



FAO-GEF Project Implementation Review

2019 – Revised Template

Period covered: 1 July 2018 to 31 December 2019



1. Basic Project Data

General Information

Region:	Africa
Country (ies):	Botswana
Project Title:	Demonstration Project for Decontamination of POPs Contaminated Soils Using Non thermal Treatment Methods.
FAO Project Symbol:	GCP/BOT/011/GFF
GEF ID:	3958
GEF Focal Area(s):	Persistent Organic Pollutants
Project Executing Partners:	Botswana Government, Ministry of Agricultural Development and Food Security.
Project Duration:	01 February 2012 – 31 December 2018

Milestone Dates:

Date of Entry into GEF Work Programme (MM/DD/YYYY):	17 March 2010
GEF CEO Endorsement Date:	17 October 2011
Project Implementation Start Date/EOD :	1 February 2012
Proposed Project Implementation End Date/NTE¹:	31 January 2016
Revised project implementation end date (if applicable) ²	31 December 2018
Actual Implementation End Date³:	

Funding

GEF Grant Amount (USD):	1.363
Total Co-financing amount as included in GEF CEO Endorsement Request/ProDoc⁴:	2.34
Total Project Cost:	3.70
Total GEF grant disbursement as	1,082,164

¹ as per FPMIS

² In case of a project extension.

³ Actual date at which project implementation ends/closes operationally -- only for projects that have ended.

⁴ This is the total amount of co-financing as included in the CEO document/Project Document.

of June 30, 2019 (USD m):	
Total estimated co-financing as of June 30, 2019⁵	2.25

Review and Evaluation

Date of Most Recent Project Steering Committee:	21 December 2018
Mid-term Review or Evaluation Date planned (if applicable):	No
Mid-term review/evaluation actual:	2016
Mid-term review or evaluation due in coming fiscal year (July 2018 – June 2019).	No
Terminal evaluation due in coming fiscal year (July 2019 – June 2020).	Yes
Terminal Evaluation Date Actual⁶:	July 2019
Tracking tools required⁷	Yes
Tracking tools date	

Ratings⁸

Overall rating of progress towards achieving objectives/ outcomes:	Satisfactory
Overall implementation progress rating:	Satisfactory
Overall risk rating:	Low

Status

Implementation Status (1st PIR, 2nd PIR, etc. Final PIR):	Final PIR.
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⁵ Please see Section 7 of this report where you are asked to provide updated co-financing estimates. Use the total from this Section and insert here.

⁷ Please note that the Tracking Tools are required at mid-term and closure. At mid-term tracking tools are not mandatory for Medium Sized projects = < 2M USD.

Project Contacts

Contact	Name, Title, Division/Affiliation	E-mail
Project Manager / Coordinator	Molatlhegi Modise, National Project Coordinator	molatlhegi.modise@fao.org
Chief Technical Advisor	Ivy Saunyama, Agricultural Officer, AGPMC	Ivy.Saunyama@fao.org
Lead Technical Officer	Maria Elisabetta Tagliati Lead Technical Officer, AGPMC	elisabetta.tagliati@fao.org
Budget Holder	Gu Baogen Senior Agricultural Officer	Baogen.gu@fao.org
Funding Liaison Officer	Kuena Morebotsane, Technical Officer, CBC	kuena.morebotsane@fao.org

1. Progress towards achieving project objectives and outcomes (cumulative)

Project objective and Outcomes	Description of indicator(s) ⁹	Baseline level	Mid-term target ¹⁰	End-of-project target	Level at 30 June 2019	Progress rating ¹¹
Objective¹² Reduction of risk to public health and environment from pesticides through the detailed characterization, selection of treatment option and decontamination of approx. 18.000 tonnes of POPs and pesticide contaminated soil at the Sebele Farm site and associated sites in Botswana	Inventory of all POPs and pesticide waste completed and environmental risk assessment of contaminated sites finalised	Previous inventory of obsolete stocks out of date and in paper format only. Needs to be systemised and updated applying FAO guidelines	Completed	Risk posed by all POPs and pesticide waste assessed and interventions prioritised	Completed	S

⁹ This is taken from the approved results framework of the project. Please add cells when required in order to use one cell for each indicator and one rating for each indicator.

¹⁰ Some indicators may not identify mid-term targets at the design stage (refer to approved results framework) therefore this column should only be filled when relevant.

¹¹ Use GEF Secretariat required six-point scale system: **Highly Satisfactory** (HS), **Satisfactory** (S), **Marginally Satisfactory** (MS), **Marginally Unsatisfactory** (MU), **Unsatisfactory** (U), and **Highly Unsatisfactory** (HU).

¹² Applicable only for projects with objective level indicators.

