as detailed in the Strategic Plan for Agricultural Sector Recovery for 2008 – 2015.

b) Alignment with NIPs

The Government of Benin has ratified the Stockholm (5 January 2004), Rotterdam (4 January 2004) and Basel (14 December 1997) Conventions. Benin developed and submitted the National Implementation Plan (NIP) to the Secretariat of the Stockholm Convention in June 2007. The project will support implementation of the following priority actions identified in the NIP:

- Safe disposal of obsolete pesticide stocks and associated waste;
- Monitoring and prevention of illegal use of obsolete pesticides in agriculture and public health;
- Strengthening of the regulatory and institutional frameworks for the management of pesticides throughout their life cycle;
- Reinforcement of technical and institutional capacities in the area of pesticides management: Training in pesticide stock management, inspection and quality control; and;
- Support to development and promotion of alternatives to chemical pesticides, especially endosulfan.

c) Alignment with GEF Focal Area Strategies

The project contributes to the implementation of the GEF-5 Chemicals Strategy. In particular, it focuses on: CHEM-1 objective on the management, prevention and disposal of POPs wastes and sound environmental management of contaminated sites. The project will dispose up to 200 tons of existing POPs and other obsolete pesticides in Benin and remediate two heavily contaminated priority sites. To prevent future mismanagement, focus will also be on strengthening regulatory and institutional capacity in the country.

d) Alignment with FAO Strategic Objectives

The new FAO Strategic Framework became operational in January 2014 and is comprised of five Strategic Objectives (SOs) that represent the main areas of work of FAO. This project is linked to Strategic Objective 2 (SO-2), "Increase and improve provision of goods and services from agriculture, forestry and fisheries in a sustainable manner".

At country level, project activities will support sustainable intensification of crop production resulting in increased productivity and reduced environmental contamination. This is aligned with the FAO Country Programming Framework (CPF) priorities on crop diversification, crop yield and soil fertility.

2 PROJECT FRAMEWORK AND EXPECTED RESULTS

2.1 PROJECT STRATEGY

The project has been structured into four technical components that complement the work that is being done under the project funded by the Government of Japan. In designing the project, priority has been placed on removing immediate danger posed by the existing POPs and obsolete pesticides and highly contaminated sites on communities and the environment. Hence, most of the GEF resources have been allocated to the component addressing this.

The strategy also focuses on strengthening national institutional capacity capitalizing on previous and on-going initiatives in the country. The project will look to use and adapt as necessary existing guidelines and training materials developed by FAO and others to support countries to adhere to the International Code of Conduct on Pesticide Management and align Benin national policies and tools to the regional and international instruments when relevant.

The project will be closely coordinated with other GEF-funded POPs projects with similar components and will also look to partner with a range of organizations including national/ international NGOs and research institutions; other UN agencies such as UNEP Chemicals and WHO that are implementing related projects on institutional strengthening for better management of chemicals, and on the promotion of integrated pest management.

2.2 PROJECT OBJECTIVES

The objective of the project is to eliminate existing obsolete pesticides, including POPs and associated wastes, and to strengthen the capacity for sound pesticide management in order to prevent future accumulation. Specific objectives of each component are to: safely dispose of POPs and other obsolete pesticides and remediate heavily pesticide-contaminated sites (Component 1); develop and implement a management system for empty pesticide containers (Component 2); strengthen the regulatory framework and institutional capacity for sound management of pesticides (Component 3); and to promote alternatives to POPs and other hazardous chemical pesticides (Component 4).

2.3 PROJECT COMPONENTS

The following section outlines the scope of the five project components including their outcomes and outputs.

Component 1: Safe disposal of POPs and other obsolete pesticides and remediation of heavily contaminated sites.

Under this component, the project will safeguard and dispose up to 200 tons of obsolete pesticides and other wastes contaminated with pesticides. The disposal of obsolete stocks will be implemented in full compliance with the technical requirements of the Basel and Stockholm Conventions and associated technical guidance materials related to selection of destruction technologies and the safe movement of wastes to the final destruction facility. In addition, 2 highly contaminated sites will be remediated to minimize risks arising from pesticide leakages into water and soils.

Outcome 1 Identified risks from existing obsolete stocks eliminated and risks from heavily pesticide-contaminated sites reduced.

Output 1.1: Up to 200 tonnes of POPs pesticides and other obsolete pesticides safely destroyed in line with the Basel Convention.

The Japan-funded project will dispose of 380 tonnes of obsolete endosulfan pesticides at a unit rate of USD 4500 per tonne. The GEF project will dispose of the remaining inventoried stockpiles up to 200 tonnes. The validated inventory data in PSMS will be used to define the preferred safeguarding strategy, the preferred disposal strategy, risks and associated mitigation measures and the overall relationship of the obsolete stocks and the storage locations with the wider environment. The Environmental Assessment (EA) and Environmental Management Plan (EMP) developed will undergo disclosure and approval in line with national requirements. CLI will undertake an outreach campaign to identify any additional high risk stocks that may be held within the private sector. These high risk private sector stocks will be added to the inventory and safeguarded and disposed along with the public sector stocks. CLI will transfer funds to FAO to allow FAO to undertake a tender for the safeguarding and disposal of both public and private sector stocks.

Main activities: The main activities to be implemented under this Output are:

Activity 1.1.1: CLI outreach and inventory of private sector stocks followed by update of the EMP and EA to dispose up to 200 tonnes of obsolete pesticides and associated wastes based on FAO guideline Environmental Management Tool Kits (EMTK)[1];

Activity 1.1.2: Safeguarding of up to 200 tonnes of obsolete pesticides and associated wastes. Opportunities to include the safeguarding and disposal in Benin in the regional tender planned under the regional GEF CILSS project (GCP/INT/147/GFF) will be explored in due course;

Activity 1.1.3: Disposal of obsolete pesticides and associated wastes.

Timeline for implementation: The project EA and EMP will be developed, disclosed and approved in year 1 of project implementation. All safeguarding activities will be completed in year 2 and 3. Disposal will be completed in year 4.

Output 1.2 Risks from highly contaminated sites quantified, remediation strategies developed and implemented.

Highly contaminated sites with POPs and other obsolete stocks have been identified as part of the inventory activities carried out in 2012. The quantity of contaminated soil according to inventory in 2012 was 118 tonnes. Four sites were prioritised for investigation: Djassin and d'Oganla in Porto-Novo, Malanville in Alibori and one site in Bohicon. Alterra, Wageningen Univeristy has been engaged to train a national team in the investigation and remediation of these contaminated sites. In late 2013, the national team, assisted by international experts, carried out investigation visits and soil sampling for risk evaluation in the first three sites to collect relevant data on source of contamination and its impact on natural resources and human health. Contamination was confirmed as follows: dieldrin in Djassin, mostly parathion-methyl in Oganla and orthene in Malanville. The EMPs recommend for the Oganla site (c. 10m^2), a remediation strategy based on bio and phyto remediation. For the D'jassin site (c. 18m^2) the risk reduction strategy will be based around high temperature incineration of the high concentration pesticide wastes and in-situ sequestration of the contaminated soil. These EMPs have been sent to the Benin Environment Agency for their approval. The other two sites at Bohicon and Malanville have been assessed as having very limited quantities and low concentrations of contaminated soil. Therefore, the GEF project will implement the remediation strategies for the Oganla and D'jassin sites.

[1] The FAO EMTK Series (volumes 1 – 4) cover aspects such as environmental risk assessment (volume 1), storage and transport planning (volume 2), EA and EMP development (volume 3) and safeguarding of stocks (volume 4). A fifth volume of the series is under development covering assessment of risks from contaminated sites.

The GEF project will attempt to identify the location of an additional site in Bohicon where 150 tonnes of obsolete pesticides were burned/buried in 1978. Depending on the availability of funds, an EMP for this site will be developed and implemented.

Main activities: The activities describe in the baseline will be completed and repeated in other priority sites:

> Activity 1.2.1 Rapid environmental assessment (REA) of heavily contaminated sites and prioritisation for action in Boico and Paracou: the national team will collect data from additional sites in Bohicon and Paracou highlighted as contaminated during the inventory process;
>
> Activity 1.2.2 Development of Conceptual Site Model for highest risk locations (based on REA results) and site-specific remediation/risk reduction plans for selected sites: in collaboration with Alterra (Wageningen University), site sampling plans developed will be implemented. The capacity of the national laboratory to support remediation will be assessed;
>
> Activity 1.2.3 Implementation of remediation/risk reduction plans for 2 selected sites: based on the available budget the remediation strategies for up to 2 high priority sites will be implemented. The strategies will be implemented over a period of 18 – 24 months to allow for a critical assessment of the risk reduction achieved over the lifetime of the project.

Timeline for implementation: The detailed site investigation and prioritization will be completed in year 1. Detailed site investigation will be completed in year 2. The implementation of the remediation and risk reduction strategies will be completed in year 4.

Component 2: Development and implementation of empty pesticides containers management system.

This component aims to develop a system for the collection, triple-rinsing, safe stockage and recycling of empty pesticide containers in cotton producing areas. The design of the component is based on the International Code of Conduct on Pesticide Management (2013) and the supporting guideline "Guidelines on Management Options for Empty Pesticide Containers" (2008). It is also based on the experience gained by FAO and the other organizations such as CLI in establishing sustainable container management programmes in other countries, including an ongoing pilot in 2 cotton producing areas in Mali.

Outcome 2: Risks to the environment and human health from empty pesticide containers used in cotton production areas reduced.

Output 2.1 Design and validation of a management scheme for empty pesticide containers completed.

Under this output, sustainable container management schemes to remove the containers from pesticide users and to recycle or dispose of them in an environmentally sound manner will be designed focusing on Borgou and Alibori Departments. The two Departments have been selected for the pilot because they contain more than 45% of the national surface given to production of cotton, rice, cowpea and horticultural crops, and account for 58% of total national pesticide use. The removal of empty containers will ensure that they are not disposed of inappropriately either through dispersal in the environment or uncontrolled combustion which is a potential source of POPs.

Main Activities: The main activities to be implemented under this Output are:

Activity 2.1.1 Needs assessment and situation analysis: national consultants working in conjunction with international experts on container management systems will undertake an assessment and situation analysis of pesticide usage and container management options in cotton producing areas in Borgou and Alibori Departments;

Activity 2.1.2 Identification of collection, processing (separation of different types of containers) centers, transport, temporary storage facilities per village and final storage per Department;

Activity 2.1.3 Assessment and identification of national or regional facility for processing and recycling of different types of empty containers (based on finding in 2.1.1 and 2.1.2). This is likely to be the recycling centre established in Benin under the national disease vector control programme. This activity will also be carried out in close collaboration with the GEF-funded project in the CILSS countries. The CILSS project will look into the establishment of a regional container management scheme.

Time line for implementation: This output will be delivered in Y1.

Output 2.2 The empty pesticide container management scheme piloted in Alibori and Borghou departments.

As mentioned, the pilot scheme will be based in the two districts in the country with the highest use of pesticides, representing the maximum risk reduction from containers during the pilot phase. During the project preparation phase, the project invited the collaboration and commitment of all stakeholders in the management chain and this process will continue in order to identify and approve a sustainable scaling up of the pilot by the end of the project.

Main Activities: The main activities to be implemented under this output are:

Activity 2.2.1 Education of 208 farmers and wider farming communities (part of the farm typology network established under the Japan-funded project, see Outcome 4) about risks associated with empty pesticide containers and techniques for triple rinsing and spray of rinsed residues in the field. The risk reduction strategy will be based on educating male and female farmers on “triple rinsing” and puncturing of containers once the contents have been used.

Activity 2.2.2: Collection, processing (separation of different types of containers) centres, transport, temporary storage facilities per village and final storage per Department;

Activity 2.2.3: Evaluation of the empty containers management scheme and recycling strategy. After a year of operation the effectiveness of the scheme will be evaluated. national consultants working in conjunction with international experts on surveying at community level will undertake an assessment of impacts from empty pesticide containers. This evaluation will also take into consideration findings from the pilot project in Mali and the regional effort undertaken as part of the CILSS project;

Activity 2.2.4: Plan of action for scaling up the management of empty containers. Based on the findings of the community baseline assessments of impacts on health and environment and the evaluation of the pilot scheme, an international expert on container management schemes and communications will develop a proposal for the scaling up of the scheme. The proposal will include recommendations for the legal basis for the scheme, roles and responsibilities of stakeholders, sustainable funding mechanisms for the scheme and the potential for synergistic use of regionally based recycling and collection infrastructure. The proposal will be validated at a stakeholder workshop.

Time line for implementation: Activities to produce this Output will start in Y2 and be completed in Y4.

Component 3: Strengthening the regulatory framework and institutional capacity for the sound management of pesticides.

This component aims to strengthen the legal and institutional framework for the sound management of pesticides throughout their life-cycle. Legislative texts will be updated to fully reflect the International Code of Conduct, particularly on post-registration control such as advertising and container management. It will also be revised in line with the regional CILSS-ECOWAS-UEMOA common system.

The recent national restructuring bringing pesticide control from SPVCP to ABSSA, are an opportunity for the project to assist in developing and establishing sustainable mechanisms well integrated into national structures and institutions. Three important aspects are i) to establish a National Pesticide Management Committee (NPMC) eventually in place of the existing CNAC (to be completed in parallel with the legislation review), ensuring that the new structure is adequately resourced in a sustainable fashion (e.g. from State budget); ii) to establish an effective inspection service in the new institutional environment, maximising the transfer of capacity from the previous structure (SPVCP); and iii) to assess and improve quality control and analysis, which is currently expensive because of the need to export samples to Europe or the US at significant cost, since national labs are not certified. A regional laboratory will be upgraded under another GEF supported project to serve as a regional center for pesticide quality control. Existing residue laboratories (LCSSA, ABSSA, monitoring unit) are being assessed for their functionality under the Japan-based project .

Outcome 3 Regulatory framework and institutional capacity for sound management of pesticides throughout their lifecycle strengthened.

Output 3.1 National legislation and regulations for registration and control of pesticides in line with the regional CILSS-ECOWAS-UEMOA common system developed and submitted to Government for approval.

Main activities: Key activities to be implemented under this Output are:

Activity 3.1.1 Drafting of the legislation, decrees and orders and all supporting documents;

Activity 3.1.2 Consultation and review of drafts;

Activity 3.1.2 Submission of the revised legislation to Government for approval.

Timeline for implementation: The revised national legislation will be submitted for adoption by the Government in Y3.

