FAO-GEF Project Implementation Report

2021 – Revised Template

Period covered: 1 July 2020 to 30 June 2021

1. Basic Project Data

General Information

Region:	Africa
Country (ies):	Benin
Project Title:	Disposal of POPs and Obsolete Pesticides and Strengthening Life-Cycle Management of Pesticides in Benin
FAO Project Symbol:	GCP/BEN/056/GFF
GEF ID:	4756
GEF Focal Area(s):	Chemicals - POPs
Project Executing Partners:	Ministries of Agriculture, Environment and Health
Project Duration:	48 months
Project coordinates: (Ctrl+Click here)	**Component 1:** **Coordinates of the obsolete stock sites:**

Porto-Novo:	N 6° 29' 47" E 2° 36' 12"
Cotonou:	N 6° 21' 55" E 2° 25’ 6"
Pobè:	N 6° 58' 48" E 2° 39’ 53"
Zogbodomey:	N 7° 1' 4" E 2° 10’ 58"
Parakou:	N 9° 20' 13" E 2° 37’ 49"
Kandi:	N 11° 8' 3" E 2° 56’ 19"
Banikoara:	N 11° 20' 22" E 2° 27’ 32"
Natitingou:	N 10° 18' 15" E 1° 22’ 46"

- Coordinates contaminated sites:

Porto-Novo:	N 6° 29' 47" E 2° 36' 12"
Bohicon:	N 7° 10' 41" E 2° 4' 0"
Malanville:	N 11° 52' 5" E 3° 22' 59"

Component 2: Coordinates of the pilot container of FFS villages
Department of Borgou:

Nikki, village Soumarou:	N 9° 53' 26" E 3° 6' 25"
Kalalé, village Gbessassi Bouka:	N 10° 13' 12" E 3° 7' 48"
Bembèrèkè, Village Ina:	N 9° 58' 34" E 2° 43' 30"

Department of Alibori:

Gogounou, Village Ouara:	N 10° 52' 0" E 2° 51' 0"
Kandi, Village Padé:	N 11° 5' 0" E 2° 54' 0"
Kandi, Village Pèdè:	N 11° 7' 43" E 2° 56' 13"
Banikoara, Village Godou:	N 11° 14' 0" E 2° 25' 0"
Ségbana, Village Kambara:	N 10° 55' 12" E 3° 29' 24"

Ségbana, Village Liboussou:	N 10° 55' 12" E 3° 29' 24"

Component 3: Coordinates of ministries/laboratories

Ministère de l'Agriculture, de l'Elevage et de la Pêche:	N 6° 21' 26" E 2° 23' 3"
Laboratoire Central de Contrôle de la Sécurité Sanitaire des Aliments:	N 6° 22' 0" E 2° 26' 0"

Component 4: Coordinates of research institute and FFS villages

Institut International d'Agriculture Tropical (IITA):	N 6° 22' 0" E 2° 21' 0"

FFS vegetable crops villages:
Department of Alibori

Malanville, village Madécali:	N 11° 42' 26" E 3° 32' 54"
Malanville, village Tomboutou:	N 11° 51' 18" E 3° 17' 21"
Malanville, village Kambouo Tounga	N 11° 48' 19" E 3° 28' 26"
Malanville, village Garou Tédji:	N 11° 48' 19" E 3° 28' 26"
Malanville, village Monkassa:	N 11° 51' 31" E 3° 23' 14"
Karimama, village Birni-Lafia:	N 11° 58' 42" E 3° 13' 29"
Karimama, village Karigui:	N 11° 58' 42" E 3° 13' 29"

FFS cotton-maize villages:
Department of Borgou

Bembèrèkè, village Ina:	N 9° 58' 34" E 2° 43' 30"
Bembèrèkè, village Guessou-Sud:	N 9° 58' 34" E 2° 43' 30"
Nikki, village Soumarou:	N 9° 53' 26" E 3° 6' 25"
Kalalé, village Gbessassi Bouka:	N 10° 13' 12" E 3° 7' 48"

Department of Alibori

Gogounou, Village Ouara:	N 10° 52' 0" E 2° 51' 0"
Kandi, Village Padé:	N 11° 5' 0" E 2° 54' 0"
Kandi, Village Pèdè:	N 11° 7' 43" E 2° 56' 13"
Kandi, Village Angaradébou:	N 11° 18' 41" E 3° 2' 22"
Kandi, Village Bensékou:	N 10° 59' 53" E 3° 8' 56"
Banikoara, Village Godou:	N 11° 14' 0" E 2° 25' 0"
Ségbana, Village Kambara:	N 10° 55' 12" E 3° 29' 24"
Ségbana, Village Liboussou:	N 10° 55' 12" E 3° 29' 24"
Ségbana, Village Piami:	N 10° 55' 48" E 3° 41' 24"

Milestone Dates:

GEF CEO Endorsement Date:	31/07/2014
Project Implementation Start Date/EOD :	22/03/2015
Proposed Project Implementation End Date/NTE[1]:	21/03/2021
Revised project implementation end date (if applicable) [2]	30/09/2021
Actual Implementation End Date[3]:	N/A

Funding

GEF Grant Amount (USD):	1,830,000 USD
Total Co-financing amount as included in GEF CEO Endorsement Request/ProDoc[4]:	10,580,625 USD
Total GEF grant disbursement as of June 30, 2021 (USD m):	1,614,239 USD
Total estimated co-financing materialized as of June 30, 2021[5]	9,673,618 USD

Review and Evaluation

Date of Most Recent Project Steering Committee Meeting:	06 June 2019
Expected Mid-term Review date[6]:	February – March 2018
Actual Mid-term review date:	November 2018
Mid-term review or evaluation due in coming fiscal year (July 2021 – June 2022)[7]:	No
Expected Terminal Evaluation Date:	December 2020 – March 2021
Terminal evaluation due in coming fiscal year (July 2021 – June 2022):	No

[1] As per FPMIS

[2] In case of a project extension.

[3] Actual date at which project implementation ends - only for projects that have ended.

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

[5] Please see last section of this report where you are asked to provide updated co-financing estimates. Use the total from this Section and insert here.

[6] The MTR should take place about halfpoint between EOD and NTE – this is the expected date

[7] Please note that the FAO GEF Coordination Unit should be contacted six months prior to the expected MTR date

Tracking tools/ Core indicators required[8]	Yes

Ratings

Overall rating of progress towards achieving objectives/ outcomes (cumulative):	Satisfactory
Overall implementation progress rating:	Satisfactory
Overall risk rating:	Moderate

Status

Implementation Status ***(1st PIR, 2nd PIR, etc. Final PIR):***	6th and final PIR

Project Contacts

Contact	Name, Title, Division/Institution	E-mail
Project Manager / Coordinator	Jacqueline SAGBOHAN	sagbohanjacqueline@yahoo.fr
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Budget Holder	Mphumuzi SUKATI	Mphumuzi.Sukati@fao.org
GEF Funding Liaison Officer	Kuena MOREBOTSANE	Kuena.Morebotsane@fao.org

[8] Please note that the Tracking Tools are required at mid-term and closure for all GEF-4 and GEF-5 projects. Tracking tools are not mandatory for Medium Sized projects = < 2M USD at mid-term, but only at project completion. The new GEF-7 results indicators (core and sub-indicators) will be applied to all projects and programs approved on or after July 1, 2018. Also projects and programs approved from July 1, 2014 to June 30, 2018 (GEF-6) must apply core indicators and sub-indicators at mid-term and/or completion

2. Progress Towards Achieving Project Objectives and Outcome (DO)

(*All inputs in this section should be cumulative from project start, not annual)*

Project objective and Outcomes (as indicated at CEO Endorsement)	Description of indicator(s)[9]	Baseline level	Mid-term target[10]	End-of-project target	Level at 30 June 2021	Progress rating [11]
Objective(s): 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.						
Outcome 1: Identified risks from existing obsolete stocks eliminated and risks from heavily pesticide-contaminated sites reduced	1a. Up to 200 tonnes of POPs and other obsolete pesticides disposed of in an environmentally sound manner.	504 tonnes of obsolete pesticides and 150 tonnes associated wastes inventoried in 2012. 380 tonnes endosulfan disposed under GCP/BEN/055/JPN	213 tonnes	213 tonnes	• Inventory of obsolete pesticides including POPs (total quantity of 1631 t.) available • Environmental management plan and risk assessment available for 213 tonnes prioritized for safeguarding and disposal available • Contract between FAO and VEOLIA ES Field Services signed and started implementation for safeguarding stowage, transport, export and disposal of 213 tonnes of obsolete pesticides. • Contract 020/BN/AGPM-CPA 343809 of 27/03/2020 • Preparation by Veolia of Basel notification documents	**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).

					• Signature of Basel notification documents by the Secretary General of the Ministry of Agriculture, Livestock and Fisheries (MAEP) as owner/exporter of obsolete pesticide waste • Development of the Health Safety Environment Plan (PSSE) for the securing, storage, export and complete safe disposal of obsolete pesticides in Benin • Updating of the Task-Based Risk Assessment (ERBT) of the PSSE • Validation of the PSSE by the Benin Environment Agency (ABE) • Obtaining the 1st Basel notification number **BJ A4030/6P.7.20** from the Ministry of the Living Environment and Sustainable Development (MCVDD) • Agreement of transit countries (Equatorial Guinea, Cameroon, Spain, France, United Kingdom, Belgium, Netherlands and Germany) of obsolete pesticide waste • Import of materials and equipment for securing obsolete pesticides on behalf of Veolia • Training of workers on the safe handling of obsolete pesticides • Reconditioning of obsolete pesticide waste (PO) carried out in the thirteen (13) priority stores selected in the security contract. • As of 06/08/2021, the quantity of reconditioned POs is estimated at **167,714 tonnes** or 78,86% of the	

					contract. The quantity actually weighed is **128,835 tonnes** or 60,58% compared to the quantity covered by the contract. • Systematic decontamination of stores at the end of PO waste reconditioning operations • Obtaining the export authorization for obsolete pesticide waste from the Directorate General of Customs and Indirect Rights (DGDDI) • A first export of PO waste is carried out in March 2021 for a net weight of **71.57 tonnes** distributed in six (06) containers for their evacuation and elimination in Switzerland. It should be noted that this 1st export has already arrived at the incineration plant in Switzerland for its disposal. • Five (05) obsolete pesticide waste containers with a net weight of **57.265 tonnes** are ready for export. • Preparation by Veolia of the documents for the 2nd Basel notification following the end of the 1st notification scheduled for June 30, 2021 • Signature of the documents of the 2nd Basel notification by the SG / MAEP • Submission to the MCVDD of the file of the 2nd Basel notification • Obtaining of the 2nd number of the Basel notification **BJ A4030/1P.5.21** covering the period from May 15, 2021 to January 1, 2022 for the transit of the rest of obsolete pesticides to be	