	Environmental Assessment (EA) for POPs and pesticide Waste impacts understood.	No EA or impact assessment available	Completed	Assessment of needs for environmentally sound disposal of all wastes (stocks, containers and contaminated sites) and associated Environmental Management Plan (EMP) completed	Completed – EMPs developed and endorsed in 2012	S
	Disposal of all obsolete stocks of pesticides and associated wastes (containers) in accordance with international Best practice.	Collection of some stocks to the Sebele collection point. No detailed inventory or stock management. Materials leaking.	Completed	All pesticide stockpiles (60-80 tonnes) sent for environmentally sound disposal and system for treatment of stockpiled pesticide containers implemented (as defined in the EA / EMP).	28,8 tonnes of obsolete pesticides shipped to UK for high temperature incineration. 35 tonnes of contaminated seeds with no detectable active ingredient levels used as additional organic matter for bioremediation of soils at Sebele	S
	Revised legislation and regulations for life-cycle management of pesticides including disposal of future	Existing legislation fragmented and Need consolidation for the entire pesticides life-cycle.	Recommendations for revised legislation prepared	Comprehensive legislation and regulations in place to allow complete pesticide life-cycle management.	Agrochemicals Act (Pesticides section) reviewed and updated. Draft Bill submitted to Government for	S

	wastes.			Assessment of existing disposal / treatment options completed to determine suitability for future waste management options in Botswana.	approval prior to transmission to Parliament for enactment	
	Treatment of contaminated sites implemented based on the recommendations of the EA / EMP plus the results of pilot scale studies completed in Botswana.	Known contaminated sites briefly described.	EMP completed for each contaminated site	Contaminated sites remediated and risk associated with contamination reduced to acceptable levels.	EMPs completed and endorsed for application in 2012 Target for soil remediation reduced from 18.000 to 450 tonnes, as only one site was prioritized for remediation. Government has already put plans in place to continue monitoring the site until remediation is complete.	S
Outcome 1.1: Characterization of level and type of contamination at contaminated sites	Phase I & II Environmental assessment for problem sites Inventory of existing stocks. Inventory of contaminated Containers.	Knowledge available at Ministry of Agriculture, Plant Protection Division. Partial inventory Available.	Target to be achieved by the end of PY1.	<ul style="list-style-type: none"> • Stores inventoried & sites prioritised according to risk. • Target contaminants identified & quantified • Analytical methods and laboratory requirements selected. • Conceptual model & sampling plan confirmed • Intrusive 	Inventory updated and data uploaded into the PSMS	S

				environmental investigation conducted.		
Outcome 1.2 Commercially available non-thermal treatment options assessed	<p>Environmental assessment completed for all wastes and treatment options.</p> <p>Environmental management plan (EMP) completed for obsolete pesticide stocks, containers and contaminated Sites.</p>	None.	Target to be achieved by the end of 2014.	<ul style="list-style-type: none"> • Soil and ground water targets confirmed. • Appropriate bio-remediation technique(s) assessed. • Bio-remediation strategies for the 2 major contaminated locations (over 2000) completed. 	<p>EMPs completed and endorsed for application in 2012</p> <p>Target for soil remediation reduced from 18000 to 450 tonnes, as only one site was prioritized for remediation</p> <p>Remediation commenced for the site where burnt warehouse used to stand at Sebele</p>	S
Outcome 1.3 Existing obsolete stocks and stockpiles of contaminated containers safe-guarded and disposed of	<p>Obsolete stocks safeguarded.</p> <p>Contaminated containers Collected and packed.</p> <p>Obsolete stocks & contaminated containers sent For disposal / recycling.</p>	Collection of some stocks to the Sebele Collection point. No detailed inventory or Stock management.	EMP completed	<ul style="list-style-type: none"> • Minimum of 30 tonnes of obsolete stocks and associated wastes sent for disposal. • 2000 contaminated containers sent for disposal / recycling. 	<p>28,8 tonnes of obsolete pesticides shipped to UK for high temperature incineration.</p> <p>35 tonnes of contaminated seeds with no detectable active ingredient levels used as additional</p>	S

				<ul style="list-style-type: none"> • Strategy for long term pesticide container management developed. 	<p>organic matter for bioremediation of soils at Sebele</p> <p>Preliminary feasibility study for a sustainable container management strategy completed in 2012</p> <p>Business model for the national empty container management strategy developed in 2017</p>	S
Outcome 2.1 Revised pesticide and waste management legislation in place	Amended legislation for future management of pesticide wastes drafted and adopted by government with emphasis on local treatment of wastes Including pesticide container management strategy developed and operational.	Revision and updating of pesticide legislation needed. Out of date waste management legislation. Limited legislation relating to hazardous Waste.	Recommendations for revised legislation prepared	<ul style="list-style-type: none"> • Legislation for pesticide life-cycle reviewed and gaps in current legislation addressed. • Assessment of current options for pesticide waste management and benchmarking against international standards. • 2 members of Govt. staff completed FAO / UCT course on pesticide risk reduction under the project (with an additional funded by the Government) 	<p>Agrochemicals Act (Pesticides section) reviewed and updated.</p> <p>Draft Bill submitted to Government for approval prior to transmission to Parliament for enactment</p>	S

