Food and Agriculture Organization of the United Nations

GLOBAL ENVIRONMENT FACILITY
INVESTING IN OUR PLANET

FAO-GEF Project Implementation Report

Period covered: 1 July 2021 to 30 June 2022

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1. Basic Project Data

General Information

Region:	Sub-Region for Central Asia (SEC)
Country (ies):	Azerbaijan, Kazakhstan, Kyrgyzstan, Tajikistan, Türkiye
Project Title:	Lifecycle Management of Pesticides and Disposal of POPs Pesticides in Central Asian countries and Türkiye
FAO Project Symbol:	GCP/SEC/011/GFF
GEF ID:	5000
GEF Focal Area(s):	Chemicals (Persistent Organic Pollutants – POPS)
Project Executing Partners:	a) Azerbaijan: Ministries of Agriculture, Environment and Health, Food Safety Agency (new, not in ProDoc); b) Kazakhstan: Ministries of Agriculture, Environment and Health; c) Kyrgyzstan: Ministry of Agriculture; Ministry of Natural Resources, Ecology and Technical Supervision (new, not in ProDoc. Changes follow fundamental government reorganisation in spring 2021); d) Tajikistan: State Committee on Environmental Protection in collaboration with the Ministries of Agriculture and Health; e) Türkiye: Ministry of Agriculture and Forestry.
Project Duration (years):	15 October 2018 – 14 October 2022. New end date now 31 December 2024.
Project coordinates:	Project Coordinates were provided to the GEF Coordination Unit separately.

Project Dates

GEF CEO Endorsement Date:	14 October 2016
Project Implementation Start Date/EOD:	15 October 2018
Project Implementation End Date/NTE[1]:	31 December 2024

[1] As per FPMIS

Revised project implementation end date (if approved) [2]	31 December 2024

Funding

GEF Grant Amount (USD):	USD 8’136’986
Total Co-financing amount as included in GEF CEO Endorsement Request/ProDoc[3]:	USD 38’300’000
Total GEF grant disbursement as of June 30, 2022 (USD)[4]:	USD 2,301,514
Total estimated co-financing materialized as of June 30, 2022[5]	USD 107’355’683 (for details, see breakdown in Section 13)

[2] If NTE extension has been requested and approved by the FAO-GEF CU.

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

[4] For DEX projects, the GEF Coordination Unit will confirm the final amount with the Finance Division in HQ. For OPIM projects, the disbursement amount should be provided by Execution Partners.

[5] Please refer to the section 12 of this report where updated co-financing estimates are requested and indicate the total co-financing amount materialized.

M&E Milestones

Date of Most Recent Project Steering Committee (PSC) Meeting:	2nd Regional Steering Committee Meeting held 28 June 2022 in Baku, Azerbaijan
Expected Mid-term Review date[6]:	14 October 2020
Actual Mid-term review date (when it is done):	17 May 2022
Expected Terminal Evaluation Date[7]:	N/A
Tracking tools/Core indicators updated before MTR or TE stage (provide as Annex)	Yes, submitted 25 May 2022 (see Annex B)

Overall ratings

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

ESS risk classification

Current ESS Risk classification:	High (unchanged)

Status

Implementation Status ***(1st PIR, 2nd PIR, etc. Final PIR):***	3rd PIR

[6] The Mid-Term Review (MTR) should take place after the 2nd PIR, around half-point between EOD and NTE. The MTR report in English should be submitted to the GEF Secretariat within 4 years of the CEO Endorsement date.

[7] The Terminal Evaluation date should be discussed with OED 6 months before the project's NTE date.

Project Contacts

Contact	Name, Title, Division/Institution	E-mail
Project Manager / Coordinator	Stephan Robinson, Senior Technical Advisor, FAO SEC	stephan.robinson@fao.org
Lead Technical Officer	Tania Santivanez, Regional Agricultural Officer, FAO REU	tania.santivanez@fao.org
Budget Holder	Viorel Gutu (Operations Specialist supporting the BH: Naoko Sakai)	naoko.sakai@fao.org
GEF Funding Liaison Officer	Hernan Gonzalez, Technical Officer, FAO OCB	hernan.gonzalez@fao.org

2. Progress towards Achieving Project Objective(s) (Development Objective)

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

Please indicate the project's main progress towards achieving its objective(s) and the cumulative level of achievement of each outcome since the start of project implementation.

	Project or Development Objective	Outcomes	Outcome indicators[8]	Baseline	Mid-term TargetMid-term Target[9]	End-of-project Target	Cumulative progress[10] since project start Level at 30 June 2022	Progress rating[11]
	Objective(s): Reduce releases of POPs from obsolete pesticide stockpiles and strengthen capacity for sound pesticide management throughout the life cycle in 4 Central Asian countries and Türkiye	**Outcome 1:** 900 tonnes of POPs and obsolete pesticides are disposed of in an environmentally sound manner; and risks from obsolete stocks, contaminated sites and empty pesticide containers are further quantified	a) Technical capacity available for environmentally sound disposal options for POPs and other hazardous wastes in the Central Asian	No environmentally sound disposal option existing due to inability to export wastes because of transit	Year 1: Follow up investigation on the feasibility of POPs pesticides disposal in AZE, TJK and TUR completed Political advocacy on lifting of	Year 3: Test destruction in new regional facility completed	**Output 1.1: National inventories** • Azerbaijan: Inventory of 19 sites in 2019. All sites must be considered contaminated. At seven sites total of 350 metric tonnes (MT) of OP, additional buried amount of 100 MT suspected at one site. In addition, 10'000+ MT of obsolete pesticides (mostly POPs) centralised at Jangi landfill and at least 25'000 MT of contaminated soil needing treatment; • Kazakhstan: Two trainings for national inventory teams held. Kobo data acquisition app tested, which simplifies data management and reduces error sources. First inventory phase, which covers four Oblasts, started. Full inventory will cover 800+ sites in 17	S

[8] This is taken from the approved results framework of the project.

[9] 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.

[10] Please report on results obtained in terms of Global Environmental Benefits and Socio-economic Co-benefits as well.

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

		and reduced	region	restrictions. Alternatives in the region need to be evaluated: CKT, SCWO, HTI to be built/upgraded.	export ban organized Year 2: Disposal strategy (new technology in the region or export) agreed		Oblasts; • Kyrgyzstan: National inventory of 62 sites in 2021. At 26 sites, approximately 4'620 MT of OP found (4'250 MT at three landfills, rest at stores). Many of the former store sites are in poor condition, posing a potential hazard to human health and the environment; • Tajikistan: Project inventoried obsolete pesticides in Sukhd Oblast. Data currently being consolidated with other inventories to receive national inventory. Main challenge in Tajikistan is, however, not obsolete pesticides but the around 200 mini-landfills. **Output 1.2: Disposal strategy** • Regional disposal strategy developed; • Export options investigated with negative result; • Cement kiln in Azerbaijan benchmarked for ability to co-process POPs wastes in compliance with relevant Basel Convention Technical Guidelines. Discussion with GEF on 10 June 2022 whether and how to move forward with testing and permitting co-processing. GEF directed to explore further the option of co-processing in close collaboration with GEF STAP and with all steps to be documented for GEF; • Benchmarking of cement kilns in Kazakhstan for ability to co-process POPs in compliance with relevant Basel Convention Technical Guidelines started; • Webinars held on POPs disposal options (21 participants) and empty pesticides container management systems (CMS) (170 participants).	S

			b) 900 tonnes of POPs and other obsolete pesticides safeguarded and disposed of	TUR: 1'239 tonnes of waste safeguarded	Year 1: National inventories updated and validated in AZE, KAZ, and TJK Year 2: Risk reduction and disposal strategies for obsolete stocks adopted in AZE, KAZ and TJK and start of implementation	Year 3: Inventoried stocks safeguarded in AZE, KGZ, and TJK (if disposal options in KGZ and TJK available). Start of disposal in AZE (KGZ and TJK) Year 4: Disposal of min. 900 MT completed in AZE (KGZ and TJK)	**Output 1.3: Safeguarding and disposal of 900 metric tonnes (MT)** • Ongoing safeguarding of 217 MT of liquid POPs and other obsolete pesticides at Jangi landfill (Azerbaijan); • Türkiye: Preparatory work ongoing for safeguarding and disposal of obsolete pesticides (estimated amount 10-15 MT). **Output 1.4: Contaminated sites** • Azerbaijan: Detailed site investigation of Ujar high risk site and analysis of contaminants pathways at Salyan high risk site started; • Kyrgyzstan: Trial of bio-remediation of soil contaminated with 19 different POPs pesticides shows substantial acceleration of decomposition process. Additional tests with phyto-remediation as second-phase treatment started. Trial with bacteria immobilising heavy-metals ongoing. Replication of the work in Kazakhstan under preparation; • Tajikistan: Vakhsh landfill is upgraded to become a recipient site for excavated obsolete pesticides from mini-landfill remediation work. Topographical map for site management and planning developed. Plans for building store annex hosting about 1'000 MT of materials developed and construction to be tendered. In preparation of remediation of DDT-containing mini-landfill at Village #1, existing detailed site investigation undertaken in 2018 and related remediation plan are reviewed. **Output 1.5: Container management system (CMS)** • CMS baseline assessed in four countries, similar assessment started in Kazakhstan; • Various country meetings held to discuss	S S S