Output 3.2 A National Strategy/Action Plan (NSAP) and budget for implementation of the Code of Conduct and its guidance on inspection and quality control of pesticides developed and National Pesticide Management Committee established.

Main activities: Key activities to be implemented under Output are:

Activity 3.2.1 Stakeholder validation of the NSAP to incorporate institutional, legal, technical, and logistical needs for inspection and quality control network (including role personnel and equipment needs of NPMC and national laboratory assessment);

Activity 3.2.2 National workshop to review and adopt strategy and establish NPMC and National Focal Points (NFPs);

Activity 3.2.3 Training and support to NPMC in developing workplan, accessing finance, delivering activities and reporting on achievements.

Timeline for implementation: NPMC officers will be nominated in Y1 and trained on new materials in support of post registration activities in Y2 to implement their action plan Y3 and Y4, including training of inspectors. The regional assessment of analytical laboratory capacities will be done in Y1.

Output 3.3 National capacity for pesticide inspections and post-registration control increased.

Based on the strategy developed in Output 3.2, inspection services will be reinforced and equipped to carry out their function. The support will include training on the FAO Manual on Pesticide Inspection, which will be adapted to the Benin situation including new legislative and regulatory framework. In addition to training, the project will provide logistical and operational support for inspectors, including at border points where there is currently no phytosanitary or pesticide control at all, but also providing for priority controls within the country for all stages of the pesticide life cycle, including transport, storage, and sale of pesticides (e.g. appropriately qualified drivers, storekeepers and vendors).

Main activities: Key activities to be implemented under Output are:

Activity 3.3.1 Development of the training plan and material for the inspection and control of pesticides;

Activity 3.3.2 Equipment of two entry points for the inspection and quality control of pesticides;

Activity 3.3.3 Training of staff on inspection and control of pesticides;

Activity 3.2.4, Evaluation of the most cost effective strategy to analyze pesticide quality: use of regional or international laboratory versus upgrading of national laboratory.

Timeline for implementation: The training will be developed in Y2 and Y3; the equipment of the entry points will take place in Y2.

Component 4: Promotion of alternatives to POPs and other hazardous chemical pesticides.

The component aims at reducing reliance on pesticides and use of highly hazardous pesticides through the promotion of alternatives and Integrated Pest Management (IPM). Alternative products and practices will be identified through the deployment of the pest and pesticide monitoring system currently piloted by FAO. The monitoring model includes data on pests and pesticides, their impact on crops, available alternatives and yield levels. Effective, low-impact alternative practices to chemical control will be identified and tested in field experiments. The best practices will be promoted through Farmer Field Schools. A communication strategy to support the promotion of alternatives (and implementation of all other project components) will be implemented in collaboration with extension services and national NGOs.

Outcome 4 IPM alternatives to conventional pesticides successfully promoted and the use of chemical pesticides and highly hazardous pesticides reduced.

Output 4.1 Potential alternatives to endosulfan, POPs and other obsolete pesticides identified and an action plan for field testing, registration and promotion agreed.

Activities to produce this output will continue from the work that is already being done under the Japan-funded project. Data on actual pest control practices from a representative network of farmers in Alibori and Borgou is being collected to identify alternatives currently used by farmers; and internationally/nationally technically feasible alternatives that are relevant for the documented production practices and pest problems.

Main activities: Key activities to be implemented under this Output are:

Activity 4.1.1 Continued collection of data on pest control practices using the 208-farmers-network derived from typology of farming system established under the Japan-funded project;

Activity 4.1.2 Uploading, analysis of collected data in pest control practices using the Pest Control Monitoring and Management system;

Activity 4.1.3 Identification of potential Plant Production Products (PPPs) and/ or other practices as alternatives control methods to POPs and other hazardous chemical pesticides;

Activity 4.1.4 Stakeholders workshop to agree on the identified potential alternatives and the strategy for field testing, registration and promotion.

Timeline for implementation: Field data collection using the farmer network and data entry and analysis in the Pest control monitoring and management system will be completed in Y1.

Output 4.2 Identified alternatives to endosulfan, POPs and other obsolete pesticides tested for their technical and economic feasibility at farm level.

Main activities: The key activities to be implemented under this Output are:

Activity 4.2.1 Develop protocols (in cooperation with IITA), and conduct efficacy trials of identified alternatives in collaboration with the West African Pesticide Registration Committee (WAPRC) and PIP-COEACP;

Activity 4.2.2 Conduct field experiments on selected alternative products to confirm their economic and technical feasibility;

Activity 4.2.3 Evaluation of value chain (manufacturing, registration, distribution, extension);

Activity 4.2.4 Submission to WAPRC for registration of the proven alternatives to endosulfan, POPs and other obsolete pesticides.

Timeline for implementation: field experiments should be conducted in Y2 and 3 of the project implementation and assessment of value chain of the identified alternatives is planned the fourth year. The viable alternatives will be submitted to in Y3 for registration.

Output 4.3 Viable alternatives to endosulfan, POPs and other obsolete pesticides are promoted

Once the alternatives are field tested the project will draw on the existing network of 1,700 farmers, technicians and engineers already trained on good agricultural practices under the regional GEF-funded project[1] and develop a training curriculum for the promotion of the established IPM alternatives.

Main activities:

Activity 4.3.1 Conduct Training of trainers (ToT) of extension agents, farm advisers, agricultural training providers, and lead farmers on proven alternative methods;

Activity 4.3.2 Conduct farmers training (FFS, Farmers study groups etc.);

Activity 4.3.3 Preparation and implementation of communication strategy on the impact of pesticides empty containers on human health and environment and promotion of the registered alternatives.

[1] Reducing Dependence on POPs and other Agro-Chemicals in the Senegal and Niger River Basins through Integrated Production, Pest and Pollution Management

Timeline for implementation: training modules will be prepared in Y2 and training sessions implemented in Y3 and Y4.

Component 5: Monitoring and Evaluation

The objective of component 5 is to ensure a systematic results-based monitoring and evaluation of project progress towards achieving project outputs and outcome targets as established in the Project Results Framework as well as promote the wider dissemination of project results for replication.

Output 5.1: Project monitoring system providing six-monthly reports on progress in achieving project outputs and outcomes.

Output 5.2**:** Mid-term and final evaluation reports.

Output 5.3: Project "best-practices" and "lessons-learned" disseminated via publications and other means to be identified in the communication strategy.

Time for implementation: 5.1 and 5.3 will be continuous. The independent evaluations will be conducted at project mid-term and completion.

2.4 GLOBAL ENVIRONMENTAL BENEFITS

The main global environmental benefit the project will deliver is the disposal of up to 200 tonnes of POPs and other obsolete pesticides, and the remediation of 2 heavily polluted sites, reducing the danger to human health and the existing risk of soil and water contamination.

Through improving container management and raising awareness among the general public about the risks inherent in re-using containers for domestic purposes, specifically for storing foodstuff and drinking water, project activities will further reduce the adverse impacts to human health.

To prevent future accumulation of POPs and obsolete pesticides the project will improve pesticide regulations and enhance capacity to implement them. By promoting and piloting IPM alternatives, and implementing a complementary communication strategy, the project will reduce the reliance of farmers on highly hazardous pesticides.

2.5 COST EFFECTIVENESS

Cost effectiveness will be achieved through: (i) building on existing capacity developed under previous and on-going initiatives implemented by FAO and other partners; (ii) exploring the opportunity to include the disposal of all obsolete stocks under the regional disposal contract for CILSS countries to reduce transaction costs and the actual cost of disposal; and (iii) employment of local or regional expertise when available.

2.6 INNOVATIVENESS

The main innovation of the project is the development of the pest monitoring and management system to identify effective alternatives to pest control. The system is being developed by FAO in collaboration with the Programme Analyse de la Politique Agricole (PAPA) of INRAB. This approach has the potential to identify viable options among farmer practices to reduce dependence on pesticides. This will be combined with the FFS approach to further develop and disseminate these practices. (For more details on the system, please see section 1.2b).

3 FEASIBILITY

3.1 ENVIRONMENTAL IMPACT ASSESSMENT

The project is designed to have positive benefits to the environment through the removal of obsolete pesticides and risk reduction of contaminated sites together with the reduction in use of hazardous pesticides and the sound management of empty pesticide containers.

However, in achieving these objectives, there is potential for environmental impairment particularly in the event of an accident in the removal and elimination of the obsolete pesticides. To mitigate these risks the project will follow FAO's Environmental Management Tool Kit (EMTK) for the assessment, safeguarding, transportation and disposal of obsolete pesticides. An EMP will be developed for the safeguarding activities that will consider all potential risks and develop mitigation strategies. The Environmental Management Plan (EMP) will cover:

- repackaging of obsolete pesticides;
- safeguarding of stocks of obsolete pesticides;
- collection, transportation and safe storage/handling of empty containers;
- transportation and intermediate storage of stocks of obsolete pesticides; and
- decontamination of heavily pesticide-contaminated sites.

The methodologies set out in the EMTK have been used in similar FAO projects since 2003 and no adverse environmental impacts have resulted. This project is therefore classified as Category B under FAO's guideline "Environmental Impact Assessment – Guidelines for FAO's field projects".

3.2 RISK MANAGEMENT

The following risks were identified during the PPG. Mitigation measures are proposed, and where appropriate, will be further elaborated in the EMP.

General project risks		
Risk	Ranking	Mitigation measures
Insufficient funds dedicated to the safeguarding of high-priority sites, and the disposal of POPs.	Low	Cost estimates are based on ongoing disposal activities under the Japan-funded project. If there is a need for additional co-financing, it will be sought from project partners and related projects during project execution.
Institutional arrangements pose challenges to project execution.	Low	Consultation meetings with stakeholders were held and implementation arrangements agreed during the preparation of the project. Institutional arrangements, including the roles and responsibilities of stakeholders will be confirmed again at the start of project implementation.
Likelihood of political instability	Low	Although there are currently no signs of unrest which could affect the project, this will be closely monitored during project implementation.
Extreme weather conditions such as torrential rain and floods	Low to medium	Emergency sites will be primarily safeguarded during the driest months (from November to May) with a view to reducing risks associated with torrential rainfall. Contingency plans, especially targeting removal of excess water accumulated in the holding areas, will be implemented in the event of torrential rains.
Component specific risks		
Component 1		
Environmental	High	Management measures to be included in the EMP include

contamination from leakage of POPs and other obsolete pesticides due to poor conditions of containers		field procedures to ensure no further leakage occurs during the project activities. Chemical stores will be ranked according to leakage risk at the beginning of the project, and will be safe-guarded as a matter of priority.
Continued government centralised procurement of pesticides through parastatal companies will give rise to re-accumulation of obsolete stocks	High	As part of component 3, government stakeholders will be engaged to develop pesticide policies that are more responsive to user demands and avoid large-scale procurements.
Lack of appropriate storage for safeguarded stocks	Medium	Application of FAO guideline EMTK 2 will facilitate the identification of possible locations which can act as interim collection points based on a combination of environmental and logistical criteria. Refurbishment of stores will be based on budget availability. This will be included in the national EA and EMP to be developed. SONAPRA has agreed to its central store in Cotonou to be used as the central collection centre.
Incidents during safeguarding	High	All staff / enterprise of the project engaged in safeguarding operations will have been trained and will be provided with protection gear by the international contractor. Strict application of measures included in Environmental Management Plan (EMP) and Health and Safety Plans.
Delays in the procurement of equipment necessary for the disposal	Low	Equipment to be supplied as part of international contract. Contractor to provide all necessary documents to GoB to allow timely import.
Government authorities disagree with the strategy for the reduction of risks posed by contaminated sites	Medium	Strategy will be developed based on objective data and options presented to government for endorsement.
Delays in administrative procedures / decisions as regards transport of obsolete stocks	Medium	Capacity-building / guidance of the competent Government authority as regards procedures of the Basel Convention.
Component 2		
Technical staff being exposed to pesticides during collection and repacking of empty containers	Low to medium	Training modules on collection techniques for the safe collection, repackaging and storage of wastes will be executed, and Personal Protection Equipment (PPE) provided for all personnel involved in container collection.
Lack of stakeholder involvement in proper disposal of empty containers and in the establishment of a sustainable system for the management of wastes.	Low	An awareness campaign and communication strategy will be put in place on safe disposal of empty containers
Component 3		
Delayed adoption of updated legislation. Law	Medium	Continued sensitization will be conducted during project execution including national training sessions.

making (including promulgation of regulations) is a prerogative of the State and will depend on the will of the legislature or law-making authority to enact legislation		
Component 4		
Low interest in adopting alternative technologies by producers	Low	Consultations with Benin's Government identified the need to find alternatives to endosulfan as a result of the ban on this product. A large-scale information and awareness-raising campaign about the modes of application and effectiveness of the proposed alternatives will be undertaken to help promote uptake of alternatives.
Climate Change Changes in the climate will impact on pest distribution, activity, seasonal appearance, as well as impact on the behaviour of chemicals in the environment.	Medium	The project has forged a link with OBEPAB, an organic cotton producers network, and with the previous FAO project which established the farmer typology network. Both these links will allow the project to learn directly from farmers about the specific climate impacts on production, and the project will document and encourage sharing of knowledge on climate resilient forms of pest control.