Outcome 2.2 Deployment of systems supporting life-cycle management of pesticides instituted	<p>Pesticide life-cycle gap analysis completed.</p> <p>PSMS installed and Operational; and all registered pesticides loaded into the system.</p> <p>Training course developed for all pesticide and customs inspectors</p>	<p>No central data base for tracking of new pesticide imports once products are Registered. No training of inspectors to identify banned / Illegal products.</p>	<p>Pesticide life-cycle gap analysis completed.</p> <p>Registered Pesticides entered into PSMS and Plant protection staff trained</p>	<ul style="list-style-type: none"> • Complete pesticide life-cycle analysis Completed. • 4 government personnel trained in PSMS. FAO PSMS system used as the central register for pesticide regulation and tracking of new imports. • 10 pesticide inspectors and plant protection staff trained (ToT). 	<p>Over 30 staff members trained in PSMS, HHP risk reduction, fast track registration of biopesticides and FAO Pesticide Registration Toolkit cumulatively over the project duration.</p> <p>Two Government staff members successfully completed DPRM in 2012</p>	S
Outcome 2.3 Review of pest control strategies and promotion of less toxic alternatives to pesticides promoted	<p>Assessment of current pest management strategies and Pesticide usage patterns completed.</p> <p>Policy on pesticide use amended to reduce numbers Of Class 1 and 2 pesticides registered.</p>	<p>No data on amounts of highly hazardous pesticides (HHPs) entering the country and assessment of Lower risk alternatives.</p>	<p>Baseline Review of pest management practices undertaken</p>	<ul style="list-style-type: none"> • Opportunities for integrated pest management (IPM) in subsistence and commercial production assessed. • 50% of Class 1 (WHO) pesticides deregistered for use in Botswana. 	<p>HHP identification, needs and risk assessment completed (combined HHP and KAP survey), risk mitigation developed</p> <p>A total of 33 registered products,</p>	S

	Changes to registered list to de-register products.				<p>containing 10 active ingredients, and constituting six percent of registered products were identified as HHPs</p> <p>A review of pest and pesticide management in Botswana was conducted in 2018, and culminated in the drafting of the Pest and Pesticide Management Strategy, which had the provisions for a National Pest and Pesticide Management Policy</p>	
Outcome 2.4 Communications and awareness programme	Development of communications strategy and national stakeholder workshop. Community education materials in use by target groups.	Limited community awareness on pesticide risks and safe use.	Communications strategy developed	5 communications messages developed with a focus on safe use of pesticides. Communications and awareness materials delivered to 10 target groups. Behavioural change in target groups assessed (reduced use of HHPs)	<p>A complete pesticide risk communication strategy was developed and endorsed by stakeholders in 2018</p> <p>Various communication materials targeting various audiences were developed, including</p>	S

					pamphlets, videos and billboards	
Outcome 3.1 Soil Treatment option selected.	Trial of selected treatment option(s) (bench-top, laboratory). Pilot scale trials of treatment options. Updating of EMP for site remediation based on pilot studies.	None	To be initiated in year 3	<ul style="list-style-type: none"> Assessment of 5 treatment options. Cost and technical feasibility study finalised. <p>Most appropriate option for each site confirmed.</p>	Conceptual Site Models and EMPs developed and endorsed	S
Outcome 3.2: Contaminated soil treated.	Issue of tender and selection of remediation contractor. Implementation of remediation strategy.	None	To be initiated in Year 4	<ul style="list-style-type: none"> Two highest risk sites excavated and soil decontaminated. Approx. 18,000 tonnes of materials treated. <p>Soil and/ or ground water validation analysis showing measured levels beneath target levels.</p>	Only Sebele site remediated. Soil excavated and treated in situ, within the Sebele compound	S

Outcome 4.1.: M&E systems in place	FAO M&E tracking tool operational. Health surveillance data kept for all operational staff.	None		<ul style="list-style-type: none"> Integrated work and M&E plan developed. Monthly reporting on progress. 	The work plan established and being regularly updated. PIRs submitted annually since 2012	S
Outcome 4.2: Project components implemented effectively and efficiently	Impact monitoring plan developed and implemented	None	Impact Monitoring plan	Set of impact monitoring criteria developed and used to assess quality of implementation.	Projects components being implemented satisfactorily.	S
Outcome 5.1: Institutional arrangements	Institutional arrangements confirmed. Steering Committee (SC) and PMU operational. SC meeting reports available.	None	Institutional arrangements operational	Inter-ministerial management of project (Agriculture, Environment and Health). Regular assessment of progress by Steering Committee.	Steering Committee and PSC did not meet as regularly as envisaged	S
Outcome 5.2 Planning and management	Annual work plans developed. Annual work plans updated and approved. Procurement plan approved.	None	Work plans developed and operational	Fully integrated annual work plan to include log frame and critical path analysis (time line) developed and maintained. Procurement plan developed highlighting major contracts and purchases and the time line for their supply.	The work plan established and being regularly updated.	S

Action plan to address MS, MU, U and HU rating ¹³

Outcome	Action(s) to be taken	By whom?	By when?