							design of national CMS with the aim to have pilot projects in each country by 2023 (AZE: 1 meeting with Agrarian Services Agency, 1 with pesticide importers association; KGZ: 1 introductory meeting with all stakeholders, 1 meeting with Director of the Department of Chemicalisation and Plant Protection, 1 meeting with the Association of Pesticides suppliers, 1 meeting with the Director of the Association of Pesticides suppliers; TJK: 1 introductory meeting with all stakeholders, 1 meeting on establishment of CMS Working Group at national level, TUR: 1 meeting with national and international Association of Pesticides suppliers, participation in final meeting of Mula Region CMS pilot project.) • Assessment of CMS legal framework showed that regulation is widely absent in all countries. FAO plans to develop generic CMS legislation which can be used as a model.	
			c) % of populations engaging in high risk behaviours that expose them to sources of obsolete pesticides	Communication strategies in KGZ have identified exposure routes from stockpile sites in communities through children'	Year 1: KAP survey to describe behaviours and set baseline % of respondents Year 2-3: Communication activities designed and	Year 4: KAP survey indicates declines of 30-50 % in high risk behaviours compared to 1st KAP.	**Output 1.6: Risk communication** • Risk communication activities under preparation, considering gender aspects, outreach targets (national audience, local communities), synergies with partners in communication activities, and cost-efficiency. Target population will vary between countries. In Kazakhstan, a national campaign is under consideration to increase general understanding in the wider population on risks exerted by obsolete pesticides. In Tajikistan, a national campaign shall address specifically the population living around the approx. 200 mini-landfills. In Azerbaijan, local campaigns might target the villages located around the two contaminated sites (Ujar, Salyan) being	S

				s behaviours and illegal excavation of products. Similar and other exposure routes have not been formally documented or quantified in any country.	implemented in 3 countries		investigated currently. In Kyrgyzstan, a campaign is to second future safeguarding and centralisation of obsolete pesticides.	
		Outcome 2: Regulatory and institutional framework for pesticide management strengthened in five countries	a) National legislations comply with international standards in AZE, KGZ, and TJK	Legal assessments conducted for AZE, KGZ and TJK have identified specific gaps in the existing laws, and	Year 2: Draft revised and harmonized pesticide legislation in AZE, KGZ and TJK	Year 3: Drafts consulted and approved by stakeholders for presentation to government for adoption	**Output 2.1: Legal assessments** • Assessments of the legal frameworks on pesticide life-cycle management undertaken in Azerbaijan, Kyrgyzstan and Tajikistan. Synthesis report showing regional commonalities and shortcomings developed. Legal assessment work started in Kazakhstan; • Assessment of CMS legal framework showed that regulation is widely absent in all countries. FAO plans to develop generic CMS legislation which can be used as a model.	S

				recommend development of secondary legislation				
			b) Data requirements for pesticide registration are more comprehensive	Registration of pesticides is possible in all countries without the full data requirements set out in the Code of Conduct and FAO/WHO specifications	Year 1: Training provided and manuals and guidance translated and published	Year 4: Labelling and packaging requirements; operator exposure data; pesticide specification data all required for dossiers	**Output 2.2: Registration procedures + Output 2.3: Field data on PPE use and spraying operations** • Regional report on the gender, socio-economic and health dimensions of pesticide use and management in Central Asia and Türkiye developed. Report includes data on current spraying practices in various agricultural sectors and countries and shows that in general women have less access to information on safe spraying practices and on PPE selection and use; • Registration lists of all five project countries were reviewed against the eight FAO/WHO criteria defining Highly Hazardous Pesticides (HHP). In each country, active ingredients qualifying as HHPs are still in use and a phase-out roadmap must be developed; • Thirteen handbooks and guidelines related to agricultural practices relying on less and less dangerous pesticides were developed resp. translated into Turkish, Russian, and/or Azerbaijani (for more details, see project website).	S
		Outcome 3: Farmers will use IPM alternatives to Highly Hazardous Pesticides	a) Reduction in pesticide application frequency in four	Conventional pesticide applications do not	Year 1: Data collected on conventional pesticide	Year 4: 20 % reduction in pesticide applicatio	**Output 3.2: IPM trials** • Türkiye: Two seasons of IPM trials on coddling moth control undertaken in apple orchards. Pesticide use against coddling moth could be reduced on average by 70 %. Economic analysis done, results support the IPM	HS

		(HHP), and reduce pesticide application frequencies	countries	consider pest pressures Alternatives are not widely known so the only option considered is often pesticides	application rates Year 2 - 3: Monitoring of pesticide use in target sites in all countries	n compared to conventional approach; reported to policy makers	approach. Based on experience made with the trials in 2020 and 2021, beneficiary farmers are interested to continue using the IPM approach paying with their own funds. IPM approaches to control apple scab are being developed and tested by Service Provider. Trainings held for direct marketing of low-input agricultural products to generate additional benefits for healthy production; • Kyrgyzstan: IPM trials undertaken in five key crops (corn, potato, sugar beet, wheat, kidney beans). IPM fields had highest harvest yields despite substantially lower pesticide use. About 60 students of the Kyrgyz National Agriculture University were involved in field work. Trials of alternatives to chemical fertilisers started; • Potato seed bank based on IPM principles developed in Tajikistan. Average potato yield per hectare 25 % higher in IPM fields and selected potatoes more resistant to potato late blight disease. Additional IPM trials in tomato and fruit orchards are under preparation; • In Azerbaijan, IPM baseline assessment undertaken, IPM practices introduced in vegetable growing, technical guidelines developed. Harvest yield evaluated in trial fields, highest in IPM fields.	
			b) Pest and disease prevalence data used to inform extension service advice	Pest and disease monitoring is not a standard practice to guide decisions and	Year 2: National training of at least 10 extension agents per country	Year 3 - 4: pest monitoring data entered in forecasting models and extension	**Output 3.1: Pest and disease monitoring** • Baseline assessment of existing pest surveillance systems undertaken in Azerbaijan, Kyrgyzstan and Tajikistan. All countries show a need to strengthen pest surveillance; • Technical webinar on Pest Surveillance for Sustainable Agriculture held (116 participants); • Study of the impact of climate change on 20 crop pests in the countries of the FAO REU	S

				advice for treatments The availability of advice to farmers is rather low in most countries		advice provided to farmers	region published: https://www.fao.org/documents/card/en/c/cb5954en. The report provides important input to understand how agricultural systems must be adapted to climate change without resorting to increased pesticide use.	
			c) Farmers applying IPM methods and familiar with alternative pest control methods	TCP project data on farmer practices in preparation The use of IPM as an alternative to conventional pesticide spraying by farmers is limited or not practice	Year 1 – 2: Continuation of existing TCP FFS and monitoring of trained and untrained farmers	Year 3-4: At least 50 % of trained farmers apply IPM in their own fields	**Output 3.3: IPM promotion** ● Collection of data of the various IPM trials ongoing in order to quantify and synthesise results at end of 3rd trial season; ● Producer's guidebook prepared, which includes suggestions on farm management, agroecological practices as well as suggestions on specific requirements for each crop and for disease and pest management.	S

				d in all countries				
		Outcome 4: Project results are shared between project countries and outside stakeholders	a) Number of project monitoring reports as per requirements	None	Year 1: 1 PIR, 2 progress Year 2: 2 PIR, 4 progress, 1 MTR	Year 3: 3 PIR, 6 progress, 1 MTR Year 4: 3 PIR, 7 progress, 1 final report, 1 MTR, 1 Evaluation	**Output 4.1: Project monitoring** • Three PIRs submitted; • Mid-term evaluation finalised, related management response submitted; • Finance and activity tracking tools in place.	S
			b) High level commitment from countries to life cycle management	Technical officers promote life cycle management but face weak involvement and support from decision makers		Year 3: High level representatives of all countries attend PSC meetings Year 4: 5 roadmaps for life cycle management published	**Output 4.2: Lessons learnt shared** • Two PSCs held. Trainings on safeguarding and the gender dimension of pesticide use were provided in the frame of the 2nd PSC; • Project website operating; • Eleven guidelines translated into various project languages (see project website); report on climate change impacts on crop pests published; books for children on pesticide risks and alternatives to pesticides published; information videos developed; three webinars held; • Various technical reports published: regional risk reduction and disposal strategy for obsolete stocks; three legal baseline assessments; three national assessments of CMS and APW baseline; regional strategy for container management; gender, socio-economic and health dimensions of pesticide use and management; regional study on impact of climate change on pest; three assessments of	S

							national pest surveillance systems; draft regional IPM strategy; HHP assessment in all five countries. • Yearbook 2021 describing progress under the project in each country published. The Yearbook is targeted at national stakeholders and a wider audience.	