4 IMPLEMENTATION AND MANAGEMENT ARRANGEMENTS

4.1 INSTITUTIONAL AND IMPLEMENTATION ARRANGEMENTS

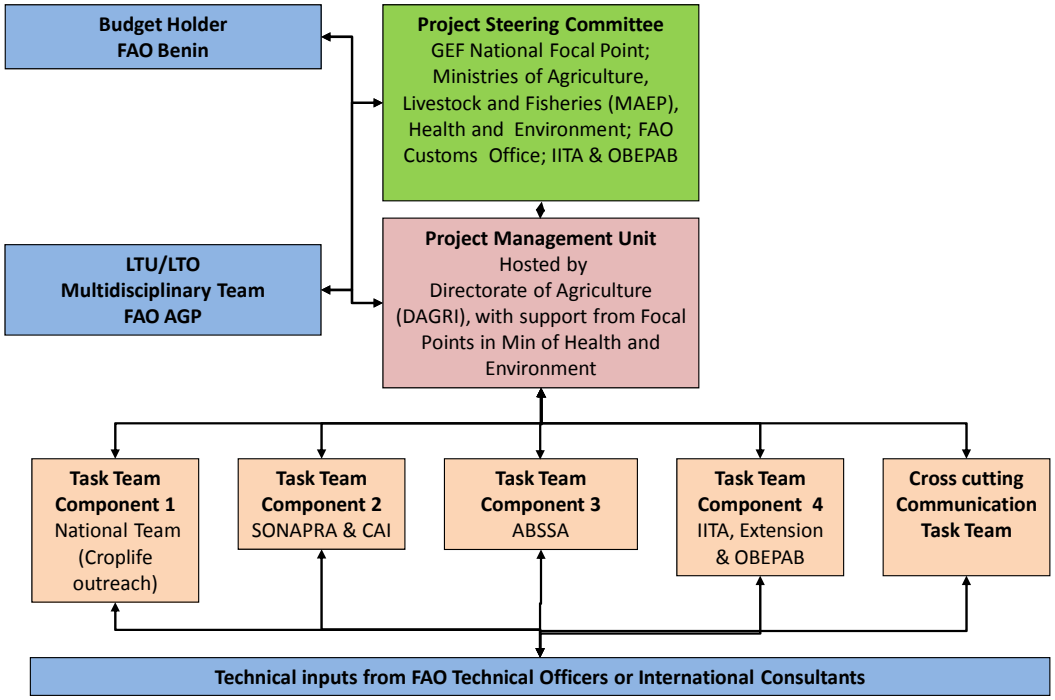
The institutional and implementation arrangements for this project are based on the mandates and experience of key institutions involved in the management of pesticides in Benin, and discussions with and recommendations made by stakeholders during the preparation of the project. The Ministry of Agriculture, Livestock and Fisheries (MAEP) will be the main executing agency responsible for the coordination and management of project activities through a Project Management Unit that will be established and hosted within the Directorate of Agriculture (DAGRI).

The Ministry of Agriculture, Livestock and Fisheries (MAEP) as the lead executing partner will chair a multi-stakeholder Project Steering Committee (PSC) which will bring together key institutions including the Ministries of Public Health and Environment, the Customs Office, and key non-government organizations (NGOs) working on alternatives to pesticides.

The **Project Steering Committee** will be the policy setting body with regard to all issues affecting the achievement of the project's objectives. The PSC will be responsible for providing general oversight of the project's implementation and will ensure that all activities agreed upon, under the GEF project document, are adequately prepared and carried out. In particular, it will:

a) Provide guidance to the PMU in the execution of the project;
b) Ensure that all project outputs are in accordance with the project document;
c) Review, amend if appropriate, and approve any proposed revisions to the project - project results framework and implementation arrangements;
d) Review, amend (if appropriate) and endorse all Annual Work Plans and Budgets;
e) Review project progress and achievement of planned results as presented in six-monthly Project Progress Reports, Project Implementation Reviews (PIRs) and Financial Reports;
f) Provide inputs to the mid-term and final evaluations, review findings and provide comments;
g) Advise on issues and problems arising from project implementation, submitted for consideration by the Project Management Unit or by various stakeholders; and
h) Facilitate cooperation between all project partners and facilitate collaboration between the project and other relevant programmes, projects and initiatives in the country.

PSC meetings will normally be held annually, but the Chairperson will have the discretion to call additional meetings if necessary. Meetings of the PSC will not necessarily require physical presence and could be undertaken electronically. The PMU will act as Secretariat to the PSC and be responsible for providing PSC members with all required documents in advance of PSC meetings, including the draft Annual Work Plan and Budget and any significant technical proposals or analyses. The PMU will prepare written report of all PSC meetings and be responsible for logistical arrangements relative to the holding of such meetings, supported by FAO Benin as the Budget Holder.



Project Management Unit (PMU): The Project Management Unit (PMU) will be hosted by DAGRI within MAEP. Focal points In the Ministries of Health and Environment will be members of the PMU. The PMU will be staffed by a full-time National Project Coordinator supported by a part-time Chief Technical Adviser and short-term consultants paid by the project. The PMU will also be supported by governmental staff through part-time secondment, as necessary, as Government co-financing. The PMU will be responsible for the day-to-day management of the project and timely and efficient implementation of and monitoring of approved annual work plans. In close consultation with partners involved in the execution of project components, the PSC and FAO, the PMU will:

a) Act as secretariat to the PSC;
b) Organize project meetings and workshops, as required;
c) Prepare Annual Work Plans and detailed Budgets (AWP/B) and submit these for approval by FAO and the PSC;
d) Coordinate and monitor the implementation of the approved AWP/B;
e) During project inception period, review the project's M&E plan and propose refinements, as necessary, and implement the plan;
f) Prepare the six-monthly Project Progress Reports (PPRs) and give inputs in the preparation of the annual Project Implementation Review (PIR) by the FAO Lead Technical Officer. Ensure that all co-financing partners provide information on co-financing disbursed during the course of the year for inclusion in the PIR;
g) Coordinate the project with other related on-going activities and ensure a high degree of inter-institutional collaboration; and
h) Assist in the organization of midterm and final evaluations.

Other executing partners

Execution of specific components/outputs will be supported by a number of partners. The partners will be part of component teams set-up to enhance engagement of key stakeholders and to utilize their technical expertise.

Component 1: will be executed by a national team with members from MAEP, MoH, ABE and the Ministry of Hydraulics. CLI will provide the technical lead and co-finance for the disposal.

Component 2: SONAPRA will lead the implementation of this component in collaboration with CNAC, relevant NGOs and representative of the waste/recycling companies.

Component 3: will be under the supervision of the Benin Food Safety Agency (ABSSA). MoE and the Central Laboratory for Food Health Safety (LCSSA) will be key collaborators.

Component 4: the International Institute for Tropical Agriculture (IITA), located in Cotonou, Benin, will be responsible for co-executing component 4, output 4.1. The Benin Organization for the Promotion of Organic Agriculture (OBEPAB) will be involved in the implementation of outputs 4.2 and 4.3. Both organisations will work closely with the department of extension, farmer associations and the Federal Union des Producteurs.

Component 4 and 5: The Directorate for Agriculture (DAGRI) will contribute to the management, monitoring and evaluation of the project.

Other suitable NGOs, including Pesticide Action Network Africa (PAN Africa) will be partners in the development and implementation of the communication strategy on the impact of pesticides on human health and the environment and alternatives.

FAO's Role

FAO will be the GEF Agency for the project. As the GEF agency, FAO will maintain project oversight to ensure that GEF policies and criteria are adhered to and that the project meets its objectives and achieves expected outcomes in an efficient and effective manner. FAO will report on project progress to the GEF Secretariat; financial reporting will be to the GEF Trustee. FAO will closely monitor the project and provide technical support (through FAO's Agriculture and Consumer Protection Department and other technical divisions) and carry out supervision missions.

As the GEF agency for the project, FAO will:

- Manage and disburse funds from GEF in accordance with the rules and procedures of FAO;
- Oversee project implementation in accordance with the project document, work plans, budgets, agreements with co-financiers and the rules and procedures of FAO;
- Provide technical guidance to ensure that appropriate technical quality is applied to all activities;
- Carry out at least one supervision mission per year; and
- Report to the GEF Secretariat and Evaluation Office, through the annual Project Implementation Review, on project progress and provide financial reports to the GEF Trustee.

FAO will also be responsible for the financial execution of the project. FAO will be responsible for the procurement of goods and services for the project in consultation with project partners based on annual work plans and budgets approved by the PSC.

The **FAO Representative in Benin** will be the **Budget Holder** (BH) responsible for the timely operational, administrative and financial management of the project. She/he, working closely with the PMU, the FAO Lead Technical Officer (LTO) and Lead Technical Unit (LTU), will be responsible for:

a) Management of GEF resources in accordance with the Project Document, and approved Annual Work Plans and Budgets;
b) Procurement of goods and contracting of services for the GEF component of the project and financial reporting in accordance with FAO rules and procedures;

c) Preparation of annual/six-monthly budget revisions, as required, for submission to the LTO/LTU and the GEF Coordination Unit;
d) Preparation of six-monthly financial reports to be submitted to the GEF Coordination Unit and shared with the executing partners and the PSC;
e) Represent FAO in the PSC.

The BH will also be responsible for reviewing and giving no-objection to Annual Work Plans and Budgets (AWP/B), Project Progress Reports and co-financing reports submitted by the Project Management Unit, in consultation with the FAO Lead Technical Officer (LTO), Lead Technical Unit (LTU) and the GEF Coordination Unit. To perform these tasks, the BH will be supported by a budget and operations officer.

FAO Project Task Force (PTF): The BH will establish a multi-disciplinary PTF to support the project. Members of the task force will be responsible for supervision of activities in their area of technical competence in collaboration with the LTO and BH.

The FAO Lead Technical Unit (LTU): The Pesticide Risk Reduction Group in the Plant Production and Protection Division (AGP) of the Agriculture and Consumer Protection Department will be the FAO Lead Technical Unit (LTU) for this project. The LTU will support a Lead Technical Officer[1] (LTO), in providing technical advice and backstopping in consultation with other teams in AGP and FAO. The LTO, supported by the LTU, will:

a) Review and provide clearance to TORs for consultancies, LOAs and contracts, in consultation with the LTU and relevant technical officers in FAO;
b) Participate in the selection of consultants and firms to be hired with GEF funding;
c) Review and provide technical comments to draft technical products/reports and, as necessary, ensure clearance by relevant FAO technical officers of final technical products delivered by consultants and contract holders financed by GEF resources before the final payment can be processed;
d) Review and approve project progress reports submitted by the Project Management Unit to the BH;
e) Support the BH in reviewing, revising and giving no-objection to AWP/B to be approved by the Project Steering Committee;
f) Prepare the annual Project Implementation Review (PIR) report, with inputs from the Chief Technical Adviser, to be submitted to the LTU and the GEF Coordination Unit (TCI) for clearance. The PIR will subsequently be submitted to the GEF Secretariat and Evaluation Office as part of the Annual Monitoring Review report of the FAO-GEF portfolio;
g) Field annual (or as needed) technical support and backstopping missions;
h) With the LTU, review and clear TORs for the mid-term evaluation, participate in the mid-term workshop with all key project stakeholders, development of an eventual agreed adjustment plan in project execution approach, and supervise its implementation;
i) With the LTU, review and clear TORs for the final evaluation, participate in the final project closure workshop with all key project stakeholders and the development of and follow up on recommendations on how to insure sustainability of project outputs and results after the end of the project.

[1] In accordance with the latest FAO policy for designation of the LTO, the Budget Holder will propose an LTO from the country, SRO or RO. The proposal will be endorsed by the ADG/RR and the Head of the LTU on a no-objection basis.

The GEF Coordination Unit in the Investment Centre Division (TCI) will review and approve project progress reports, annual project implementation reviews (PIRs) and financial reports and budget revisions. The unit will also participate in the mid-term and final evaluations and the development of corrective actions to mitigate eventual risks affecting the timely and effective implementation of the project. The GEF Coordination Unit will, in collaboration with the FAO Finance Division, request transfer of project funds from the GEF Trustee based on 6 monthly projections.

The FAO Finance Division will provide annual Financial Reports to the GEF Trustee and, in collaboration with the GEF Coordination Unit, call for project funds on a six-monthly basis from the GEF.

4.2 FINANCIAL PLANNING AND MANAGEMENT

4.2.1 Financial plan (by component, outputs and co-financier)

USD																	
Component	Output		ABSSA in-kind	ABSSA Grant	DAGRI in kind	OPEBAB in-kind	OPEBAB Grant	IITA Grant	Croplife Grant	Croplife in-kind	FAO in-kind	FAO Grant	Total co-financing	% co-financing	Total GEF	% GEF	Grand Total
1	1.1	Safeguard+ Disposal							868,500	60,000		1,500,000	2,428,500	80.5%	590,000	19.6%	3,018,500
	1.2	Contaminated sites										300,000	300,000	53.3%	262,500	46.7%	562,500
2	2.1	Design CMS										500,000	500,000	75.3%	164,000	24.7%	664,000
	2.2	Pilot and develop National CMS strategy												0.0%	90,000	100.0%	90,000
3	3.1	legislation										70,125	70,125	56.5%	54,000	43.5%	124,125
	3.2	National Strategy for inspection and Q/C		2,650,000								100,000	2,750,000	98.0%	56,500	2.0%	2,806,500
	3.3	Capacity building for post registration enforcement	300,000	1,600,000									1,900,000	96.3%	73,000	3.7%	1,973,000
4	4.1	Alternatives identifieded						300,000				431,000	731,000	88.7%	92,750	11.3%	823,750
	4.2	Alternatives tested				150,000	150,000						300,000	77.8%	85,750	22.2%	385,750
	4.3	Alternatives promoted through FFS				350,000	350,000					251,000	951,000	87.6%	135,000	12.4%	1,086,000
5	5.1	M&E			250,000						50,000		300,000	70.9%	122,916	29.1%	422,916
6	6.1	Project Management			250,000						100,000		350,000	77.2%	103,584	22.8%	453,584
Grand Total			300,000	4,250,000	500,000	500,000	500,000	300,000	868,500	60,000	150,000	3,152,125	**10,580,625**	**85.3%**	**1,830,000**	**14.8%**	**12,410,625**

4.2.2 GEF inputs

The majority of GEF funds (USD 852,500) are allocated to the safe disposal of POPs and the remediation of contaminated sites. To support the sustainability of the project's key results and prevent future accumulation of POPs and obsolete pesticides, GEF funds are also allocated to promoting less toxic alternatives (USD 313,500), developing a sustainable container management system (USD 254,000), and building the capacity for enforcement of pesticide regulations (USD 183,500).

4.2.3 Government inputs

The GoB will provide cash and in-kind co-financing in the form of sites and stores for safeguarding and temporary storage of inventoried stocks awaiting their shipment for incineration; the preparation and facilitation of all paper work required under the Basel Convention for transboundary movement of hazardous wastes; the provision of national teams for the preparation of the EA and EMPs and the supervision of disposal; a national team for sites remediation; contribution to the container management infrastructure and operation including the provision of transport and intermediate and final collection centres for processing empty pesticides containers, the national laboratory and staff for pesticide contamination analysis. The Government will contribute to the promotion of alternatives to hazardous pesticides in the form of in-kind staff time. In addition, GoB will provide in-kind cofinancing to support project management including office space for the Project Management Unit.