					evacuated outside the national territory. • Ongoing preparation of letters of agreement from transit countries (Togo, Equatorial Guinea, Cameroon, Spain, Morocco, France, United Kingdom, Belgium, Netherlands and Germany) for obsolete pesticide waste.	
	1b. At least 2 contaminated sites with reduced risk of exposure/ contamination level (50% reduction).	3 sites investigated and EA and EMP produced. Baseline contamination of methyl-parathion at Oganla site according to EMP developed by GCP/BEN/055/JPN = 0,074mg/kg (depth 10cm) to 0,047mg/kg (120 cm) New site reported in 2013 to be investigated	Risk reduction strategies for 2 contaminated sites developed and approved, and work started.	50% reduction in contamination or exposure levels	• 2 sites decontaminated: Malanville (179, 5 Kg of orthène 75 SP) and Bohicon (12,775 kg of thioral): Conceptual site modelling and Environmental Management Plans (EMPs) delivered and validated by Agence Béninoise pour l' Environnement (ABE) decontamination undertaken and monitoring mission confirming decontamination successful • Additional site (1) is finalizing decontamination: Oganla (including parathion methyl and DDT, DDD and DDE): - characterization and EMP delivered - Bio-remediation with Vétiver sp et Jatropha sp in progress • Additional sites (2) rapid environmental assessment of contamination delivered, and EMP in validation : Djassin and Djohounta (POPs) • Investigations carried out during inventory activities for obsolete pesticide stocks in Benin revealed a number of contaminated sites, 4 of	**HS**

					which had been deemed a priority. The choice of these 4 contaminated sites took into account the persistent toxicity in the soil and the odor of the contaminants for the reduction of health and environmental risks for the communities living near these sites. • Evaluation of capacity of the National Laboratory of the Central Food Safety Laboratory (LCSSA) for pesticide soil contamination analysis undertaken and recommendation provided • Excavation operation of **21,503 tonnes** of dieldrin and aldrin sludge and contaminated earth at the dump of the polluted site of Djassin • Ongoing update of the work plan for the sanitation of the Djassin site	
Outcome 2: Risks to the environment and human health from empty pesticide containers used in cotton production areas reduced	2a) Number of empty containers triple rinsed, collected and stored awaiting recycling	3.9m containers imported over the last 5 years, 0.5m per year in cotton zone, 8.8 tonnes containers in national inventory	75,000 in PY3	150,000	• Collection of 5,465 empty containers in ten (10) villages in seven (07) municipalities in the departments of Borgou and Alibori through a partnership with the NGO Bethesda • Benin did not have a management plan for empty pesticide packaging in the regulatory texts on the management of pesticides. The project decided and retained to implement a pilot plan for the management of empty pesticide packaging, which is the first step in reducing the risks of health and environmental pollution. These packaging are reused by farming communities living in cotton growing	**S**

					areas, giving them a second life cycle. The pilot plan is a demonstration of the management plan on a reduced scale with 200 producers and is installed only in two departments of North Benin which is found in the cotton basin. Following the results obtained from the pilot plan, a national sustainable management plan for empty packaging was drawn up for the national management of empty pesticide packaging, which is now the responsibility of the Plant Protection Service of the Production Department Plant of the Ministry of Agriculture, Livestock and Fisheries by decree No. 097/MAEP/DC/SGM /DPV/CJ/SA/091SGG18 of December 18, 2018 laying down the procedures for managing empty packaging of pesticides and biopesticides as well as the procedures for distributing the related costs. • Treatment and recycling of 5,465 empty pesticide containers into finished products for non-food use • Improvement of Bethesda structures to comply to international standards for recycling empty pesticide containers carried • Training of 20 trainers and 200 cotton and maize farmers on risks of empty pesticide containers and risk reduction options (triple rinsing and perforation and pilot recycling	

					scheme) through Farmer Field Schools (FFS). • Poster produced by the project and delivered to 13 FFS • National strategy for empty container management including lessons learned from monitoring pilot scheme available • Analysis of waste water from the treatment and recycling of empty pesticide packaging • Results of the analyzes: the results of the analyzes of the waste water revealed the presence of the following chemical substances: Acetamiprid (0.18 µg/L), Cypermethrin (0.27 µg/L), Chlorpyrifos (0.45 µg/L) , Emamectin Benzoate (0.12 µg/L), Lead (0.72 mg/L) and Cadmium (0.48 mg/L) • **Comments from the international consultant in the management of Empty Pesticide Packaging (EVP):** Based on Law No. 98-030 of February 12, 1999 on the framework law on the environment and Decree No. 2001-109 of April 4 2001 setting wastewater quality standards in the Republic of Benin, it should be possible to discharge contaminated wastewater in small quantities. However, this procedure is not recommended. It is more environmentally friendly to evaporate waste water by exposing it	

					to the sun, and to dispose of residues with obsolete pesticide stocks or, failing that, to store residues in a hazardous waste landfill for their future elimination. • Preparation of the final report being validated by the international consultant on LoA activities between FOA and NGO Bethesda for the treatment/recycling of empty pesticide packaging	
Outcome 3: Regulatory framework and institutional capacity for the sound management of pesticides throughout their lifecycle strengthened	3a) Revised national legislation in compliance with international and regional obligations adopted by PY4.	Legislation in Benin does not yet support the regional CILSS-ECOWAS-UEMOA harmonization which it joined in 2012.	Review meetings for legislation	Decrees adopted	• Harmonisation of national legislation on pesticide management discussed at national stakeholder workshop and with CILSS experts (linked with output 3.2.) • ECOWAS Harmonization of legislation on inspection and control (linking with output3.2) • Decree No. 2018-172 of May 16, 2018 laying down the terms of application of community regulations on the approval of pesticides issued and signed by President of Benin (linked with output 3.2.)	**S**
	3b) Management Committee (NPMC) and a national system for inspection and quality control of pesticides operational by PY3.	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	NPMC established Two entry points equipped	National system for inspection and quality control operational	• Decrees (2) revised through FAO work under this component was issued by the Council of Ministers and signed by the President of the Republic 1. Decree N°2018-171 du 16 mai 2018 portant creation, attributions, organization et fonctionnement du Comité	**S**

		registration fees. Neither national strategy nor sustainable funding mechanism for pesticide control.			National de Gestion des Pesticides (CNGP) 2. Decree N°2018-172 du 16 mai 2018 fixant les modalités d'application des règlements communautaires sur l'homologation des pesticides en République du Bénin • Decrees on the harmonisation and implementation of Community regulations on quality control and management of agricultural inputs in the ECOWAS/UEMOA/CILSS area discussed in workshop organized by the Plant Protection Service/ DPV/MAEP and awareness campaign agreed. (linked with 3.1.) • Decree N°2018-176 du 16 mai 2018 fixant les modalités de gestion et de contrôle de qualité des engrais en République du Bénin • Decree N°2018-173 du 16 mai 2018 instituant le catalogue béninois des espèces et variétés végétales • Delivery, discussion and validation by Ministry of Agriculture, Livestock and Fisheries, Ministry of the Living Environment and Sustainable, Development Ministry of Health, Ministry of Industry and Commerce, Ministry of Higher Education and Scientific Research, Beninese Organization for the Promotion of Organic Agriculture, Inter-professional Cotton Association Cotton Development Corporation of the improved national pesticide	

					inspection and control system and raised awareness among key stakeholders in the pesticide sector • Gaps and dysfunctions as well as recommendations relating to the inspection and control of pesticides in Benin: - Lack of reassessment of approved pesticides to check whether the health and environmental risks are still acceptable - Lack of CNGP action plan - Lack of a pesticide inspection and compliance policy - Lack of promotion of the legislation and its numerous decrees - Lack of training for inspectors on inspection and law enforcement; - Systematic non-execution of inspections and controls at all stages of the pesticide life cycle, except for import. - Insufficient or lack of materials, technical equipment and infrastructure, and lack of staff to support inspectors - Lack of documents and tools necessary for inspections and controls - Existence of unapproved pesticides on the territory of Benin due to the great porosity of the borders • Recommendations - Need for periodic re-evaluation of pesticides to assess whether the risk of use is still acceptable - Consider technical and informational support with a view to the easy	

					appropriation of legislative and regulatory texts by members of the CNGP; - Sensitize inspection managers on the culture of compliance; - Systematic sampling for the purpose of compliance analysis - Train inspectors in planning risk-based inspections; - Have a continuous training plan for inspectors; - Support technical training and regular retraining of storekeepers - Sensitize inspectors on the culture of compliance and the assessment of risks related to conflict of interest • Training of thirty-seven (37) sworn phytosanitary inspectors including 30 men and 7 women on improved inspection methods from all Departmental Direction of Agriculture, Livestock and Fisheries (DDAEP) and Crop Protection Service/Plant Production Department (SPV/DPV) (Port and airport) and monitoring mission • Acquisition of pesticide inspection equipment for the two (02) entry points for pesticides belonging to the SPV/DPV: Port (Fumigation Center) and airport	
Outcome 4: IPM alternatives to conventional pesticides successfully promoted and the use of chemical	4a) Number of farmers trained on IPM alternatives through Farmer Field Schools (FFS)	(i) No bio-pesticides are currently registered (law for bio-pesticides is currently in process of adoption)	Alternatives identified and field-tested	Farmers trained	• National list of alternatives to POPs and conventional pesticides delivered and validated with national stakeholder under leadership of IITA-Benin for main crops in Benin including: (i) botanical pesticides in vegetable crops, cowpea and organic	**S**

pesticides, POPs and highly hazardous pesticides reduced **Outcome 4:** IPM alternatives to conventional pesticides successfully	4b) % Reduction in pesticide use on cotton and other crops	(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) Successful experiences to grow cotton without chemical use under OPEBAB project			cotton; (ii) parasitoids used in the control of multi-crop pests; (iii) biopesticides based on fungi, viruses or bacteria on cotton, maize, soya and vegetable crops; (iv) agricultural practices used to break the life cycle of a number of pests of cereal crops and cotton or weeds • The validation was made by all the stakeholders of the project representing the ministries in charge of agriculture, environment, health, agricultural research, NGOs involved in the promotion of alternatives to dangerous chemical pesticides, associations of producers of market gardening and cotton-maize and the federation of producers unions. • Strategy for field testing, certification and Promotion of selected alternatives with Farmers Field School (FFS). • Curricula (4) for the implementation of FFS including the Integrated Pest Management on onion, tomato, maize and cotton in Borgou and Alibori. • 25 trainers (total) were trained in IPM for vegetables, maize and cotton production during two seasons • 400 farmers were trained in IPM through Farmer Field Schools • 200 farmers (in 7 villages) were trained for two years in producing onions and tomatoes with IPM. • 200 farmers (in 10 villages) were trained for two years in producing	**S**

promoted and the use of chemical pesticides, POPs and highly hazardous pesticides reduced	among trained farmers			specific targets to be determined in PY1-2	cotton and maize with IPM were set up. • 317 men and 83 women took part in all CEP activities, i.e. a rate of 20.75% female participation • Data generated on pest problems, use of pesticides and alternatives (553 producers, including 460 men and 93 women, involving 20 villages in the Borgou/Alibori departments). • Monitoring and evaluation framework for the farmer field schools validated with national stakeholder and operationalized (Ongoing report) • Soil characterization and sampling of the soil for analysis in the laboratory Sciences Soil Water and Environment (LSSEE/INRAB) • Development of brochure on promotion of biopesticides in Benin • Conducting efficacy trials on two (02) entomopathogens: *Metarhizium anisopliae*, Met 31 and the *Nuclear Polyhedrosis Virus (Helicoverpa armigera Nuclear Polyhedrosis* virus HaNPV) for the control of caterpillars of the pest *Helicoverpa armigera* of tomatoes in Malanville, department of the Alibori. • In terms of experimental trials, we noted a reduction in the use of pesticides in CEP fields led by agricultural producers. With regard to the analysis of the monitoring results of CEP producers over the period from 2016 to 2018, it	

					emerges a 4% reduction in the use of pesticides by CEP producers compared to witness producers using conventional chemical pesticides for cotton production.	
Outcome 5: Project monitored and evaluated effectively and best practices disseminated.	All required M&E reports and evaluations conducted	0	7 (4 PPR, 2 PIR, MTR)	14 (8 PPR, 4 PIR, MTR and final evaluation)	7 Project Progress Report 6 Project Implementation Review (including this one) 9 Project Management Unit meetings 4 Project Steering Committee meetings 1 Mid-term evaluation report of the project 1 rapport d'évaluation finale du projet 1 final project evaluation report 1 project factsheet developed 5 radio spots delivered Regular calls and monitoring on activities between HQ and field office	**S**