Action Plan 2021/2022 progress:

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

	2.2) Develop model legislation for CMS.	FAOLEG, international consultant and project team	4Q/2021	Model legislation not yet developed, but discussions ongoing with FAO LEG on best approach to develop model.
	2.3) Compile all gaps in current pesticide registration systems in project countries. Develop and implement regional training programme to close gaps. Define and support implementation of national actions to ensure efficiency of registration systems.	National counterpart, national and international consultants and project team	1Q/2022	Deferred to 2H/2022.
	2.4) Collect data on national pesticide use including HHPs. Develop based on baseline data a status overview and define next steps needed, including addressing the issue of illicit pesticides.	International consultant and project team	4Q/2021	Analysis of HHPs appearing in registration lists done in all five project countries. Next steps are 1) undertaking risk assessment of pesticide formulations using active ingredients classified as HHPs, and 2) develop alternatives for one pesticide in a key crop. Illicit pesticides to be addressed as part of the design of CMS and in the frame of strengthening pesticide registration systems.
	2.5) Develop national trainings incl. training materials on pesticide risk reduction, alternatives to HHP use, and on HHP phase out.	International consultant and project team	2Q/2022	Part of annual work plan 2022. Producer's guidebook prepared which promotes IPM approaches.
Outcome 4: Project results are shared between project countries and outside stakeholders	4.1) Hire international consultant to coordinate all national and regional communication activities as well as publication of information materials.	Project team	3Q/2021	Consultant facilitating information work, update of project website, development of various information materials.

3. Implementation Progress (IP)

(Please indicate progress achieved during this FY as per the Implementation Plan/Annual Workplan)

Outcomes and Outputs[12]	Indicators (as per the Logical Framework)	Annual Target (as per the annual Work Plan)	Main achievements[13] (please avoid repeating results reported in previous year PIR)	Describe any variance[14] in delivering outputs
Outcome 1 **900 tonnes of POPs and obsolete pesticides are disposed of in an environmentally sound manner; and risks from obsolete stocks, contaminated sites and empty pesticide containers are further quantified and reduced**				
Output 1.1 National Inventory of obsolete pesticides and associated wastes finalized in 3 countries	1) Tonnes of identified stocks entered and validated in PSMS *(note: PSMS is defunct since 2017)*	• AZE: Endorse inventory • KAZ: Start inventory • KGZ: Finalise inventory • TJK: Finalise inventory	• AZE: Inventory reviewed by AZE government; • KAZ: Two trainings for national inventory teams held. Kobo data acquisition app tested, use of the app is to simplify data management and reduce error sources. First inventory phase, which covers four Oblasts, started. Full inventory will cover 800+ sites in 17 Oblasts; • Kyrgyzstan: National inventory of 62 sites in 2021. At 26 sites, approximately 4'620 MT of OP found (4'250 MT at three landfills, rest at stores). Most of the stockpiles of obsolete pesticides are mixed with soil and contaminated packaging material. Many of the former stores are in poor condition, posing a potential hazard to human health and the environment; • Tajikistan: Project inventoried obsolete pesticides in Sukhd Oblast. Data currently being consolidated with other inventories from prior projects in other Oblasts to form a first national inventory. Based on	

[12] Outputs as described in the project Logframe or in any approved project revision.

[13] Please use the same unit of measurement of the project indicators as per the approved Implementation Plan or Annual Workplan. Please be concise (max one or two short sentence with main achievements)

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

			discussions regarding the various inventories, there are currently 3-4 stores left with minor amounts of OP to be safeguarded and brought to a central store. The total at these sites is estimated to be not more than 1 MT. Main challenge in Tajikistan is, however, not obsolete pesticides but the around 200 mini-landfills.	
Output 1.2 Risk reduction and disposal strategy for sound management of obsolete and POPs pesticides completed	2) Number of EAs and EMPs adopted 3) Disposal capacity	• AZE: Develop EA/EMPs in AZE, KGZ, TJK • Discuss with GEF way forward regarding co-processing • Undertake performance test at AZE cement kiln	• Discussion with GEF on 10 June 2022 whether and how to move forward with testing and permitting co-processing. GEF directed to explore further the option of co-processing in close collaboration with GEF STAP and with all steps to be documented in detail for the further use by the GEF; • Cement kilns in Kazakhstan being benchmarked for ability to co-process POPs in compliance with relevant Basel Convention Technical Guidelines.	• EA/EMPs in KGZ and TJK are waiting for related UNEP-project (GEF ID 9421) to start its development of national hazwaste management strategy as the EA/EMPs feed into this strategy; • Preparations for performance tests deferred as GEF meeting, which cleared the way forward, only happened recently.
Output 1.3 900 MT of obsolete and POPs pesticides are safeguarded and disposed of in AZE, KGZ and TJK	4) Tonnes of wastes a) safeguarded and b) destroyed	• AZE: Safeguard 217 MT of OP at Jangi landfill • Train monitoring and regulatory staff on safeguarding supervision	• Safeguarding of 217 MT of liquid POPs and other obsolete pesticides at Jangi landfill (Azerbaijan) ongoing; • Attached to the 2nd PSC, a training on safeguarding was provided to the meeting participants (which included representatives from MoEs and MoAs of the project countries) to have them better understand all the steps involved in planning and undertaking safeguarding; • Türkiye: Preparatory work ongoing for safeguarding and disposal of obsolete (confiscated) pesticides (estimated amount 10-15 MT).	• Regulatory training deferred to a later stage.
Output 1.4 Risk associated with one critical contaminated site in one country is	5) Rapid Environmental Assessment score for the site has reduced	• AZE: Investigate Ujar and Salyan sites • KGZ: Continue bio-	• Azerbaijan: Detailed site investigation of Ujar site and analysis of contaminants pathway at Salyan site started; • Kyrgyzstan: Trial of bio-remediation of soil contaminated with 19 different POPs pesticides shows	

reduced		remediation trials • TJK: Work towards remediation of Village #1 site	substantial acceleration of decomposition process. Additional tests with phyto-remediation as second-phase treatment started. Trial with heavy-metal immobilising bacteria ongoing. Replication of the work in Kazakhstan under preparation; • Tajikistan: Vakhsh landfill is upgraded to become a recipient site for excavated obsolete pesticides from mini-landfill remediation work. Topographical map for site management and planning developed. Plans for building store annex hosting about 1'000 MT of materials developed and construction to be tendered. In preparation of remediation of DDT-containing mini-landfill at Village #1, existing detailed site investigation undertaken in 2018 and related remediation plan are reviewed.	
Output 1.5 Container management capacity developed in the region and risks of empty containers reduced in AZE	6) Number of farmers (m/f) a) reusing containers and b) practicising triple rinsing 7) Number of containers collected in AZE	• Development of CMS concepts in AZE, KGZ, TJK, TUR • Assess CMS baseline in KAZ	• CMS baseline assessment started in Kazakhstan; • Various country meetings organised to discuss design of national CMS with the aim to have pilot projects in each country by 2023 (AZE: 1 meeting with Agrarian Services Agency, 1 with pesticide importers association; KGZ: 1 introductory meeting with all stakeholders, 1 meeting with Director of the Department of Chemicalisation and Plant Protection, 1 meeting with the Association of Pesticides suppliers, 1 meeting with the Director of the Association of Pesticides suppliers; TJK: 1 introductory meeting with all stakeholders, 1 meeting on establishment of CMS Working Group at national level.); • Assessment of CMS legal framework showed that regulation is widely absent. Generic framework to be developed together with FAO LEG.	• Development of CMS concepts more time-consuming than anticipated and will continue into early 2023.
Output 1.6 High risk behaviours by exposed populations are quantified and reduced	8) Proportion of high risk populations practising high risk behaviours which expose them to obsolete pesticides	• Develop communication plans • Start information work	• Risk communication activities under preparation considering gender aspects, outreach targets (national audience, local communities), synergies with partners in communication activities, and cost-efficiency.	• Start of information work deferred to later 2022.