4.2.4 FAO inputs

FAO, through a grant from the Government of Japan, is co-financing the project with respect to the disposal of endosulfan, and risk assessment and remediation of contaminated sites. FAO is also co-financing capacity building on component 3 through two phases of the EC-funded project on Multi-lateral Environmental Agreements implementation. FAO will provide in-kind co-financing comprising staff time to support capacity building/training activities under each of the four technical components.

4.2.5 Other co-financiers inputs

Crop Life International will co-finance the safeguarding and disposal of obsolete stocks.

OPEBAB and **IITA** will confinance activities in support of promotion of alternatives to chemical control and Farmer Field Schools.

4.3 FINANCIAL MANAGEMENT AND REPORTING ON GEF RESOURCES

FAO will maintain a separate account in USD for the Project GEF resources showing all income and expenditures. Expenditures incurred in a currency other than USD will be converted into USD at the United Nations operational rate of exchange on the date of the transaction. FAO shall administer the GEF resources in accordance with its regulations, rules and directives.

Financial reports

FAO Benin as the BH, supported by an Operations and Administrative Officer, will prepare six-monthly Project expenditure accounts and final accounts for the Project GEF resources, showing amount budgeted for the year, amount expended since the beginning of the year, and separately, the unliquidated obligations as follows:

- Details of project expenditures on an output-by-output basis, reported in line with Project budget codes as set out in the Project Document, as at 30 June and 31 December each year;
- Final accounts on completion of the Project on an output-by-output cumulative basis, reported in line with Project budget codes as set out in the Project Document;
- A final statement of account in line with FAO Oracle Project budget codes, reflecting actual final expenditures under the GEF component of the Project, when all obligations have been liquidated;
- An annual budget revision will be prepared by the BH in consultation with the LTO and LTU and submitted for approval to the FAO GEF Coordination Unit.

The BH will submit the financial reports for review and monitoring by the LTU, and the FAO GEF Coordination Unit. Financial reports for submission to the GEF will be prepared in accordance with the provisions in the GEF Financial Procedures Agreement and submitted by the FAO Finance Division.

Responsibility for cost overruns

The BH is authorized to enter into commitments or incur expenditures up to a maximum of 20 percent over and above the annual amount foreseen in the GEF component of the Project budget under any budget sub-line provided the total cost of the annual budget is not exceeded.

Any cost overrun (expenditure in excess of the budgeted amount) on a specific budget sub-line over and above the 20 percent flexibility should be discussed with the FAO GEF Coordination Unit with a view to ascertaining whether it will involve a major change in Project scope or design. If it is deemed to be a minor change, the budget holder shall prepare a budget revision in accordance with FAO standard procedures. If it involves a major change in the Project's objectives or scope, a budget revision and justification should be prepared by the BH for discussion with the GEF Secretariat.

Savings in one budget sub-line may not be applied to overruns of 20 percent in other sub-lines even if the total cost remains unchanged, unless this is specifically authorized by the FAO GEF Coordination Unit upon presentation of the request. In such a case, a revision to the Project Document amending the budget will be prepared by the BH.

Under no circumstances can expenditures exceed the approved total Project budget for the GEF resources or be approved beyond the completion (NTE) date of the Project. Any over-expenditure is the responsibility of the BH.

Audit

Project GEF resources will be subject to the internal and external auditing procedures provided for in FAO financial regulations, rules and directives and in keeping with the Financial Procedures Agreement between the GEF Trustee and FAO.

The audit regime at FAO consists of an external audit provided by the Auditor-General (or persons exercising an equivalent function) of a member nation appointed by the governing bodies of the Organization and reporting directly to them, and an internal audit function headed by the Inspector-General who reports directly to the Director-General. This function operates as an integral part of the Organization under policies established by senior management, and furthermore has a reporting line to the governing bodies. Both functions are required under the Basic Texts of FAO, which establish a framework for the TOR of each. Internal audits of imprest accounts, records, bank reconciliation and asset verification take place at FAO field and liaison offices on a cyclical basis.

4.4 PROCUREMENT

Goods and services will be procured in accordance with FAO's regulations, rules, procedures, and administrative instructions for procurement and finance. A procurement plan shall be prepared following the approval of the project (inception phase).

4.5 MONITORING, EVALUATION AND REPORTING

4.5.1 Oversight and reviews

Project oversight will be carried out by the PSC and FAO. Project oversight will be facilitated by: (i) documenting project transactions and results through traceability of related documents throughout the implementation of the project; (ii) ensuring that the project is implemented within the planned activities applying established standards and guidelines; (iii) continuous identification and monitoring of project risks and risk mitigation strategies; and (iv) ensuring project outputs are produced in accordance with the project results framework. At any time during project execution, underperforming components may be required to undergo additional assessments, implementation changes to improve performance or be halted until remedies have been identified and implemented.

Project revisions

The following types of revisions may be made to this project document with no-objection from the PSC and the approval of FAO GEF Coordination Unit in consultation with the LTO, LTU and BH:

- Minor revisions that do not involve significant changes in the immediate objectives and outputs of the project, but are caused by the rearrangement of inputs already agreed to or by cost increases due to inflation. These minor amendments are changes in the project design or implementation that could include, *inter alia*, changes in the specification of project outputs that do not have significant impact on the project objectives or scope, changes in the work plan or specific implementation targets or dates, renaming of implementing entities, or reallocation of grant proceeds not affecting the project's scope;
- Revisions in, or addition of, any of the annexes of the project document;
- Mandatory annual revisions which rephase the delivery of agreed project inputs or take into account expenditure flexibility.

All minor revisions shall be reported in the annual Project Implementation Reviews (PIRs) submitted by FAO to the GEF Secretariat and the GEF Evaluation Office.

4.5.2 Monitoring responsibilities

Monitoring and Evaluation (M&E) of progress in achieving project results and objectives will be done based on the targets and results indicators established in the project results framework and the annual work plans and budgets. M&E activities will follow FAO and GEF monitoring and evaluation policies and guidelines. The M&E plan, which has been budgeted at USD 122,916 will be reviewed and updated during the project inception phase. This will involve: (i) review of the project's results framework; (ii) refining of outcome indicators; (iii) identification of missing baseline information and action to be taken to collect the information; and (iv) clarification of M&E roles and responsibilities of project stakeholders. The project's M&E system will be put in place within the first 6 months of project implementation.

The day-to-day monitoring of the project implementation will be the responsibility of the Project Management Unit led by the National Project Coordinator and driven by the preparation and implementation of annual work plans and budgets (AWP/B) and six-monthly project progress reports (PPRs). The preparation of the AWP/B and six-monthly PPRs will represent the product of a unified planning process between main project partners. As tools for results-based-management (RBM), the AWP/B will identify activities proposed for the coming project year and provide the necessary details on output targets to be achieved, and the PPRs will report on the monitoring of the implementation of activities and the achievement of output targets. An annual project progress review and planning meeting should be organized by the Project Management Unit with the participation of representatives from key executing partners prior to the Project Steering Committee Meeting. The AWP/B and PPRs will be submitted to the PSC for approval (AWP/B) and Review (PPRs) and to FAO for approval. The AWP/B will be developed in a manner consistent with the project's Results Framework to ensure adequate fulfillment and monitoring of project outputs and outcomes.

4.5.3 Indicators and information sources

To monitor project outputs and outcomes including contributions to global environmental benefits specific indicators have been developed in the Results Framework (see Annex 1). The framework's indicators and means of verification will be applied to monitor both project performance and impact. Following FAO's monitoring procedures and progress reporting formats, data collected will be of sufficient detail to be able to track specific outputs and outcomes and flag project risks early on. Output target indicators will be monitored on a six-monthly basis and outcome target indicators will be monitored on an annual basis if possible or as part of the mid-term and final evaluations.

Monitoring information sources will be evidence of outputs (reports, website, farmer surveys, lists of participants in training activities, manuals etc.). To assess and confirm the congruence of outcomes with project objectives, physical inspection and/or surveying of activity sites and participants will be carried out. This latter task would often be undertaken by the Project Management Unit supported by the FAO LTO and LTU.

4.5.4 Reports and their schedule

The specific reports that will be prepared under the M&E program are the: project inception report; Annual Work Plan and Budget (AWP/B); Project Progress Reports (PPRs); annual project implementation review (PIR); technical reports; co-financing reports; and a terminal report. In addition, assessment of the GEF POPs tracking tool against the baseline will be required at mid-term and final evaluation.

Project Inception Report: After FAO approval of the project and signature of the FAO/Government Cooperative Programme (GCP) Agreement, the project will initiate with a six month inception period. An inception workshop will be held and immediately after the workshop, the National Project Coordinator will prepare a project inception report in consultation with the FAO LTO and other project partners. The report will include a narrative on the institutional roles and responsibilities and coordinating action of project partners, progress to date on project establishment and start-up activities and an update of any changed external conditions that may affect project implementation. It will also include a detailed First Year Annual Work Plan and Budget (AWP/B) and a supervision plan with all monitoring and supervision requirements. The draft report will be circulated to FAO and the Project Steering Committee for review and comments before its finalization. The report should be cleared by the FAO BH (FAO Benin), LTO, LTU and the FAO GEF Coordination Unit and uploaded in FPMIS by the BH.

Annual Work Plan and Budget (AWP/B): The National Project Coordinator will submit to the FAO LTO an Annual Work Plan and Budget. The AWP/B, divided into monthly timeframes, should include detailed activities to be implemented and outputs (targets and milestones for output indicators) to be achieved during the year. A detailed project budget for the activities to be implemented during the year should also be included together with all monitoring and supervision activities required during the year. The draft AWP/B is circulated to and reviewed by the FAO Project Task Force, Project Coordinator incorporates eventual comments and the final AWP/B is sent to the PSC for approval and to FAO BH for final no-objection and upload in FPMIS by the GEF Coordination Unit.

Project Progress Reports: One month before the mid-point of each project year, the Project Coordinator will prepare a semi-annual Project Progress Report (PPR). The report will contain the following: (i) an account of actual implementation of project activities compared to those scheduled in the AWP/B; (ii) an account of the achievement of outputs and progress towards achieving project objectives and outcomes (based on the indicators contained in the results framework); (iii) identification of any problems and constraints (technical, human, financial, etc.) encountered in project implementation and the reasons for these constraints; (iv) clear recommendations for corrective actions in addressing key problems resulting in lack of progress in achieving results; (iv) lessons learned; and (v) a revised work plan for the final six months of the project year. The report will also include an estimate of cofinancing received from all co-financing partners.

The PPR will be submitted by the Project Coordinator to FAO no later than one month after the end of each six-monthly reporting period (30 June and 31 December). The draft PPR will be reviewed and cleared by FAO (BH and LTO). The LTO will submit the PPR to the GEF Coordination Unit for final clearance. The final PPR will be circulated by the BH to the PSC.

Project Implementation Review: The LTO supported by the FAO LTU, with inputs from the Project Coordinator will prepare an annual Project Implementation Review (PIR) covering the period July (the previous year) through June (current year). The PIR will be submitted to the GEF Coordination in TCI for review and approval no later than 31 July. The GEF Coordination will submit the final report to the GEF Secretariat and Evaluation Office as part of the Annual Monitoring Review report of the FAO-GEF portfolio.

Technical Reports: Technical reports will be prepared to document and share project outcomes and lessons learned. The drafts of any technical reports must be submitted by the Project Coordinator to the FAO BH in Benin who will share it with the LTO for review and clearance, prior to finalization and publication. Copies of the technical reports will be distributed to the Project Steering Committee and other project partners as appropriate. These will be posted on the FAO FPMIS by the LTO.

Co-financing Reports: The Project Coordinator will be responsible for collecting the required information and reporting on in-kind and cash co-financing provided by all co-financing partners. The Project Coordinator will provide the information in a timely manner and will transmit such information to FAO. The co-financing reports should be completed as part of the semi-annual PPRs and annual PIRs.

GEF-5 Tracking Tools: Following the GEF policies and procedures, the tracking tools for POPs will be submitted at three moments: (i) with the project document at CEO endorsement; (ii) at project mid-term evaluation; and (iii) at final evaluation. These should be completed by Project Coordinator with support from the LTO at mid-term and final evaluation.

Terminal Report: Within two months of the project completion date the Project Coordinator will submit to FAO a draft Terminal Report, including a list of outputs detailing the activities taken under the Project, "lessons learned" and any recommendations to improve the efficiency of similar activities in the future. This report will specifically include the findings of the final evaluation as described above.

4.5.5 Monitoring and evaluation plan summary

Monitoring of project progress will be against indicators identified in the project logical framework. These indicators will be further refined, as necessary, in consultation with project stakeholders during the project inception phase. This process of further collaborative refinement of project indicators will facilitate greater stakeholder engagement with the project and support broader monitoring and reporting of project achievements and failures.

The monitoring and evaluation plan is summarized below.

Type of monitoring and evaluation activity	Responsible parties	Time frame	Budget
Inception Workshop	National Project Coordinator (NPC), Project Steering Committee, FAO (FAO Benin as Budget Holder - BH, FAO Lead Technical Officer and Technical Unit- LTO and LTU, FAO GEF Coordination Unit)	Within first two months of project inception	USD 30,000
Inception report	NPC with inputs project partners.	Immediately after the project inception workshop	
	Cleared by FAO LTO, LTU, BH and the FAO GEF Coordination Unit, and the Project Steering Committee.		
Design and implementation of monitoring and evaluation system, including staff training	NPC with support from the Chief Technical Adviser and FAO LTO and LTU.	Within the first six months after the project inception	USD 2,000
Field-based impact monitoring	NPC with support from other project partners – local NGOs, farmers/producers associations.	Continually	USD 3,000
Technical support and backstopping missions	FAO LTO/LTU.	Annual or as required	Paid by GEF Agency fee
Supervision missions	Independent missions organized by TCI/GEF Coordination Unit	Annual or as necessary	Paid by GEF Agency fee
Project	National Project Coordinator	Six- monthly	USD 3,000

progress reports (PPRs)	Submitted to the BH and LTU for clearance. Finalized reports submitted to the FAO GEF Coordination Unit by the LTO, and to the PSC by the PC.		
Project Implementation Review (PIR)	FAO LTO with inputs from the NPC, BH and LTU. Submitted by the FAO GEF Coordination Unit to the GEF Secretariat. Final report also submitted to the PSC and the GEF Operational Focal Point.	Annually	Paid by GEF Agency fee
Reports on co-financing	NPC with information from all co-financing partners.	Six monthly and annually as part of PPR and PIR.	USD 1,500
PSC meetings	NPC, PSC Chair, FAO Budget Holder	At least once a year	USD 1,916
Technical reports	NPC, Consultants, FAO LTO/LTU	As appropriate	From component budgets
Mid- term evaluation	External consultant(s), arranged by the FAO independent evaluation unit in consultation with the project partners, the FAO BH, LTO, LTU and the FAO GEF Coordination Unit.	At mid-point of project implementation	USD 40,000
Final evaluation	External consultant(s), arranged by the FAO independent evaluation unit in consultation with the project partners, the FAO BH, LTO, LTU and	At the end of project implementation	USD 40,000
Terminal report	NPC, FAO LTO	At least one month before end of project	USD 1,500
			USD 122,916

4.6 PROVISION FOR EVALUATIONS

An independent Mid-Term Evaluation (MTE) will be undertaken at project mid-term to evaluate progress and effectiveness of implementation in terms of achieving the project objectives, outcomes and outputs. Findings and recommendations of this evaluation will be instrumental for bringing improvement in the overall project design and execution strategy for the remaining period of the project's term. FAO will arrange for the MTE in consultation with the project partners. The evaluation will, *inter alia:*

(i) review the effectiveness, efficiency and timeliness of project implementation;
(ii) analyze effectiveness of partnership arrangements;
(iii) identify issues requiring decisions and remedial actions;
(iv) propose any mid-course corrections and/or adjustments to the implementation strategy as necessary; and
(v) highlight technical achievements and lessons learned derived from project design, implementation and management.

