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Mid-term review of the project

“Lifecycle Management of Pesticides and Disposal of POPs Pesticides in Central Asian countries and Turkey”

**GCP/SEC/011/GFF
GEF ID 5000**

April 2022

**FOOD AND AGRICULTURE ORGANIZATION OF THE UNITED NATIONS
Sub regional Office for Central Asia**

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Acronyms and abbreviations

BH	Budget Holder
CMS	Container Management System
EMP	Environmental Management Plans
EMTK	Environmental Management Toolkit
ESS	Environmental and Social Safeguards
FAO	Food and Agriculture Organization of the United Nations
FLO	Funding Liaison Officer (FAO)
GEF	Global Environment Facility
GEF CU	GEF Coordination Unit (at FAO)
HHP	Highly Hazardous Pesticide
IPM	Integrated Pest Management
LTO	Lead Technical Officer
MTR	Mid-Term Review
NIP	National Implementation Plan (for the Stockholm Convention)
ODS	Ozone Depleting Substances
OP	Obsolete Pesticide
PIR	Project Implementation Report
PMU	Project Management Unit
POP	Persistent Organic Pollutant
PPR	Project Progress Reports
ProDoc	Project Document
PSC	Project Steering Committee
PTF	Project Task Force
SMART	Specific, Measurable, Achievable, Relevant, Time-bound
STA	Senior Technical Advisor
ToC	Theory of Change
ToR	Terms of Reference
UN	United Nations
UNEP	United Nations Environment Programme
UNIDO	United Nations Industrial Development Organization

Executive summary

Introduction

1. This report presents the results of the Mid-Term Review (MTR) of the project GCP/SEC/011/GFF “Lifecycle Management of Pesticides and Disposal of POPs Pesticides in Central Asian countries and Turkey” (GEF ID 5000). The MTR was carried out from December 2021 to March 2022. The main purpose of the MTR is to provide evidence of results to meet accountability requirements, to provide recommendations for improvement of the project, and to contribute to learning and knowledge sharing among FAO and its project partners.
2. The scope of the MTR covers the implementation of all four project components in Azerbaijan, Kyrgyzstan, Tajikistan and Turkey. Since Kazakhstan joined the project only recently, in August 2021, no activities have been implemented so far in this country. For Kazakhstan the MTR focused on assessing the relevance of all project outputs and outcomes for the country, the need for and duration of extension of the project, and any possible challenges for implementation of the project.
3. The MTR was conducted by an International MTR Leader, an International technical MTR consultant for component 1 of the project (related to safeguarding and disposal of obsolete pesticides (OPs), contaminated sites remediation and container management), and five National MTR consultants for each project country who interviewed national stakeholders.
4. The MTR is based on desk research of all key documents, and on semi-structured interviews. Basic interview protocols were developed that would ensure that the same kind of information could be gathered from all stakeholders. To support the conduction of interviews, an Evaluation Matrix was prepared, containing the key questions and specific sub-questions per criterion and including indicators, as well as the sources of information to be consulted and the review methods to be applied in order to gain as much information as possible and ensure validation and triangulation of the findings of the MTR. The national consultants developed a final report with their findings and observations, which were incorporated into this main MTR report. The key questions assessed by the MTR team and the main findings are summarized below.

Main findings

MTR question 1 – Relevance

Is the project still relevant to the country, beneficiaries and donor? To what extent are the project objectives relevant and suited to the priorities, policies and strategies of the executing and implementing agencies, donors, stakeholders and target groups?

5. The MTR assessed the project to be fully in line with national priorities (such as the Stockholm Convention National Implementation Plans), as well as donor strategic priorities (GEF-5 focal area strategies), other interventions (mainly UNEP and UNIDO POPs disposal projects), and with the FAO Strategic Framework. The interviews conducted by the MTR team made clear that the project is still very relevant and important for the countries. The Ministry of Agriculture and Forestry in Turkey indicated that the project is very relevant, especially the work on IPM and container management. However, the country does not need huge support on the management of Persistent Organic Pollutants (POPs) pesticide wastes (as those have

been largely disposed of within earlier projects) and remediation of contaminated sites (both activities within Component 1 of the project).

6. Cooperation of FAO with the UNEP (for Kyrgyzstan and Tajikistan) and UNIDO (for Kazakhstan) projects, is considered crucial for achieving the project results, specifically related to potentially realising disposal options in Kazakhstan, Kyrgyzstan and Tajikistan.

MTR question 2 – Effectiveness

To what extent has the project delivered on its outputs, outcomes and objectives?

7. Outputs and outcomes of the project have not been fully achieved at the mid-term point of the project. However, important progress has been made for some outputs, e.g. inventories (output 1.1), the development of a regional disposal strategy (1.2), the bioremediation trial in Kyrgyzstan (1.4), assessments/feasibility studies on container management (1.5), assessment of legal frameworks (2.1), and Integrated Pest Management (IPM) field trials and alternatives (3.2).
8. The most challenging issue within the project is related to component 1. The project is targeting to dispose of 900 tonnes of obsolete pesticides, including POPs pesticides, in an environmentally sound manner. However, currently there are no disposal options for Kazakhstan, Kyrgyzstan and Tajikistan. As mentioned, it is therefore essential that the FAO project cooperates closely with the UNEP and UNIDO projects as these projects also consider disposal options in these countries. For Azerbaijan, co-processing in a cement kiln, which is already co-processing various wastes, is being considered. A definite decision on conducting a test burn in the Holcim cement kiln needs to be taken and discussed with GEF. In principle the test burn is planned to be conducted in 2022.
9. The MTR team considers that the likelihood that the project will make a contribution to the higher level, longer-term intended changes and impacts is moderately likely, provided that the project is extended to allow the outputs and outcomes to be achieved, and important steps are taken in building capacity and ownership in the countries.

MTR question 3 – Efficiency

To what extent has the project been implemented efficiently and cost effectively? Has management been able to adapt to any changes and conditions and improve the efficiency of project implementation?

10. There have been delays at the start of and during the project, and therefore it is not possible to implement the project activities by the current end date of the project (October 2022). The reasons for the delays are the late signature of countries joining the project, low level of activities at the start of the project, restructuring in ministries, changes in staff (both within FAO and country counterparts), the restrictions related to the COVID-19 pandemic, and generally long hand-over and approval processes within FAO (as well as within governmental counterparts) related to e.g. the development of strategies and reports
11. The project considers cost-effectiveness through building on existing FAO projects and partnerships, and by seeking cooperation with other initiatives (UNEP and UNIDO projects). Cost effectiveness is also one of the important considerations in tender processes that have been and will be organized within the project. COVID-19 has inadvertently also lead to cost

savings as only few face-to-face meetings could be held and no international travel could be organized. However, the fact that less physical meetings could be organized also slowed down the project and made effective communication more difficult.

MTR question 4 – Sustainability

To what extent are there financial, institutional and governance, socio-political and/or environmental risks to sustaining project results in the long-term?

12. Environmental sustainability is assessed as likely, as the project for example intends to safeguard and/or dispose of (over) 900 metric tonnes of POP stockpiles that have been degrading and creating a risk for the environment for years, to demonstrate and promote IPM as an alternative to extensive use of pesticides, and to introduce better life-cycle management as a measure to prevent re-formation of stocks of obsolete pesticides. Risks to the environment can be high in case of accidents or exposure during safeguarding and disposal activities, but these risks are mitigated by following FAO, international and national standards and working with experienced service providers.
13. The government counterparts and other stakeholders do not always have the technical capacity to undertake all project activities. Interviewees pointed out that it is important to ensure that capacity will be built by the project and sustained after the project ends. Government counterparts may sometimes lack institutional sustainability, for example, due to regular changes in staff, restructuring, and other priorities in their work.
14. The (pilot, demonstration and trial) activities currently implemented and planned to be executing within the project, have a potential for replication and upscaling. However, at the same time sustainability of such activities can be challenging if during project implementation FAO, the government counterparts and relevant stakeholders do not timely discuss and agree on responsibilities of replication and upscaling and on ownership after project end (including an assessment of financial aspects). Financial sustainability is an issue for some countries, specifically when it concerns costly operations such as safeguarding and disposal.

MTR question 5 – Factors affecting performance

What are the main other factors affecting the project in reaching its results, and how are they affecting the project's performance? (consider project design and readiness; project execution and management arrangements; project oversight; financial management and co-financing; project partnerships and stakeholder engagement; communication, knowledge management and knowledge product, M&E design and implementation.)