Outcome 2 **Regulatory and institutional framework for pesticide management strengthened in five countries**				
Output 2.1 Revised legal frameworks in line with the Code of Conduct developed	9) Number of identified non-conformances between national legislation and Code	• Finalise legal assessments in AZE, KGZ, TJK • Develop regional synthesis report • Formulate legal updates to close gaps	• Assessments of legal framework on pesticides life-cycle management finalised in Azerbaijan, Kyrgyzstan and Tajikistan. Synthesis report developed showing regional commonalities and short-comings. Assessment of legal framework started in Kazakhstan; • Assessment of CMS legal framework showed that regulation is widely absent. Generic framework to be developed together with FAO LEG.	• Formulation of legal updates deferred to WP 2022.
Output 2.2 Registration procedures and capacity strengthened by training and collection and consideration of field data on pesticide use and impacts	10) Quality and comprehensiveness of data requirements for registration regulation in TAJ, TUR, and KAZ	• Develop assessment of ongoing use of HHPs • Define national needs in developing registration systems	• Registration lists of all five project countries reviewed against the eight FAO/WHO criteria defining Highly Hazardous Pesticides (HHP). In each country, active ingredients qualifying as HHPs are still in use and a phase-out roadmap has to be developed.	• Work on pesticide registration deferred to later 2022.
Output 2.3 Field data on PPE and spray operations is used to provide advice to farmers	11) Current and best case operator exposures quantified 12) Dissemination of results to extension advisors & farmers including # of publications/events	• Baseline assessment on pesticide use, PPE, spraying operations • Improving spraying practices	• Updated regional report on the gender, socio-economic and health dimensions of pesticide use and management in Central Asia and Türkiye developed. Report includes data on spraying practices and shows that in general women have less access to information on safe spraying practices and PPE selection and use; • Various handbooks and guidelines needed for introducing agricultural practices relying on less and less dangerous pesticides translated into Turkish, Russian, and/or Azerbaijani (see project website).	• Planning of activities on improving spraying practices ongoing, practical work deferred to WP 2022.
Outcome 3 **Farmers will use IPM alternatives to Highly Hazardous Pesticides (HHP), and reduce pesticide application frequencies**				
Output 3.1 Pest and disease monitoring to guide plant	13) Number of advisors (m/f) trained and number of farmers	• Develop study on impact of climate	• Study of the impact of climate change on 20 crop pests in the countries of the FAO REU region published	

protection decisions in key crop(s) established in 3 countries (AZE, KGZ, TJK)	participating 14) Frequency of pesticide applications reduced	change on pests (related project) • Prepare work on pest and disease monitoring	(https://www.fao.org/documents/card/en/c/cb5954en). The report provides important input to understand how agriculture has to be adapted to climate change without resorting to increased pesticide use; • Baseline assessment of existing pest surveillance systems undertaken in Azerbaijan, Kyrgyzstan and Tajikistan. All three countries show a need to strengthen pest surveillance;	
Output 3.2 Integrated pest management practices tested, validated and promoted to male and female farmers	15) Number of farmers (m/f)participating in IPM demonstration sites and applying methods in their own fields	• Develop national IPM action plans • Continue IPM trials	• Türkiye: Second season of IPM trials undertaken in apple orchards. Results confirmed first season results: Pesticide use against coddling moth can be reduced on average by 70 % using pheromone traps, all while apples are of better quality. Economic analysis done, shows that use of pheromone traps is substantially cheaper than use of pesticides. Beneficiary farmers involved in trials in 2020 and 2021 are interested to continue using IPM approach using their own finances. IPM approaches to control apple scab are being developed and tested by Service Provider. Trainings were held for direct marketing of low-input agricultural products (about 50 participants and lecturers) with the aim to generate additional benefits for healthy production. Women participation: 10 % of beneficiary producers, 4 % of participants in producers' trainings, 30 % of participants of marketing training, 50 % of Service Provider's project team; • Kyrgyzstan: Second season IPM trials undertaken in five key crops (corn, potato, sugar beet, wheat, kidney beans). Trials showed highest harvest yields in IPM fields despite substantially lower pesticide use. About 60 students of the Kyrgyz National Agriculture University involved in field work. Trials of alternatives to chemical fertilisers started; • Potato seed bank based on IPM principles developed in Tajikistan. Average potato yield per hectare 25 % higher and selected potatoes more resistant to potato late blight disease. Additional IPM trials in	

			tomato and fruit orchards are under preparation; • In Azerbaijan, IPM baseline assessment undertaken, IPM practices introduced in vegetable growing, technical guidelines developed. Harvest yield in IPM fields highest.	
Output 3.3 Quantify and promote the benefits of IPM and alternatives to HHPs, to farmers and pesticide management decision-makers	16) Profit, pesticide use and exposure comparison for trained and untrained farmers 17) Dissemination of results and experience	• Collect data to prepare synthesis report	• All final reports of IPM trials include a section analysing amounts of inputs needed for a specific agricultural approach and an economic analysis of the output. Data will be aggregated in a synthesis report at end of 3rd trial season; • Producer's guidebook prepared, which includes suggestions on farm management, agroecological practices as well as suggestions on specific requirements for each crop and for disease and pest management.	
Outcome 4 **Project results are shared between project countries and outside stakeholders**				
Output 4.1 Project monitoring system fulfils all applicable donor and stakeholder reporting requirements	18) Quality and timely project reports 19) Midterm and final evaluation reports	• Mid-term evaluation	• Mid-term evaluation finalised, related management response submitted. MTR final report sent to GEF IEO and uploaded in the Portal.	
Output 4.2 Project evidence and lessons are taken into consideration in pesticide and agriculture policy-making, and widely disseminated to key national and international audiences	20) Number of high-level participants attending project events and meetings 21) Media coverage of publications and awareness materials	• Collect data to prepare synthesis report	• Second PSCs held 28 June 2022 in Baku, Azerbaijan. Trainings on safeguarding and the gender dimension of pesticide use were attached to the meeting; • Project website operating; • Eleven guidelines translated into various project languages (for more details, see project website), report on climate change impacts on crop pests published, information videos developed; • Various technical reports published: three legal baseline assessments; gender, socio-economic and health dimensions of pesticide use and management; regional study on impact of climate change on pest; three assessments of national pest surveillance systems; draft regional IPM strategy; HHP assessment in	

			all five countries; • Yearbook 2021 describing progress under the project in each country published. The Yearbook is targeted at national stakeholders and a wider audience.	

4. Summary on Progress and Ratings

Please provide a summary paragraph on progress, challenges and outcome of project implementation consistent with the information reported in sections 2 and 3 of the PIR.

The project is now beyond its midpoint. At this stage, necessary baseline information has been acquired and based on this information all fundamental project approaches (e.g. on management and disposal of obsolete pesticides or on introducing better agricultural practices leading to a reduced use of pesticides) have been formulated into a coherent approach, reviewed for applicability and discussed with project countries. The second part of the project is now to focus on implementing, refining and scaling up these approaches.

Key progress in more detail and per component includes:

- Component 1: The first ever national inventory started in Kazakhstan, which lays the foundation for a lot of the ensuing work under C1 in this country. Safeguarding of the polidofen stock at Azerbaijan's Jangi landfill is ongoing and should be finished by end 2022. During a meeting with the GEF, latter directed to explore further the option of co-processing in close collaboration with the GEF STAP. Work on various aspects of contaminated sites remediation continued (site investigation, planning for site remediation, upgrading of engineered landfill for long-term storage of contaminated soil, bio-remediation trials). And various meetings were held to advance the design of Container Management Systems in the project countries, with the aim to have CMS pilot projects starting in spring 2023.
- Component 2: Assessments of the legal framework on pesticides life-cycle management was finalised in Azerbaijan, Kyrgyzstan and Tajikistan and started in Kazakhstan. A first synthesis showed various short-comings to be addressed in a next step, and especially with regard to empty pesticides container management regulations are widely absent. An analysis of active ingredients used in registered pesticides showed that in all five project countries some dozen AIs classified as HHPs are in use; it is intended to address alternatives in a next step. The regional report on the gender, socio-economic and health dimensions of pesticide use and management in Central Asia and Türkiye shows that in general women in the Central Asia region have less access to information on safe spraying practices and PPE selection and use; this information will be used when designing trainings on better spraying practices.
- Component 3; A study of the impact of climate change on 20 crop pests in the countries of the region provides important input to understand how agriculture has to be adapted to climate change without resorting to increased pesticide use. A baseline assessment of existing pest surveillance systems undertaken in Azerbaijan, Kyrgyzstan and Tajikistan showed that there are various gaps to be addressed in a next step. IPM field trials confirmed prior year data that despite substantially lower pesticide use, same or better quality crops could be produced with similar or increased levels of net incomes.
- Component 4: The project website is operating, providing a platform to inform on project progress and distribute guidelines and information materials (e.g. Yearbook 2021). The Mid-term Review was held and at the 2nd PSC in Baku (Azerbaijan), participants also

profited from trainings on safeguarding and the gender dimension of pesticide use.

Challenges ahead are:

- the technical complexity of some activities and time needed, and the necessary understanding, buy-in and support of a diverse group of stakeholders (e.g. on developing and testing national disposal capacity, best practices in safeguarding and soil remediation);
- scaling up of the efforts. In some areas the project can only provide pilot demonstrations (e.g. on IPM methods) but scaling up the novel approaches is beyond the possibilities and time-frame of the project (e.g. to have at the end hundreds of thousands if not millions of beneficiary farmers using IPM methods). This calls for a clear exit strategy to ensure take up by farmers' associations and relevant government agencies;
- Institutionalisation of the efforts to ensure long-term sustainability, financing, and resolution of the various issues (e.g. development of national hazardous waste management strategies with according resources for coherent implementation, testing and permitting of disposal facilities, comprehensive life-cycle management of pesticides from cradle to grave e.g. to avoid build up of new volumes of obsolete pesticides, establishment of comprehensive pesticide registration systems, scale up of IPM, national training programmes on spraying and PPE use, regulatory control, introduction of CMS) can only be facilitated by the project, but are also dependent on overarching, consistent governmental agendas and priorities. Linkages with related initiatives (e.g. on biodiversity, climate change, gender, UN SDGs) can be helpful to mainstream the work and ensure it is continued independently of the project.