An independent Final Evaluation (FE) will be carried out three months prior to the terminal review meeting of the project partners. The FE will aim to identify the project impacts and sustainability of project results and the degree of achievement of long-term results. This evaluation will also have the purpose of indicating future actions needed to sustain project results and disseminate products and best-practices within the country and to neighbouring countries.

4.7 COMMUNICATION AND VISIBILITY

The project will broaden the scope of the existing communications strategy on endosulfan to address other issues of pesticide risk reduction. Collaboration with prominent NGOs will continue on this issue to maximise project impact by promoting participation and behavioural change in pesticide management in target groups. The revised communications strategy will include a component on container management, particularly targeting women and householders to encourage participation in the container collection scheme and adoption of “triple rinsing”, and on alternatives, informing rural populations about the dangers and risks associated with pesticide use, as well as the availability of alternatives. Specific monitoring indicators will allow the project to monitor the performance of the communication strategy.

The project communication strategy will also support the Project Management Unit to ensure two-way exchanges with stakeholders in order to improve project implementation and ensure buy-in, particularly by the private sector in relation to the long term sustainability of the container management scheme, and by decision makers and enforcement structures in relation to the review of registration and post-registration system in Benin.

5 SUSTAINABILITY OF RESULTS

5.1 SOCIAL SUSTAINABILITY

The project will generate community health benefits through decreased exposure to highly hazardous pesticides, by a) removing sources of these chemicals from stockpiles and contaminated sites, b) removing contaminated containers from communities, c) promoting and encouraging availability and uptake of non-toxic alternatives, and d) enhancing the quality of products through better control of pesticides in their life cycle, ultimately reducing pesticide residues. By promoting alternatives to chemical pesticides, the project will help producers reduce their reliance on credit and expensive inputs, contributing to increased profits from production.

Due to the traditional roles and responsibilities of women, women are more vulnerable to the adverse effects of pesticide exposure than men. Women constitute the bulk of the labor force in cotton and fruit and vegetable agricultural holding and processing units and are exposed to high pesticide residues in handling produce. Women may also produce food for family consumption but use pesticides intended for other crops, not in accordance with the intended uses and conditions, exposing themselves and their families to high levels of inappropriate residues. Project activities will take the gender dimensions into account, through consulting women, identifying specific needs and concerns, especially through the Farmer Field School approach and the typology of agricultural production studies which will explicitly include crops that are primarily cultivated by women. The project will ensure that: women are represented in project component activities, thus increasing opportunities for professional women in the agriculture sector; and specifically target women through partnerships with civil society organizations in training and awareness-raising activities, to ensure women are aware of the risks posed by pesticides, and empty pesticide containers, which are used to harvest fruit and vegetables and for domestic purposes, often by women.

5.2 ENVIRONMENTAL SUSTAINABILITY

By safeguarding and safely disposing of emergency stocks of POPs and other obsolete pesticides and associated waste, and remediating heavily contaminated sites, the project will be removing key source contaminants from the environment. The project also aims to prevent future accumulation of obsolete stocks and to reduce the use of highly hazardous pesticides by building the capacity at all critical levels (policy, institutional and community).

All these contribute directly to environmental sustainability.

5.3 FINANCIAL AND ECONOMIC SUSTAINABILITY

This project will promote sustainable intensification of farming systems, contributing to the financial and economic sustainability of farmers. To reduce demand for POPs and highly hazardous pesticides, the project will research, pilot and promote viable alternatives for key crops, in an effort to drive long-term uptake of such non-toxic alternatives. Agricultural production carried out in compliance with IPM approach contributes to high quality crops that are highly competitive within the international marketplace – particularly given that cotton is such an important export commodity for Benin.

5.4 SUSTAINABILITY OF CAPACITIES DEVELOPED

This project aims to build sustainable capacity in national institutions. Several elements have been incorporated into the project design to ensure capacities are developed to lead to the continuity of project-initiated activities. These include: a focus on strengthening national institutional capacity and pesticide management skills; the cooperation with national stakeholders, research institutions and NGO representatives to promote alternatives to highly hazardous pesticides to prevent building up of future stocks; and the training of key national stakeholders in container management to ensure capacity exists to implement the strategy over the long term. Finally, the project focuses on empowerment of local communities through Farmer Field Schools to sustain the changes achieved.

5.5 APPROPRIATENESS OF TECHNOLOGY INTRODUCED

The project is going to utilize and promote a number of technologies, particularly under Components 1 and 4. Component 1 involves the remediation of contaminated sites. Remediation will employ locally available, cost-effective techniques, ensuring it can be repeated on further identified sites by trained national staff, post-project. Pilot activities on non-toxic alternatives will focus on affordable, low cost, readily available alternatives, aiming to demonstrate their efficacy and to ensure they are within reach of farmers.

The relevance of the technologies considered during project design is outlined in Table 1, below.

Table 1: Relevance of technologies to be used in the project

Technologies considered	Relevance
High temperature incineration of POPs obsolete pesticides and associated wastes	✓ Expensive, but appropriate for high-risk obsolete pesticides that cannot be safely disposed of in Benin. ✓ Not appropriate for wastes that can be safely managed in Benin, for example soils
Triple rinsing with any organic solvent and recycling of empty containers.	✓ Increases overall cleanliness rate by over 90 % ✓ Restricts the reuse of empty containers and therefore intoxication cases ✓ Provides possibilities for recycling plastic and metal materials and using them for non-food purposes.
Extension of the use of Pesticide Stock Management System (PSMS) to different departments	✓ It makes it possible to ensure daily monitoring of pesticide stocks and their evolution ✓ Facilitates management of stocks within the framework of risk management plans ✓ Facilitates ready access of the various stakeholders to information about pesticides (Lists of registered pesticides, withdrawal of pesticides and other useful information)
Bioremediation and phytoremediation of soils contaminated with pesticides	✓ Minimizes any contribution to the contamination of the environment ✓ Utilizes local means (organic manures, native plants, etc.) ✓ Develops local and regional expertise ✓ Significantly less expensive than “dig and dump” method (involving offshore disposal)
Alternatives to conventional chemical pesticides through Farmer Field Schools	✓ Provides non-hazardous products ✓ Efficiency tested and proven for controlling a number of target pests ✓ Accessible through either local production or regulated importation ✓ Empowerment of community ✓ Focus on gender

5.6 REPLICABILITY AND SCALING UP

The project components with potential for replicability and scaling up are the container management scheme piloted in Alibori and Borgou Departments and the Farmer Field Schools to support the development and adoption of alternatives. During the last year of implementation, based on the rate of achievements, the project will deploy a phase-out strategy with the government to ensure that successful outcomes are replicated and scaled-up as needed.

Appendices

APPENDIX 1 RESULTS MATRIX

Objective			Assumptions	
To eliminate existing obsolete pesticides, including POPs and associated wastes, and to strengthen the capacity for sound pesticide management in order to prevent future accumulation.			Security conditions remain stable and allow project staff to operate in all project countries	
Component 1: Safe disposal of POPs and other obsolete pesticides and remediation of heavily contaminated sites				
Outcome 1	Outcome Indicators and targets	Baseline	Milestones	Assumptions
Identified risks from existing obsolete stocks eliminated and risk from heavily pesticide-contaminated sites reduced	(i) Up to 200 tonnes of POPs and other obsolete pesticides disposed of in an environmentally sound manner (ii) At least 2 contaminated sites with reduced risk of exposure / contamination level (50% reduction)	(i) 504 nett tonnes of obsolete pesticides and 150 nett tonnes associated wastes inventoried in 2012. 380 nett tonnes endosulfan in process of safeguard and disposal @ USD4500/tonne (under GCP/BEN/055/JPN) (ii) 11 sites with contaminated soils have been identified in inventory and entered into PSMS. 5 sites were prioritized for investigation. 3 investigations completed and EMA and EMP produced. Risk reduction of 3 sites (Bohicon, Oganla and Djassin) will be undertaken by under GCP/BEN/055/JPN. New sites of buried pesticides have been reported in 2013.	**Year 1:** - Risk reduction strategies for obsolete stocks developed, approved and safeguarding completed. - Risk reduction strategies for 2 contaminated sites developed and approved, and work started. **Year 2:** - Risk reduced in 1 new prioritized contaminated site. **Year 3:** - Evaluation of risk reduction measures undertaken. **Year 4:** - Disposal of obsolete stocks completed. - Risk reduced in 1 new prioritized contaminated site.	Safeguarding and disposal prices do not exceed USD 4500 /tonne; Support from key Government institutions and co-financiers is maintained.

Output	Indicator	Baseline	Milestones and target s				Data Collection and reporting	
			Year 1	Year 2	Year 3	Year 4	Means of verification	Responsibility for data collection
1.1 Up to 200 tonnes of POPs pesticides and other obsolete pesticides safely destroyed in line with the Basel Convention	Number of tonnes destroyed	504 tonnes OP inventoried in 2012. 380 tonnes endosulfan removed	Environmental Management Plans developed and disposal contract signed between FAO and disposal company	Safeguarding of 200 tonnes completed		Up to 200 tonnes exported and destroyed in line with Basel Convention	Project Progress Report (PPR) PSMS records EA and EMP reports Basel Convention destruction certificates	National project teams Project Coordinator
1.2 Risks from 2 highly contaminated sites quantified, remediation strategies developed and implemented	Risk quantified at priority sites	11 heavily contaminated sites in PSMS; five prioritised; three have been sampled and environmental assessment and management plans prepared		Detailed investigation of 2 more heavily contaminated sites completed	Remediation strategies developed and approved in priority sites	Remediation of the prioritized sites completed	PPR Detailed investigations reports Remediation strategy documents	Project Coordinator
	Reduction in contamination level/risk of exposure at mitigated sites against baseline	Tbd during Rapid Environmental Assessment (year 1)	Baseline contamination levels analysed at sites (Bohicon 2 and Malanville)			50% reduction in contamination level.	Analytical reports	

Component 2: Development and implementation of empty pesticides containers management system				
Outcome 2	Outcome Indicators and targets	Baseline	Milestones	Assumptions
Risks to the environment and human health from empty pesticide containers used in cotton production areas reduced	75,000 empty containers triple rinsed, collected and stored awaiting recycling in PY3; 150,000 in PY4.	(i) 3.9m containers imported over the last 5 years, 0.5m per year in cotton zone, 8.8 tonnes containers in national inventory	**Year 1:** - Management scheme of empty pesticide containers developed. - Proposals for recycling options reviewed. - Collection and recycling centres established. **Year 2:** - Pilot collection schemes in Borgou and Alibori Departments rolled out (including awareness programme for triple rinsing) **Year 3:** - Pilot collection schemes in Borgou and Alibori Departments continued. - Evaluation of the pilot collection scheme in the two Departments conducted. **Year 4:** - Proposal for scaling up of the pilot collection scheme designed	**Assumptions:** Extension service and NGOs adopt the implement the communication strategy A national/ regional facility for recycling collected containers will be identified (e.g. through the CILSS project)

Component 2: Development and implementation of empty pesticides containers management system								
Output	Indicator	Baseline	Milestones and target values				Data Collection **and r**eporting	
			Year 1	Year 2	Year 3	Year 4	Means of verification	Responsibility for data collection
2.1 Design & validation of management Scheme for empty pesticide containers completed	Container management scheme design document and report of stakeholder acceptance	Assessment report on the management of empty container available Data collection sheets on the management of empty containers in Borgou and l'Alibori Districts under development	National or regional facility for processing and recycling of different types empty containers identified Design for the container management scheme developed and validated by stakeholders				PPR, mid-term and final evaluations	National Project Coordinator SONAPRA Croplife
2.2 Empty pesticide container management scheme piloted in Alibori and Borghou departments	Number of containers use in Borgou and Alibori Departments are: • Rinsed • Collected • Stored securely • Recycled/ disposed of	500,000 containers imported per year for cotton production: 58% of pesticide use in Alibori & Borghou districts i.e. 290,000 containers No empty container management system exists at present in the country		208 farmers trained Collection mechanism in place, roles of involved stakeholders defined and staff trained	Collection and recycling system established 75,000 containers triple rinsed, collected and recycled in the two Depart.	150,000 containers triple rinsed, collected and recycled in the two Depart.	Pilot project report Programme Statistics	National Project Coordinator SONAPRA NGOs Croplife