15. There are several factors that have influenced the implementation of the project, as well as factors that should be considered during further implementation in order to achieve the objectives of the project:
16. There have been substantial delays in starting the project, in part due to the late signing by some countries. The project execution arrangements and administration framework within FAO are well formed and of good quality, and the communication lines and decision-taking procedures are mostly clear. Generally, these frameworks and arrangements support the

project’s implementation well. Nevertheless, stakeholders from all countries that have implemented activities explained that there are often long internal approval procedures and hand-over processes within FAO that can affect project efficiency and sometimes causes unclarities in communication between the different parties.

17. Overall, FAO has provided satisfactory quality of supervision, guidance and technical backstopping for the activities implemented. The project’s governance and supervision model as developed during project design is structured, but in reality the structures and the communication between government counterparts, FAO and other stakeholders have been more ad hoc. Stakeholders were overall engaged adequately but, in some cases, there has been a lack of interaction. Restructuring within ministries has at times also complicated communication and engagement. Several interviewees expressed the need for more structured communication mechanisms for all stakeholders, also on national level, as this will improve engagement and create a common understanding of the stakeholders on project activities and their specific roles in the project. The work of the Project Steering Committee (PSC) needs to be strengthened; there has been only one such meeting and many stakeholders therefore found it difficult to assess the work of the PSC or were not aware of this structure.
18. Few structured communication and awareness raising activities have been implemented, and few publications and knowledge products have been prepared to showcase the results of the project (except within Turkey). Many interviewees noted that visibility needs to be improved and results already produced by the project should be disseminated to a wider audience.
19. The overall expenditure for project management is 49.7%. This project management component should be assessed when the project is extended to ensure that expenditure for this budget line will remain within budget.

MTR question 6 – Cross-cutting dimensions (including gender and Environmental and Social Safeguards)

To what extent have gender considerations been taken into account in project design and implementation? Have Environmental and Social Risks been identified and are appropriate mitigation measures taken?

20. The project at design targets women as specific beneficiaries and adheres to the relevant FAO and GEF gender policies. Until the mid-term point of the project, aspects related to gender and vulnerable groups have been considered only in a limited way in the project’s implementation. However, recently the report “Gender, socio-economic and health dimensions of the use of pesticide and management in Central Asia and Turkey” has been (largely) finalised, which provides comprehensive and useful information and recommendations on gender and pesticides which enables the project team to design proper actions in the near future. The MTR considers that it will be important to make the involvement of a gender expert more sustainable; this gender consultant should work closely with the specialists preparing a regional communication strategy, awareness raising campaigns on national level, and with the Monitoring and Evaluation (M&E) specialist.
21. The project document contains an Environmental and Social Screening (ESS) checklist. The chapter on Risk Management also mentions environmental risks related to safeguarding and

disposal, and the chapter on Environmental Impact Assessment describes the different mitigation measures to counteract these risks. For the safeguarding in Azerbaijan, necessary precautions have been arranged, including development of a Health, Safety and Environmental Plan. All work is expected to be conducted in line with Stockholm and Basel Convention requirements, and FAO’s Environmental Management Tool Kits (EMTKs).

Overall progress on implementation

22. Overall progress on implementation has been assessed as **moderately satisfactory**. Due to the delays in the project (caused by late signature of countries, staff changes, restructuring of ministries, the COVID-19 pandemic and long approval and hand-over processes), the project is behind schedule. Nevertheless, the project has made important progress for some of the outputs, such as the inventories, assessments on container management, and bioremediation trials in Kyrgyzstan under component 1, the legal assessments under component 2, and the and field trials on IPM and alternatives under the third component. The main issue for the implementation of the project is related to the disposal of obsolete pesticides. One of the project’s aims is to dispose of 900 tonnes of obsolete pesticides, including POPs pesticides, in an environmentally sound manner. Currently there are no disposal options for Kazakhstan, Kyrgyzstan and Tajikistan. Cooperation with the UNEP and UNIDO projects in the region is therefore essential, as these projects also consider disposal options in these countries. Additionally, plans for a performance test at the Holcim cement kiln in Azerbaijan need to be further discussed and agreed with the GEF.

Progress towards achieving the objective

23. The overall progress towards achieving the project objective (*“reduce releases of POPs from obsolete pesticide stockpiles and strengthen capacity for sound pesticide management throughout the life cycle in four Central Asian countries and Turkey”*) is rated as **moderately satisfactory**. Although important project activities have been implemented to achieve outputs and outcomes, there are still crucial decisions to be taken (in discussion with the GEF) and complex activities related to safeguarding and disposal to be implemented. It is also essential that the project focuses more on building capacities and ensuring that these capacities are maintained also after project end.

Overall risk rating

24. The MTR rates the project’s level of risk to be low to medium and therefore it is **moderately likely to likely** that the project will reach the objectives if the project will be extended until in minimum December 2024 (the current end date of the project is October 2022), and the recommendations from this report will be addressed properly and timely.

Conclusions (summarized)

25. **Conclusion 1 (Relevance):** The project is strategically highly relevant and in line with national priorities as well as donor strategic priorities, existing interventions, and with the FAO Strategic Framework. The interviewees confirmed the continued relevance of the project and the project activities for their country. Also the stakeholders in Kazakhstan, where no activities have been implemented yet as they joined the project only in August 2021, are committed to achieving all project results for their country and region. The Ministry of Agriculture and Forestry in Turkey indicated that the

project is very relevant, but that the country does not need huge support for all project outputs and outcomes, for example on the management of POPs pesticide wastes (as those have been largely eliminated within earlier projects) and remediation of contaminated sites. The GEF UNEP project, which is operational in Kyrgyzstan and Tajikistan, and the GEF UNIDO project that is active in Kazakhstan are of specific interest for the FAO project as there are complementarities in activities and because these projects can contribute to the development of disposal options in Kazakhstan, Kyrgyzstan and Tajikistan

26. **Conclusion 2 (Effectiveness):** Although the project is delayed, good progress is being made for some outputs, e.g. inventories (output 1.1), development of a regional disposal strategy (1.2), bioremediation trial in Kyrgyzstan (1.4), assessments/feasibility studies on container management (1.5), assessment of legal frameworks (2.1), and field trials on IPM and alternatives (3.2). A main issue in the project is (the lack of) disposal options in Kazakhstan, Kyrgyzstan and Tajikistan. Discussion is ongoing and cooperation with the UNEP and UNIDO projects is required to potentially realise disposal options for Kazakhstan, Kyrgyzstan and Tajikistan through joint efforts (e.g. through additional disposal methods that are considered in the UNEP and UNIDO projects, and by researching whether co-processing in cement kilns could be an option in some of these countries). A decision on the test burn in Azerbaijan is taking time and should be decided as soon as possible.
27. The IPM field trials were most successfully implemented in Kyrgyzstan and Turkey, and these will be continued in 2022. In Azerbaijan, the project team decided that for 2022 it is more relevant to first focus on capacity building on IPM within the government counterpart Agrarian Services Agency, before actual IPM field work can be further implemented or demonstration farms can be set up. The COVID-19 pandemic showed how dependent Tajikistan is on the import of seeds. Therefore it was decided to focus the work on developing a potato seed bank based on IPM methods to enhance national seed autonomy. However, the MTR team could not validate and triangulate benefits of these activities, as the activities have not been documented well. Obsolete Pesticide inventories in Azerbaijan, Kyrgyzstan and Tajikistan were conducted, but the inventory reports have not been approved by the government counterparts (yet). In Azerbaijan the inventory report was sent to the government counterparts for information purposes, and in Kyrgyzstan and Tajikistan the reports still need to be finalized and to be sent to the governments. A soil remediation trial study has been set up in Kyrgyzstan in cooperation with the Kyrgyz Manas University. The results of the bioremediation trial in Kyrgyzstan has been successful (99% of the 19 types of POPs pesticides were eliminated in situ within 6 to 8 months) and encourage upscaling of the pilot study in the country and to other countries.
28. **Conclusion 3 (Efficiency):** The project has been delayed, due to the late start of the project (the project was officially approved in 2016, and started in October 2018, after the first two countries had signed the project agreement with FAO), late signature of countries joining the project, the limited activities at the start of the project partly due to only two countries having joined the project, the COVID-19 pandemic, restructuring within some ministries, staff changes (both within FAO and country counterparts), and long approval and hand-over processes (of reports and strategies). Because of these delays, the outputs and outcomes cannot be achieved by the current end date of the project (October 2022). Kazakhstan joined the project only in August 2021. This was in

part due to the restructuring within the Ministry of Agriculture and COVID-19, but also because the Ministry of Agriculture decided that since component 1 of the project is such an important and large part of the project, and the Ministry of Ecology is responsible for these issues in the country, it would be better that the Ministry of Ecology would take over project responsibility.