Action plan to address MS, MU, U and HU ratings

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

3. Progress in Generating Project Outputs (Implementation Progress, IP)

(Please indicate progress achieved during this FY as planned in the Annual Work Plan)

Outputs[12]	Expected completion date [13]	Achievements at each PIR[14]						Implement. status (cumulative)	Comments Describe any variance[15] or any challenge in delivering outputs
		1st PIR	2nd PIR	3rd PIR	4th PIR	5th PIR	6th PIR		
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	Sept 2021	5% - Update of the national inventory completed - 1,250 tonnes inventoried in Feb. 2016	7% - The complementary inventory of obsolete POPs and pesticides revealed a total of 1,251,274 kg of obsolete POPs and pesticides including the existing stock of obsolete pesticides in the PSMS database. - Update of the PSMS database for the prioritization of the 200 tonnes of obsolete pesticides to be secured and	10% - Development of the Environmental Management Plan (EMP) for safeguarding and disposal obsolete pesticides - Submission and validation of the EMP by ABE - Finalization of the bidding documents for safeguarding and disposal POPs and obsolete pesticides	15% - Launch of the call for tender with a closing date of 31 January 2019 for the recruitment of an international specialist firm for the safeguarding and disposal of 200 tonnes of POPs and obsolete pesticides : The tender is being evaluated - Picking and safeguarding operations of 354 kg of POPs and obsolete pesticides	20% - Recruitment of VEOLIA ES Field Services for safeguarding, stowage, transport, export and disposal of 213 tonnes of POP and obsoletes pesticides by the FAO contract 2020/BN/AGPM-CPA 343809 of 27/03/2020. - A notification letter was sent to all relevant ministries including the Ministry of Agriculture, Livestock and Fisheries (Ministry of Agriculture – MAEP), Ministry in charge of the Living Environment, Ministry	35% - Development of the Health Safety Environment Plan (PSSE) for the securing, stowage, export and complete safe disposal of obsolete pesticides in Benin - Updating and updating of the Task-Based Risk Assessment (ERBT) of the PSSE - Validation of the PSSE by the Benin Agency for the Environment (ABE) - Obtaining the 1st Basel notification number **BJ A4030/6P.7.20** from the Ministry of the	92%	

[12] 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.

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

[14] 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)

[15] Variance refers to the difference between the expected and actual progress at the time of reporting.

			eliminated by the project. - Eleven (11) priority stores containing obsolete POPs and pesticides with high health and environmental risk factors selected		instead of 259.9 kg of obsolete pesticides originally planned for the picking mission - Evaluation of the tender underway	of Health and the Ministry of Economy and Finances. - Official letter received from Ministry of Environment indicating their availability to actively support the contract. - Implementation of the contract: - Elaboration of descriptive sheet of the safeguarding and disposal operations of the OP to be carried out by Veolia on the instruction of the Ministry of Agriculture (MAEP) - Dossiers for requesting authorization of waste transit after export, in compliance with the Basel Convention have been prepared and sent by Veolia for validation by the Ministry of Environment of Benin prior to their extension to countries. Development by Veolia of the Health, Safety and Environment Plan (HSE) amended by project team (currently under finalization)	Living Environment and Sustainable Development (MCVDD) - Agreement of transit countries (Equatorial Guinea, Cameroon, Spain, France, United Kingdom, Belgium, Netherlands and Germany) of obsolete pesticide waste - Importation of materials and equipment for securing obsolete pesticides on behalf of Veolia - Training of workers on the safe handling of obsolete pesticides - Reconditioning of obsolete pesticide waste (PO) carried out in the thirteen (13) priority stores selected in the security contract. - As of 06/08/2021, the quantity of reconditioned POs is estimated at **167,714 tonnes** or 78,86% of the contract. The quantity actually weighed is **128,835 tonnes** or 60.58% compared to the quantity covered by the contract. - Systematic decontamination of stores at the end of PO waste reconditioning operations		

							- Obtaining the export authorization for obsolete pesticide waste from the Directorate General of Customs and Indirect Rights (DGDDI) - A first export of PO waste is carried out in March 2021 for a net weight of **71,57 tonnes** distributed in six (06) containers for their evacuation and elimination in Switzerland. It should be noted that this 1st export has already arrived at the incineration plant in Switzerland for its disposal. - Five (05) containers of pesticide waste for a net weight of **57,265 tonnes** are ready for export. - Preparation by Veolia of the documents for the 2nd Basel notification following the end of the 1st notification scheduled for June 30, 2021 - Signature of the documents of the 2nd Basel notification by the SG/MAEP - Submission to the MCVDD of the file of the 2nd Basel notification		

							- Obtaining the 2nd number of the Basel notification **BJ A4030/1P.5.21** covering the period from May 15, 2021 to January 01, 2022 for the transit of the rest of obsolete pesticides to be evacuated outside the national territory. - Ongoing preparation of letters of agreement from transit countries (Togo, Equatorial Guinea, Cameroon, Spain, Morocco, France, United Kingdom, Belgium, Netherlands and Germany) for obsolete pesticide waste.		
Output 1.2 Risks from 2 highly contaminated sites quantified, remediation strategies developed and implemented	Jul 2018	10% Risk quantified at priority sites. ToR for Rapid Environmental Assessment for a site at Assantoun, with a "hot zone" estimated at 900m^2	50% - Signature by Alterra University of Wageningen of the Memorandum of Understanding between FAO and Alterra for sanitation/ reduction of the risks of polluted sites in Benin - Mission to investigate the rapid environmental assessment of the heavily contaminated Djohounta site (ex Assantoun, Zou	60% - Development of Specific Environmental Management Plans (EMPs) of the polluted sites of Djassin, Malanville and Bohicon (ex CARDER Zou) - Submission and validation by ABE of the EMPs of the polluted sites of Malanville and Bohicon - Update of the Djassin EMPs according to the recommendations	100% - Validation of the Specific Environmental Management Plan (PGEs) of the contaminated site of Djassin	-	-	100%	

			department, Bohicon commune) (Mission Alterra in Benin August 3 to 10, 2016) - Mission to realize the conceptual models of the contaminated sites of Malanville, Djassin and Bohicon to better refine the technical options of risk reduction of these sites.	of the national team resulting from the extraordinary meeting of the PMU and also to the new observations made by the technical team and the international consultant specialized in decontamination of polluted sites - Submission of the Djassin PGE to ABE for final validation					
	Mar 2020	50% (one site decontaminated)- Reduction in contamination level ToR (national consultant) for decontamination of site at Oganla. Bio-remediation commenced in 2015.	Follow-up and maintenance of the landfarm installed by the installation of the detoxification plants (Vetiver sp and Jatropha sp) of the decontaminated site of Oganla: Cut after eight (08) months of plant growth of Vetiver sp for homogenization and replacement of one hundred and twenty Eight (128) plants out of five hundred and fifty (550) plants planted during the remediation of the site.	100% - Realization of the decontamination operations of the polluted sites of Malanville and Bohicon - Follow-up of the maintenance of the detoxification plants (Vetiver and Jatropha) of the landfarm of the decontaminated site of Oganla: realization of the 3rd and 4th cut of Vetiver and Jatropha plants for the reinforcement of the landfarm in organic matter in order to accelerate	- Follow-up by maintenance and watering of detoxification plants (Vetiver and Jatropha) landfarm decontaminated sites of Oganla, Malanville and Bohicon - Realization of the monitoring and evaluation mission and maintenance of the decontaminated sites of Malanville and Bohicon through the filling of monitoring sheets (general condition of the landfarm, rainfall and temperature	- Assessment of three decontaminated sites: **1. Bohicon site:** lindane analysis result (25µg/kg) less than 244µg/kg at the time of decontamination operations, low biodegradation of the lindane molecule. Lindane is a POP whose biodegradation is difficult and slow, hence the strengthening of the landfarm by covering the soil with biodegradable straw from vetiver plants. **2. Malanville site:** the acephate molecule is absent in the samples analyzed by LCSSA.	- Excavation operation of **21,503 tonnes** of dieldrin and aldrin sludge and contaminated earth at the dump of the polluted site of Djassin - Ongoing update of the work plan for the sanitation of the Djassin site	100%	

				biodegradation of POP contaminants - Evaluation of the decontaminated site of Oganla: the results of the analyzes showed a total biodegradation (disappearance) of Parathion-methyl by landfarm. On the other hand, these analyzes detected the presence of DDT (0.123g/kg), DDD (0.015g/kg) and DDE (4.448 mg/kg) which are POPs. To this end, it has been recommended by the international consultant on decontamination of polluted sites to continue the monitoring and maintenance of the landfarm in order to allow the biodegradation of the POP molecules found at ground level.	survey, plant and animal biodiversity, new measures taken) and the taking of soil samples at 20 cm depth for laboratory analysis to assess the decrease in the level of pesticide residues in the soil - The results of the orthène soil samples taken during the decontamination operations at the Malanville site confirmed the absence of the acephate molecule. Therefore the international consultant recommended to stop the maintenance and the follow-up of the landfarm	Consequently, there was no contamination at this particular site because the bags of orthene were buried at this site. As a result, monitoring of the landfarm installed for remediation is stopped. **3. Oganla site:** soil analysis result showed the amount of DDT (34,93 mg/kg) which is lower (0,123 g/ kg) than that found in the soil sample taken during the 1st monitoring-evaluation carried out in 2016. Note a decrease in the concentration of the DDT (POP) molecule whose biodegradation is very difficult and slow. The international consultant therefore recommended strengthening the landfarm by covering the soil with biodegradable straw from vetiver plants.			
Component 2 - Development and implementation of empty pesticides containers management system									
Output 2.1 Design and validation of a	Sept 16 Oct 18 for	5% National Project Coordination (NPC) and	10% - draft national strategy for the management of	80% - Mission of the international consultant	100% - Validation by the International Consultant in empty	-	-	100%	