¹³ To be completed by Budget Holder and the Lead Technical Officer

2. Progress in Generating Project Outputs

Outputs ¹⁴	Expected completion date ¹⁵	Achievements at each PIR ¹⁶							Implement. status (cumulative)	Comments. Describe any variance ¹⁷ or any challenge in delivering outputs
		1 st PIR	2 nd PIR	3 rd PIR	4 th PIR	5 th PIR	6th PIR	Final PIR (7th)		
Characterization of level and type of contaminated sites										
Output 1.1.1. Characterisation of type and level of contamination	30/8/2018					Contamination characterised	Done, except where burned warehouse stood.	Characterization done for all the sites including the site where burnt warehouse used to stand	75%	5 potentially contaminated sites were inspected. Only two sites (Sebele and Kasane) selected for further investigations. Sampling confirmed only Sebele required remediation. 28,8 tons of POPs and obsolete pesticides and 35 tons of contaminated seed identified and centralized at Sebele Contamination due to high levels of POPs and Organophosphates.
Output 1.1.2. Inventory of existing stocks	30/6/2013					done			100%	Inventory completed PSMS installed and staff trained but poor internet

¹⁴ Outputs as described in the project logframe or in any updated project revision. In case of project revision resulted from a mid-term review please modify the output accordingly or leave the cells in blank and add the new outputs in the table explaining the variance in the comments section.

¹⁵ As per latest work plan (latest project revision); for example: Quarter 1, Year 3 (Q1 y3)

¹⁶ Please use the same unity of measures of the project indicators, as much as possible. Please be extremely synthetic (max one or two short sentence with main achievements)

¹⁷ Variance refers to the difference between the expected and actual progress at the time of reporting.

										speed and stability has compromised the use of the system.
Output 1.1.3. Inventory of contaminated containers	30/6/2013					Done			100%	All obsolete stock including contaminated containers were inventoried and centralized at Sebele warehouse
Commercially available non-thermal treatment options assessed										
Output 1.2.1. Environmental assessment complete for all wastes	30/6/2013					Done			100%	EIA completed
Output 1.2.2. Environmental management plan completed for Obsolete stocks and Containers	30/9/2013					Done			100%	EMP for obsolete pesticides complete. Feasibility study for container management prepared EPC management strategy developed by consultant August 2017
Output 1.2.3. Environmental management plan completed for contaminated sites	30/12/2013					Done			100%	Two sites investigated and EMP and remediation plans prepared. Only one site requires action. EMP for Sebele site endorsed by Department of Environmental Affairs containing approved environmental strategies and targets in June 2015 Bioremediation work started in February 2017
Existing obsolete stocks and stockpiles of contaminated containers disposed.										

Output 1.3.1. Obsolete stocks safeguarded	30/12/2013						Some empty containers still in various sites across the country	90%	Safeguarding completed for most obsolete pesticides.
Output 1.3.2. Contaminated containers collected and inspected	30/12/2013					Recommendations from the 2012 consultancy on EPCs revisited in August 2017 by the new FAO Consultant, Dr Detlef Dohnert.	Mistender for the equipment to process the empty containers prior to transportation for recycling.	80%	Contaminated containers at collection points across the country remained unprocessed at the time of project closure.
Output 1.3.3. Obsolete stocks & contaminated containers sent for disposal / recycling	30/6/2014					There are no EPC at Sebele currently, but large amounts of EPC are littered around the country with no disposal system in place posing human and environmental risks.		80%	28,8 tn obsolete stocks exported to the UK for high temperature incineration in 2014; 35 tonnes of contaminated seed disposed by land farming in the remediation of contaminated soils at Sebele (as source or organic matter). About 10t obsolete pesticide waste and empty containers destroyed in the accidental fire at the Sebele warehouse in 2016. Though no inventory available for EPC, large amounts are generated around farms with no

										<p>system of disposal nor recycling in place. EPC management strategy and business model for recycling formulated. Pilot phase to test the suitability of the Strategy and Business Model not conducted due to mis-tender with the requisite container management equipment. At project closure Government had advanced plan, budget and staff in place to continue with the ECM pilot.</p> <p>Project personnel conducting awareness campaigns on triple rinsing and the general management of EPCs.</p>
Revised pesticide and waste management legislation in place										
Output 2.1.1. Legislation for future management of pesticides/ POPs waste reviewed and amended	30/12/2020					Process towards review on course despite delayed processes and subdued communication between Project Management Team and the National Project			70%	<p>Legislation reviewed in 2016 and report submitted to government. Attorney General Chambers and MoA to raise a Cabinet Directive for revision of the Act. Attorney General Chambers Drafting the Pesticides Amendment Bill for Presentation to the Parliament. Bill had still not been approved at the time of project closure.</p>