Component 3: Strengthening the regulatory framework and institutional capacity for the sound management of pesticides.				
Outcome 3	Outcome indicators & targets	Baseline	Milestones	Assumptions
Regulatory framework and institutional capacity for the sound management of pesticides throughout their lifecycle strengthened	(i) Revised national legislation in compliance with international and regional obligations adopted by PY4. (ii) NPMC and a national system for inspection and quality control of pesticides operational by PY3.	(i) Legislation in Benin does not currently support the regional CILSS-ECOWAS-UEMOA harmonization which it joined in 2012. (ii) Mandate for pesticide control transferred to ABSSA but not yet operational. The registration committee, CNAC, does not have access to official government budget but financed by registration fees. Neither national strategy nor sustainable funding mechanism for pesticide control.	**Year 1:** - Meetings for the review of existing laws and workshops to align them with the Benin's regional and international commitments held. - National Strategy/Action Plan developed. - National Pesticide Management Committee (NPMC) established. **Year 2:** - Two key entry points well equipped for the inspection and quality control of pesticides. - NPMC operational (responsibilities, staff, budget..) **Year 3:** - Revised draft legislation completed and undergoing approval process. Effectiveness of NPMC evaluated. **Year 4:** - Revised draft legislation approved - National system for inspection and quality control of pesticides operational	Timely adoption of the updated Legislation by the Parliament. Beneficiaries are willing to participate in training seminars and apply the acquired knowledge in effective implementation of the revised legal framework for the management of pesticides Political commitment to set up a service for inspection and control of pesticides Effective enforcement of reforms. Stability in staff appointments

Component 3: Strengthening the regulatory framework and institutional capacity for the sound management of pesticides.								
Output	Indicator	Baseline	Milestones and target values				Data Collection and reporting	
			Year 1	Year 2	Year 3	Year 4	Means of verification	Responsibility for data collection
3.1 National legislation and regulations for registration and control of pesticides in line with the regional CILSS-ECOWAS-UEMOA common system developed and submitted to Government for approval	National legislation enabling the regional harmonized pesticides regulation in line with international and regional instruments	Benin is a party of the CILSS-ECOWAS-UEMOA harmonized pesticide registration system developed for Western Africa in 2012. Assessment report of legislative and regulatory framework (2012).		Legislation, decrees and orders including those relating to the operation of the National Pesticide Management Committee (NPMC) drafted	Revised legislation submitted to Government for approval		PPR Finalized national legislation Record of submission to national authorities	National Project Coordinator National legal expert Concerned Governmental bodies responsible for approval
3.2 National Strategy/Action Plan (NSAP) and budget for inspection and quality control of pesticides developed	Publication of national strategy for pesticide inspection and quality control;	No national strategy on plant protection and pesticide control Mandate and 20 plant inspectors transferred to ABSSA; but without procedures or policies in place to implement pesticide inspection	NSAP developed NFPs identified		Implementation of NSAP		PPR Evaluation and assessment	National Project Coordinator ABSSA NPMC members

Component 3: Strengthening the regulatory framework and institutional capacity for the sound management of pesticides.								
Output	Indicator	Baseline	Milestones and target values				Data Collection and reporting	
			Year 1	Year 2	Year 3	Year 4	Means of verification	Responsibility for data collection
	Resources allocated for implementation and follow up of national strategy	National Committee for the Registration and Control of Phytopharmaceutical products – no post-registration control or access to State budget		National Pesticide Management Committee (NPMC) operational and budgeted workplan announced	Funds for workplan execution provided by government or through designated sustainable funding mechanism	Report on workplan and 10% increase in budget	Reports in line with national strategy reporting requirements	
<u>Output 3.3</u> National capacity for pesticide inspections and post-registration control increased	Number of mandated and trained pesticide inspectors	2 trainers on the FAO Manual of inspection available in CNAC 20 phytosanitary inspectors planned to be transferred in ABSSA; 77 Agents Communaux d'Inspection Phytosanitaire et de la Protection des Végétaux (ACIPV)		Equipment and capacity for pesticide control and two key entry points	Training plan and material, developed # Staff trained (M/F) Min 25% improvement in score		Training modules Training reports Performance tests	
	Number, destination and cost of quality control analyses	Samples sent to Europe, US, with high cost.			Samples sent to regional lab instead of afar, with lower costs tbd	Laboratory invoices		

Appendices

Component 4: Promotion of alternatives to POPs and other hazardous chemical pesticides				
Outcome 4	Outcome indicators and targets	Baseline	Milestones	Assumptions
IPM alternatives to conventional pesticides successfully promoted and the use of chemical pesticides and highly hazardous pesticides reduced.	(i) number of farmers trained on IPM alternatives through Farmer Field Schools (ii) % Reduction in pesticide use on cotton and other crops among trained farmers (targets to be determined in PY1-2)	(i) No bio-pesticides are currently registered (law for bio-pesticides is currently in process of adoption) (ii) A total of 55 alternatives have been identified, 37 short-term and 15 long-term alternatives. Among the 37 short-term, 9 are cultural methods already applied in vegetable production, 6 are Integrated Pest Management (IPM) on cassava, maize, banana and vegetables; (iii) Succesfull expereinces to grow cotton without chemical use under OPEBAB project	**Year 1:** Database on pest and pesticide managemnt completed and gaps in baseline filled **Year 2:** Alternatives identified and field-tested **Year 3:** Extension agents trained **Year 4:** Farmers trained	Government institutions, NGOs, and private sector willing to cooperate for integrated pest and pesticides management to reduce crop losses due to pest and diseases and negative impact to human health and environment caused by pesticides Extension services are enabled (time and transport) to train and assist farmers in the use of alternative management practices. Adherence of stakeholders to demonstrations of selected alternatives; Participation of relevant institutions and structures in tests for the confirmation of results of alternatives;

Output	Indicator	Baseline	Milestones and target values				Data Collection and reporting	
			Year 1	Year 2	Year 3	Year 4	Means of verification	Responsibility for data collection
4.1 Potential alternatives to endosulfan, POPs and other obsolete pesticides identified and an action plan for field testing, registration and promotion agreed	Number of best practices identified. Target 1 biopesticide (Extent of use or testing of the selected practices will be known after the first year data of farm typology)	55 alternatives identified - Assessment report Experience of IITA on biological control Proven IPM alternative pest management practices and extension agents trained under GIPD/GEF[1] project 5 biological pesticides authorized by Sahel Pesticides Committee (CSP)	Baseline data on the use of pesticides and other pest control practices completed Alternative management practices and Plant Production Products identified	Action plan including the proposed IPPM alternatives and training plan endorsed			The Action Plan	National Project Coordinator IITA Extension agents Farmer/producer associations

[1] EP/INT/606/GEF – Reducing Dependence on POPs and other Agro-Chemicals in the Senegal and Niger River Basins through Integrated Production, Pest and Pollution Management

Output	Indicator	Baseline	Milestones and target values				Data Collection and reporting	
			Year 1	Year 2	Year 3	Year 4	Means of verification	Responsibility for data collection
4.2 Identified alternatives to endosulfan, POPs and other obsolete pesticides tested for their technical and economic feasibility at farm level	Number of Plant Protection Products field tested	Network of 208 farmers representatives of farm profiles established in 2012 IITA and other research centres testing various alternatives		Field experiments on alternatives carried out	Field experiments on alternatives Assessment of the second year field experimental data	Assessment of the value chain (import, local production, distribution, availability to farmers) of alternative Plant Production Products (PPPs) in order to make them available to farmers	Scientific Reports field experiments Workshop reports	National Project Coordinator IITA Extension department and agents Farmer/producer associations
4.3 Viable alternatives to endosulfan, POPs and other obsolete pesticides are promoted	Number of female and male farmers trained in FFs	FAO expertise in the area of Farmer Field School in the region for the reduction of pesticides and promotion of alternatives to pesticides (GIPD/GEF Project) OBEPAP project on organic cotton and Farmer Field Schools	Training and promotion strategy developed	TOT curriculum revision to include testing of PPPs and new management practices	Training of Master Trainers (ToT) Establishment of Farmer field Schools (FFSs)	Establishment of Farmer field Schools (FFSs)	PPR Training modules FFS reports	National Project coordinator Extension department and agents OBEPAB NGOs
Component 5: Monitoring and Evaluation								

APPENDIX 2 PROVISIONAL WORKPLAN

Output	Activities	Responsible entity	Year 1				Year 2				Year 3				Year 4			
			Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
Component 1: Safe disposal of POPs and other obsolete pesticides and remediation of heavily contaminated sites																		
Output 1.1: Up to 200 tonnes of POPs pesticides and other obsolete pesticides safely destroyed in line with the Basel Convention	1.1.1 CLI outreach and inventory of private sector stocks plus update of the EA and EMP to dispose of 200 tons of obsolete pesticides and associated wastes	CropLife, Task Team	X	X	X	X												
	1.1.2 Safeguarding of up to 200 tonnes of obsolete pesticides and associated wastes	CropLife, Contractor					X	X	X	X	X	X						
	1.1.3 Disposal of obsolete pesticides and associated wastes	Contractor											X	X	X	X	X	X
Output 1.2 Risks from highly contaminated sites quantified, remediation strategies developed and implemented	1.2.1 Rapid environmental assessment of heavily contaminated sites and prioritisation for action	National project team Technical experts	X	X	X	X												
	1.2.2 Development of Conceptual Site Model for highest risk locations (based on REA results) and site-specific remediation /risk reduction plans for selected sites	Technical experts			X	X	X	X	X	X								
	1.2.3 Implementation of remediation /risk reduction plans for selected sites	Technical experts									X	X	X	X	X	X	X	X
Component 2: Development and implementation of empty pesticides containers management system																		
Output 2.1 : Design and validation of a management scheme for empty pesticide containers	2.1.1 Needs assessment and situation analysis:	National project team	X	X	X	X												
	2.1.2 Identification of collection,	National project			X	X												

Output	Activities	Responsible entity	Year 1				Year 2				Year 3				Year 4			
			Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
completed	processing centers, transport, temporary storage facilities per village and final storage per Department	team																
	2.1.3. Assessment and identification of national or regional facility for processing and recycling of different types empty containers (based on finding in 2.1.1 and 2.1.2)	National project team				X												
Output 2.2 : The empty pesticide container management scheme implemented in Alibori and Borgho departments	2.2.1 Education of 208 farmers about the risks associated with empty pesticide containers and techniques for triple rinsing and spray of rinsed residues in the field	Depart. Extension National project team					X	X	X	X								
	2.2.2 Collection, processing (separation of different types of containers) centers, transport, temporary storage facilities per village and final storage per Department	Farmers network Croplife								X	X	X	X	X				
	2.2.3 Evaluation of the implementation of empty containers management scheme and recycling strategy	National project team Croplife													X	X	X	X
	2.2.4 Plan of action for scaling up the strategy for the management of empty containers	National project team													X	X	X	X
Component 3: Strengthening the regulatory framework and institutional capacity for sound management of pesticides throughout their lifecycle.																		
Output 3.1 National legislation and regulations for registration and control of pesticides	3.1.1 Drafting of the legislation, decrees and orders	National and international experts	X	X	X	X	X	X	X	X								
	3.1.2 Consultation and review of drafts	ABSSA, National Project Coordinator							x	x								

Output	Activities	Responsible entity	Year 1				Year 2				Year 3				Year 4			
			Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
revised in line with international obligations and the regional CILSS-ECOWAS-UEMOA common system and submitted to Government for approval	3.1.3 Submission of revised legislation to Government for approval	ABSSA									X	X						
Output 3.2 A National Strategy/Action Plan (NSAP) for inspection and quality control of pesticides developed and resourced and National Pesticide Management Committee established	3.2.1 Stakeholder validation of the strategy	ABSSA	X	X	X	X												
	3.2.2 National workshop to review and adapt strategy, including establish NPMC	ABSSA	X	X	X	X												
	3.2.3 Training and support for NPMC	Technical experts																
Output 3.3 National capacity for pesticide inspections and post-registration control increased	3.3.1 Development of the training plan and material, for the inspection and control of pesticides	National Project Coordinator					X	X	X	X								
	3.3.2 Equipment of two entry points for the inspection and quality control of pesticides	National project team Gov counterparts					X	X	X	X								
	3.3.3 Training of staff on inspection and control of pesticides	National project team					X	X	X	X	X	X	X	X				
	3.3.4 Evaluation of the most cost	National project			X	X	X	X										

Output	Activities	Responsible entity	Year 1				Year 2				Year 3				Year 4			
			Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
	effective strategy to analyze pesticide quality: use of regional or international laboratory versus upgrading of national laboratory	team																
Component 4: Promotion of alternatives to POPs and other hazardous chemical pesticides																		
Output 4.1. Potential alternatives to endosulfan, POPs and other obsolete pesticides identified and an action plan for field testing, registration and promotion agreed	4.1.1 Continue collection of data on pest control practices using the 208-farmers-network derived from typology of farming system.	National project team Farmer network	X	X	X	X												
	4.1.2 Uploading, analysis of collected data in pest control practices using Pest Control Monitoring and Management system	National project team		X	X	X												
	4.1.3 Identification of potential Plant Production Products (PPPs) and/ or other practices as alternatives control methods to POPs and other hazardous chemical pesticides.	National project team			X	X												
	4.1.4 Stakeholders workshop to agree on the identified potential alternatives and the strategy for field testing, registration and promotion.	National Project Coordinator				X												
Output 4.2 Identified alternatives to endosulfan, POPs and other obsolete pesticides are tested for their technical and economic feasibility in the region.	4.2.1 Develop (IITA), West African Pesticides Registration Committee (WAPRC) and PIP-COEACP protocols to conduct efficacy trials of identified alternatives	IITA, WAPRC, PIP COEACP					X	X	X	X								
	4.2.2 Conduct field experiments on selected alternatives to confirm their economic and technical feasibility	IITA					X	X	X	X	X	X	X	X				
	4.2.3 Evaluation of value chain	IITA													X	X	X	X
	4.2.4 Submission to WAPRC for registration of the proven alternatives to endosulfan, POPs and other obsolete	IITA								X	X	X	X	X	X	X	X	X

Output	Activities	Responsible entity	Year 1				Year 2				Year 3				Year 4			
			Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
	pesticides																	
Output 4.3. Viable alternatives to endosulfan, POPs and other obsolete pesticides are promoted	4.3.1 Conduct training of trainers (ToT) of extension agents, farm advisers and lead farmers on proven alternative methods	National project team Department of extension						X	X	X	X	X						
	4.3.2 Conduct Farmer Field Schools (FFSs)	National project team Department of extension Farmer network									X	X	X	X	X	X	X	X
	4.3.3 Preparation and implementation of communication strategy on the impact of pesticides empty containers on human health and environment and promotion of the registered alternatives	National project team Department of extension Farmer network			X	X	X	X	X	X	X	X	X	X	X	X	X	X
Component 5: Monitoring and Evaluation																		
5.1 Preparation of project progress reports		National Project Coordinator		X		X		X		X		X		X		X		X
5.2 Mid-term and Final Evaluations		FAO Evaluation Office								X								X
5.3 Project “best-practices” and “lessons-learned” disseminated via publications and other means to be identified in the communication strategy		Project Management Unit (NPC), FAO LTO/LTU.																