29. **Conclusion 4 (Sustainability):** Sustainability of institutional capacities need further attention during the remaining part of the project and measures should be taken to ensure that capacities developed within government counterparts and other stakeholders are sustained. Additionally, sustainability and upscaling of project results should also be further considered and these aspects need to be reflected in the different strategies and action plans that are being developed in the project. The risks to environmental sustainability are considered to be low to medium, if the international and national requirements are respected and closely monitored. The (pilot, demonstration and trial) activities currently implemented or planned to be implemented within the project, can potentially be replicated and upscaled, as the design of such activities can be improved based on the lessons learned from these pilot activities. However, sustainability of such activities can become challenging if during project implementation no timely discussions and agreements are made between FAO, the government counterparts and relevant stakeholders on responsibilities of replication and upscaling and on ownership after project end (including an assessment of financial aspects, institutional sustainability, sustainability of capacities, and environmental sustainability).
30. **Conclusion 5 (Factors affecting project performance):** Overall, FAO has provided satisfactory quality of supervision, guidance and technical backstopping for the activities implemented. Stakeholders were overall engaged adequately but, in some cases, there has been a lack of interaction. Several interviewees expressed the need for more structured and regular communication with and between project counterparts and stakeholders, as this will help to create a mutual understanding of the stakeholders on project activities and their specific roles, and will increase a better understanding of their contribution to the overall project objectives and outcomes. Besides National Project Steering Committees (which is operational in Azerbaijan only), suggestions were made to set up working groups on specific topics including representatives of relevant specialized organizations and international experts, to provide update sheets and to set up an interactive platform for regional exchange of experience. The PSC is a good platform for coordination, but its function is less action-oriented, and serves more formal coordination, approval and decision-taking processes. More structured communication on national level can improve communication between stakeholders and additionally contribute to discussing and resolving practical issues. Additionally, there are often long internal approval procedures and bureaucracy within FAO (but also government counterparts) that can sometimes affect project efficiency and can cause confusion in communication between the different parties.
31. **Conclusion 6 (Factors affecting project performance):** Few structured communication and awareness raising activities have been implemented, as most pilot and demonstration projects as well as safeguarding, disposal and remediation of contaminated sites have yet to take place. In addition, few publications and knowledge products have been prepared to showcase and inform stakeholders about the results of the project. For the remaining part of the project, it is important to develop and

implement a regional communication strategy as well as national communication, awareness raising and outreach strategies, in order to raise the awareness and strengthen capacities of project stakeholders and beneficiaries, including women and vulnerable groups. It would also be good to make an assessment of how publications and guidelines that will be prepared and translated within the project are used by the stakeholders and whether these communication tools support sustainable project results and increase the awareness and capacity of stakeholders.

32. **Conclusion 7 (gender):** The project document targets women as specific beneficiaries and is in compliance with the relevant FAO and GEF gender policies. Many of the activities in which gender aspects are planned to be considered and awareness raising of the local population is expected to be conducted (such as contaminated sites remediation, safeguarding, disposal, container management, IPM field trials) still need to take place or have only partially been implemented. Therefore, during implementation gender aspects have been considered only in a limited way. The recently drafted report “Gender, socio-economic and health dimensions of the use of pesticide and management in Central Asia and Turkey” provides comprehensive and valuable information on gender and pesticides and allows the project team to design proper actions for the remaining part of the project.

Recommendations

33. Based on the findings and conclusions, the MTR has prepared the following recommendations (summarized):
34. **Recommendation 1 (Efficiency):** 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 capitalise 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).
35. **Recommendation 2 (Factors affecting performance):** 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.
36. **Recommendation 3 (Communication):** 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.
37. **Recommendation 4 (Sustainability):** 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.
38. **Recommendation 5 (Environmental and Social Safeguards):** 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).

39. **Recommendation 6 (Effectiveness): 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.**
40. **Recommendation 7 (Effectiveness): 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.**
41. **Recommendation 8 (Effectiveness): 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 trials, potentially through promoting commercialization of these technologies in project countries.**
42. **Recommendation 9 (Effectiveness): 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".**
43. **Recommendation 10 (Gender): 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.**

Paragraphs for the GEF-portal:

Stakeholder participation

44. Stakeholders (the government counterparts, as well as the implementing project partners such as universities, research institutes, NGOs and organizations active on IPM) in all countries show interest in and commitment to the project objectives. Most stakeholders were adequately identified at project design or before the start of the relevant activity. Generally, the stakeholders are well engaged, but stakeholders also mentioned during the MTR that at times there has been a lack of interaction and communication between FAO and project counterparts and other stakeholders. Long approval and hand-over processes have affected the efficiency of the project and stakeholders stated that more regular updates are necessary to keep them engaged and involved in the project. Restructuring within ministries has at times also complicated communication and engagement. More structured and regular communication mechanisms for all stakeholders, also on national level, will strengthen engagement and create a common understanding of the stakeholders on project activities and their specific roles and responsibilities in the project.

Progress on gender responsive measures

45. The project document targets women as specific beneficiaries and is in compliance with the relevant FAO and GEF gender policies. Many of the activities in which gender aspects are planned to be considered and awareness raising of the local population is expected to be conducted (such as contaminated sites remediation, safeguarding, disposal, container management, IPM field trials) still need to take place or have only partially been implemented. Therefore, during implementation gender aspects have been considered only in a limited way (mostly during the IPM trials in Turkey). The recently drafted report “Gender, socio-economic and health dimensions of the use of pesticide and management in Central Asia and Turkey” provides (for the first time) comprehensive and valuable information on gender and pesticides and allows the project team to design proper actions for the implementation of sustainable, inclusive, and gender-transformative approaches in rural development and agriculture during the remaining part of the project. Additionally, the gender MTR expert has provided a series of recommendations to support the implementation of gender specific actions, including (additional) specific field studies on gender in regions targeted within component 1 of the project and in Kazakhstan, 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.

Knowledge activities and products

46. Component 4 of the project (Project achievements and lessons monitored and widely shared for maximum Influence) can be considered a supporting component for the other three components; raised awareness will contribute to sustainability of the other components (and the outputs and outcomes of these components). If stakeholders are more aware of the risks related to POPs and obsolete pesticides, of the regulatory framework, of IPM and other alternative agricultural practices, it can be expected that they are more committed to reducing risks and improving the regulatory framework and agricultural practices, and show more ownership to achieve project results.
47. A communication strategy has not been developed. Currently a regional communication strategy is being prepared. Few structured communication and awareness raising activities have been implemented (mostly during the IPM field trials in Turkey), and few publications and knowledge products have been prepared to present the results of the project. Visibility needs to be improved and results already produced by the project should be disseminated to a wider audience to raise awareness.

GEF rating table

Ratings: *Highly satisfactory (HS), Satisfactory (S), Moderately satisfactory (MS), Moderately unsatisfactory (MU), Unsatisfactory (U), Highly unsatisfactory (HU), Unable to assess (UA)*. Additional ratings for Section D: *Likely (L), Moderately likely (ML), Moderately unlikely (MU), Unlikely (U)*.

Table 1: GEF Rating table

GEF criteria/sub-criteria	Rating	Summary comments
A. STRATEGIC RELEVANCE		
A1. Overall strategic relevance	HS	The project is strategically relevant and fully in line with national and regional priorities, as well as with GEF and FAO strategic objectives.
A1.1. Alignment with GEF and FAO strategic priorities	HS	The project adheres to the GEF-5 Focal Area Strategy on Chemicals and Waste. The project fits under Outcome 1.4 “POPs waste prevented, managed, and disposed of, and POPs contaminated sites managed in an environmentally sound manner”.
A1.2. Relevance to national, regional and global priorities and beneficiary needs	HS	The project is in line with national strategies and action plans. The Ministry of Agriculture and Forestry of Turkey indicated that not all outputs are fully relevant for them and that they do not need (much) support on for instance the management of POPs pesticide wastes and remediation of contaminated sites. For the other countries the project is highly relevant and government counterparts overall are committed to achieving all outputs and outcomes, and therefore the MTR has assessed the relevance to national priorities and beneficiary needs as highly satisfactory.
A1.3. Complementarity with existing interventions	HS	There are two initiatives in the region that are of specific interest for the FAO project, and have complementary and overlapping activities. These projects will also be crucial for potentially realising disposal options in Kazakhstan, Kyrgyzstan and Tajikistan; the GEF UNEP project “Demonstration of Non-thermal Treatment of DDT Wastes in Central Asia (Kyrgyz Republic and Tajikistan)” (GEF ID 9421) and the GEF UNIDO project “Regional Demonstration Project for Coordinated Management of ODS and POPs Disposal in Ukraine, Belarus, Kazakhstan and Armenia” (GEF ID 5300). FAO and UNEP are developing a Memorandum of Understanding for cooperation in Kyrgyzstan and Tajikistan. Both UNIDO and FAO will also cooperate closely, for example by setting up a joint coordination mechanism in Kazakhstan.
B. EFFECTIVENESS		