						Coordinator.				
Output 2.1.2. Review and assessment of local disposal options for treatment of pesticide and POPs wastes	30/12/12					Done			100%	Done, bioremediation recommended for organophosphates contaminated area and concrete capping for POPs and EPC recycling
Output 2.1.3. 2 officers from Plant Protection Service complete the FAO course on pesticide risk management hosted by the University of Cape Town in South Africa.	30/12/2012					Done			100%	3 officers trained (2 under project support and 1 with Government funding).
Deployment of systems supporting life-cycle management of pesticides instituted										
Output 2.2.1. Pesticide life-cycle gap analysis completed	30/10/2018					done			100%	Pesticides life cycle gaps identified.
Output 2.2.2. PSMS installed and operational; all registered pesticides loaded into the system.	30/3/13					moderate progress			60%	PSMS installed and staff trained. Wi Fi installation has improved internet connectivity. Government wishes to use PSMS once FAO re-commissions it.
Output 2.2.3. Training course developed for all pesticide and customs inspectors	30/6/13					Done			100%	25 Plant Protection, Agrochemicals committee and Customs personnel trained in FAO Pesticide Registration Toolkit. Internet speed and

										stability improved to facilitate pesticide regulatory activities including access of web based tools and guidelines.
Review of pest control strategies and less toxic alternatives to pesticides promoted										
Output 2.3.1. Current pest management strategies assessed and reviewed	30/10/2018					On going			100%	IPM situational analysis completed; Pest and Pesticide Management Strategy drafted in lieu of an IPM policy upon Government request not to have a standalone IPM policy, but to use the Pest and pesticide management strategy as a module in the National Agricultural Development Policy which was under development at the time of project closure.
Output 2.3.2. Revision of existing policy to reduce use of highly toxic materials	31/10/2018					On course			60%	Review process for agrochemicals legislation underway. Preparations for presentation of a draft Pesticides Amendment Bill to the July/August 2018 Parliament session pursued by the ministry of Agriculture. Draft still not yet presented to Parliament at time of project closure.
Communications and awareness programme in place										
Output 2.4.1. Comprehensive	30/07/2018					On course			70%	A comprehensive communication and

communications and awareness strategy developed										awareness strategy for life cycle management of pesticides developed.
Output 2.4.2. Communications and awareness materials developed	30/07/2018					On course			90%	Roll out of information, education and communication materials was in progress at time of project closure with indications from Government to continue beyond the project.
Output 2.4.3. Communications and awareness materials delivered	30/06/2018					Work in progress			90%	Some awareness materials delivered; with plans to continue development and roll out.
Treatment option selected										
Output 3.1.1. Trial of selected treatment option(s) (bench-top, laboratory)	31/6/2014					Done			100%	EMP for Sebele site endorsed in June 2015 by Department of Environmental Affairs.
Output 3.1.2. Pilot scale trials of treatment options	30/12/2014					Done			100%	Completed.
Output 3.1.3. Updating of EMP for site remediate based on pilot studies	30/3/2015					Done			100%	Completed.
Contaminated soils treated										
Output 3.2.1. Issue of tender and selection of remediation contractor	30/6/2015					Done			100%	Completed.
Output 3.2.2. Implementation of	31/10/2018					In progress			80%	The mis-tender for ECM equipment and generator

remediation strategy										was a major impediment to implementation of the ECM business model. Government requested FAO for the technical specifications with the intention to procure and continue with rolling out of the ECM model beyond project closure.
Output 3.2.3. Assessment of implementation	30/10/2018					Time bound			0%	Not yet done.
4.1 M&E systems in place										
Output 4.1.1 M&E / project tracking plan developed	30/9/2012					Done			100%	Developed.
Output 4.1.2 M&E / project tracking plan installed	30/9/2012								80%	Tracking tool updated once during project implementation.
Output 4.1.3 M&E system operational	30/9/2017					Not yet			0%	M&E tracking tool operational.
4.2 Project components implemented effectively and efficiently										
Output 4.2.1. M&E plan implemented and M&E reports produced.	30/9/12					DONE			80%	Monthly, biennial and annual reports produced. Terminal report prepared and submitted.
Output 4.2.2. Health surveillance data for all operational staff collected to ensure no impact to health during field implementation.	As required					On going			60%	Health surveillance data on operational staff not collected, but safety training conducted (for ECM and remediation activities).

5.1 Institutional arrangements										
Output 5.1.1 Institutional arrangements confirmed	30/6/2012					Done			100%	Project Management Team, Project Steering Committee, FAO Consultants and NPC in place.
Output 5.1.2 Project Steering Committee (PSC) and PMU operational	30/6/2012					Dis functional			50%	Latest Steering Committee meeting held on the 21/12/2018.
5.2. Planning and management										
Output 5.2.1 Work plan developed	As required					Done			100%	Work plan developed at inception and reviewed every year. Work plan revised in January 2018 and granted a No Cost Extension up to 31 st December 2018.
Output 5.2.2. Work plan approved	As required					No meetings lately			90%	Work plan approved at Steering Committee meetings but lately no meeting because of lack of cooperation with Government Project Management Team.
Output 5.2.3. Budget revisions approved	As required					Done			100%	Budget revision and extension approved.