APPENDIX 3 RESULTS BUDGET

	Expenditures by Component								Expenditure by Year				
Oracle Code	Description (ORACLE)	Units	No. of units	Unit Cost	Component 1: Disposal and Remediation		Total GEF		Year 1	Year 2	Year 3	Year 4	Total
					1.1	1.2							
5300	SALARIES PROFESSIONAL												
5570	CONSULTANTS												
5542	INTERNATIONAL CONSULTANTS												
	EMP and Contract (OPs)	Month	1	12,000	12,000		12,000		12,000				12,000
	Safeguarding and disposal monitoring	Month	1.5	12,000	18,000		18,000			9,000	9,000		18,000
	Contaminated site assessment, EMP, tender and monitoring implementation	Month	2.5	12,000		30,000	30,000		10,000	10,000	10,000		30,000
5542	Sub-total (international)				30,000	30,000	60,000		22,000	19,000	19,000	0	60,000
5543	NATIONAL CONSULTANTS												
	National Project Coordinator	Month	16	3,000	24,000	24,000	48,000		12,000	12,000	12,000	12,000	48,000
	Contaminated sites	Month	4	1,200		4,800	4,800		1,200	1,200	1,200	1,200	4,800
5543	Sub-total (national)				24,000	28,800	52,800		13,200	13,200	13,200	13,200	52,800
5570	TOTAL CONSULTANTS				54,000	58,800	112,800		35,200	32,200	32,200	13,200	112,800
5900	TRAVEL												
	International				14,000	16,500	30,500		12,500	9,000	9,000	0	30,500
	National + national teams				12,000	9,000	21,000		6,000	9,000	3,000	3,000	21,000
5900	TOTAL TRAVEL				26,000	25,500	51,500		18,500	18,000	12,000	3,000	51,500
5920	TRAINING												
5650	CONTRACTS												
	Disposal				500000		500,000			0	500,000		500,000
	Soil analysis					30,000	30,000			30,000	0		30,000
	Contaminated sites remediation					117500	117,500				60,000	57,500	117,500
5650	Contracts budget				500,000	147,500	647,500		0	30,000	560,000	57,500	647,500
6000	EXPENDABLE PROCUREMENT												
	Personal Protective Equipment					15700	15,700		15,700				15,700
	IT (consumables)					5000	5,000		5,000				5,000
6000	Expendable procurement				0	20,700	20,700		20,700	0	0	0	20,700
6100	NON-EXPENDABLE PROCUREMENT												
	Soil sampling equipment						0		0				0
6100	TOTAL Non expendable procurement				-	-	0		0	0	0	0	0
6300	GENERAL OPERATING EXPENSES												
	Car hire + other GOE				10,000	10000	20,000		5,000	5,000	5,000	5,000	20,000
6300	TOTAL GOE				10,000	10,000	20,000		5,000	5,000	5,000	5,000	20,000
TOTAL	Component 1				590,000	262,500	852,500		79,400	85,200	609,200	78,700	852,500

	Expenditures by Component						Expenditure by Year					
Oracle Code	Description (ORACLE)	Units	No. of units	Unit Cost	Component 2: Container Management		Total GEF		Year 1	Year 2	Year 3	Year 4	Total
					2.1	2.2							
5300	SALARIES PROFESSIONAL												
5570	CONSULTANTS												
5542	INTERNATIONAL CONSULTANTS												
	Communication consultant	Month	2	12,000	24,000		24,000		*24,000*				24,000
	Legal consultant	Month	1.5	12,000	18,000		18,000		*18,000*				18,000
	Container Management	Month	4	12,000	24,000	24,000	48,000		24,000	12,000	12,000		48,000
5542	Sub-total (international)				66,000	24,000	90,000		66,000	12,000	12,000	-	90,000
5543	NATIONAL CONSULTANTS												
	National Project Coordinator	Month	8	3,000	12,000	12,000	24,000		12,000	4,000	4,000	4,000	24,000
	Legal consultant	Month	1.5	4,000	6,000	-	6,000		6,000				6,000
	Container Management	Month	2	3,000	3,000	3,000	6,000		3,000	1,500	1,500		6,000
5543	Sub-total (national)				21,000	15,000	36,000		21,000	5,500	5,500	4,000	36,000
5570	TOTAL CONSULTANTS				87,000	39,000	126,000		87,000	17,500	17,500	4,000	126,000
5900	TRAVEL												
	International				14,000	7,000	21,000		14,000	3,500	3,500		21,000
	National + national teams				8,000	8,000	16,000		8,000	4,000	4,000	0	16,000
5900	TOTAL TRAVEL				22,000	15,000	37,000		22,000	7,500	7,500	0	37,000
5920	TRAINING												
5650	CONTRACTS												
	Communications campaign				10,000	10,000	20,000		10,000	0	5,000	5,000	20,000
	Container Management					26,000	26,000			9,000	8,500	8,500	26,000
5650	TOTAL CONTRACTS				10,000	36,000	46,000		10,000	9,000	13,500	13,500	46,000
6000													10,000
	Personal Protective Equipment				10,000		10,000		10,000				10,000
	IT (computers, printers)						0						0
6000	Expendable procurement Budget				10,000	0	10,000		10,000	0	0	0	10,000
6100	NON-EXPENDABLE PROCUREMENT												
	Container processing equipment				15,000		15,000		15,000				15,000
6100	TOTAL Non expendable procurement				15,000	-	15,000		15,000	0	0	0	15,000
6300	GENERAL OPERATING EXPENSES												
	Strategy workshop/consultations				10000		10,000		10,000				10,000
	Car hire + other GOE				10,000		10,000		10,000				10,000
6300	TOTAL GOE				20,000	-	20,000		20,000	-	-	-	20,000
TOTAL	Component 2				164,000	90,000	254,000		164,000	34,000	38,500	17,500	254,000

	Expenditures by Component									Expenditure by Year				
Oracle Code	Description (ORACLE)	Units	No. of units	Unit Cost	Component 3: Capacity Building			Total GEF		Year 1	Year 2	Year 3	Year 4	Total
					3.1	3.2	3.3							
5300	SALARIES PROFESSIONAL													
5570	CONSULTANTS													
5542	INTERNATIONAL CONSULTANTS													
	Legal	Month	2	12,000	24,000			24,000		12,000	12,000			24,000
	Pesticide Management (inspection and information	Month	1.5	12,000		9,000	9,000	18,000		9,000	9,000			18,000
	Pesticide Q/C labororatory	Month	1	12000			12,000	12,000		12,000				12,000
5542	Sub-total (international)				24,000	9,000	21,000	54,000		33,000	21,000	-	-	54,000
5543	NATIONAL CONSULTANTS													
	National Project Coordinator	Month	8	3,000	8,000	8,000	8,000	24,000		6,000	6,000	6,000	6,000	24,000
	Legal consultant	Month	2	4,000	8,000			8,000		4,000	4,000			8,000
	Pesticide management	Month	3	3,000	3,000	3,000	3,000	9,000		4,500	4,500			9,000
5543	Sub-total (national)				19,000	11,000	11,000	41,000		14,500	14,500	6,000	6,000	41,000
5570	TOTAL CONSULTANTS				43,000	20,000	32,000	95,000		47,500	35,500	6,000	6,000	95,000
5900	TRAVEL													
	International				6,000	9,000	6,000	21,000		8,000	7,000	3,000	3,000	21,000
	National + national teamsand workshp participants				5,000	10,000	5,000	20,000		10,000	10,000			20,000
5900	TOTAL TRAVEL				11,000	19,000	11,000	41,000		18,000	17,000	3,000	3,000	41,000
5920	TRAINING													
5650	CONTRACTS													
5650	TOTAL Contracts				-	-	-	0				-	-	0
6000	EXPENDABLE PROCUREMENT													
	Personal Protective Equipment						10000	10,000		10,000				10,000
6000	Expendable procurement Budget				0	0	10,000	10,000		10,000	0	0	0	10,000
6100	NON-EXPENDABLE PROCUREMENT													
	IT (computers, printers)						5000	5,000		5,000				5,000
	Pesticide sampling equipment						15000	15,000		15,000				15,000
6100	TOTAL Non expendable procurement				-	-	20,000	20,000		20,000	-	-	-	20,000
6300	GENERAL OPERATING EXPENSES													
	National Strategy workshop/consultations/ training					15000		15,000			15,000			15,000
	Car hire + other GOE					2500		2,500			2,500			2,500
6300	TOTAL GOE				-	17,500		17,500		-	17,500	-	-	17,500
TOTAL	COMPONENT 3				54,000	56,500	73,000	183,500		95,500	70,000	9,000	9,000	183,500

	Expenditures by Component								Expenditure by Year				
Oracle Code	Description (ORACLE)	Units	No. of units	Unit Cost	Component 4: Alternatives			Total GEF	Year 1	Year 2	Year 3	Year 4	Total
					4.1	4.2	4.3						
5300	SALARIES PROFESSIONAL												
5570	CONSULTANTS												
5542	INTERNATIONAL CONSULTANTS												
	Pest and Pesticide Management	Month	3	12,000	12,000		24,000	36,000	12,000		12,000	12,000	36,000
	Communications Alternatives	Month	1	12,000			12,000	12,000				12,000	12,000
	Typology and data collection	Month	3	12,000	18,000	18,000		36,000	12,000	12,000	12,000		36,000
5542	**Sub-total (international)**				**30,000**	**18,000**	**36,000**	**84,000**	**24,000**	**12,000**	**24,000**	**24,000**	**84,000**
5543	NATIONAL CONSULTANTS												
	National Project Coordinator	Month	12	3,000	12,000	12,000	12,000	36,000	9,000	9,000	9,000	9,000	36,000
	Communications	Month	2	3,000			6,000	6,000				6,000	6,000
	Typology and data collection development	Month	6	3,000	9,000	9,000		18,000	9,000	4,500	4,500		18,000
5543	**Sub-total (national)**				**21,000**	**21,000**	**18,000**	60,000	**18,000**	**13,500**	**13,500**	**15,000**	**60,000**
5570	**TOTAL CONSULTANTS**				**51,000**	**39,000**	**54,000**	**144,000**	**42,000**	**25,500**	**37,500**	**39,000**	**144,000**
5900	TRAVEL												
	International				14,250	14,250	14,250	42,750	**14,250**	**10,000**	**10,500**	**8,000**	42,750
	National consultants				4,000	4,000	14,250	22,250	**4,000**	**2,250**	**8,000**	**8,000**	22,250
	Enumerators				6,000	6,000		12,000	6,000		6,000		**12,000**
5900	**TOTAL TRAVEL**				**24,250**	**24,250**	**28,500**	77,000	**24,250**	**12,250**	**24,500**	**16,000**	**77,000**
5650	CONTRACTS												
	Typology, field data collection & training				10,000			10,000	10,000				10,000
	IPM implementation & training						50,000	50,000			50,000		50,000
	Communication Strategy					20,000		20,000			20,000		20,000
5650	**TOTAL Contracts**				**10,000**	**20,000**	**50,000**	80,000	**10,000**	**0**	**70,000**	**0**	**80,000**
6000	EXPENDABLE PROCUREMENT												
	Survey materials				5,000			5,000	5,000				5,000
6000	**Expendable procurement Budget**				**5,000**	**0**		5,000	**5,000**	**0**	**0**	**0**	**5,000**
6100	NON-EXPENDABLE PROCUREMENT												
6300	GENERAL OPERATING EXPENSES												
	General Operating Expenses				**2,500**	**2,500**	**2,500**	7,500	**2,500**	**1,250**	**2,500**	**1,250**	7,500
6300	**TOTAL General Operating Expenses**				**2,500**	**2,500**	**2,500**	7,500	**2,500**	**1,250**	**2,500**	**1,250**	7,500
TOTAL	**Component 4**				**92,750**	**85,750**	**135,000**	**313,500**	**83,750**	**39,000**	**134,500**	**56,250**	**313,500**

	Expenditures by Component											Expenditure by Year			
Oracle Code	Description (ORACLE)	Units	No. of units	Unit Cost	Component 5: M&E				Project Management	Total GEF		Year 1	Year 2	Year 3	Year 4
					5.1	5.2	5.3	TOTAL	TOTAL						
5300	SALARIES PROFESSIONAL														
	Budget and Operations Officer	Month	12	8,785				-	103,584	103,584		25,896	25,896	25,896	25,896
5300	TOTAL SALARIES PROFESSIONAL				-			-	103,584	103,584		25,896	25,896	25,896	25,896
5570	CONSULTANTS														
5542	INTERNATIONAL CONSULTANTS														
	Evaluation expert(s)	Lumpsum				60,000		60,000		60,000			30,000		30,000
5542	Sub-total (international)				-	60,000	-	60,000	-	60,000		0	30,000	0	30,000
5543	NATIONAL CONSULTANTS														
	National Project Coordinator	Month	4	3,000	3,000	6,000	3,000	12,000		12,000		3,000	3,000	3,000	3,000
	National Admin Assistant	Month	0	1,937				-	-	0					
5543	Sub-total (national)				3,000	6,000	3,000	12,000	-	12,000		3,000	3,000	3,000	3,000
5570	TOTAL CONSULTANTS				3,000	66,000	3,000	72,000	-	72,000		3,000	33,000	3,000	33,000
5900	TRAVEL														
	Evaluation experts					19,000		19,000		19,000			9,500		9,500
	Workshop participants					10,000		10,000		10,000			5,000		5,000
5900	TOTAL TRAVEL				0	29,000	0	29,000	0	29,000		0	14,500	0	14,500
5920	TRAINING														
6300	GENERAL OPERATING EXPENSES														
	Inception and closing workshop, PSC meetings					20,000		20,000		20,000		8,000	2,000	2,000	8,000
	miscellaneous						1,916	1,916		1,916		479	479	479	479
6300	TOTAL General Operating Expenses				-	20,000	1,916	21,916	-	21,916		8,479	2,479	2,479	8,479
TOTAL					3,000	115,000	4,916	122,916	103,584	226,500		37,375	75,875	31,375	81,875

Appendices

APPENDIX 4 DRAFT TERMS OF REFERENCE

National Project Coordinator (NPC)

Under the overall supervision of the Directorate of Agriculture (DAGRI) of Benin, the FAO Budget Holder and the PSC, and with direct technical support and guidance from the LTO, the National Project Coordinator will be responsible for:

- Coordinating all project activities at national level;
- Under the guidance and direction of the LTO, implement monitoring and evaluation activities at national level;
- In accordance with approved annual work plans and budgets, organize and facilitate national workshops, training exercises and official meetings;
- Supervise national consultants and contracts;
- Preparation of project progress reports;
- Liaise with relevant national organizations and partners and support communication, coordination and collaboration;
- Draft annual work plans and budget revisions for approval by PSC, BH and LTO
- Compile information on co-financing from national partners; and
- Perform other related duties as required.