GEF criteria/sub-criteria	Rating	Summary comments
B1. Overall assessment of project results	MS	There have been delays in the project, which means that the outputs and outcomes cannot be achieved by the current end date of the project (October 2022). There has been important progress for some outputs, e.g. inventories (1.1), regional disposal strategy (1.2), bioremediation trial in Kyrgyzstan (1.4), assessments/feasibility studies on container management (1.5), assessment of legal frameworks (2.1), IPM strategy and IPM field trials and alternatives, specifically in Kyrgyzstan and Turkey (3.2). However, there are still important issues to solve related to disposal, and large activities to be implemented on safeguarding, test burn in Azerbaijan, contaminated sites remediation and container management. Additionally, capacities of stakeholders need to be built in order for the project to reach its objectives.
B1.1 Delivery of project outputs	MS	There have been several delays in the project, due to the late start of the project, late signature of the project agreement by countries, staff changes, ministry restructuring, long approval and hand-over processes, and also COVID-19 (although of course the pandemic is beyond the control of the project and thus has not been considered in rating progress). Important progress has been made for some outputs, e.g. inventories (1.1), regional disposal strategy (1.2), bioremediation trial in Kyrgyzstan (1.4), assessments/feasibility studies on container management (1.5), assessment of legal frameworks (2.1), IPM strategy and IPM field trials and alternatives (3.2).
B1.2 Progress towards outcomes and project objectives	MS	There has been progress towards all outcomes. However, as the outputs have not been achieved (fully), and are rated as Moderately Satisfactory, the progress towards the outcomes and project results are also rated as Moderately Satisfactory. The MTR considers that the outcomes can be fully achieved, if the project is extended (until in minimum December 2024), and the recommendations from this MTR are implemented.
- Outcome 1: 900 tonnes of POPs and obsolete pesticides are safeguarded and eliminated in an environmentally sound manner; risks from obsolete stocks, contaminated sites and empty pesticide containers are further quantified and reduced; and capacity on safeguarding, disposal, contaminated sites and empty container management is	MS	Important preparatory activities to reach this outcome have been taken. For example, inventories have been conducted in Azerbaijan, Kyrgyzstan and Tajikistan and assessments on container management systems in the countries have been developed. Also, a bioremediation trial was set up in Kyrgyzstan. Safeguarding of 217 tonnes of obsolete pesticides is planned to be conducted in Azerbaijan in April/May 2022. There are, however, still important issues to resolve regarding disposal options in Kazakhstan, Kyrgyzstan and Tajikistan,

GEF criteria/sub-criteria	Rating	Summary comments
strengthened.		and a decision on a test burn (performance test) in Azerbaijan needs to be taken and the test burn conducted. Capacities are planned to be built during the safeguarding, disposal, contaminated sites, container management and other activities.
- Outcome 2: Strengthened regulatory framework and strengthened institutional capacity for sound pesticide management.	MS	First essential steps have been taken to achieve this outcome by developing baseline assessments and reports. Concrete steps to revise/strengthen the legal framework and institutional capacity have yet to be taken. Legal assessments on pesticide management were prepared for Azerbaijan, Kyrgyzstan and Tajikistan. Additionally, a report on the status of “Gender, Socio-Economic and Health Dimensions of the Use of Pesticide and Management in Central Asia and Turkey” has been drafted in 2021. Finally, an assessment of Highly Hazardous Pesticides (HHPs) included in the list of registered pesticides started at the end of 2021. The consultant involved finalised the list of identified HHPs for Azerbaijan and Kazakhstan, and is working on the list for Turkey.
- Outcome 3: Increased capacity and awareness on Integrated Pest Management (IPM) and alternatives to Highly Hazardous Pesticides (HHP).	MS	IPM trials have been implemented successfully in Kyrgyzstan and Turkey. In Azerbaijan it has been decided (after one year of IPM field work) to first focus on capacity building and understanding of IPM principles. In Tajikistan no IPM trials have been implemented, for this country it was decided to focus the work on developing a potato seed bank based on IPM methods to enhance national seed autonomy. The results of this work are not well documented; therefore the benefits are not fully clear.
- Outcome 4: Increased awareness and ownership of stakeholders and beneficiaries on project results and methodologies.	MS	Several FAO guidelines and materials were translated into Turkish, Russian and Azerbaijani. To raise awareness among the younger generation on the risks by pesticides a Kids Story Book was developed in Turkish and English and the FAO Activity Book was translated into Azerbaijani and Turkish. The project’s website went online in later 2021. It was mentioned by several interviewees that more publications and knowledge products need to be prepared to showcase the results of the project. It is not clear how the different materials translated are used by the recipients.
- Overall rating of progress towards achieving objectives/ outcomes	MS	As progress towards achieving the individual outcomes have all been assessed as Moderately Satisfactory, it follows that the overall rating is also considered Moderately Satisfactory.

GEF criteria/sub-criteria	Rating	Summary comments
B1.3 Likelihood of impact	Not rated at MTR	-
C. EFFICIENCY		
C1. Efficiency	MS	As there have been delays at the start of and during the project, it is not possible to implement the project activities by the current end date of the project (October 2022). The reasons for the delays are the late signature of countries joining the project, restructuring in ministries, changes in staff (both within FAO and country counterparts), the restrictions related to the COVID-19 pandemic, and generally long hand-over and approval processes. The project considers cost-effectiveness through building on existing FAO projects and partnerships, and by seeking cooperation with other initiatives (UNEP and UNIDO projects).
D. SUSTAINABILITY OF PROJECT OUTCOMES		
D1. Overall likelihood of risks to sustainability	ML	The MTR assesses that it is moderately likely that there are risks to sustainability, for instance sustainability of capacities built and financial sustainability. There are some measures that can be taken to mitigate these risks, for example by incorporating sustainability aspects into the different strategies and national action plans that are being developed within the project.
D1.1. Financial risks	ML	Financial sustainability is an issue for some countries, specifically when it concerns costly operations such as safeguarding and disposal, depending also on the economic situation and priorities in the country. The last Project Identification Report (PIR) additionally mentions that funds for safeguarding and remediation will always remain insufficient until governments develop funding and taxation mechanisms for legacy wastes. The project team plans to provide support to develop such mechanisms during the remaining part of the project.
D1.2. Socio-political risks	ML	There is (political) instability in project countries which has affected the project, especially in Kyrgyzstan where restructuring of ministries has taken a long time and delayed the project. Also in Azerbaijan and Tajikistan restructuring of ministries and changes within ministries affected the project.
D1.3. Institutional and governance risks	ML	Changes in ministries (see D1.2) indicates that institutional memory and institutional capacity built within the project may be partly lost. Additionally, capacities built within government counterparts

GEF criteria/sub-criteria	Rating	Summary comments
		may be lost due to staff changes. Therefore, it is important that the project includes aspects related to sustainability and upscaling in the regional strategies that are developed and in the action plans that will be developed in each country, in order to mitigate effects related to instability and changes in ministries.
D1.4. Environmental risks	ML	Risks to the environment and health can be significant if accidents and exposure occur. However, these risks can be mitigated by complying with national and international standards. FAO only works with experienced waste management companies with a proven track record and which operate according to best international practices. For the safeguarding in Azerbaijan, the waste management company has prepared an Environment, Health and Safety plan and will train local workers before the start of the work in order to reduce the risks and to build up national capacity.
D2. Catalysis and replication	ML	The (pilot, demonstration and trial) activities currently implemented and planned to be implemented within the project, have a potential for replication and upscaling. However, sustainability of such activities can become problematic if during project implementation no timely discussions and agreements are made between FAO, the government counterparts and relevant stakeholders on responsibilities of replication and upscaling and on ownership after project end (including an assessment of financial aspects, institutional sustainability, sustainability of capacities, and environmental sustainability).
E. FACTORS AFFECTING PERFORMANCE		
E1. Project design and readiness	MU	The project document was adequately designed and relevant stakeholders were identified at project design. As the project document was designed in 2013, an update of the results matrix is currently prepared to reflect the present-day situation in the project. There have been substantial delays in starting the project, in part due to the late signing of some countries. Accordingly, a limited number of activities were implemented during the first period of the project.
E2. Quality of project implementation	S	There has been important progress for some outputs, e.g. inventories (1.1), regional disposal strategy (1.2), bioremediation trial in Kyrgyzstan (1.4), assessments/feasibility studies of container management (1.5), assessment of legal frameworks