management scheme for empty pesticide containers completed	national strategy	national consultant trained in Lyon (12-16 Oct 2015) to develop the strategy. Strategy for empty container management drafted Dec 2015.	empty packaging of pesticides (Report of Development of a strategy for management of empty packaging of pesticides in Benin of the national consultant in management of pesticide packaging (December 2015). - Approximately 200,235 empty pesticide containers in state and private structures, including the 30,000 empty containers inventoried in state structures in 2012, are to be secured for processing/ recycling.	specialized in empty pesticide packaging management in Benin from March 13 to 24, 2017, which aims to carry out a study on the implementation of a pilot plan for the management of empty pesticide packaging in the departments of the country. Borgou and Alibori - Sensitization of project stakeholders involved in the rational management of empty pesticide packaging. - Sensitization of cotton producers through the CEP on triple rinsing technique, drilling to make them unusable and collection of empty pesticide packaging. - At the end of the mission, a work plan for 2018 and 2019 for the implementation of the pilot plan for the management of empty pesticide	pesticide packaging management of the empty pesticide packaging management plan in the departments of Borgou and Alibori - Validation by the International Consultant of the strategy of treatment and recycling of empty pesticide packaging by the NGO Bethesda				

				packaging in the departments of Borgou and Alibori was prepared by the international consultant					
Output 2.2 The empty pesticide container management scheme piloted in Alibori and Borgou Departments	Oct 18 – farmer training Apr 19 - Scheme up and running Dec 19 - evaluation	5% Workshop to develop training curriculum for Farmer Field Schools planned for August 2016	10% awareness-raising of producers on the rational management of empty packaging of pesticides at the level of the FFS crops vegetable and cotton by the master trainers during the Facilitator Training (as part of Component 4).	15% - Preparation of LoA between FAO and the Social Engineering and Environment Company (CISE)/NGO Bethesda for the treatment and recycling of empty pesticide packaging in the departments of Borgou and Alibori - Development and validation of the LoA technical annex by the project technical team - Ongoing finalization of LoA between FAO and CISE/NGO Bethesda	25% - Training and sensitization of the 2018 FFS cotton-maize facilitators on the technique of triple rinsing and management of empty pesticide packaging - Production of a poster on empty pesticide packaging to raise awareness among producers on the management of empty pesticide packaging at the level of the thirteen (13) FFS installed in 2018 in the departments of Borgou and Alibori - Training and sensitization of CEP producers on the dangers related to the use of chemical pesticides and the management of empty pesticide packaging (triple rinsing) - Training and	35% - A total of 5,465 EPP were collected in the departments of Borgou and Alibori - Benin did not have a management plan for empty pesticide packaging in the regulatory texts on the management of pesticides. The project decided and retained to implement a pilot plan for the management of empty pesticide packaging, which is the first step in reducing the risks of health and environmental pollution. These packaging are reused by farming communities living in cotton growing areas, giving them a second life cycle. The pilot plan is a demonstration of the management plan on a reduced scale with 200 producers and is installed only in two departments of North Benin which is found in the cotton basin. Following the results	5% - Analysis of waste water from the treatment and recycling of empty pesticide packaging - Results of the analyzes: the results of the analyzes of the waste water revealed the presence of the following chemical substances: Acetamiprid (0.18 µg/L), Cypermethrin (0.27 µg/L), Chlorpyrifos (0.45 µg/L) , Emamectin Benzoate (0.12 µg/L), Lead (0.72 mg/L) and Cadmium (0.48 mg/L) - **Comments from the international consultant in the management of Empty Pesticide Packaging (EVP):** Based on Law No. 98-030 of February 12, 1999 on the framework law on the environment and Decree No. 2001-109 of April 4 2001 setting wastewater quality standards in the Republic of Benin, it	95%	

					sensitization of producers of different categories of farm typology on triple rinsing and management of empty pesticide packaging - Identification of collection and regrouping points by village and department of empty pesticide packaging - Signing and execution of LoA activities between FAO and the Bethesda NGO for the treatment /recycling of empty pesticide packaging in the Borgou and Alibori departments: Start up and continuation of the redevelopment work and upgrading to health standards/ safety/environment of processing and recycling center for empty pesticide packaging - Visit to the Bethesda NGO treatment and recycling center to	obtained from the pilot plan, a national sustainable management plan for empty packaging was drawn up for the national management of empty pesticide packaging, which is now the responsibility of the Plant Protection Service of the Production Department. Plant of the Ministry of Agriculture, Livestock and Fisheries by decree N°097/MAEP/DC/SGM/ DPV/CJ/SA/091SGG18 du 18 décembre 2018 fixant les modalités de gestion des emballages vides de pesticides et de biopesticides ainsi que les modalités de répartition des frais y afférents. - Shredding of EPP resulted in a weight of 252 kg - Treatment and recycling of EPP into finished products for non-food use: manufacture of brick pavers and flower pots by liquefying granules mixed with very fine sand: - Number of plastic pavers produced: 62	should be possible to discharge contaminated wastewater in small quantities. However, this procedure is not recommended. It is more environmentally friendly to evaporate waste water by exposing it to the sun, and to dispose of residues with obsolete pesticide stocks or, failing that, to store residues in a hazardous waste landfill for their future elimination. - Preparation of the final report being validated by the international consultant on LoA activities between FOA and NGO Bethesda for the treatment/recycling of empty pesticide packaging		

					assess the implementation of the upgrading work of the treatment center	- Number of plastic bricks produced: 04 bricks of 10 - 6 plastic flower pots - A thorough evaluation of pilot empty container projects was carried by the national consultant and is available. It includes expectations and recommendations for building a national strategy. - The evaluation identifies success and expectation from farmers involved and difficulties including poor road infrastructure and lack of non-recyclable waste treatment options. It reccomends pre-treatment (compaction or grinding) in the collection area to minimize transport constraints. - Currently, the rational management of EPP is entrusted to the structure in charge of plant protection, the DPV through a 2018 decree N°097/MAEP/DC/SGM/DPV/CJ/SA/091SGG18 du 18 décembre 2018 fixant les modalités de gestion des emballages vides de pesticides et de biopesticides ainsi que			

						les modalités de répartition des frais y afférents. - Proposals are made for the permanent funding for the implementation of the containers management system, including the application of the polluter pay principle. - Development of a management plan for empty pesticide packaging in Benin is launched			
Component 3 - Strengthening the regulatory framework and institutional capacity for the sound management of pesticides									
Output 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 Governmen		5% National workshop (10-11 Sept 2015) with participation of 2 CILSS experts Validation of biopesticides decree Jan 16.	25% - Workshop on the Validation of Draft Legislation and Decree on Biopesticides in the Republic of Benin organized by the Plant Protection Service (SPV) in the framework of strengthening the regulatory framework and institutional capacities for the rational management of pesticides and the registration of biopesticides (20 and 21 January 2016).	30% - Revision workshop (29 to 31 August 2017) draft decrees on the implementation of Community regulations on quality control and management of agricultural inputs in the ECOWAS area organized by the Plant Protection Service / DPV with the participation of the national consultant specializing in legislation - Workshop on the validation of draft decrees laying down the terms of	40% - Order in Council of Ministers and signature by the President of the Republic of: (i) Decree No. 2018-171 of May 16, 2018 establishing, attributing, organizing and operating the National Pesticide Management Committee (CNGP) and (ii) Decree No. 2018-172 of 16 May 2018 laying down the procedures for the application	-	-	100%	

t for approval.			- The mission of the international legal consultant in Benin (27 to 31 March 2017) made it possible on the one hand to inquire about the concerns of stakeholders and stakeholders involved in the management of pesticides and on the other hand to identify the different texts that govern the institutional, legislative and regulatory framework in the field of pesticide management. It also analyzed the regional regulation C/ REG.3/05/2008 harmonizing the rules governing pesticides in ECOWAS and noted potential difficulties in relation to these different texts that do not take into account the management of the cycle of pesticides especially the management aspect of empty packaging of pesticides. During this mission, the	application in Benin of the ECOWAS Regulations on the harmonization of the rules governing the quality control of agricultural inputs organized by the Plant Protection Service / DPV with the participation of the Coordinator of the project. - Decree by the President of the Republic of decrees on the CNGP and on the approval of pesticides in the Republic of Benin.	of Community regulations on the approval of pesticides in the Republic of Benin - Campaign of internalization and sensitization on the decrees of application of the ECOWAS/ UEMOA/CILSS regulations relative to the quality control and the management of pesticides organized by the Service of Plant Protection/DPV /MAEP - Designation of the members of the CNGP by the national structures involved in pesticide management - Development of operational application orders and management of the CNGP				

			international consultant sensitized stakeholders on the complexity of integration between regional provisions and the national institutional and legal framework for pesticides.						
Output 3.2 A national strategy, workplan and budget for inspection and quality control of pesticides developed, and a National Pesticide Management Committee established	Sept 16 - Strategy (consultant report) Jul 17 – resources allocated for NPMC	5% - National workshop (10-11 Sept 2015) with participation of 2 CILSS experts, agreed to develop an Interministerial Decree to establish a NPMC s - Awareness raising workshop on NPMC (10 March 2016), 35 participants (6 women)	25% - Information and awareness-raising workshop (10 March 2016) organized by the Plant Protection Service (SPV) of the Department of Plant Production (DPV) of the Ministry of Agriculture, Livestock and Fisheries (MAEP) of Benin on the establishment and functioning of NPMCs in all member states of the regional CILSS-ECOWAS-UEMOA region - Pesticide inspection action plan proposal	-	70% - Validation by the international consultant and the technical team of the project of the report of the national consultant on the post-homologation management of pesticides in Benin: Evaluation of the capacity of control and inspection - Validation by the technical team of the project of the report of the international consultant: Post-approval management of pesticides in Benin: Gaps and Strategies for Consolidating Inspection and Compliance Promotion Activities	-	-	100%	