Requirements:

1. University degree in Agronomy and / or plant protection or integrated pests and pesticide management pest or in a related subject matter;
2. Five years of relevant professional experience;
3. Excellent oral and written communication skills in French andEnglish;
4. Familiarity with pest and pesticide management issues in the country;
5. At least two years project management/coordination experience;

EMP and tender development (OPs)

Under the supervision of the National Project Coordinator and FAO Budget Holder, with technical guidance from the FAO Lead Technical Officer, and in close cooperation with Croplife International (CLI), the consultant(s) will undertake the following:

- Review the environmental management plans (EMP) developed by the Contractor for the safeguarding operation, including health and safety procedures, and all safeguarding procedures (packaging materials, labelling, etc)
- Train national team to monitor the safeguarding operations of CLI for conformance to EMP, EMTK standards and in conformance of International Maritime Dangerous Goods Code
- Train national team to monitor the compilation of the inventory and weights of the safeguarded stocks
- Develop detailed tender specifications for the export and destruction of the safeguarded obsolete pesticides
- Supervise, monitor and witness the acceptance of the waste by the contractor and the storage in shipping containers
- Provide guidance and support to the PC and Contractor in their preparation of the documentation needed under the Basel Convention for disposal of stocks

Requirements:

1. A degree in chemistry, environmental science or a related subject;
2. At least 10 years of relevant working experience;

3. Experience of developing EMP's in relation to safeguarding operations;
4. Understanding of international standards and good practice in relation to safeguarding operations;
5. Experience of safeguarding pesticides.
6. Ability to work in French and English.

International Consultant: Contaminated site assessment and EMP development
Under the direct supervision of the National Project Coordinator and FAO BH, and with technical guidance from FAO Lead Technical Officer, the consultant will be responsible for the following activities in accordance with the procedures set out in EMTK volume 5:

- Train the national team and lead them in the intrusive investigations of the prioritized sites including implementation of the sampling plans.
  - Following the completion of the sampling and analysis programme, develop final conceptual site models and site specific Environmental Management Plans (EMPs);
  - Develop site specific risk reduction / remediation strategies based on risk management approach;
  - Complete site specific technology assessment for the treatment of the contaminated materials based on technical and economic feasibility assessment.

Present and discuss with the national counterparts the site specific proposals;

Requirements:

1. Advanced degree in chemistry, geology, environmental science or related subject;
2. Professional qualifications related to waste management.
3. 10 years experience in waste management with a focus on contaminated site assessment;
4. 10 years experience related to implementation of contaminated site remediation;
5. Excellent communication skills in French and English.

International Consultant: Container Management
Under the supervision of the NPC and FAO BH, and with guidance from FAO LTO , the consultant will:

- Supervise the National Consultant to update the report on pesticide containers in Benin on empty pesticide container management for agricultural, livestock and public health pesticides in Alibori and Borgou Departments, including identifying: the annual quantities by type of container by type of farmer and source of supply; current practices for rinsing and disposing of containers; options for sensitizing users to adopt triple rinsing; options for collecting the empty containers and small quantities of unwanted pesticides from users including the local waste management services, dedicated collection points, reverse distribution through the resellers; and identifying and assessing the national waste management and recycling industry to identify potential recycling/disposal options for each of the container materials
- Propose one or more models for establishing and operating a pilot container management collection storage and recycling scheme for the containers generated in Alibori and Borgou Departments, including infrastructure requirements, collection and recycling costs, requirement and costs of any awareness raising activities, institutional arrangements for operating the scheme, its legal basis and perspectives for future sustainable funding mechanisms
- Together with the national consultant, undertake a stakeholder workshop to present the findings of the feasibility study and the proposed model for the establishment of the scheme

- Write a business plan for the agreed pilot scheme, including the detailed set up and operating requirements

Requirements

1. Post-graduate degree in agriculture, environmental sciences, chemistry or related fields;
2. At least 5 years' experience in empty pesticide container management;
3. Knowledge of the pesticide industry and regulatory environment in Benin.
4. Excellent report writing skills in English; working knowledge of either French would be an advantage.

International Consultant: Pesticide Management (inspection and information exchange)
Under the direct supervision of the NPC and FAO BH, and with direct technical guidance from FAO Lead Technical Officer, the consultant will be responsible for the following activities:

- Development of risk based enforcement and sampling procedures:
- Work with customs officials to assess and improve inspection and sampling procedures (e.g. based on FAO Inspectors Manual (Pesticide Inspection and Control)
- Provide guidance, support and monitoring of the implementation of the proposed sampling strategy and procedures
- On information exchange, the consultant will assess both government and private sector inspection and enforcement capacity in order to propose effective information exchange mechanisms:
    - Supervise the national pesticide management consultant to produce report on capacity for inspection (by government and private sector) of pesticides throughout the life-cycle of pesticides from entry point through formulation, storage, distribution, retail and use. The report should identify critical gaps in information exchange for the inspection of pesticides and recommendations for capacity building measures to address them.
    - Provide an overview of mechanisms used in different regions (including Europe or others) for information exchange between regulatory bodies responsible for inspection, monitoring, or other enforcement activities and case studies of the most relevant for Benin

Requirements:

1. Post-graduate degree in agriculture, environmental sciences, chemistry or related fields;
2. At least 5 years experience in pesticide management and/or environmental regulation and risk-based approaches
3. At least 5 years experience in the inspection for quality control of chemical, pharmaceutical or pesticide products
4. Knowledge of pesticide industry in Benin or in similar country
5. Knowledge of international best practice in regulations for inspection of chemical, pharmaceutical or pesticide products
6. Knowledge of international best practice in undertaking inspections of chemical, pharmaceutical or pesticide products
7. Excellent report writing skills in English and French

Pesticide Quality Control (Q/C) laboratory expert
Under the supervision of the NPC, FAO BH and FAO LTO, and in liaison with technical departments and other national stakeholders, the consultant will;

- Undertake in-service assessment and evaluate the needs and requirements for laboratory analysis at Benin laboratory;
    - Run and evaluate the functionality and accuracy of existing chromatographs and other analytical instruments;
    - Run and evaluate the current storage facilities for the analytical standards, solvents and other consumables;
    - Review the existing instruments for the preparation of samples for pesticide residues and quality control of pesticide formulations;
    - Review and assess the current professional skills to ensure proper sampling, storage, preparation, analysis, calculation and interpretations of the results related to quality control of pesticide formulations;
    - Develop a list of materials and equipment, solvents and analytical standards required to ensure the operational activities of the laboratory under its current mandate, along with their order of priority, possible sources and technical specifications;
- Propose a technical profile to be recruited or training curricula required for existing technical staff to ensure the professional activities for quality control of pesticide formulations;
- Assist the laboratory in the implementation of the requirements, including procurement, training, and preparation for external certification

Requirements:

1. Advanced degree in organic chemistry
2. 10 years experience in laboratories and/or quality control of pesticides
3. 5years experience related to laboratory certification and management
4. Ability to work in French and English.

International Consultant Pest and Pesticide Management: Farmer Field Schools (FFSs)
Under the direct supervision of the NPC and FAO BH, and technical guidance by the FAO Lead Technical Officer, the consultant(s) will be responsible for the following activities:

- Review lessons learned through FFSs experience in the country;
- Meet with key stakeholders in the Department of Agriculture and IITA and OPEBAB to discuss implementation arrangements: key geographical areas, identify technical needs in the area of pest identification; participation of extension agents in Training of Trainers (ToT), possible training centers, available expertise for master trainers in the country, etc.
- Map possible other partners among NGOs, farmer organisations and other projects and explore collaboration for the implementation of the training component;
- Visit the identified key areas and meet with extension agents and farmers/ farmer organisations to assess training priorities for the selected crops;
- Develop an implementation plan (complete with operational workplan and indicative budget including suggested plan of activities) for IPM FFSs;
- Propose key elements of a communication strategy to be implemented over the 4 years of the project life.

Requirements:

- Advanced degree in agriculture, statistics, or related subject

- 10 years experience in Farm Field Schools
- 10 years experience related to field demonstration of IPM and non-chemical alternative pest control methods
- Excellent communication skills in French and English.

National Communications Consultant (containers and alternatives) - NGO
Under the direct supervision of the NPC and FAO BH and Lead Technical Officer, the consultant will be responsible for the following activities:

- Consult with project partners and consultants responsible for delivery of outcomes 2 and 4 to understand the project expected results on container management and adoption of alternatives; and the actions and roles of each partner in delivering the outcomes
- Prepare an outline communications plan to achieve the above results, identifying specific communication outcomes (behaviour changes), relevant audiences, key messages and channels, which supports the activities of the implementing partners
- Design and conduct a statistically valid Knowledge, Attitudes and Practices (KAP) survey of the pilot areas to gather baseline, mid-term and final data
- Produce and assist in the dissemination of any communications tools as identified in the plan (publications, media interviews, training, etc)
- Contribute to the Monitoring and Evaluation (M&E) plan as needed (monitor media coverage, produce data for indicators on target audiences etc)

Requirements:

1. Advanced degree in communications, development, psychology, media studies or other relevant subject;
2. 10 years experience in communications for development
3. 2-3 years experience related to agricultural or pesticide awareness raising
4. Excellent communication skills in French and English.

National Consultant – Contaminated sites
Under the direct supervision of the NPC and International Consultant on contaminated sites, the national consultant will be responsible for leading the national team in completing the rapid environmental assessment (REA) field work:

- develop detailed site specific sampling plans including provisional conceptual site models;
- carry out the intrusive investigations of the prioritized sites including implementation of the sampling plans.
- Contribute to the final conceptual site models and site specific Environmental Management Plans (EMPs);

Discuss the site specific proposals with the international consultant and facilitate selection and adoption by the whole national team;

Establish and agree work plans, budgets, and logistical arrangements including contracts with members of the national teams where needed, for the implementation of the site remediation plans

Monitor the results of the site remediation including coordinating laboratory analyses and presentation to national workshops

Requirements:

1. Advanced degree in chemistry, geology, environmental science or related subject;
2. Professional qualifications related to waste management.
3. 5 years experience in waste management with a focus on contaminated sites;
4. Excellent communication skills in French and English.

National Consultant – Container Management

Under the overall supervision of the National Project coordinator and international consultant (Empty Pesticide Container Management), the National Expert (Empty Pesticide Container Management) will support the development of the pilot scheme business plan and establishment of facility. In particular, he/she will:

- Provide desk and field research to update the PPG study into pesticide containers in pilot areas including estimating the current level of practice of "triple rinsing"; national capacity and options for collection and recycling
- Support the stakeholder workshop to present the findings of the assessment and propose options, and develop recommendations for the national container management scheme.
- Maintain contacts with all relevant private sector and government and non-government sectors e.g. at annual stakeholder meetings to review and discuss progress and results in operation of pilot facility to propose and define a sustainable long term model for operation

Requirements

1. Post-graduate degree in agriculture, environmental sciences, chemistry or related fields;
2. At least 5 years experience in container management;
3. Knowledge of the pesticide industry and regulatory environment in Benin.
4. Excellent communication skills in French and English.

National Consultant – Pesticide Management

Under the supervision of the international consultant and NPC, the National Pesticide Expert will undertake an assessment of capacity and activity for inspection of pesticides throughout the life-cycle of pesticides in Benin from entry point through formulation, storage, distribution, retail and use. The review should include both government and private sector inspectors. In particular, he/she will:

- Evaluate inspection actors and activities from government and private sector inspection and pesticide management regional MAEP services responsible for inspection of pesticides, customs inspectors, quarantine officers, other government inspection staff, and private sector inspectors involved in pesticides inspection and quality control.
- Assess information produced, available and shared by each inspection activity including resources – funds, infrastructure and equipment, Guidelines and directives, and current regulations governing inspection at each point of the life-cycle, current manuals, guidelines and checklists for inspection
- Prepare a report for review by the International Consultant (Pesticide Inspection) with recommendation for the network of inspectors to exchange information (who, when what based on the patterns of use of pesticides in the country)
- Perform training with the international consultant for imports inspectors on identification of pesticide products, inspection and sampling methods.

Requirements:

1. Post-graduate degree in agriculture, environmental sciences, chemistry or related fields;

2. At least 5 years experience in pesticide management;
3. Knowledge of the pesticide industry and regulatory environment in Lebanon.
4. Excellent communication skills in French and English.

National Consultant – Farmer Field Schools
Under the direct supervision of the NPC and International Consultant, the consultant(s) will be responsible for the following activities:

- Organise and coordinate training of trainers and FFS activities;
- Support the international consultant to integrate FFSs with farm typology.

Requirements:
1. Advanced degree in agriculture, statistics, or related subject
2. 5 years experience in Farmer Field Schools
3. Excellent communication skills in French and English.

Budget and Operations Officer
Under the direct supervision of the FAO Budget Holder, the Budget and Operations Officer will:

- Ensure smooth and timely implementation of project activities in support of an approved, results-based workplan, through operational and administrative procedures according to rules and regulations of FAO and the donor(s);
- Coordinate the project's operational arrangements through contractual agreements with key project partners;
- Be operationally responsible for Letter of Agreements with relevant project partners;
- Responsible for the day to day management of the project's budget including monitoring of cash availability, and for preparation of budget and project revisions for review by the Budget Holder;
- Responsible for ensuring accurate recording of all relevant data for operational, financial and results-based monitoring;
- Responsible for ensuring that relevant reports on expenditures, forecasts, progress against work-plans, and closure of projects are prepared and submitted in accordance with defined procedures and reporting formats, schedules and communication channels, as required;
- Responsible for accurate and timely actions on all operational requirements for personnel related matters, equipment and materials, and field disbursements;
- Assist with preparation of Terms of Reference of consultants and short-term staff assigned to the project;
- Undertake any other duties as required.

Requirements:
1. Degree in finance or related subject;
2. 5 years experience in project operation and management;
3. Excellent communication skills in French and English.

APPENDIX 5 PROCUMENT PLAN

(to be prepared during project inception period)