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.

	FY2022 Development Objective rating[15]	FY2022 Implementation Progress rating[16]	Comments/reasons[17] justifying the ratings for FY2022 and any changes (positive or negative) in the ratings since the previous reporting period
Project Manager / Coordinator	S	S	Work in this PIR period allowed to lay the foundations for some key activities to be further developed in the second half of the project under Component 1 (mainly on developing and testing national disposal capacity) and on Component 2 (strengthening registration systems, spraying practices including gender aspects, HHP phase-out). Work under Component 3 has developed well and shows very promising results on trialling IPM.
Budget Holder	S	S	Following the signature of project agreement by Kazakhstan, the project manager in each country has been actively facilitating planned activities. Component 4 also showed substantial progress in this reporting period and it will continue. Extension until 31 December 2024 has given extra time to the project to pursue complex activities (e.g. choosing an appropriate disposal option) in full consultation with the donor and beneficiary countries.
GEF Operational Focal Point[18]			It was not possible in the time available to translate the PIR into various languages and facilitate comments from 5 OFPs.
Lead Technical	S	S	In this reporting period, the project has made good progress in component 4, and I would like to highlight the activities done in Kazakhstan.

[15] **Development Objectives Rating** – A rating of the extent to which a project is expected to achieve or exceed its major objectives.
For more information on ratings and definitions, please refer to Annex 1.

[16] **Implementation Progress Rating** – A rating of the extent to which the implementation of a project's components and activities is in compliance with the projects approved implementation plan. For more information on ratings and definitions, please refer to Annex 1.

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

[18] In case the GEF OFP didn't provide his/her comments, please explain the reason.

Officer[19]			
FAO-GEF Funding Liaison Officer	S	S	While the project's Mid Term Review (MTR) indicated that the project's progress as of early 2022 was moderately satisfactory, this was due to the late signature of project agreement by countries, ministerial level restructuring, staff changes and other implementation delays. Currently, all countries are fully active and engaged in project activities, therefore there has been significant advance as COVID pressure tends to subside. The 2022 Work Program is expected to be completed without major issues. One of the key topics continues to be the disposal of obsolete pesticides and related wastes in the Central Asia (Component 1) as, very often, chemical composition is unknown and the wastes are of highly-mixed nature. Disposal is further complicated by the fact that the region widely lacks disposal and treatment infrastructure, experienced staff, lab capacity, parts of regulations, while at the same time, export to other countries for disposal is impossible due to the large volumes of waste and transit bans imposed by surrounding countries. The large volumes of wastes in the region demand an economic solution which will make disposal affordable otherwise countries might fail to implement their Stockholm Convention obligations for budgetary reasons. FAO and UNEP have been collaborating in this regard and are discussing with GEF STAP on adequate steps to analyse (and document) the use of co-processing as an alternative option. Following the MTR recommendations (see section 7 of the PIR), the project team developed a management response to ensure the project is completed in a satisfactory manner. The MTR indicated that the project is moderately likely to achieve its main objections if an extension is granted. In this regard, and after consulting with the project's Steering Committee, a 2-year no-cost extension was granted.

[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)

Please describe the progress made complying with the approved ESM plan. 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. Add new ESS risks if any risks have emerged during this FY.

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				
ESS 2: Biodiversity, Ecosystems and Natural Habitats				
ESS 3: Plant Genetic Resources for Food and Agriculture				
ESS 4: Animal - Livestoand Aquatic - Genetic Resources for Food and Agriculture				
ESS 5: Pest and Pesticide Management				
Risks related to safeguarding, transport and disposal of obsolete pesticides were considered “High” at time of endorsement of project.	It was suggested to describe the management of risks in the frame of	In absence of finalised EA/EMPs, risks during safeguarding of 217 MT	Further exploration of national disposal option in Azerbaijan	STA, LTO, service providers

	national EA/EMPs.	of POPs pesticides at Jangi landfill (Azerbaijan) are mitigated by using an experienced international contractor who developed an HSE plan reviewed by FAO and submitted to AZE government. Safeguarding staff has been trained by the international contractor. FAO has an international consultant overseeing safeguarding work independently. Benchmarking of national disposal options is done against standards set forth in the relevant Basel Convention Technical Guidelines.	and eventual performance test to demonstrate compliance with Basel Convention Technical Guidelines will be done in close cooperation with GEF STAP.	
ESS 6: Involuntary Resettlement and Displacement				
ESS 7: Decent Work				
ESS 8: Gender Equality				

None.	None.	The regional report on the gender, socio-economic and health dimensions of pesticide use and management in Central Asia and Türkiye shows that in general women in the Central Asia region have less access to information on safe spraying practices and PPE selection and use.	Information provided by the report will be used when designing trainings on better spraying practices and PPE use.	
ESS 9: Indigenous Peoples and Cultural Heritage				
New ESS risks that have emerged during this FY				

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

Initial ESS Risk classification (At project submission)	**Current ESS risk classification** Please indicate if the Environmental and Social Risk classification is still valid[20]. If not, what is the new classification and explain.
High	High

[20] **Important:** please note that if the Environmental and Social Risk classification has changed, the ESM Unit should be contacted and an updated Social and Environmental Management Plan addressing new risks should be prepared.

***Pl*ease report if any grievance was received as per FAO and GEF ESS policies. If yes, please indicate how it is being/has been addressed.**
No.

6. Risks

The following table summarizes risks identified in the Project Document and reflects also any new risks identified in the course of project implementation (including COVID-19 related risks). The last column should be used to provide additional details concerning manifestation of the risk in the project, as relevant.

	Type of risk	Risk rating[21]	Identified in the ProDoc Y/N	Mitigation Actions	Progress on mitigation actions	Notes from the Budget Holder in consultation with Project Management Unit
1	Project agreement with FAO will not be signed in different countries in a timely manner and season-sensitive activities such as inventory field work and cropping systems are unavoidably delayed to Year 2	Medium	Yes		All countries have joined the project and are actively participat-ing.	

[21] Risk ratings means a rating of accesses the overall risk of factors internal or external to the project which may affect implementation or prospects for achieving project objectives. Risk of projects should be rated on the following scale: Low, Moderate, Substantial or High. For more information on ratings and definitions please refer to Annex 1.

	Type of risk	Risk rating[21]	Identified in the ProDoc Y/N	Mitigation Actions	Progress on mitigation actions	Notes from the Budget Holder in consultation with Project Management Unit
2	Lack of disposal options in the Central Asian Region means that safeguarded stocks will not be able to be finally disposed	Medium	Yes	In AZE, a national disposal option has been identified. In a next step, a performance test has to be undertaken to demonstrate compliance of disposal with the standards set forth in the Basel Convention Technical Guidelines. Assessment of national disposal options in Kazakhstan started. National disposal options in Tajikistan will be evaluated by related UNEP project GEF ID 9421. Export options were investigated.	Assessment of export options is negative. Discussion held with GEF on 10 June 2022 whether and how to move forward with testing and permitting co-processing. GEF directed to explore further the option of co-processing in close collaboration with GEF STAP and with all steps to be documented in detail for GEF.	
3	Political instability in project countries	Medium	Yes	To reduce risks of work stalled due to a paralysed government, FAO works also through universities and other actors independent from government.	IPM trials are done mainly in collaboration with research and academic institutions. Safeguarding and disposal work is done through Service Providers. CMS work aims at involving crop protection industry as a process driver.	

	Type of risk	Risk rating[21]	Identified in the ProDoc Y/N	Mitigation Actions	Progress on mitigation actions	Notes from the Budget Holder in consultation with Project Management Unit
4	Contradiction between national and international legislation/ standards; and between ministries	Low to Medium	Yes	FAO legal assessment defined gaps in existing legislation and made suggestions for harmonisation with international standards. Certain topics are hardly covered by legislation (CMS) and model legislation should be developed by FAO for further adaptation by countries.	Gaps of current legislation against the Code of Conduct have been defined and model legislation to close gaps will be developed for the further use by the countries. Model legislation on CMS will be drafted by FAO LEG.	

	Type of risk	Risk rating[21]	Identified in the ProDoc Y/N	Mitigation Actions	Progress on mitigation actions	Notes from the Budget Holder in consultation with Project Management Unit
5	Lack of technical capacity (personnel and equipment) in project countries, including staff mobility	Medium	Yes	Provide countries with guidelines and relevant trainings. Activities in the countries are to include considerations of how to create national sustainability.	The project's 2nd PSC was used as an opportunity to provide countries with hands-on impressions of the complexity of safeguarding through a training and a site visit to the ongoing safeguarding work at nearby Jangi landfill. A follow-on workshop discussing national management of pesticides waste in Azerbaijan is planned for autumn 2022. Bio-remediation trials shall mature an approach which is economic and low-tech to address the huge volumes of contaminated soil. Inspection of spraying equipment shall be strengthened in Türkiye through development of a mobile inspection system.	