GEF criteria/sub-criteria	Rating	Summary comments
		(2.1), IPM strategy and IPM field trials and alternatives in Azerbaijan, Kyrgyzstan and Turkey (3.2). Overall, the MTR considers that the activities that have been implemented are implemented well and with a satisfactory level of quality. In Tajikistan, the development of a potato seed bank based on IPM methods to enhance national seed autonomy in Tajikistan, has, however, not been well documented.
E2.1 Quality of project implementation by FAO (BH, LTO, PTF, etc.)	S	Overall, FAO has provided satisfactory quality of guidance and technical backstopping for the activities implemented until the mid-term point of the project.
E2.2 Project oversight (PSC, project working group, etc.)	MS	FAO has mostly provided satisfactory quality of supervision, guidance and technical backstopping for the activities implemented. The project’s governance and supervision model as developed during project design is structured, but in reality the structures and the communication between government counterparts, FAO and other stakeholders have been more ad hoc. Stakeholders indicated that they found it difficult to assess (the (results of) the work of the PSC, as there has been only one meeting and not everyone was aware of its existence. More structured mechanisms for communication on national level are needed for properly engaging all stakeholders.
E3. Quality of project execution	S	The project execution and administration framework and arrangements within FAO are well established and of good quality, and the communication lines and decision-taking procedures are mostly clear. Overall, these frameworks support the progress being made in the project well. However, several interviewees (from all countries) explained that there are often long internal approval procedures and bureaucracy that can sometimes affect project efficiency and sometimes causes unclarities in communication between the different parties.
E3.1 Project execution and management (PMU and executing partner performance, administration, staffing, etc.)	S	The project execution and administration framework and arrangements within FAO are well established and of good quality, and the communication lines and decision-taking procedures are mostly clear. Overall, these frameworks support the progress being made in the project well. Long internal approval and hand-over processes can delay the project at times.
E4. Financial management and co-financing	S	Financial overviews of the project (per component/outcome and per country) were provided to the MTR team as well as an overview of

GEF criteria/sub-criteria	Rating	Summary comments
		co-finance overview from the last PIR. The MTR team did not note any specific issues related to financial management, and there is good cooperation between the relevant FAO staff members working on this.
E5. Project partnerships and stakeholder engagement	MS	Stakeholders were overall engaged adequately but, in some cases, there has been a lack of interaction. Restructuring within ministries has at times also complicated communication and engagement. Several interviewees expressed the need for more structured communication with and between project counterparts and stakeholders, as this will help to create a common understanding of the stakeholders on project activities and their specific roles, and will increase a better understanding of their contribution to the overall project objectives and outcomes.
E6. Communication, knowledge management and knowledge products	MS	Few structured communication and awareness raising activities have been implemented (mostly during the IPM trials in Turkey), and few publications and knowledge products have been prepared to showcase the results of the project. More attention on this is needed. Many interviewees noted that visibility needs to be strengthened and results already produced by the project should be disseminated to a wider audience.
E7. Overall quality of M&E	MS	Both design and implementation of M&E are adequate. There is no structured and comprehensive collection of gender disaggregated data. The original Result Matrix is being updated to reflect the present-day reality of the project, and indicators are being revised to make them more SMART.
E7.1 M&E design	MS	The design of M&E as described in the project document is satisfactory. It describes the monitoring responsibilities, M&E reporting and contains an M&E plan, including type of activity, responsible parties, time frame and budget. Gender aspects have not been included in the M&E at project design, and the indicators in the Result Matrix are not always SMART.
E7.2 M&E plan implementation (including financial and human resources)	MS	Reporting is conducted through the Project Progress Reports (FAO reports) and Project Implementation Reviews (to GEF). Overall, these reports provide sufficient information about the project. Although some stakeholders indicated that the project considers gender aspects, there is no structured and comprehensive collection of gender disaggregated data. Currently the national technical

GEF criteria/sub-criteria	Rating	Summary comments
		coordinator for Turkey is updating the M&E mechanism, and the updated Results Matrix is expected to be reflected therein.
E8. Overall assessment of factors affecting performance	MS	The quality of project implementation is satisfactory. However, more attention is needed on stakeholder engagement, more structured communication between government counterparts, FAO and other stakeholders, awareness raising, and visibility of the project.
F1. Gender and other equity dimensions	MS	The project at design targets women as specific beneficiaries and is in compliance with the relevant FAO and GEF gender policies. The report “Gender, socio-economic and health dimensions of the use of pesticide and management in Central Asia and Turkey” that has been developed in the project provides comprehensive and valuable information on gender and pesticides and allows the project team to design proper actions in the near future. During project implementation gender aspects were thus far considered in a limited way.
F2. Human rights issues	MS	Human rights issues focus on the position of women and vulnerable groups – see F1.
F2. Environmental and social safeguards	S	Environmental and social safeguards are adequately considered in the project document. All work during safeguarding, transport, disposal and handling of wastes and empty containers are planned to be conducted in compliance with the relevant international standards and directives, the Stockholm and Basel Conventions, as well as the relevant FAO’s EMTKs. For safeguarding in Azerbaijan, a Health, Safety and Environmental Plan has been developed.
Overall project rating		MS

1. Introduction

1.1. Purpose and scope of the MTR

1. This report presents the results of the Mid-Term Review (MTR) of the project GCP/SEC/011/GFF “Lifecycle Management of Pesticides and Disposal of POPs Pesticides in Central Asian countries and Turkey”. The MTR was carried out from December 2021 to April 2022. The purpose of the MTR is to provide evidence of results to meet accountability requirements, to provide recommendations for improvement of the project to ensure the expected results are achieved by the end of the project, and to contribute to learning and knowledge sharing among FAO and its project partners. The MTR also identifies any possible problems or challenges faced by the project, understands their causes and also understands the project strengths to overcome them.
2. The scope of the MTR covers the implementation of all four project components of the project in Azerbaijan, Kyrgyzstan, Tajikistan and Turkey. As Kazakhstan joined the project only recently, in August 2021, no activities have been implemented yet in this country. For Kazakhstan, the MTR focused on assessing the relevance of all project outputs for the country, the need and duration of extension of the project, and any possible challenges for implementation of the project.

1.2. Objective of the MTR

3. The main objective of the MTR is to assess the relevance of the project activities and outputs, to review its progress in achieving outcomes, cost-effectiveness and efficiency, the strategy for stakeholder engagement and regional/national partnerships, the likelihood of sustainability and potential for long-term impact, the high risk factors that affected its performance and delivery to date, to advise on potential extension of the project implementation period, as well as to examine cross-cutting dimensions such as gender and equity concerns. The MTR assessed the GEF evaluation criteria of the MTR as presented in the box below. Based on the assessment of these criteria, an overview of conclusions, lessons learned and actionable recommendations is provided.
4. The main questions for each criterion are described in the ToR (Terms of Reference) of the MTR and are copied in the box below. During the inception phase of the MTR, an evaluation matrix was prepared and included in the Inception Report. This matrix can be found in appendix IV of this report. The evaluation matrix contains the key questions per criterion, includes more specific sub-questions for the criteria, and also indicates indicators for the different sub-questions, as well as the sources of information to be consulted and the review methods to be applied in order to gain as much information as possible and ensure validation and triangulation of the findings of the MTR.

Box 1 : Main MTR questions (as defined in the ToR of the MTR)