Information on Progress, Outcomes and Challenges on project implementation.

Main significant results:

Under Component 1, the main achievements included the development of a business model for a national empty pesticide container management scheme; the disposal of 63,8 tonnes of obsolete pesticides and associated waste (comprising 26,8 tonnes net weight of solid and liquid organic pesticides and 2 tonnes of contaminated packaging that were exported disposed by incineration at the Veolia Ellesmere Port site in the United Kingdom in December 2014 and 35 tonnes of treated seed disposed of locally through use as source of organic matter and mixed with contaminated soil undergoing remediation at Sebele).

Under Component 2, the pesticide regulatory capacity for Botswana was strengthened through long and short-term training of over 30 staff members; the revision of the Agrochemicals Act 1999; the addressing of HHPs, including identification, risk and needs assessment, complete with a national Knowledge, Attitudes and Practices (KAP) survey, as well as the elaboration of a mitigation plan. To increase pesticide risk awareness, a pesticide risk reduction communication strategy was elaborated and rolled out. In addition, a national pest and pesticide management strategy was drafted, and it is anticipated that it will be used as an implementation tool for the National Policy on Agricultural Development (NPAD), which was still under development at the time the project closed.

Under Component 3, the contaminated soils at Sebele were remediated, and the analyses results over the remediation period showed a significant decrease in contaminant levels. The concentrations of fenthion, fenitrothion and chlorpyrifos had decreased to levels that no longer presented significant risks to human health and the environment.

Main lesson learned/contributions to innovations/good practices to be highlighted:

The good practices followed by the project, which could be replicated in similar projects, are outlined below:

- Promoting the development of private-sector-driven inclusive business models helps address the sustainability question, and should be aimed for earlier on in the project. There was a lot of interest and buy-in from commercial farmers in Pandamatenga for the empty container management model, albeit late in the project.
- The ability of the project team to learn from the field experiences, and to continuously adapt the design of the various interventions was key in driving the project towards the desired results. The project was very successful in addressing HHPs, an activity that was modified in tandem with international and regional developments.

Major challenges:

The implementation of the project encountered delays and challenges, especially during the first third of the project. As highlighted in the MTR, the project was slowed down by the lack of a full-time NPC; delays in the disbursement of government cofinance; and other administrative constraints, such as delays in the recruitment of consultants and lengthy procurement procedures. As mentioned above, a full-time NPC was assigned to the project in November 2016.

The elaboration and implementation of the communication strategy should be tied to key project components and activities. Education and awareness raising for various target audiences, alongside the implementation of key activities, allows for better buy-in, ownership and involvement. Once communication had been strengthened and a common understanding achieved, the initial bottlenecks concerning government cofinance were rectified, and government buy-in significantly improved. As a result, by the time the project closed, the Government had put in place structures and staff to continue with key project activities, such as contaminated soil remediation at the Sebele site, rolling out the empty container strategy, and awareness raising on pesticide risk reduction.

The project was unable to fully clear the Sebele warehouse. This was because the disposal contractor shipped out 28,8 tonnes of obsolete wastes from the warehouse, but left behind 4,5 tonnes of safeguarded pesticides, 2-3 tonnes of unidentified pesticides that required in situ analysis, and 10 tonnes of contaminated plastic containers. These remaining obsolete stocks were destroyed in the accidental fire that broke out at Sebele in July 2016.

Objective Ratings, Implementation Progress Ratings and Overall Assessment

	FY2019 Development Objective rating ¹⁸	FY2019 Implementation Progress rating ¹⁹	Comments/reasons justifying the ratings for FY2019 and any changes (positive or negative) in the ratings since the previous reporting period
Project Manager / Coordinator	S	S	<p>The project encountered constraints that were beyond its scope. It is therefore recommended that the Government provide assistance for the following:</p> <ul style="list-style-type: none"> • The amendment of the Agrochemicals Act of 1999. Unless the revised legislation is duly approved, enacted and enforced, there is the potential risk that some of the gains made through the project will be undone, e.g. the phasing out of HHPs and the prevention of further accumulation of obsolete pesticide stocks. The Temporary Import Permit (TIP) provision under the current legislation could jeopardize sound pesticide management of pesticides in Botswana. Thus, the revised legislation seeks to revoke the TIP provision; • A review of the current agricultural policy, which promotes heavy pesticide use, e.g. through input subsidy schemes such as the Integrated Support Programme for Arable Agricultural Development (ISPAAD). The current policy is intended to promote the intensification of agricultural production. However, it is highly recommended that the Government dialogue with stakeholders and invest in sustainable production intensification; and if necessary, it should seek technical support from appropriate development partners to achieve this; • The operationalization of the national empty container management strategy; and • Awareness raising on pesticide risks reduction should be continued, and targeted at various audiences.
Budget Holder	S	S	<p>Major outputs were achieved for the project. Government should safeguard the gains made by ensuring approving and enacting the requisite legislative and policy frameworks. Government should maintain momentum to implement the empty container management strategy.</p>