Output 3.3 National capacity for pesticide inspections and post-registration control increased	May 19 - Equipment Jun 19 - Inspector training	5% ToR approved by LTO for national & international consultants for inspection & information exchange for pesticide management	10% Procurement procedures for the recruitment of the national pesticide management consultant: inspection and exchange of information	40% - Mission of the national consultant, specialist in inspection and control of pesticides, which aims at the evaluation of the capacity and the activities of inspection and quality control of pesticides all along their life cycle in Benin from their point of view entry through importation, transportation, storage, distribution, sale and use. - Report on Pesticide Management: Inspection and Information Exchange, Assessment of Pesticide Inspection and Control Capacity and Activities Throughout their life cycle in Benin	20% - Consultation with the structures involved in the inspection and control of pesticides belonging to the SPV: Port (fumigation center) and airport for the expression of equipment needs. - Visit of the Central Food Safety Control Laboratory (LCSSA) to study and assess the different sampling equipment and equipment - Preparation of two (02) lists of pesticide inspection and control equipment and equipment to be made available to the two (02) points of entry of the SPV pesticides to support the control and inspection actions to make them available. operational - Finalization of the procurement at FAO-Benin level and acquisition of a (01) batch of materials and equipment for the benefit of the	25% - Acquisition of equipment for inspection and control of pesticides including laboratory equipment to the two (02) entry points of pesticides belonging to the SPV: Port (fumigation center) and airport - Workshop to validate the improved national pesticide inspection and control system and raise awareness among key stakeholders in the pesticide sector: ✓ Sensitization of National Pesticide Management Committee (NPMC) members on the importance of pesticide inspection and control activities for the protection of human and animal health and the safeguarding of the environment in Benin. ✓ Validation of the proposal for the improved national system of pesticide inspection and control by the members of the National Pesticide	-	100%	

					two (02) points of entry for pesticides - Development and validation of TOR for the national system of validation workshop improved pesticide control and awareness CNGP members and key industry players and training of phytosanitary inspectors on the inspection manual and pesticide control Benign - Development and validation of the plan and training modules for phytosanitary inspectors - Preparation in progress of the training: Development and signature by DPV of letters of invitation, distribution of letters of invitation, printing of the manual of the phytosanitary inspector	Management Committee - Theoretical and practical training of thirty-seven (37) phytosanitary inspectors including 30 men and 7 women on the manual of inspection and control of pesticides in Benin - Post-training monitoring mission for phytosanitary inspectors to ensure compliance with inspection techniques and pesticide control procedures. The post-training follow-up mission of the inspectors made it possible to note progress on many levels: ✓ the restitution of the training by the participants to the other phytosanitary inspectors concerning the principles of phytosanitary inspection and control ✓ the application of the content of the principles and concepts concerning phytosanitary control and inspection and			

						the use of the phytosanitary manual as an inspection and control tool ✓ the effective application of the content of regulatory texts ✓ capacity building in terms of technical equipment and materials ✓ Provision of the inspection and control system for pesticides in sufficient human resources			
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	Feb 16 - Data base availabl e Jul 16 – alternati ves identifie d	10% Letter of Agreement with IITA to identify and test alternative products to pesticides has been developed. IITA is carrying out a stock-taking of alternative methods (bioproducts and practices) to chemical control for	90% Organization of a workshop at IITA (30-31 August to 1 September 2016) of the stakeholders to agree on the identified potential alternatives and to develop the strategy for field testing, homologation and Promotion of alternatives to the FFS	-	-	-	-	100%	

		cotton, rice and vegetables. Focus group discussions in 18 villages with farmers from the typology are underway to analyse pesticide use on vegetables and rice farming systems, main crop production and protection issues and to identify potential alternatives. A workshop to finalise FFS plan and IITA testing is planned for August 2016.							
Output 4.2 Identified alternatives to endosulfan, POPs and other hazardous pesticides tested for their technical and economic feasibility at farm level	Oct 16 – field tests of alternatives Jul 17 – registration of alternatives Jun 18 – Value chain analysis	10% National consultant from PAPA/INRAB to supervise field data collection (typology) has been recruited.	40% - Elaboration by IITA of the protocols and test plan on validated cotton alternatives by the national stakeholder workshop - Conducted by IITA in the field of tests on potential alternatives to endosulfan, POPs and other obsolete pesticides	20% - IITA conducts tests on potential alternatives to endosulfan, POPs and other obsolete pesticides through laboratory and field experiments - Report of tests on alternatives validated by the workshop on potential alternatives to POPs and other	30% - Signature and implementation of activities of the second phase of the partnership between FAO and IITA (International Tropical Agriculture Institute) for the conduct of efficacy trials of the identified alternatives, in particular for alternatives based	*Metarhizium anisopliae* Met 31 and the nuclear polyhedrosis virus (*Helicoverpa armigera Nelcear Polyhedrosis Virus*) (HaNPV) isolate on tomato in Madecali (Malanville, Alibori department) *Metarhizium anisopliae* Met 31 and the nuclear polyhedrosis virus isolate (*Helicoverpa armigera Nelcear Polyhedrosis Virus*)	-	100%	

			- Production of spores of *Beauveria bassiana* (entomopathogenic fungus), prospecting for aphid collection and tests for herding	chemical pesticides of dangerous syntheses	on fungi, viruses or/and bacteria for control of tomatoes pests: ✓ Establishment of the tomato nursery ✓ Transplanting tomato plants ✓ Organic manure: One week after transplanting ✓ First observations and first application of products ✓ Weekly application of tomato products (*Metarhizium* anisopliae Met 31 and the nuclear polyhedrosis virus isolate (*Helicoverpa armigera* Nelcear Polyhedrosis Virus) (HaNPV). - Continuation and finalization of the effectiveness tests of the alternatives in real environment (Malanville, department of Alibori) for the control of Helicoverpa armigera of tomato in LoA FAO IITA framework	(HaNPV) on cotton in the Facilitating School Field in Kassakou (Kandi, Alibori department)			

					- Analysis of the test results: The experiment made it possible to assess and confirm the efficacy of the bioinsecticides Metarhizium, Met 31 and the HaNPV virus used on larvae of Helicoverpa armigera, a pest of tomato, cotton and many other species. other cultures.				
Output 4.3 Viable alternatives to endosulfan, POPs and other obsolete pesticides promoted	Feb 17 – training agents Sept 17 & Apr 18 – farmer training Mar 18 – communciation strategy	10% National consultant to develop an FFS implementation plan has been recruited.	50% - Four (04) FFS training sessions for trainers (Facilitators) took place from September 2016 to February 2017 in Malanville on the promotion of Alternatives to hazardous chemical pesticides on vegetable crops (tomato and onion) - Promotion of alternatives with the use of aqueous neem extracts to protect tomato plants against insect pests at the CEP level - Data collection mission at the start and end of the cycle as part of the	20% - Conduct of 4 facilitator training sessions (FDF) on cotton-maize FFS respectively from June 27 to July 3, August 24 to 29, November 04 to 14 and December 13 to 24, 2017 - Supervision mission of the 1st session of FDF by the international consultant in FFS of the technical team AGPM - Training on the recycling of facilitators of FFS vegetable crops (CUMAR) 2016, installation FFS CUMAR 2017 and monitoring of FFS cotton-maize	20% - Carried out training on the recycling of thirteen (13) FFS cotton-maize facilitators - Baseline survey in the seven (7) new 2018 cotton-maize FFS + four (4) control villages in the Borgou and Alibori departments - Monitoring, installation and operation of thirteen (13) cotton-maize FFS 2018 in the departments of Borgou and Alibori including: ✓ Five (05) 2nd year CEP (BPA, Special Studies)	20% - Delivery of the final report on the project Farmers Field Schools (FFS) for the promotion of non-toxic alternatives to chemical pesticides on vegetable crops, cotton and maize in the departments of Borgou and Alibori - Monitoring and evaluation of FFS actions: Finalization of the final report on the effect of FFS in integrated management of cotton production and pests - Development of the communication strategy on the impact of empty pesticide packaging and the promotion of alternatives to	-	100%	

Output 4.3 Viable alternatives to endosulfan, POPs and other obsolete pesticides promoted			assessment of the FFS vegetable crops (Sept 2016 and April 2017) - Implementation of the 1st FFS TOT training session of the facilitators in June 2017 on the promotion of alternatives to hazardous chemical pesticides on cotton and maize in the departments of Borgou and Alibori	- Two (02) follow-up missions for FFS market garden crops respectively from 05 to 13 February and from 11 to 17 March 2018 in the communes of Malanville and Karimama - Final report of training sessions for cotton-maize FFS facilitators - Conduct of a study on the commercialization of alternatives to conventional chemical pesticides in Benin - Monitoring and evaluation of FFS: Mission of the international and national consultants specialized in typology and monitoring-evaluation of the FFS on the typology and the basic survey for the evaluation of the actions of cotton-maize FFS, training of the facilitators on the characterization of soil and soil sample	in Piami, Gbessassi Bouka, Padé, Wara and Ina; ✓ Eight (08) 1st year CEP (BPA and PP) in Angaradébou, Pédè, Bensékou, Kambara, Liboussou, Godou, Soumarou and South Guessou. - Monitoring of cotton-maize CEP activities by FAO-Benin - Supervision of the monitoring and final evaluation activities of the 2018 cotton-maize CEP activities - Organization of a workshop on the evaluation of CEP activities and presentation of certificates to CEP facilitators for maize and market gardening - Collection of end-of-cycle data in cotton-maize CEPs and evaluation of CEP actions: completion of quantitative and	conventional chemical pesticides - Realization of the project factsheet (in finalization) - Preparation of summary case study on FFS natural solutions for sustainable agriculture fro the GEF project in Benin: "Promotion of non-toxic alternatives to synthetic chemical pesticides through the Farmer Field Schools (FFS) cotton-maize in Benin: neem oil and food spray a combination for sustainable cotton production in Benin "			

				collection for laboratory analysis Soil Science Water and Environment (LSSEE / INRAB) - Report on "Effect of FFS in integrated management of crop production and pests: Tomato and onion case in the municipalities of Karimama and Malanville - Validation of ToRs by the project technical team for the recruitment of national consultants specialized in FFS and monitoring and evaluation of FFS	qualitative surveys at the end of the cotton and maize crop production cycle in the departments of Borgou and Alibori to measure the effect of CEP - Ongoing preparation of the final report of the cotton-maize CEP activities in close collaboration with all the consultants involved in Component 4 - Development of a matrix of project communication interventions for the management of empty pesticide packaging and the promotion of biopesticides				
Component 5 – M&E									
Output 5.1: Project monitoring system providing six-monthly reports on progress in achieving project outputs and outcomes.		Inception meeting: 14-15 July 2015; PMU first meetings: 25 Nov 2015; Project planning meeting: 28-29 Jan 2016; SC meeting: 29 Décembre 2015 (24	2nd meeting of the PMU: 22 July 2016 3rd meeting of the PMU: 17 November 2016 4th meeting of the PMU: 22 June 2017 2nd session of the Steering Committee of the project: 05 January 2017 Four (4) FAO-Benin quarterly meetings	- Extraordinary meeting of the PMU: December 01, 2017 - 5th meeting of the PMU: January 31, 2018 - 3rd session of the Steering Committee of the Project: 06 March 2018 - FAO Country	- 6th meeting of the PMU: 09 October 2018 - 7th meeting of the PMU: 06 March 2019 - 4th session of the Steering Committee of the Project on June 06, 2019 - 2018 Assessment Workshop and 2019 Activity Planning of	- 8th meeting of the PMU: September 25, 2019 - 9th meeting of the PMU: February 11, 2020 - FAO-Benin 2019 Activity Review and 2020 Activity Planning Workshop - Two (02) quarterly meetings to present the activities carried out by FAO-Benin projects	- Quarterly meetings of FAO-Benin to present the activities carried out by the projects - FAO-Benin workshop to review activities carried out in 2020 and planning of 2021 activities, March 4 and 5, 2021 - Zoom conference sessions with the technical team of the	100%	

		participants, 4 women)	on the implementation of projects	Office 2018 Activity Planning Workshop: 1-2 February 2018 - Two (02) quarterly meetings of FAO-Benin to present the activities carried out by the projects	FAO-Benin - Two (02) quarterly meetings of FAO-Benin to present the activities carried out by the projects		project, Veolia and FAO-Benin and the Coordinator for the execution and monitoring of the contract for securing obsolete pesticides - Preparation of implementation reports for the activities of the Coordinator's contract for the periods of: May-July 2020, August-November 2020, November-December 2020, January-March 2021 and April-June 2021 - Preparation of mission reports on activities carried out by the project		
Output 5.2: Mid-term and final evaluation reports		-	-	- Mid-term evaluation of the project, from 19 to 28 February 2018	-		- Final evaluation of the project in November 2020: - Interview of the final project evaluation team with the Coordinator, the Program Officer of FAO-Benin and the national consultant in PO securing (ex FAO Project Coordinator GCP/BEN /055/JPN) about the global implementation of the FAO project GCP/BEN/056/GFF and its anchoring with the FAO project GCP/BEN/055/JPN	100%	