	Type of risk	Risk rating[21]	Identified in the ProDoc Y/N	Mitigation Actions	Progress on mitigation actions	Notes from the Budget Holder in consultation with Project Management Unit
6	Objections and non-cooperation with disposal activities by governments and civil society in project and transit countries.	Low to High	Yes	Highest risk of dissent on disposal options in Kyrgyzstan. Preferably, a national dialogue on waste management will be established to ensure better understanding across stakeholder groups and work towards a national consensus. Also, other countries will be engaged early in development of disposal strategies to ensure buy-in.	Establishment of a National Dialogue in Kyrgyzstan discussed with ministries. Community involve-ment ahead of test-ing co-processing is a key consideration.	
7	Insufficient funds for safeguarding of major contaminated sites, the disposal of POPs and other project activities.	High	Yes	Funds for safeguarding/ remediation will always remain insufficient until governments develop funding and cost covering schemes for legacy wastes. Support will be provided to develop such mechanisms.	Topic regularly ad-dressed in meeting with governments.	

	Type of risk	Risk rating[21]	Identified in the ProDoc Y/N	Mitigation Actions	Progress on mitigation actions	Notes from the Budget Holder in consultation with Project Management Unit
8	Accidents and exposure during safeguarding, transport and handling of wastes and empty containers.	Medium	Yes	Only experienced waste management companies adhering to best international practices and with a proven track record are eligible to participate in safeguarding/disposal tenders. These companies are to provide trainings to national teams before start of work to lower risks, ensure adequate supervision during work, but also build up national capacity and experience.	Safeguarding work in Azerbaijan is undertaken by experienced, international waste management company. Work is supervised by FAO international consultant and FAO AZE representatives.	
9	Lack of awareness about OP problems among populations and decision makers.	Medium	Yes	Awareness raising activities are to be undertaken in parallel to IPM resp. safeguarding work.	To adequately address the lack of awareness, national information campaigns are planned in Tajikistan and Kazakhstan.	
10	Climate risks such as heavy winters and hot summers, crop calendars disruption or increase of pest invasions.	Medium	Yes	Seeds and cultivation methods adapted to the climate zone to be selected.	Study on impact of Climate Change on pests and diseases published, which provides directions on mitigation options.	

	Type of risk	Risk rating[21]	Identified in the ProDoc Y/N	Mitigation Actions	Progress on mitigation actions	Notes from the Budget Holder in consultation with Project Management Unit
11	Low existing use and uptake of alternative technologies by producers.	Medium	Yes	Change agents like NGOs or farmer associations will be involved to ensure sustainability and to multiply uptake. Advantages of alternative technologies are documented and information shared.	Farmers involved in apple orchard trials in Isparta, Türkiye, have expressed their will to take up the newly introduced IPM methods.	
12	Slow down or inability of implementing some activities due to Covid-19	High	No	FAO is following country rules with regard to social distancing and travel. As many training formats as possible are revised so that they can be held by zoom.	Covid-19 situation is monitored in each project country closely and work plans are updated in a flexible manner to adapt to changing circumstances and catch windows of opportunities.	

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

FY2021 rating	FY2022 rating	Comments/reason for the rating for FY2022 and any changes (positive or negative) in the rating since the previous reporting period
Moderate	Moderate	The nature and incidence of risks identified during project formulation has in general remained unchanged. Mitigation measures are implemented. The novel risk of a pandemic (Covid) has partially impacted project implementation timelines due to the inability to travel and hold in-person meetings. All activities are of an innovative nature and ask national partners to change traditional approaches. Intensive discussions are needed to ensure the needed buy-in. While stakeholders show interest in the approaches promoted by the project, project risks still remain moderate for the time being.

7. Follow-up on Mid-term review or supervision mission (only for projects that have conducted an MTR)

If the project had an MTR or a supervision mission, please report on how the recommendations were implemented during this fiscal year as indicated in the Management Response or in the supervision mission report.

MTR or supervision mission recommendations	Measures implemented during this Fiscal Year
Recommendation 1: The MTR recommends a no-cost extension of the project until at least December 2024, in order to make it possible for the project team and the executing partners to achieve the project outputs and outcomes and capitalize on all the preparatory work done so far. For Kazakhstan, it is necessary to have additional discussions between the government counterparts and FAO on short notice as in this country all activities still need to be implemented (accelerating/intensifying activities, running activities in parallel, preparation of a follow-up project). No cost extension, jump-start work in KAZ	Extension approved on 28 June 2022 by 2nd PSC in Baku, Azerbaijan. Extension is granted until 31 December 2024.
Recommendation 2: FAO to ensure that communication, coordination and regular flow of information with (and between) national stakeholders of the project become more structured, and the functioning of the PSC is strengthened. Strengthen communication, coordination and regular flow of information	With relaxed Covid-measures, 2nd PSC could be held in person. Yearbook 2021 published. Project website operating. National Team Leaders (NTLs) ensure collaboration among national stakeholders and information flow.
Recommendation 3: FAO to ensure that methodical/strategic communication and awareness raising/outreach strategies are prepared (that considers increasing rural women's (and children's) access to knowledge and participation in project activities) and implemented. Prepare methodical/strategic communication and awareness raising/outreach strategies	

Recommendation 4: FAO to ensure that (exit) strategies (including elements on what will happen after project end) and national action plans will be agreed with the government counterparts, to ensure sustainability and upscaling of project results. Ensure exit strategies ensuring sustainability and upscaling of project results	
Recommendation 5: FAO to keep ensuring that all activities are in-line with relevant national and international rules and regulations. For this reason, conduct due diligence prior to major activities of the project (safeguarding, transport, temporary storage and disposal). Ensure all activities are in-line with relevant national and international rules and regulations.	Company safeguarding obsolete pesticides at Jangi landfill (Azerbaijan) works according to best international practices. Work is supervised by FAO international consultant and FAO AZE representatives.
Recommendation 6: Align the separate national inventory studies in the region and put all data into a common database in a systematic manner (as the project will not be able to resolve all issues and a well-organized database may be useful in future projects in the region). Ensure agreement of the relevant ministries with the inventories conducted. Insert all inventory data into a common database. Ensure agreement of the relevant ministries with the inventories conducted.	Azerbaijan and Kyrgyzstan inventories were reviewed by respective governments. Kazakhstan inventory is done using Kobo app, which automatically inserts data into a database for further processing.
Recommendation 7: FAO to focus on the disposal of 900 tonnes of obsolete pesticides. If this target cannot be achieved, the project should secure safeguarding of obsolete pesticides (of larger amounts than 900 tonnes) in UN-approved packaging, temporary storage in a licensed facility, and obtaining a letter of intent for completion of disposal from the government authority. If safeguarding is not possible, ensure at least safeguarding and centralisation of materials.	With the project extended until end 2024, disposal of 900 MT is still possible in case the performance tests of disposal facilities in Azerbaijan (under this project) and Kazakhstan (under the UNIDO GEF ID 5300 project) succeed. In Kyrgyzstan, no disposal option will be available until end 2024. Therefore, construction of 1-2 central stores is planned with ensuing safeguarding of as much as possible of the unsecured 400 MT.
Recommendation 8: Considering the POPs disposal limitations in the region and the huge number of buried pesticides (leading to large volumes of contaminated soil) in all project countries except Turkey, it is recommended that the project focuses more on upscaling of the bioremediation	Foreseen in Work Plan 2022.

trials, potentially through promoting commercialization of these technologies in project countries. Focus on upscaling of bioremediation trials	
Recommendation 9: Ensure life-cycle management of pesticides containers and Agricultural Plastic Waste in demonstration projects rather than just collecting pesticide containers, and consider applying innovative circular solutions such as demonstrating pest-control services with "product as a service approach". Ensure not only collection, but also treatment and disposal of empty containers	Treatment and disposal are integral parts of any CMS.
Recommendation 10: Ensure that recommendations provided by the MTR gender consultant are implemented to increase gender mainstreaming in the project, including (additional) specific field studies on gender, identifying gender-disaggregated indicators, increasing awareness of the decision-makers on gender concerns, preparing a gender action plan, and regularly consulting a gender expert in the project. Ensure gender mainstreaming in the project	Based on the findings of the gender assessment report, an action plan for mainstreaming gender in pesticide management and use will be developed by one international gender consultant and national specialists from each country. The project plans in 2022 an exposure assessment study, which includes gender disaggregation and will be able to show the various pesticide exposure risks by gender.

Has the project developed an Exit Strategy? If yes, please describe	Exit strategy to be developed in final project year (2024)

8. Minor project amendments

Minor amendments are changes to the project design or implementation that do not have significant impact on the project objectives or scope, or an increase of the GEF project financing up to 5% as described in Annex 9 of the GEF Project and Program Cycle Policy Guidelines[22].