¹⁸ **Development/Global Environment Objectives Rating** – Assess how well the project is meeting its development objective/s or the global environment objective/s it set out to meet. Ratings can be Highly Satisfactory (HS), Satisfactory (S), Moderately Satisfactory (MS), Moderately Unsatisfactory (MU), Unsatisfactory (U) or Highly Unsatisfactory (HU). For more information on ratings, definitions please refer to Annex 1.

¹⁹ **Implementation Progress Rating** – Assess the progress of project implementation. For more information on ratings definitions please refer to Annex 1.

Lead Technical Officer²⁰	S	S	The project satisfactorily attained the project outputs. It is good to note that the Government has continued to mobilize and avail resources to sustain the project achievements. Government to ensure the requisite policy frameworks are in place for sustainable pest and pesticide management.
GEF Funding Liaison Officer	S	S	The project has achieved most of its objectives with some shortcomings. Of course there is a sustainability question which the Government and relevant partners has to address – appropriate policy frameworks, institutional capacity and a shift to sustainable pest management.

²⁰ The LTO will consult the HQ technical officer and all other supporting technical Units.

3. Risks

Environmental and Social Safeguards (Under the responsibility of the LTO)

Overall Project Risk classification (at project submission)	Please indicate if the Environmental and Social Risk classification is still valid ²¹ . If not, what is the new classification and explain.
Not assigned at project submission. However, given the nature of the project, Environmental Management Plans were developed as part of project activities and outputs.	Still valid.

Risk ratings

RISK TABLE
<i>The following table summarizes risks identified in the Project Document and reflects also any new risks identified in the course of project implementation. The <u>Notes</u> column should be used to provide additional details concerning manifestation of the risk in your specific project, as relevant. The “Notes” column has one section for the BH and PMU and one for the LTO.</i>

²¹ **Important:** please note that if the Environmental and Social Risk classification is changing, the ESM Unit should be contacted and an updated Social and Environmental Management Plan addressing new risks should be prepared.

	Risks ²²	Original rating in ProDoc	BH rating now	LTO ²³ rating now	Notes from the BH and/or Project Management Unit
1	Risk of environmental contamination from POPs and other obsolete pesticide during safeguarding, transportation and remediation operations.	H/L	L	L	Awareness raising on pesticide risk reduction to continue beyond project lifespan
2	Project staff and public are exposed to pesticides	H/L	L	L	Proper safety protocols should be strictly followed for activities continuing beyond project closure to avoid undue exposure.
3	Project coordination becomes ineffective due to lack of cooperation among institutions.	H/L	L	L	N/A
4	Re-accumulation of stock of obsolete pesticides due to poor pesticide management practices.	H/L	H	H/L	Government to pass the revised Agrochemicals Bill and adopt sustainable pest and pesticide management policy/ies.
5	Difficulties in recruitment of international consultants	M/M	L	L	N/A

²² Risk ratings will assess the overall risk of factors internal or external to the project which may affect implementation or prospects for achieving project objectives. Risks of projects should be rated on the following scale: **High Risk (H)** - There is a probability of greater than 75% that assumptions may fail to hold or materialize, and/or the project may face high risks); **Substantial Risk (S)** - There is a probability of between 51% and 75% that assumptions may fail to hold and/or the project may face substantial risks); **Modest Risk (M)** - There is a probability of between 26% and 50% that assumptions may fail to hold or materialize, and/ or the project may face only modest risks.); **Low Risk (L)** - There is a probability of up to 25% that assumptions may fail to hold or materialize, and/ or the project may face only modest risks.) **Please add any new risk not initially foreseen in the Project Document.**

²³ LTO = Lead Technical Officer - The LTO will consult the Budget Holder, the HQ technical officer and all other supporting technical Units.

	Risks²²	Original rating in ProDoc	BH rating now	LTO²³ rating now	Notes from the BH and/or Project Management Unit
6	Unavailability of adequately experienced national staff, lack of follow-up by policy-makers at high Government levels and local administrative bottlenecks.	H/L	L	L	N/A
7	Lack of adequate incentives to national staff to participate in training courses and to implement disposal activities.	M/L	M	M	N/A
8	Equipment procured from domestic suppliers/through import is delayed.	H/M	M	M	Government has more flexibility in procurement and it is anticipated that the procurement (by Government) of the ECM equipment, will be successful.
9	Co-finance identified in the Prodoc is not forthcoming	M/L	M	M	
10	Frequent machinery break down	H/L	L	L	
11	Lack of security at the Sebele site	H	L	L	

Project overall risk rating (Low, Medium, Substantial or High):

FY2018 rating	FY2019 rating	Comments/reason for the rating for FY2019 and any changes (positive or negative) in the rating since the previous reporting period
L	L	The project has been completed.