							- Individual interview of the Coordinator with the final evaluation team of the project on the implementation of activities, project management, difficulties and approaches to solutions. - Organization of individual interviews of the evaluation team with the stakeholders and beneficiaries of the project on their involvement at the project level - Zoom conference of the final evaluation team of the project with BH, FAO-Benin, FAO-Rome, GEF FAO-Rome Unit and the Coordinator on the feedback of conclusions and recommendations from the final evaluation of the project ***Conclusions :*** - The project responded well to the strategic priorities of the Government, FAO and GEF, and to the needs of safeguarding the environment and limiting the exposure of populations to the risks and dangers associated		

							with the management and inappropriate use of chemical pesticides and related wastes - Beyond the objective of eliminating 213 tonnes of POP, PO and related waste which is on the way to being reached, the project has strengthened national capacities for the management and rational, safe use of hazardous pesticides and proposed a number of alternative systems based on integrated management of production and pests (IPPM), thus stimulating the appropriation of the results generated by the Government for dissemination on a larger scale. - In general, the project was well managed, but delays in some procurement or recruitment processes negatively affected its efficiency during implementation. - The regulations, plans, strategies and technologies developed and tested by the project are within the reach of the different		

							categories of beneficiaries, and are reproducible thanks to the many capacities developed by the project. - Focused on environmental and social protection, the project achieved its objectives, but the gender dimension could be better taken into account during the design and implementation of the project, starting from an analysis of the specific needs of women. ***Recommendations :*** - The design of reasoned management projects for chemical pesticides and research-action on alternatives by FAO and the Government must integrate all the actors in this value chain and provide sufficient incentives to support the adoption of technologies and good proposed practices. As such, it is necessary to create a partnership framework with AIC and the private sector to support, for example,		

							the production, availability and accessibility of quality biopesticides, and to create a niche market for them. products obtained from production systems with low use of synthetic inputs. - FAO must promote the ownership and consolidation of the achievements and results generated by the project and the institutionalization of the CEP approach by the Government. - FAO must support the Government to ensure the management of the knowledge generated by the project, the implementation of the Communication Strategy, the development of new labels and ultimately, contribute to the visibility and sustainability of the project. - FAO should improve its mechanism for mainstreaming concerns related to gender and vulnerable groups and mobilizing co-financing during the		

							design and implementation of similar projects.		
Output 5.3: Project "best-practices" and "lessons-learned" disseminated via publications and other means to be identified in the communication strategy.		Inception Workshop – coverage Media promotion of inventory: articles in Le Matinal, La Fraternité et Le Quotidien (16/9/15)	Publication in the newspaper "The Nation" of calls for candidates for the recruitment of national project consultants Training of facilitators and associated FFS vegetable crops: publication of an article in the newspaper "The Nation" and on the FAO online site, interview of the Project Coordinator in the newspaper "La nouvelle Tribune"	Completion of a poster on empty pesticide packaging	- Publication of an article on the decontamination of the polluted site of Bohicon and the cotton-maize CEPs in the quarterly newsletter of the FAO Representation in Benin/July-September 2018 - Kandi and Banikoara (Alibori Department) broadcast radio messages about triple rinsing and empty pesticide packaging management - draft of project factsheet - poster on management of empty pesticide containers for farmers	Delivery of a summary case study: "Promotion of alternatives to synthetic chemical pesticides: neem oil and food spray- a combination for the sustainable production of cotton in Benin"	-	100%	

4. Information on Progress, Outcomes and Challenges on Project Implementation

Please briefly summarize main progress achieving the outcomes (cumulative) and outputs (during this fiscal year):
C1: 1st export of six (06) containers of obsolete pesticide waste for a total quantity of **71,57 tonnes** achieved in March 2021. Five (05) other containers of **57,267 tonnes of PO waste** are already ready for export. Completing the excavation operation for **21,503 tonnes** of dieldrin and aldrin sludge and contaminated soil from the polluted Djassin site. **C2:** Recommendations for treatment of wastewater from recycling of Empty Pesticide Packaging (EVP) formulated. This was the remaining aspect element under component 2. **C5:** A final evaluation of the project was conducted leading to a final project report with conclusions and recommendations.
What are the major challenges the project has experienced during this reporting period?
- The original shipping route chosen by the disposal company (Veolia) has undergone a change. As a result, the ship must now pass through Togo, which is not on the list of transit countries in the Basel notification granted to Veolia. Consequently, no waste export can be carried out before June 30, 2021, date of the end of the 1st notification. A new request for 2nd Basel notification had to be launched with Togo as the transit country. This 2nd notification covers the period from May 15, 2021 to January 01, 2022 and will allow the export of the rest of the obsolete pesticides. - The Covid 19 pandemic has caused a considerable delay in the recruitment of Veolia, an international company specializing in the securing and disposal of obsolete pesticides but also in the manufacture and import of materials and equipment for safeguarding the waste. It is also the basis for the total closure of airports, thus causing a significant delay for Veolia's trip to Benin for the practical phase of operations to secure obsolete pesticides.

Development Objective (DO) Ratings, Implementation Progress (IP) Ratings and Overall Assessment

Please note that the overall DO and IP ratings should be substantiated by evidence and progress reported in the Section 2 and Section 3 of the PIR.

For DO, the ratings and comments should reflect the overall progress of project results.

	FY2021 Development Objective rating[16]	FY2021 Implementation Progress rating[17]	Comments/reasons[18] justifying the ratings for FY2021 and any changes (positive or negative) in the ratings since the previous reporting period
Project Manager / Coordinator	Satisfactory	Satisfactory	The activities of components 2, 3 and 4 are finalized. The activities of component 1, in particular the securing and disposal of obsolete pesticides, has seen considerable progress through the securing of stocks of obsolete pesticides (167,714 tonnes) from all priority stores and the evacuation of 71,57 tonnes for disposal in Switzerland.
Budget Holder	Satisfactory	Satisfactory	The planning of the operation to secure and eliminate obsolete pesticides has not been respected for various reasons including the Covid-19 pandemic. We hope that everything will be done so that this delicate operation will be executed before the end of the project.
GEF Operational Focal Point	Satisfactory	Satisfactory	Component 1 of the project, in particular the activities for securing and eliminating obsolete pesticides, are normally carried out with a first export of obsolete pesticide waste for incineration in Switzerland. The schedule for carrying out these activities was disrupted by the COVID-19 pandemic, which caused considerable delays in the implementation of said activities. Activities to secure and dispose of obsolete pesticides are continuing and should be finalized before the end of the project scheduled for September 30, 2021. In view of the level of execution of activities for securing and eliminating obsolete pesticides, the main objective of the project, the project is deemed satisfactory.

[16] **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.

For more information on ratings, definitions please refer to Annex 1.

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

[18] Please ensure that the ratings are based on evidence

Lead Technical Officer[19]	Satisfactory	Satisfactory	The project has advanced satisfactorily and in its final year of implementation. Disposal activities are at the final stage of completion through the contract with the waste management company recruited by FAO. The project surpassed its targets regarding the development and implementation of remediation strategies and quantification of Risks from 2 highly contaminated sites. Stakeholders are fully engaged regarding all components of the project. While the project is expected to achieve its objectives, the current situation with the COVID-19 pandemic caused delays in implementation. The project was extended until end of September 2021 to ensure project activities are completed and outcomes are achieved.
FAO-GEF Funding Liaison Officer	Satisfactory	Satisfactory	The project has delivered on most of the key results. The disposal operations will likely be completed within the remaining months.

[19] The LTO will consult the HQ technical officer and all other supporting technical Units.

5. Environmental and Social Safeguards (ESS)

Under the responsibility of the LTO (PMU to draft)

This section of the PIR describes the progress made towards complying with the approved ESM plan, when appropriate. Note that only projects with **moderate** or **high** Environmental and Social Risk, approved from June 2015 should have submitted an ESM plan/table at CEO endorsement. This does not apply to **low** risk projects. Please add recommendations to improve the implementation of the ESM plan, when needed.

Social & Environmental Risk Impacts identified at CEO Endorsement	Expected mitigation measures	Actions taken during this FY	Remaining measures to be taken	Responsibility
ESS 1: Natural Resource Management				
	NA			
ESS 2: Biodiversity, Ecosystems and Natural Habitats				
	NA			
ESS 3: Plant Genetic Resources for Food and Agriculture				
	NA			
ESS 4: Animal - Livestock and Aquatic - Genetic Resources for Food and Agriculture				
	NA			
ESS 5: Pest and Pesticide Management				
	See risk mitigation plan below.			
ESS 6: Involuntary Resettlement and Displacement				
	NA			
ESS 7: Decent Work				
	NA			
ESS 8: Gender Equality				
	NA			
ESS 9: Indigenous Peoples and Cultural Heritage				
	NA			
New ESS risks that have emerged during this FY				
	NA			

In case the project did not include an ESM Plan **at CEO endorsement stage, please indicate if the initial Environmental and Social Risk classification is still valid; if not, what is the new classification and explain**.

Overall Project Risk classification (at project submission)	**Please indicate if the Environmental and Social Risk classification is still valid[20].** If not, what is the new classification and explain.
Medium-High	Still valid.

Please report if any grievance was received as per FAO and GEF ESS policies. If yes, please indicate how it is being/has been addressed.
None.

6. Risks

Risk ratings

RISK TABLE
*The following table summarizes risks identified in the **Project Document** and reflects also **any new risks** identified in the course of project implementation. Please make sure that the table also includes the Environmental and Social Management Risks captured by the Environmental and social Management Risk Mitigations plans. The Notes column should be used to provide additional details concerning manifestation of the risk in your specific project, **as relevant**.*

[20] **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.