1.Relevance	<p>Are the project outcomes congruent with the GEF focal areas/operational program strategies, FAO Countries or Subregional priorities, countries priorities and beneficiaries need?</p> <p>Has there been any change in the relevance of the project since its design, such as new national policies, plans or programmes that affect the relevance of the project objectives and goals? If so, are there any changes that need to be made to the project to make it</p>
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	more relevant?
2. Effectiveness Achievement of project results	<p>(Delivery of results) To what extent has the project delivered on its outputs, outcomes, and objectives, and what, if any, wider results has the project had at regional and global levels to date? Were there any unintended results? Is there any evidence of environmental stress reduction and environmental status change (reflecting Global Environmental Benefits), or any change in policy/legal/regulatory framework? To what extent can the attainment of results be attributed to the GEF-funded component?</p> <p>(Likelihood of impact) Are there any barriers or other risks that may prevent future progress towards and the eventual achievement of the project’s intended longer-term impacts, and what can be done to improve the likely achievement of positive impacts from the project? To what extent may the progress towards long-term impact be attributed to the project?</p>
3.Efficiency	<p>To what extent has the project been implemented efficiently, cost-effectively, and management been able to adapt to any changing conditions to improve the efficiency of project implementation?</p> <p>To what extent has the project built on existing agreements, initiatives, data sources, synergies, complementarities with other projects and partnerships, etc., and avoided duplication of similar activities of other groups?</p> <p>Is the project cost-effective? How does the project cost/time versus output/outcomes equation compare to that of similar projects?</p>
4.Sustainability	<p>(Sustainability) What is the likelihood that the project results will continue to be useful or will remain after the end of the project? What are the key risks that may affect the sustainability of the project results and benefits (consider financial, socio-economic, institutional and governance, and environmental risks)?</p> <p>(Replication and catalysis) What project results, lessons and experiences generated by the project have been replicated (experiences are repeated and lessons applied in different geographic areas) or scaled up (experiences are repeated and lessons applied in the same geographic area but on a much larger scale and funded by other sources), or are likely to be in the near future?</p>
5.Factors affecting progress	<p>(Project design) Is the project design appropriate for delivering the expected outcomes? Is the project’s logic coherent and clear? To what extent are the project’s objectives and components, clear, practical and feasible within the time-frame?</p> <p>(Project execution and management) To what extent did the executing agency effectively discharge its role and responsibilities related to the management and administration of the project? What have been the main challenges in relation to the management and administration of the project? How well have risks been identified and managed? What changes are needed to improve delivery in the second half of the project?</p> <p>(Financial management and Co-financing) What have been the challenges related to the financial management of the project? To what extent has the pledged co-financing been delivered, and has there been any additional leveraged co-financing provided since implementation began? How has any short fall in co-financing or materialization of greater than expected co-financing affected project results?</p> <p>(Project oversight, implementation role) To what extent has FAO delivered on project identification, concept preparation, appraisal, preparation, approval and start-up, oversight and supervision?</p> <p>(Partnerships and stakeholder engagement) Have other actors, such as civil society,</p>

	<p>indigenous population or private sector, been sufficiently involved in project design and implementation, and what has been the effect of their involvement/non-involvement on the project results? What are strengths and challenges of the project’s partnerships?</p> <p>(Communication and knowledge management) How effective has the project been in communicating and promoting its key messages and results to partners, stakeholders and a general audience? How can this be improved?</p> <p>(M&E design) Is the M&E plan practical and sufficient?</p> <p>(M&E implementation) Does the M&E system operate as per the M&E plan? Has information been gathered in a systematic manner, using appropriate methodologies? To what extent has information generated by the M&E system during project implementation been used to adapt and improve project planning and execution, achievement of outcomes and ensure sustainability? How can the M&E system be improved?</p>
<p>6. Cross-cutting dimensions</p>	<p>(Gender and minority groups) To what extent were gender considerations taken into account in designing and implementing the project? Has the project been designed and implemented in a manner that ensures gender equitable participation and benefits?</p> <p>(Environmental and social safeguards) To what extent were environmental and social concerns taken into consideration in the design and implementation of the project?</p>

1.3. *Intended users*

5. For the stakeholder analysis as presented in its MTR Inception Report, the MTR team used the stakeholder analysis as provided in the ToR of the MTR. The MTR team described the (anticipated) role of the different stakeholders in the project, provided reasons for the inclusion or exclusion of these stakeholders in the MTR, prioritised the stakeholders for involvement in the MTR, and explained how the stakeholders would be involved during the MTR.
6. The primary users of the MTR report that will actually use the findings, lessons learned and recommendations of the MTR are as follows:
 - FAO: the Budget Holder (BH) and MTR Manager (RM), the project Senior Technical Advisor (STA) and National Project Team Leaders (PMU), the Project Task Force (PTF) including the Funding Liaison Officer (FLO) and the Lead Technical Officer (LTO), who are expected to use the findings, lessons learned and recommendations identified in the MTR to continue and improve the project activities and plan for sustainability of the results achieved;
 - The government counterparts from the five countries as defined in chapter 2 - Project background and context, and members of the Project Steering Committees;
 - The GEF.
7. Additionally, there are other stakeholders who may not directly consult the MTR report but can indirectly benefit from the recommendations as presented in this report, such as NGOs and other (national and international) organizations that are/will be involved in the project, research institutes, farmer groups, the local population living near pesticide sites, and women and vulnerable groups.

1.4. Methodology

8. The MTR has been conducted in line with the FAO–GEF MTR Guide and annexes and the United Nations Evaluation Group (UNEG) Norms & Standards 2016, which includes the following key considerations: (a) all interviews and information were provided in confidence and no information can be traced back to a direct source/individual, (b) those involved in the evaluation have had the opportunity to review the MTR findings as well as the main MTR report, (c) the MTR consultants were sure to have empathy and sensitivity to different contexts in which stakeholders work throughout the course of the MTR, (d) the MTR findings and judgments were based on sound evidence and analysis, and information was, as far as possible, triangulated, meaning verified from different sources, and (e) debriefing sessions were conducted and MTR report was circulated among stakeholders for comments and feedback.
9. During the inception phase, the MTR team, based on the preliminary stakeholder assessment and the feedback from the project team, prioritised stakeholders into two groups; the highest priority level were those stakeholders who needed to be interviewed during the MTR as their feedback would be essential for understanding how the project is progressing and for assessing the different evaluation criteria. Other stakeholders were categorized into the second priority level group; the MTR team considered it important to receive background information from these stakeholders and to verify if these stakeholders considered that activities are implemented well, or if any changes in the project activities would be necessary.
10. The project document (ProDoc) mentions specific target groups and beneficiaries, such as local communities living near obsolete pesticides stores and severely contaminated sites, and the farming community. Women and children are also explicitly mentioned as key beneficiaries. The MTR team recognizes the importance of these groups for inclusion in the MTR. However, as activities related to obsolete pesticides stores and contaminated sites have not been implemented yet, these groups did not yet participate in the project, and therefore it was not possible to interview them. In Turkey a representative of farmers involved in field trials in Isparta, was interviewed. A gender expert has been consulted during the MTR who provided recommendations for improving gender mainstreaming in the project and recommendations to ensure that the interests of women as key beneficiary group will be properly represented in the project (see Appendix 9).
11. The MTR is based on extensive **desk research of all key documents**, and on **interviews** that were conducted face-to-face as well as online (specifically with international stakeholders). Interviews were conducted in a semi-structured manner and individually with key stakeholders to allow space for interviewees to provide their views, priorities, and potential recommendations. In total 69 persons were interviewed (in several cases multiple times). Basic interview protocols were prepared that would ensure that the same kind of information could be gathered from all stakeholders. Minutes of the meetings conducted by the national MTR consultants were shared with the MTR Team Leader and MTR technical consultant. The national consultants also prepared a final report with their findings and observations, which were incorporated into this main MTR report.
12. The MTR was conducted by an international MTR Leader, an international technical MTR consultant for component 1 of the project, and five national MTR consultants. The MTR team conducted the MTR in close and ongoing discussion with the FAO SEC MTR manager in Ankara and the FAO-GEF Coordination Unit (FAO GEF CU) MTR focal point.

13. The international MTR Team Leader was responsible for coordinating the MTR team’s contribution and had ultimate responsibility for ensuring the delivery of the MTR reports. The MTR team undertook all activities required for the MTR, including preparing the Inception Report, the preliminary findings and the main MTR report, conducting all interviews with key stakeholders, collection of primary and secondary data, considering the feedback on the draft MTR report and, based on the feedback received, finalising the MTR report.
14. The International MTR Team Leader has extensive experience in coordinating environmental and health projects related to POPs and obsolete pesticides, and also has a broad experience in evaluating large scale international projects, including GEF projects. The International Technical MTR consultant has experience in managing large scale POPs safeguarding and elimination projects as well as extensive experience on container management and POPs contaminated site identification and remediation works. The National MTR consultant of Turkey has solid management and evaluation experience in national and international environmental projects, especially related to the sound management of POPs and remediation of contaminated sites. The National MTR consultant of Azerbaijan has extensive experience in project management and development, evaluation, environmental protection, waste management planning and implementation (including hazardous waste), and environmental impact assessments. The National MTR consultant in Kyrgyzstan has extensive experience in project design, implementation, monitoring and evaluation, impact assessment and knowledge management, including livelihood and poverty analysis, development of agricultural value-added chains, and promotion of environmentally sound agricultural practices. The national MTR consultant in Tajikistan has broad professional experience in planning, M&E, reporting, project proposal writing, and programme management.

1.5. *Limitations*

15. There were several limitations faced by this MTR, including the following:
 - Potential for respondent bias (see also paragraph 16 below);
 - Time limitations due to the long contracting procedures for the national MTR consultants;
 - In some cases a slow response to requests for interviews from government counterparts and other stakeholders;
 - More limited possibilities for face-to-face meetings due to COVID-19;
16. The MTR findings are based partly on the views of interviewees with a responsibility for implementation and execution of project activities who could be potentially biased in their responses. Several measures were taken to reduce the effect of respondent biases and validate interview results, such as including interviewees who did not have a direct responsibility for implementation of (all) project activities, asking respondents to provide a rationale for their judgments, and using the documents and reports that were prepared to verify or validate responses of the respondents.
17. Long contracting procedures for the MTR consultants caused some delays; the national MTR could only start the interviews with national government counterparts and holders once they were contracted. Therefore, the initial schedule for the MTR process could not be kept and contracts had to be extended.