Please describe any minor changes that the project has made under the relevant category or categories. And, provide supporting documents as an annex to this report if available.

Category of change	Provide a description of the change	Indicate the timing of the change	Approved by
Results framework	Update of initial 2013 logframe currently ongoing to better reflect current country needs and MTR findings		
Components and cost			
Institutional and implementation arrangements			
Financial management			
Implementation schedule	Project has been ex-tended until end 2024	28 June 2022	2nd PSC meeting in Baku (Azerbaijan)
Executing Entity			
Executing Entity Category			
Minor project objective change			
Safeguards			
Risk analysis			
Increase of GEF project financing up to 5%			
Co-financing			
Location of project activity			
Other			

[22] Source: https://www.thegef.org/council-meeting-documents/guidelines-project-and-program-cycle-policy-2020-update

9. Stakeholders' Engagement

Please report on progress and results and challenges on stakeholder engagement (based on the description of the Stakeholder engagement plan) included at CEO Endorsement/Approval during this reporting period.

Stakeholder name	Role in project execution	Progress and results on Stakeholders' Engagement	Challenges on stakeholder engagement
Government Institutions			
Isparta Fruit Research Institute	Undertakes IPM trials in apple orchards in Türkiye	Works in an exemplary manner with fruit producers by involving key figures in the local community to establish contact between the Institute and single farmers, establish trust to participate in the trials, and ensure transfer of knowledge.	
Kazakh MoE	Governmental counterpart for activities in Kazakhstan	Practical work in Kazakhstan has started in early 2022. A series of discussions was held leading to an understanding of the work to be done and an approved work plan 2022.	Reaching a comprehensive understanding of technical and economic aspects of managing obsolete pesticides will still need more exchanges.
Tajik Committee of Environmental Protection	Governmental counterpart for activities in Tajikistan		Reaching a comprehensive understanding of technical and economic aspects of managing obsolete pesticides and related timelines will still need more exchanges.
Turkish MoA	Governmental counterpart for activities in Türkiye		Türkiye is far more developed and has other needs than the other four project countries. Additional discussions are needed to define a work programme which suits the specific needs of the country.
Non-Government organizations (NGOs)			
Private sector entities			
Holcim Azerbaijan	Potential national disposal solution	The Holcim facility is interested in upgrading its facility, which already provides co-processing services, such that it can also co-process POPs-containing waste.	New stakeholders became over the last months part of the process (Geocycle (the waste arm of Holcim), GEF STAP). Also, Holcim plans kiln upgrades which impact the way the waste is fed into the rotary kiln.
Veolia Field Services	Safeguarding of	Veolia is providing not only	

	obsolete POPs pesticides at Jangi landfill	safeguarding services according to international standards but also supported the project with safeguarding training for participants of the 2nd PSC, which included several ministerial representatives from the project countries.	
OOthers[1]			
New stakeholders identified/engaged			

OOO[1] They can include, among others, community-based organizations (CBOs), Indigenous Peoples organizations, women's groups, private sector companies, farmers, universities, research institutions, and all major groups as identified, for example, in Agenda 21 of the 1992 Rio Earth Summit and many times again since then.

10. Gender Mainstreaming

Information on Progress on Gender-responsive measures as documented at CEO Endorsement/Approval in the gender action plan or equivalent (when applicable) during this reporting period.

Category	Yes/No	Briefly describe progress and results achieved during this reporting period
Gender analysis or an equivalent socio-economic assessment made at formulation or during execution stages.	No	The Project Document mentions gender-sensitive activities, but no full-scale analysis was undertaken at the time of project formulation. In 2020/2021, the project has undertaken in four countries a study on the gender, socio-economic and health dimensions of pesticide use and management in Central Asia and Türkiye. A similar assessment is planned for Kazakhstan. Based on the findings of the gender assessment report, an action plan for mainstreaming gender in pesticide management and use will be developed by one international gender consultant and national specialists from each country. The project plans in 2022 a pesticide exposure assessment study, which includes gender disaggregation and will be able to show the various pesticide exposure risks by gender and cropping systems.
Any gender-responsive measures to address gender gaps or promote gender equality and women's empowerment?		Three countries plan in gender considerations when preparing training and information activities, e.g. by adapting training times such that women with family obligations can still participate, ensuring that there is a balance between female and male trainers providing courses, developing questionnaires or interviews considering the specifics of a female or male audience, etc.
Indicate in which results area(s) the project is expected to contribute to gender equality (as identified at project design stage):		
f) closing gender gaps in access to and control over natural resources		
g) improving women's participation and decision making		With regard to pesticide use, women have less access to information and PPE. The project intends to close this gender gap.

h) generating socio-economic benefits or services for women		
M&E system with gender-disaggregated data?		Currently not.
Staff with gender expertise		Training on gender was provided to staff. Hiring of gender consultants planned.
Any other good practices on gender		

11. Knowledge Management Activities

Knowledge activities / products (when applicable), as outlined in Knowledge Management Approach approved at CEO Endorsement / Approval during this reporting period.

Does the project have a knowledge management strategy? If not, how does the project collect and document good practices? Please list relevant good practices that can be learned and shared from the project thus far.	The project does not have a dedicated knowledge management strategy. Key outputs are currently collected by STA and both uploaded to FPMIS as well as to the project team's shared disk. Materials are published on project website. Technical reports are shared with project governments. GEF has requested project to document in detail all steps undertaken to assess, test and permit co-processing for POPs-disposal.
Does the project have a communication strategy? Please provide a brief overview of the communications successes and challenges this year.	Based on the gender assessment report, awareness raising and risk communication strategies at regional and national level will be elaborated including gender considerations.
Please share a human-interest story from your project, focusing on how the project has helped to improve people's livelihoods while contributing to achieving the expected Global Environmental Benefits. Please indicate any Socio-economic Co-benefits that were generated by the project. Include at least one beneficiary quote and perspective, and please also include related photos and photo credits.	Video from IPM trials undertaken in apple orchards in Isparta region, Türkiye, and related feedback by farmers on their experience with the use of pheromone traps instead of pesticides: https://youtu.be/HbfSq6OZ7UA
Please provide links to related website, social media account	https://www.fao.org/in-action/pesticides-central-asia/en
Please provide a list of publications, leaflets, video materials, newsletters, or other communications assets published on the web.	See project website.
Please indicate the Communication and/or knowledge management focal point's name and contact details	Ms. Birim Mor, birim.mor@fao.org

12. Indigenous Peoples and Local Communities Involvement

Are Indigenous Peoples and local communities involved in the project (as per the approved Project Document)? If yes, please briefly explain.
If applicable, please describe the process and current status of on-going/completed, legitimate consultations to obtain Free, Prior and Informed Consent (FPIC) with the indigenous communities. N/A Do indigenous peoples and or local communities have an active participation in the project activities? If yes, briefly describe how. N/A

13. Co-Financing Table

Sources of Co-financing[23]	Name of Co-financer	Type of Co-financing	Amount Confirmed at CEO endorsement / approval (USD)	Actual Amount Materialized at 30 June 2022 (USD)	Actual Amount Materialized at Midterm or closure (confirmed by the review/evaluation team) (note by MTR team: amounts as per last PIR, until June 2021)	Expected total disbursement by the end of the project
Nat. Gov.	Azerbaijan MoA	Cash	2'000'000	0	0	
Nat. Gov.	Azerbaijan MoA	In-kind	1'600'000	2'549'528	2'458'697	3'600'000
Nat. Gov.	Azerbaijan MoE	In-kind	1'400'000	0	0	1'400'000
Nat. Gov.	Kazakhstan MoA	In-kind	3'000'000	1'098'491	0	3'000'000
Nat. Gov.	Kazakhstan MoE	In-kind	--	116'219	--	--
Nat. Gov.	Kyrgyzstan MoA	In-kind	650'000	895'000	770'000	650'000
Nat. Gov.	Kyrgyzstan SAEPF	In-kind	350'000	130'000	70'000	350'000
Nat. Gov.	Tajikistan MoA	In-kind	650'000	89'375	80'375	650'000
Nat. Gov.	Tajikistan MoA	Cash	--	--	--	--
Nat. Gov.	Tajikistan CEP	In-kind	350'000	261'271	21'131	350'000
Nat. Gov.	Tajikistan CEP	Cash	--	--	--	--
Nat. Gov.	MoA Türkiye	Cash	3'000'000	0	0	0
Nat. Gov.	MoA Türkiye	In-kind	3'300'000	93'437'124	47'066'716	47'066'716