	Risk	Risk rating[21]	Mitigation Actions	Progress on mitigation actions[22]	Notes from the Project Task Force
General project risks					
1	Insufficient funds dedicated to the safeguarding of high-priority sites, and the disposal of POPs.	Low		Budget for safeguarding and disposal POPs and obsolete pesticides is available and funded by GEF. This activity is co-funded by CropLife	Budget available for more than 200 tonnes of obsolete pesticides and 2 sites remediated
2	Institutional arrangements pose challenges to project execution.	Low		Project focal points have been designated at the level of the Ministry of Agriculture and the Ministry of Health. These focal points are members of the Project Management Unit and participate in the realization of project activities.	All ministries (Health, Agriculture and Environment) have coordinated well during project implementation
3	Likelihood of political instability	Low		No political instability was observed during the implementation of the project	
4	Extreme weather conditions such as torrential rain and floods	Low to medium		Areas where stores containing obsolete pesticides and contaminated soil are located are not flood-prone areas	
Component 1: Safe disposal of POPs and other obsolete pesticides and remediation of heavily contaminated sites					

[21] GEF Risk ratings: Low, Moderate, Substantial or High

[22] If a risk mitigation plan had been presented as part of the Environmental and Social management Plan or in previous PIR please report here on progress or results of its implementation. For moderate and high risk projects, please Include a description of the ESMP monitoring activities undertaken in the relevant period".

	Risk	Risk rating[21]	Mitigation Actions	Progress on mitigation actions[22]	Notes from the Project Task Force
General project risks					
5	Environmental contamination from leakage of POPs and other obsolete pesticides due to poor conditions of containers	High	Management measures to be included in the EMP include 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.	Mitigation measure implemented	The security measures are provided for in the EMP and the national team will ensure strict compliance by the international company
6	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	The Government has realized the danger of obsolete pesticides. Thus, any import of pesticides is subject to a prior import authorization and takes into account the remaining stock of pesticides In addition, the control of pesticides for the cotton season takes into account the residual stock of pesticides of the previous season	
7	Lack of appropriate storage for safeguarded stocks	Medium		Following the liquidation of SONAPRA, the project could not benefit from the SONAPRA department store as an intermediate/final storage center (CSI/F) for secure pesticide stocks because this store currently contains inputs. Nevertheless, the SONAPRA Court has been selected as the CSI/F platform for secure obsolete pesticide stocks	Relevant stores identified in EMP for centralisation of stocks

	Risk	Risk rating[21]	Mitigation Actions	Progress on mitigation actions[22]	Notes from the Project Task Force
General project risks					
8	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.	Personal protective equipment specification available. Health and safety plans in EMP available for minimising incidents and worker exposure	Safety measures for each obsolete pesticide safety operation are provided for in the EMP and the Health and Safety Environment Plan. The national team will ensure strict compliance with these measures by the international company
9	Delays in the procurement of equipment necessary for the disposal	Low		The acquisition of equipment is subject to the recruitment of the international company by FAO-Rome and the length of the procurement procedures	
10	Government authorities disagree with the strategy for the reduction of risks posed by contaminated sites	Medium		The Specific Environmental Management Plans (EMP) of the contaminated sites were cleared by the Benin Environmental Agency (ABE) before the implementation of site remediation operations.	All EMP (obsolete pesticides and contaminated sites) have been cleared by the ABE
11	Delays in administrative procedures/decisions as regards transport of obsolete stocks	Medium		The preparation of notification documents for transit countries and the processing of these documents in accordance with the procedures in force at the national level lasts 2 to 3 months	
Component 2: Development and implementation of empty pesticides containers management system					

	Risk	Risk rating[21]	Mitigation Actions	Progress on mitigation actions[22]	Notes from the Project Task Force
General project risks					
12	Technical staff being exposed to pesticides during collection and repacking of empty containers	Low to medium		Training on triple rinsing undertaken and treatment of containers by Bethesda (NGO) planned to minimise exposure	Training and awareness sessions on triple rinsing and rational management of empty pesticide packaging to facilitators of FFS, producers and agricultural communities.
13	Lack of stakeholder involvement in proper disposal of empty containers and in the establishment of a sustainable system for the management of wastes.	Low		In addition to the FFS producers from the villages of the Borgou and Alibori departments, the project involved producers and actors of the national pesticide supply system for the implementation of the pilot plan for the management of empty pesticide packaging.	
Component 3: Strengthening the regulatory framework and institutional capacity for the sound management of pesticides					
14	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 authority to enact legislation	Medium		Decrees have been issued by the President of the Republic for better pesticide management	
Component 4: Promotion of alternatives to POPs and other hazardous chemical pesticides					
15	Low interest in adopting alternative technologies by producers	Low		The final evaluation of the FFS revealed that most of the CEP producers have tested and given positive feedback in using alternatives indicated as part of integrated pest management	

	Risk	Risk rating[21]	Mitigation Actions	Progress on mitigation actions[22]	Notes from the Project Task Force
General project risks					
16	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		Integrated pest management methods were the subject of a training module during the animation of FFS	

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

FY2020 rating	FY2021 rating	Comments/reason for the rating for FY2021 and any changes (positive or negative) in the rating since the previous reporting period
Low	Moderate	Although most of the activities are done, there is still a chance that the COVID-19 pandemic could still affect the final disposal operations – e.g. disposal team not being able to travel due to restrictions.

7. Adjustments to Project Strategy – Only for projects that had the Mid-term review (or supervision mission)

If the project had a MTR review or a supervision mission, please report on how the MTR recommendations were implemented as indicated in the Management Response or in the supervision mission report.

MTR or supervision mission recommendations	Measures implemented
Recommendation 1: Develop and implement a communication strategy to improve visibility and inform the public about the efforts being made to solve a public health and environmental problem	A communication strategy implemented for the project on the promotion of effective alternatives and on the impact of empty pesticide packaging on human health and the environment in order to reduce the risks of toxicity linked to human health and the environment. During the implementation of the activities of the different components, awareness, education and information sessions were held with the partners and beneficiaries of the project during meetings, workshops and through communication channels such as posters, radios, newspapers, television, internet and good practices at Farmer Field School (FFS) level
Recommendation 2: Hold regular weekly or at least monthly meetings of the Project Management Unit (PMU) to enable members to monitor project implementation and effectively facilitate and accelerate the implementation of activities	During the 1st meeting of the Project Management Unit (PMU), PMU members decided on a 4-month period to discuss the activities carried out and the annual work plans. However, actions such as reports of bimonthly activities carried out are made to members in order to ensure the effective implementation of the annual work plan approved by the PMU.
Recommendation 3: Design and rapidly implement a monitoring and evaluation system to facilitate instant monitoring of the remaining activities' implementation.	An effective project monitoring and evaluation mechanism is set up at FAO-Benin to monitor activities carried out in the field for better achievement of project results. The evaluation makes it possible to assess the progress of the project, to see if the planned results are achieved and the direct effects targeted in the logical framework of the project and to promote the dissemination of the results.
Recommendation 4: Speed up the implementation of activities that have been significantly delayed, in particular those related to the implementation of a system for empty pesticide container management.	A system of collection, triple rinsing, safe storage and recycling of empty pesticide packaging in areas of large cotton production (Borgou and Alibori departments) has been set up and is being consolidated through the sensitization of cotton and maize producers and training on the triple rinsing of empty pesticide packaging to reduce the risks of human and environmental toxicity associated with the use of these packaging. A memorandum of understanding was signed with the NGO Bethesda to set up the pilot plan for managing Empty Pesticide Packaging (EVP) through a mechanism for collecting, storing and processing/recycling EVP. The implementation of this memorandum of understanding made it possible to recover through the pilot plan 5,465 EVP from the departments of Borgou and Alibori which were treated and recycled into finished products such as paving stones, bricks and flower pots.

Recommendation 5: Simplify procedures and avoid delays in the approval of pre-requisite documents submitted to the FAO Pesticide Risk Reduction Group and the Benin Environmental Agency (ABE).	Better-structured system of accountability for the activities of the various project components to reduce the delay in processing reports and other project documents was put in place. Documents were submitted for validation to the ABE as soon as possible in order to reduce the time taken to review documents for validation.
Recommendation 6: Involve women more in the implementation of project activities, particularly in Farmer Field Schools.	The installation of cotton-maize FFS saw an increase in terms of women's involvement, i.e. 38.46% compared to the market gardening FFS which had only two (02) women among the 10 facilitators (20%) i.e. an increase of 18.46% at the level of the facilitators responsible for the animation of the FFS The involvement of women in the FFS increased from 4% in the market gardening FFS to 20% in the cotton-maize FFS, i.e. an increase of 16%
Recommendation 7: Design an exit strategy involving key partners to ensure the continuation of activities and the sustainability of achievements after the end of the project.	Full involvement of the Plant Protection Service (SPV), the State structure responsible for the management of pesticides belonging to the Plant Production Directorate (DPV)/MAEP, which houses the coordination of the project. The targeted strategy will focus on raising awareness and strengthening the regulatory framework and institutional, technical and material capacities and policy makers to better manage pesticides and prevent future accumulations of obsolete pesticides. The sustainability of the achievements obtained by the project must be integrated into the activities of the Plant Protection Service to improve the national pesticide management system. The SPV will rely at the field level on the decentralized structures of the MAEP that are the Departmental Directorate of Agriculture, Livestock and Fisheries (DDAEP) and the Territorial Agricultural Development Agency (ATDA).

Adjustments to the project strategy.

Pleases note that changes to outputs, baselines, indicators or targets cannot be made without official approval from PSC and PTF members, including the FLO. These changes will follow the recommendations of the MTR or the supervision mission.

Change Made to	Yes/No	Describe the Change and Reason for Change
Project Outputs	No	
Project Indicators/Targets	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, mid-term review, final evaluation 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 PTF, 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	Original NTE: 21/03/2021 Revised NTE: 30/09/2021 Justification: The Covid 19 pandemic caused the total closure of airports causing a significant delay for Veolia's (disposal company) trip to Benin for the practical phase of operations to secure and remove obsolete pesticides. It also caused a considerable delay in the manufacture and import of materials and equipment for securing obsolete pesticides. In view of the above, the project was extended to 30 September 2021.