18. Overall, the government counterparts and other stakeholders were responsive to requests for interviews. However, it sometimes took longer for the counterparts to respond (which also meant in a few cases that follow-up interviews could not be organised within the duration of the MTR), or only short interviews could be conducted by phone. Also, in a few cases the involved staff member of a government counterpart was replaced and the new person was not yet appointed or not yet familiar with the project. Fortunately, the MTR team could conduct most interviews and, in this way, ensured maximum data collection and triangulation with the help of the documents’ review and the semi-structured interviews with FAO, government counterparts and other stakeholders. However, the MTR team also feels that in some particular cases not all relevant data was collected due to the lack of response or slow response from some key stakeholders.

19. Due to the COVID-19 pandemic, the International MTR Team leader and the International Technical MTR Consultant could not travel to the project countries. The MTR team considers that it could have been helpful if for instance the International Technical MTR consultant could have talked face-to-face with stakeholders in Azerbaijan involved in disposal. Fortunately, in most cases, the national MTR consultants could conduct the interviews face-to-face. Several times, the MTR Team Leader and/or technical consultant joined (for part of) the interviews online. Overall, the MTR team considers that the interview calls (face-to-face on national level and remotely with international and some national stakeholders) provided sufficient information for the MTR, and most interviews were productive and informative.

2. Project background and context

20. This Inception report is written within the framework of the Mid-Term Review (MTR) of the FAO/GEF sub regional project project GCP/SEC/011/GFF "Lifecycle Management of Pesticides and Disposal of POPs Pesticides in Central Asian countries and Turkey", with GEF Project ID 5000. It is implemented in Azerbaijan, Kazakhstan, Kyrgyzstan, Tajikistan and Turkey. The planned budget for the project is USD 46,436,986, the GEF allocation is USD 8,136,986 and the total co-finance is USD 38,300,000. The project duration is planned for 48 months, from October 2018 to October 2022. The project aims to address issues related to obsolete pesticides and pesticides management in the region.
21. Obsolete pesticides (OPs) pose a significant environmental and health concern in the Central Asia region, stemming from overuse and mismanagement of pesticides during the Soviet era. Central Asia, which was an important center for agriculture and particularly cotton production during Soviet times, with mandatory pesticide application and over-supply, has a large portion of the world's quantities of obsolete pesticides. Many of the obsolete pesticides had been disposed of in inappropriate burial sites or dumped into industrial landfill sites. In some instances, concrete bunkers were constructed, but these were not environmentally sound disposal options and show signs of leakage with contamination of the surrounding environment and associated risk to public health. Many of these sites were privatized upon independence after the collapse of the Soviet Union, and the governments no longer own the storage locations. This leads to serious problems both in inventorying stocks, but also in developing central stores where safeguarded stocks can be temporarily stored awaiting final destruction. In total, at the time of project formulation (2013), about 48,500 tons of POPs were inventoried in the project countries. It was estimated that the sum of these inventories represented 20 to 50 % of the total stockpiles in the territory, except in Turkey where the inventory was considered as final.
22. Weaknesses in the capacities of responsible institutions and actors to effectively manage pesticides and associated wastes throughout their life-cycle, and gaps in the legal and regulatory framework in the region led to the accumulation of obsolete pesticides stockpiles and contamination of sites. Common and major issues exist in pesticide registration and risk assessment, where regulatory and technical requirements such as the FAO specifications and equivalence are hardly known, and in pesticide labelling and packaging, resulting in poor risk communication to users. Pesticide use surveillance and monitoring are largely absent, and in the cases where issues were detected, there were no mechanisms for regulatory follow up, through de-registration or re-registration mechanisms. At the same time, farmers' knowledge relating to cropping is limited and the use of available information on alternative crop production methods is underutilized.
23. The project builds on the detailed assessments and priorities identified in previous projects (such as the need to develop national disposal capacities, national/regional disposal strategies, as well as approaches to deal with the large volumes of POPs-contaminated soils) by building capacity and delivering field activities on pesticide life cycle management as well as addressing POPs contamination problems in a systematic and coordinated way, seeking synergy and regional cooperation on the issue of disposal options, in particular in order to create long term capacity and eventually allowing all the wastes to be destroyed in an environmentally sound manner.

24. FAO is the Implementing and Executing GEF Agency. The government counterparts (executing partners) are the following:
- Azerbaijan: Ministry of Agriculture, Ministry of Ecology and Natural Resources, Ministry of Emergency Situations, Ministry of Health and Azerbaijan Food Safety Agency (established in 2018);
 - Kazakhstan: Ministry for Ecology, Geology and Natural Resources;
 - Kyrgyzstan: Ministry of Agriculture, the Ministry of Natural Resources, Ecology and Technical Supervision, and the Ministry of Health (as per latest changes following a government reorganization in spring 2021);
 - Tajikistan: State Committee on Environmental Protection in collaboration with the Ministries of Agriculture and Health;
 - Turkey: Ministry of Agriculture and Forestry.
25. Key stakeholders and direct beneficiaries included in the project are:
- **Line Ministries of the recipient countries** (as mentioned above): These national institutions implement activities at the national level, and are coordinated through the Project Steering Committee and STA to ensure close links with national institutions and government activities via Focal Points from each participating Ministry.
 - **Non-governmental organizations:** Key non-government stakeholders include national and international NGOs. Some of these were involved in delivering and coordinating different project components in earlier projects and have developed methodologies and approaches that were shared with the project, particularly in communication, community monitoring, contaminated land remediation, socio-economic and health impacts, and information sharing and advocacy.
 - **Local communities:** Local communities living near rehabilitated obsolete pesticide stores and severely contaminated sites are beneficiaries from the implementation of Outcome 1 of this project, and will be directly targeted for communications and risk reduction activities. In addition, due to the persistence of many of the chemicals in the environment, the wider rural and urban populations are also indirect beneficiaries from the removal of materials and containment of pollution.
 - **Farming communities:** Farming communities are key beneficiaries through trainings to reduce risks of exposure to pesticides. Women and children that work in the farms will benefit from reduced exposure to pesticides through adoption of improved pesticide management and increased awareness about the risk of pesticides. Vulnerable groups including seasonal workers and their families will be explicitly targeted.
 - **Local industry:** Local industries including pesticide, bio-pesticide, recycling and cement manufacturing companies are all considered to be important stakeholders able to deliver solutions to improve pesticide management. Private sector stakeholders relating to all the project activities and pilot projects have been and will be identified and engaged during project implementation.
 - **International companies:** Companies that are involved in safeguarding and disposal. In Azerbaijan for example, the company Veolia Field Services will safeguard the pesticide store at the Jangi landfill.

- **Research institutions/universities:** Research institutes and universities are involved as implementing partners in pilot projects for testing, validating and promoting IPM alternatives through experimental trials, but also to work on contaminated land.
 - **International organizations and funders:** Financing and implementing organizations on obsolete pesticides and pesticide management in the region will be engaged to ensure continued coordination between initiatives and where possible cost sharing, including more specifically UNEP and UNIDO as they have ongoing initiatives in the region.
26. Women and vulnerable groups are mentioned several times in the ProDoc. For example, the ProDoc mentions that "Due to migration of men as laborers to Russia and Ukraine, women constitute an important proportion of the agricultural labour force and are exposed to high pesticide residues in handling produce. Women may also produce food for family consumption but use pesticides intended for other crops, not in accordance with the intended uses and conditions, exposing themselves and their families to high levels of residues. The project will explicitly target women, children and seasonal workers through the pesticide surveillance pilot, and ensure that women are represented in all project component activities through partnerships with civil society organizations in training and awareness-raising activities. By improving the pesticide registration, labelling and packaging systems, the project will improve risk communication to all pesticide users and vulnerable groups will be explicitly considered in the training and activities on registration." And for the empty container management campaign, the ProDoc clarifies that "the campaign will also focus on vulnerable groups such as women and children who are often the ones using the containers for food and water storage in the home, and are thus exposed to pesticide residues in old containers." There is no specific gender mainstreaming plan in the ProDoc. However, recently the report "Gender, socio-economic and health dimensions of the use of pesticide and management in Central Asia and Turkey" has been drafted and largely finalised. This report is assessed within the MTR. Additionally, a gender MTR expert has been consulted to provide recommendations on improving gender mainstreaming of the project.
27. The **project objective** is to "reduce releases of POPs from obsolete pesticide stockpiles and strengthen capacity for sound pesticide management throughout the life cycle in four Central Asian countries and Turkey". It should be noted that Kazakhstan only recently, in August 2021, signed an agreement with FAO and, therefore, they have not been involved in any project activities yet.
28. The table below provides an overview of the project objectives, outcomes, and outputs as presented in the narrative text of the ProDoc and the Results Matrix in Annex I of the ProDoc (there are some differences between the outputs in the narrative text and result matrix of the ProDoc which are indicated in the table below). This overview was used as the basis for the Mid-Term Review and developing the Theory of Change (ToC) during the inception phase of the MTR.