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

GEF Agency	FAO FTPP, FTFP	Cash	10’000’000	205’996	15’858	10’000’000
GEF Agency	FAO TCP	Cash	2’400’000	1’647’867	1’459’331	2’400’000
GEF Agency	FAO Locust	Cash	7’000’000	4’801’348	4’234’737	7’000’000
GEF Agency	FAO Regular	Cash	600’000	0	0	600’000
GEF Agency	FAO 040	Cash	1’000’000	327’060	327’060	1’000’000
GEF Agency	FAO STDF	Cash	1’000’000	1’077’164	1’077’164	1’000’000
Bilat. Aid	Tajikistan EC	Cash	--	280’190	280’190	280’190
Bilat. Aid	Tajikistan JICA	CASH	--	160’400	160’400	160’400
NGO	Tajikistan various	Cash	--	278’650	257’650	257’650
		TOTAL	38’300’000	107’355’683	58’279’309	79’764’956

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 Objectives Rating. A rating of the extent to which a project is expected to achieve or exceed its major objectives.	
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. A rating of the extent to which the implementation of a project's components and activities is in compliance with the project's approved implementation plan.	
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.
Risk rating. It should access the overall risk of factors internal or external to the project which may affect implementation or prospects for achieving project objectives. Risk of projects should be rated on the following scale:	
High Risk (H)	There is a probability of greater than **75%** that assumptions may fail to hold or materialize, and/or the project may face high risks.
Substantial Risk (S)	There is a probability of between **51%** and **75%** that assumptions may fail to hold or materialize, and/or the project may face substantial risks
Moderate Risk (M)	There is a probability of between **26%** and **50%** that assumptions may fail to hold or materialize, and/or the project may face only moderate risk.
Low Risk (L)	There is a probability of up to **25%** that assumptions may fail to hold or materialize, and/or the project may face only low risks.

Annex B. – POPs Tracking Tool

MANAGEMENT AND DISPOSAL OF OBSOLETE PESTICIDES, INCLUDING POPs					
Project title	**Lifecycle Management of Pesticides and Disposal of POPs Pesticides in Central Asian countries and Turkey**				
Country	**Azerbaijan, Kazakhstan, Kyrgyz Republic, Tajikistan and Turkey**				
GEF Agency	**FAO**				
GEF PMIS #	**5000**				
Indicators				**Number**	
Number1 of countries receiving GEF support for environmentally sound management of obsolete pesticides, including POPs [1.4.2.1]				**5**	
Note 1. indicate "1" if this is a single-country project.					
Indicators	**Quantity (in tons)**	**Qualitative comments from the project team or the GEF Agency2**			

Baseline inventory3,4 of obsolete pesticides, including POPs pesticide. [1.4.2.2]	*14'161*	*Number of 14'161 metric tonnes (MT) includes the results from various inventories undertaken in Azerbaijan, Kyrgyzstan, Tajikistan and Turkey undertaken in 2007-2009.* *No national inventory exists in Kazakhstan which could have been added to this number. A regional inventory undertaken by the Government of Kazakhstan in 2011 estimated 16'676 MT of obsolete stockpiles. Other estimates assume even higher volumes.* *This project will update current PSMS data available for Azerbaijan, Kyrgyzstan and Tajikistan and will complete the first national inventory for Kazakhstan.*	
Updated inventory Azerbaijan	*10'450*	*At seven out of the 19 sites inventoried in 2019, a total of 350 MT of obsolete pesticides stocks were found. All 19 sites must be considered to be contaminated sites, though to a varying degree, and a buried amount of 100 MT is suspected in Samukh.* *In addition, Jangi engineered landfill stores another 10'000+ MT of obsolete pesticides in bunkers and an above-ground store building.* *These numbers do not include volumes of contaminated soil. Latter are estimated to be at least another 25'000 MT.*	
Updated inventory Kyrgyzstan	*4'620*	*A national inventory was undertaken in 2021 at 62 sites. At 26 sites, approximately 4'620 MT of obsolete pesticides and related materials were inventoried. This includes about 250 MT of DDT in the Kochkor landfill and about 4'000 MT in the Suzak A and Suzak B landfills. The rest are obsolete pesticides at various (former) stores which await safeguarding.* *Most of the sites are in poor condition, posing a potential hazard to human health and the environment. Many of the storage sites are in close proximity to housing and agricultural land, used for housing livestock and storing fodder. Most of the stockpiles of obsolete pesticides are mixed with*	

		soil and contaminated packaging material.	
Updated inventory Tajikistan	*1*	*There are currently 3-4 stores left with minor amounts of OP to be safeguarded and brought to a central store. The total at these sites is estimated to be not more than 1 MT.* *Tajikistan's main challenge are the approx. 200 mini-landfills with large soil volumes with high contamination levels, many of these landfills being in the middle of settlements.*	
Inventory Kazakhstan	*TBD*	*Start of national inventory in June 2022.*	
		Note on precision: Control of all the pesticides stores stopped with the end of the Soviet Union. Many of the stores have since disappeared, pesticides buried, or waste mined and sold on local bazaars. Unlike other regions in the world, there are no neatly packed obsolete pesticides in reasonably maintained stores, but the challenge is the large amounts of "unknowns" and massive volumes of soils and other materials contaminated with obsolete pesticides. *Based on the inventory/safeguarding experience in other countries of the region, often volumes safeguarded are 2-3 times larger than assumed based on inventory data.*	

Notes. 2. Include in particular information on inventory coverage and precision.					

3. This is the total baseline inventory in the country before disposal operations. It might be a preliminary inventory such as possibly at concept stage; or a more detailed inventory such as is typically prepared during project development or as an early activity during project implementation.
Updated more accurate information should replace the first estimates as it becomes available - in that case, please indicate that the information has been updated relative to a previous entry in the "comments" column.

4. If the project addresses more than one country, please specify in the comments column; and also provide disaggregated data per country, if available.

Indicators	**Implementation Status**		**Qualitative comments4 from the project team or the GEF Agency**
Pesticides or POPs pesticides regulations5 in place [1.4.2.3]	0 = Not applicable : not an objective of the project 1 = legislation/ regulation drafted or revised 2 = legislation/ regulation adopted but is not enforced 3 = legislation/ regulation is enforced with corresponding budget	Status = 1	Legislation and regulations do exist in most countries but are outdated and not fully harmonized with international best practice. Legal Assessments conducted for Azerbaijan and Tajikistan (EC project) and Kyrgyz Republic (FTPP) have identified specific gaps in the existing laws, and recommend development of secondary legislation. The project will produce draft revised legislation for Azerbajian, Tajikistan and Kyrgyz Republic for submission to the respective parliaments by year 4. A legal assessment is also ongoing in Kazakhstan.

Indicators	Implementation Status		Qualitative comments4 from the project team or the GEF Agency
Waste management plans to prevent6,7 further accumulation of pesticide stockpiles and empty pesticide containers, in place [1.4.2.4]	0 = Not applicable : not an objective of the project 1 = management plans have been developed 2 = infrastructure and logistics in place to permit implementation 3 = management plans budgeted and implemented	Status = 1	Environmental Assessments and Management Plans drafted for AZE, KYR and TAJ. The project will promote the elaboration/update of 4 Environmental Assessment and Management Plans Introduction of IPM practices should lead to a reduced consumption of pesticides, use of HHPs is to be phased out. Sensitisation of farmers during trainings is to reduce the use of illegal pesticides from black markets. CMS is to be introduced to collect and dispose of empty containers. Baseline has been assessed in AZE, KGZ, TJK and TUR.

Notes. 5. Describe in the "comment" column the type of regulatory measures, which can include policies, decrees, bylaws, standards, guidelines such as broadly aligned with the objectives of the chemicals conventions and the International Code of Conduct on the Distribution and Use of Pesticides.

6. Describe specific prevention mesures in the comments section.

7. Waste pesticides and containers will always be generated where pesticides are used. In order to prevent accumulation of new stockpiles, a waste management plan must be in place.

Indicators	**Quantity (in tons)**		**Cost ($ per ton)**	**Qualitative comments from the project Team or GEF Agency4,8**	
	Project target	achieved to date			

Obsolete pesticides, including POPs pesticides, disposed of in an environmentally sound manner, and average cost9 [1.4.2]	900 metric tonnes	0 tonnes	*To be calculated at project end*	The development of national or subregional disposal capacity is a key strategic objective for the project. A national solution has been identified in Azerbaijan. A performance test to demonstrate compliance with Basel Convention Technical Guidelines is planned for 2022, based on which the facility can be permitted by the government for POPs disposal.
Obsolete pesticides safeguarded10 and average cost11 [1.4.2.5]	*900 metric tonnes*	*0 tonnes*	*To be calculated at project end*	*Safeguarding of 217 MT of polidofen (mixture of DDT and toxaphene) and other obsolete (POPs) pesticides ongoing in Azerbaijan. Contract cost for safeguarding (i.e. no transport or disposal included) is USD 315k or USD 1'450 / MT.*
Notes. 8. Provide information on disposal technology and whether in-country or abroad.				
9. Cost relates to overall cost of achieved disposal: Cost = price per ton for repackaging, transportation (land and sea), and destruction.				
10. This should only be indicated as an item separate from disposal if safeguarding is carried out as a risk reduction measure where disposal is not possible.				
11 Cost relates to overall cost of achieved safeguarding: Cost = price per ton for repackaging, transport, and safe storage.				