8. Stakeholders Engagement

List of stakeholders	Category	Engagement mechanism
Direction de la Production Végétale/ Ministère de l'Agriculture, de l'Elevage et de la Pêche (MAEP)	Government	The MAEP is the executing agency of the project through the Directorate of Plant Production, which houses the project
Direction de la Qualité, des Innovations et de la Formation Entrepreneuriale (DQIFE)/MAEP	Government	The DQIFE is involved at the level of component 4 of the project notably in the activities of FFS for the promotion of alternatives to POPs and extremely dangerous chemical pesticides
Agence Béninoise de la Sécurité Sanitaire des Aliments (ABSSA)/MAEP	Government	The Benin Food Safety Agency is involved at the project level through the Central Food Safety Control Laboratory for the analysis of soil samples contaminated with pesticides
Direction Générale de l'Environnement et du Climat (DGEC)/Ministère du Cadre de Vie et du Développement Durable	Government	The Directorate General for Environment and Climate through the project focal point participates in the execution of the activities and the management of the project. The Bâle Convention will support the project in the administrative procedures for the transport of obsolete POPs and pesticides for disposal abroad
Agence Béninoise pour l'Environnement (ABE)/Ministère du Cadre de Vie et du Développement Durable	Government	The Benin Environmental Agency (ABE) will participate in the implementation of the safeguarding and disposal of obsolete POPs and other pesticides and the remediation of heavily contaminated sites.
Direction Nationale de la Santé Publique/Ministère de la Santé	Government	The National Directorate of Public Health through the project's focal point participates in the execution of the activities and the management of the project.
Institut National des Recherches Agricoles du Bénin (INRAB)/MAEP	Government	INRAB intervenes mainly at the project level in the collection of typology data and basic surveys, monitoring and evaluation at the level of farmer's fields school. It will also support the project at the pre-registration level of biopesticides tested by IITA at the farmer field fields for registration
Direction Départementale de l'Agriculture, de l'Elevage et de la Pêche (DDAEP)	Government	The DDAEPs of contaminated departments and depots /stores of POP stocks and obsolete pesticides are involved through their phytosanitary surveillance structure during the execution of the activities related to the investigation of contaminated sites and to the operations of census of deposits/stores stocks of POPs and obsolete pesticides. They are also involved in the decontamination of polluted sites and the safeguarding and disposal of obsolete pesticides. DDAEP Borgou and Alibori are strongly involved in the management of empty pesticide packaging (component 2) and the promotion of alternatives to POPs and extremely

		dangerous chemical pesticides (component 4) DDAEP Zou and Alibori are involved in the decontamination of polluted sites of Bohicon and Malanville
Agence Territoriale de Développement Agricole (ATDA)/MAEP	Government	The ATDA are involved at the level of component 4 of the project notably in the activities of FFS for the promotion of alternatives to POP and extremely dangerous chemical pesticides
Organisation Béninoise pour la Promotion de l'Agriculture Biologique (OBEPAB)	NGO	OBEPAB participates in the project activities by encouraging alternatives for pest control based on their experience, impact monitoring, awareness, education and communication strategies in cotton producing areas.
Institut International d'Agriculture Tropicale (IITA)	International Institute	IITA supports the project in promoting tried and tested alternatives at the farmer field fields to reduce the dependence of cotton and market gardening producers on highly dangerous synthetic chemical pesticides
Communautés agricoles	Farmer Organization	Agricultural communities are the key participants in the project and engaged through the communication strategy, their active participation at the level of farmers' fields and typological studies on alternatives aimed at reducing the use of synthetic chemical pesticides.
NGO Bethesda	NGO	Bethesda is involved in component 4 of the project through an LoA signed with the FAO for the collection, grouping, transport, treatment and recycling of empty pesticide packaging in the departments of Borgou and Alibori

9. Gender Mainstreaming

Information on Progress on gender-responsive measures as documented at CEO Endorsement/Approval in the gender action plan or equivalent (when applicable)
The national project coordinator is a woman and she encourages participating women on steering committees (Project Steering Committee and Project Management Unit) and key stakeholder events. Emphasis is also placed on the participation of rural women in awareness-raising and education meetings on exposures related to the risks associated with contamination at contaminated sites and pesticides and through the re-use of empty packaging of pesticides. By removing and addressing sources of POPs contamination in communities, the project will help reduce the exposure of women, children and other vulnerable groups. Partnerships with civil society (for example, the NGO that already removes containers from the use of public health from traffic) explicitly target women in their advocacy and communication efforts. Regarding the participation of women in the Farmer Field Schools (FFS), 46 women took part in the activities in the 10 FFS market gardening of 1st and 2nd years and 37 women in the 13 FFS cotton-maize of 1st and 2nd year. As part of the implementation of the pilot plan for the management of empty pesticide packaging in the departments of Borgou and Alibori, 200 producers including two (02) groups of 22 women were trained and sensitized on triple rinsing and the management of empty pesticide packaging in the departments of Borgou and Alibori.

10. Knowledge Management Activities

Knowledge activities / products (when applicable), as outlined in knowledge management approved at CEO Endorsement / Approval
Safeguarding, disposal POPs and obsolete pesticides and cleaning up heavily contaminated sites help protect human health and the environment by reducing the risk of toxicity due to contamination of soil and water. Similarly, the project carried out the collection, treatment and recycling of empty pesticide packaging in the departments of Borgou and Alibori to prevent the reuse of empty pesticide packaging which poses risks of toxicity to human health and the environment. The project developed a communication strategy on the impact of empty pesticide packaging and the promotion of alternatives to conventional chemical pesticides. The implementation of this plan has included the following: 5 radio spots on risks of pesticides and risk reduction measures 1 manual on inspection of pesticides 3 curricula on farming and integrated pest management for cotton, maize and vegetables 1 poster on management of empty pesticide containers management for farmers 1 brochure on biopesticide (in progress) 1 A success story from the project on the IPM FFS was delivered The case study summary sent is titled "Promotion of alternatives to synthetic chemical pesticides: neem oil and food spray- a combination for the sustainable production of cotton in Benin" 1 publication on the FAO-Benin website of an article on the training of phytosanitary inspectors on the pesticide inspection and control manual. http://www.fao.org/benin/actualites/detail-events/fr/c/1207578/ 1 project factsheet (under development)

11. Indigenous Peoples Involvement

Are Indigenous Peoples involved in the project? How? Please briefly explain.
The agricultural populations, in particular the cotton producers who are bariba, dendi, and other ethnic groups of the Benin cotton basin, are the key participants at the same time as the beneficiaries, through the reduction of exposure to pesticides, and will be engaged through the communication strategy, FFS and typological studies concerning alternatives. Women and children of agricultural producers benefit from reduced pesticide exposure, through improved management of pests and pesticides and awareness of the risks posed by pesticides. In particular, cotton producers have used proven biopesticides as less harmful alternatives for integrated cotton pest management to reduce the use of hazardous chemical pesticides. Market gardeners (bariba, dendi and djerma) in the department of Malanville also participated in FFS activities to promote alternatives to conventional chemical pesticides. Urban and rural Yoruba, gon, fon, nago populations living near remediated contaminated sites and decontaminated pesticide stores are less exposed to health and environmental risks.

12. Innovative Approaches

Please provide a brief description of an innovative[23] approach in the project / programme, describe the type (e.g. technological, financial, institutional, policy, business model) and explain why it stands out as an innovation.
• The project through component 4 "Promotion of alternatives to POPs and other dangerous chemical pesticides" introduced integrated pest management (IPM) in Borgou and Alibori from 2016 to 2019 through running farmer field schools for 400 vegetable (tomato, onion) and cotton-maïze producers (total). In the frame of IPM a number of less toxic/non toxic alternatives to pesticides like the aqueous extract of Neem and the aqueous extract of Hyptis suaveolens, as well as the combination of food extracts were thought to use by farmer, including the ecological management of their fields including for the new fall armyworm on maize and for cotton pests against which business as usual includes calendar treatment with conventional pesticides. These were integrated with the production of healthy plants – including rotation and organic matter – that are not innovations per se but they are social innovations for the country. The whole component has therefore brought technical and social innovations in the context of Benin, including protecting farmers from risks of pesticides. • Through component 2 "Pilot container management" a pilot has recycled empty pesticide containers into bricks which is one of the few examples of successful recycling model of pesticide waste in Benin. • Through component 3 Technical improvement at the level of phytosanitary inspectors for the control and inspection of pesticides. It then became clear that most phytosanitary inspectors at the national level have received notions and are edified about the inspection and sampling of pesticides during controls. The two (02) official entry points for pesticides (Port and airport) were equipped with materials and equipment for the collection, collection, handling and conservation of pesticides. All of this allowed for better organization, planning and execution in terms of inspection, control and management of pesticides.

[23] Innovation is defined as *doing something new or different in a specific context that adds value*

13. Possible impact of the Covid-19 pandemic on the project

Please indicate any implication of the Covid-19 pandemic on the activities and progress of the project. Highlight the adaptative measures taken to continue with the project implementation.
The Covid 19 pandemic has caused a considerable delay in the recruitment of Veolia, an international company specializing in the securing and disposal of obsolete pesticides but also in the manufacture and import of materials and equipment for securing obsolete pesticides. It is also the basis for the total closure of airports, thus causing a significant delay for Veolia's trip to Benin for the practical phase of operations to secure obsolete pesticides.

14. Co-Financing Table

Sources of Co-financing	Name of Co-financer	Type of Co-financing	Amount Confirmed at CEO endorsement / approval	Actual Amount Materialized at 30 June 2021	Actual Amount Materialized at Midterm[24] or closure	Expected total disbursement by the end of the project
Government	Ministry of Agriculture (ABSSA)	In-kind	300,000	281,250		300,000
Government	Ministry of Agriculture (ABSSA)	Grant	4,250,000	3,984,375		4,250,000
Government	Ministry of Agriculture (DAGRI)	In-kind	500,000	468,750		500,000
Private Sector	CropLife International	Grant	868,500	568,500		868,500
Private Sector	CropLife International	In-kind	60,000	56,250		60,000
Civil society	OBEPAB	Grant	500,000	468,750		500,000
Civil society	OBEPAB	In-kind	500,000	468,750		500,000
Research Institute	IITA	Grant	300,000	281,250		300,000
GEF Agency	FAO	Grant	3,152,125	2,955,118		3,152,125
GEF Agency	FAO	In-kind	150,000	140,625		150,000
		TOTAL	**10,580,625**	**9,673,618**		**10,580,625**

[24] This was not confirmed by the evaluation team even though the project team provided information.

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

Annex 1. – GEF Performance Ratings Definitions

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. DO **Ratings definitions: Highly Satisfactory (HS -** Project is expected to achieve or exceed **all** its major global environmental objectives, and yield substantial global environmental benefits, without major shortcomings. The project can be presented as "good practice"); **Satisfactory (S -** Project is expected to achieve **most** of its major global environmental objectives, and yield satisfactory global environmental benefits, with only minor shortcomings); **Moderately Satisfactory (MS -** Project is expected to achieve **most** of its major relevant objectives but with either significant shortcomings or modest overall relevance. Project is expected not to achieve **some** of its major global environmental objectives or yield some of the expected global environment benefits); **Moderately Unsatisfactory (MU -** Project is expected to achieve of its major global environmental objectives with major shortcomings or is expected to achieve only **some** of its major global environmental objectives); **Unsatisfactory (U -** Project is expected **not** to achieve **most** of its major global environment objectives or to yield any satisfactory global environmental benefits); **Highly Unsatisfactory (HU -** The project has failed to achieve, and is not expected to achieve, **any** of its major global environment objectives with no worthwhile benefits.)

Implementation Progress Rating – Assess the progress of project implementation. **IP Ratings definitions**: **Highly Satisfactory (HS):** Implementation of all components is in substantial compliance with the original/formally revised implementation plan for the project. The project can be resented as "good practice". **Satisfactory (S):** Implementation of most components is in substantial compliance with the original/formally revised plan except for only a few that are subject to remedial action. **Moderately Satisfactory (MS):** Implementation of some components is in substantial compliance with the original/formally revised plan with some components requiring remedial action. **Moderately Unsatisfactory (MU):** Implementation of some components is not in substantial compliance with the original/formally revised plan with most components requiring remedial action. **Unsatisfactory (U):** Implementation of most components is not in substantial compliance with the original/formally revised plan. **Highly Unsatisfactory (HU):** Implementation of none of the components is in substantial compliance with the original/formally revised plan.