4. Adjustments to Project Strategy

Please report any adjustments made to the project strategy, as reflected in the results matrix, since the Project Document signature²⁴

Change Made to	Yes/No	Describe the Change and Reason for Change
Project Objective	No	
Project Outcomes	No	
Project Outputs/Activities/Inputs	No	

Adjustments to Project Time Frame

If the duration of the project, the project work schedule, or the timing of any key events such as project start up, evaluations or closing date, have been adjusted since project approval please explain the changes and the reasons for these changes. The Budget Holder may decide, in consultation with the GEF Unit, to request the adjustment of the EOD-NTE in FPMIS to the actual start of operations providing a sound justification.

Change	Describe the Change and Reason for Change
Project extension	Project extended to 31 st December 2018.
Project evaluation	Project closing date extended from 31st January 2018 to 31st December 2018 on account of delayed disbursement of project funds from Government, delays in procurement for goods and services as well as and frequent breakdown of equipment assigned to the project.

²⁴ Minor adjustments to project outputs can be made during project inception. Significant adjustments can be made only after a mid-term review/evaluation or supervision missions. The changes need to be pre-cleared by the GEF Unit, then approved by the whole Project task Force and endorsed by the Project Steering Committee.

5. Gender Mainstreaming

Is the project applying a gender sensitive approach? How? Please briefly explain.

The project applied a gender sensitive approach affording males and females equal opportunities in its activities. The Project Steering Committee comprised of 10 members has an equal number of males and females, whereas Temporary Project Assistants hired comprise 9 females and 3 males and the PMU is made up of 2 males and 1 female.

Deliberate efforts were made to include female respondents during the combined HHP and KAP surveys.

6. Indigenous Peoples Involvement

Are Indigenous Peoples involved in the project? How? Please briefly explain.

N.A.

7. Stakeholders Engagement

Please list (i) all stakeholders engaged in the project and specify whether any new stakeholders have been identified/engaged; (ii) briefly describe stakeholders' engagement events, specifying time, date stakeholders engaged, purpose (information, consultation, participation in decision making, etc.) and outcomes. If a Stakeholder Engagement Plan was prepared please report on the progress in its implementation.

Stakeholders include Farmers, Pesticides dealers, NGOs e.g. Birdlife Botswana and Kalahari Conservation Society, Academia from the Chemistry Department of the University of Botswana and the Botswana University of Agriculture and Natural Resources, Ministry of Environment, Wildlife and Tourism represented by Department of Environmental affairs and Department of Waste Management and Pollution Control, Department of Environmental Health, Division of Plant Protection, Department of Agricultural Research, Department of Research and Statistics, Legal Practitioners (Attorney Generals Chambers) Law makers, IPM specialists, Communication specialists and Bio-remediation experts.

Stakeholder engagement events include the HHP stakeholder consultation workshop and validation of HHPs held from 1st -3rd August 2017 with 80 participants (49 male and 31 female) from a cross section stakeholders. Training on FAO Pesticides Registration Toolkit and Rotterdam Convention from 11th – 15th December 2017.

Awareness campaigns on EPC held in Kanye and Pandamatenga in March 2018 targeting farmers, NGOs and extension personnel from various government departments.

8. Co-Financing Table

Materialized Co-financing – Mandatory for projects that are completing the Mid-term review or ending operations within this reporting period (June 2017-june 2018). Recommended for all projects.

Name of Partner or Contributor ²⁵	Nature of contributor	Type of Co-financing ²⁶	Amount Confirmed at CEO endorsement / approval	Actual Amount Materialized at 30 June 2019- Highly recommended but not mandatory	Actual Amount Materialized at Midterm or closure (confirmed by the review/evaluation team) Mandatory for projects that has completed an MTR or closure	Expected total disbursement by the end of the project (or Actual Amount Materialized at Closing) Highly recommended but not mandatory
Botswana Government	National Government	Cash	0.40	0.75		0.75
EC	Bilateral Donor	Grant	1.10	0.74		0.74
FAO	UN Agency	In kind	0.43	0.35		0.35
Botswana Government	National Government	In kind	0.41	0.41		0.41
TOTAL			2.34	2.25		2.25

Explain “Other Sources of Co-financing”: _____

Please explain any significant changes in project financing since Project Document signature, or differences between the anticipated and actual rates of disbursement

No changes in project funding.

²⁵ Sources of Co-financing may include: Bilateral Aid Agency(ies), Foundation, GEF Agency, Local Government, National Government, Civil Society Organization, Other Multi-lateral Agency(ies), Private Sector, Other.

²⁶ Type of Co-financing may include: Grant, Soft Loan, Hard Loan, Guarantee, In-Kind, Other.