Table 2 : Overview of project objectives and components (based on the 2013 ProDoc)

* Brown texts are the outputs and outcomes as presented in the Result Matrix (when different from main text of the report)

Project objective:	The project objective is to reduce releases of POPs from obsolete pesticide stockpiles and strengthen capacity for sound pesticide management throughout the life cycle in four Central Asian countries and Turkey. Specific objectives of each component are to: safely destroy POPs and obsolete pesticides and remediate pesticide-contaminated sites (Component 1); strengthen the institutional and regulatory framework for managing pesticides through their life cycle (Component 2); and increase the successful uptake of alternatives to chemical pesticides on key crops (Component 3). These three components are supported by a horizontal project management, Monitoring and Evaluation (M&E) and communication component (Component 4) which will inform project execution decisions and create the necessary conditions for beneficiary knowledge and participation in project activities.
Component 1:	Reduction of releases from POPs and other obsolete pesticides posing high risk to public health and the environment.
Outcome:	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.
Outputs:	1.1. Definitive detailed inventories of obsolete pesticides developed for Azerbaijan, Kazakhstan, Kyrgyz Republic and Tajikistan. National inventory of obsolete pesticides and associated wastes finalized in 3 countries. 1.2. Risk reduction and disposal strategy for sound management of obsolete and POPs pesticides completed. 1.3. 900 metric tonnes of obsolete and POPs pesticides are safeguarded and disposed of in an environmentally sound manner from Azerbaijan, Kyrgyz Republic and Tajikistan. 900 metric tonnes of obsolete pesticides are safeguarded and disposed in Azerbaijan and Kyrgyzstan and Tajikistan. 1.4. Risks associated with one critical contaminated site in one country are reduced. 1.5. Container management capacity developed in the region and risks of empty containers reduced in Azerbaijan. 1.6. High risk behaviours by exposed populations are quantified and reduced.
Component 2:	Strengthening the legal, institutional and regulatory framework for pesticide life cycle management.
Outcome:	Regulatory framework and institutional capacity for sound pesticide management strengthened in five countries. Regulatory and institutional framework for pesticide management strengthened in five countries.
Outputs:	2.1. Revised legal frameworks in line with the International Code of

	<p>Conduct on Pesticide Management developed in three countries. Revised legal frameworks in line with the Code of Conduct developed. 2.2. Registration procedures strengthened and data requirements for dossiers made more comprehensive. Registration procedures and capacity strengthened by training and collection and consideration of field data on pesticide use and impacts. 2.3. Field data on PPE and spray operations is used to provide advice to farmers.</p>
Component 3:	Pesticide use and pesticide risk reduction through pest monitoring and promotion of IPM.
Outcome:	<p>Promotion of Integrated Pest Management (IPM) alternatives to Highly Hazardous Pesticides (HHP) and awareness rising. Farmers will use IPM alternatives to Highly Hazardous Pesticides (HHP), and reduce pesticide application frequencies.</p>
Outputs:	<p>3.1. Pest and disease monitoring to guide plant protection decisions in key crop(s) established in 3 countries (Azerbaijan, Kyrgyzstan, Tajikistan). 3.2. Integrated pest management alternatives/practices tested, validated, and promoted to male and female farmers. 3.3. Quantify and promote the benefits of IPM and alternatives to HHPs, to farmers and pesticide management decision makers.</p>
Component 4:	Project achievements and lessons monitored and widely shared for maximum Influence.
Outcome:	Project results are shared between project countries and outside stakeholders.
Outputs:	<p>4.1. Project monitoring system fulfils all applicable donor and stakeholder reporting requirements. 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.</p>

3. Theory of change

29. When the ProDoc was designed, a Theory of Change was not prepared as at that time it was not obligatory. Therefore, the ToC has been developed based on the activities, outcomes, outputs, and objectives as described in the ProDoc (see also table 2, chapter 2 – Project background and context). The outcomes and outputs as described in the ProDoc were found to not always be fully in line with the definitions of results used by FAO. Therefore, some outcomes and outputs have been rephrased (in some cases outputs in the ProDoc were for example more phrased as activities instead of outputs, and outcomes more as summaries of the outputs without providing any clear cause and effect linkage with the outputs) by the MTR consultants to form an adequate basis for assessing performance, better align them with the FAO definitions, to develop a coherent intervention logic and to describe more clearly the causal pathways from outputs to outcomes on to intermediate states and long-term impact. A comparison table (table 3) between the ProDoc and the rephrased outcomes and outputs can be found below.
30. The Intermediate States and Impact were not explicitly described in the ProDoc. The MTR team, however, considered the explanations on potential longer-term results that were mentioned in the ProDoc (specifically the global benefits that were defined in the ProDoc) to define the Intermediate States and Impact. The developed ToC, including assumptions and drivers, has been discussed multiple times with the Senior Technical Advisor (STA) the international consultant on IPM, and the National Technical Consultant in Turkey, and has also been discussed with the core project staff, the MTR manager, and the FAO-GEF Coordination Unit (FAO GEF CU) MTR focal point.
31. During the MTR, the STA, international consultant on IPM and the National Technical Consultant in Turkey in cooperation with the Lead Technical Officer (LTO) have been developing an update of the Results Matrix. The Results Matrix was originally developed in 2013, and although the internal logic of the matrix did not change, it had become necessary to update the indicators (make them more SMART) and the milestones in line with the current situation of the project. In some cases, more countries are involved within certain outputs than originally planned. The updated Results Matrix has not been finalised at the time of writing this MTR report, but it is expected that the updated matrix will be presented at the next PSC. The MTR team considers that the update is important as the matrix provides more clarity on the outputs and outcomes to be achieved within each country and regionally. It will be important to align the finalised Results Matrix with the ToC outputs and outcomes.

Causal pathways

32. The ProDoc divided the project into four components. Each component has one outcome and each component has two to six outputs. The ToC outputs and outcomes are based on the outputs and outcomes as mentioned in the ProDoc, although the MTR team – in consultation with the STA and the consultant on IPM - rephrased outputs and outcomes to clarify the causal linkages between outputs and outcomes, to make the actual situation in the project more clear, and to stress the importance of increased awareness, capacity, ownership and related sustainability that the project plans to generate. For a comparison between the ProDoc and the ToC and a justification for rephrasing the outputs and outcomes, see table 3 below. The ToC also contains one overall project outcome, based on the project objective, to show how the outcomes per component together would lead to one overall project result.

33. Original Output 4.1 (Project monitoring system fulfils all applicable donor and stakeholder reporting requirements) is not used in the reconstructed ToC (nor in the Results Matrix that is currently being updated by project staff), as it is an operational output referring to execution and administrative aspects of the project, and has no causal link to the direct and project outcomes. Original Output 4.2 has been used for this ToC (rephrased) and is now new Output 4.1 in the ToC. Component 4 (Project achievements and lessons monitored and widely shared for maximum Influence) can be considered a supporting component for the other three components; raised awareness will contribute to sustainability of the other components (and the outputs and outcomes of these components). If stakeholders are more aware of the risks related to POPs and obsolete pesticides, of the regulatory framework, of IPM and other alternative agricultural practices, it can be expected that they are more committed to reducing risks and improving the regulatory framework and agricultural practices, and show more ownership to achieve project results. The arrows in the ToC diagram below show how this component and the outputs within this component contribute to all the outcomes.
34. Overall, the outcomes and outputs within the four components as described in the ProDoc are grouped logically. The first component deals with the (legacy) waste aspect and is related to safeguarding and disposal of existing POPs pesticide stockpiles, to assessing risks of POPs pesticide contaminated sites and to improving empty container management (in order to prevent future accumulation of hazardous waste). Component 2 focuses on strengthening the legal, institutional and regulatory framework for pesticide life cycle management, specifically on preparing proposals for revising legal frameworks in line with the International Code of Conduct on Pesticide Management, on strengthening registration procedures and on gathering field data on PPE and spray operations that will be used to provide advice to farmers. The third component addresses agricultural practices relying on less pesticides by promoting IPM and other alternative practices. These three components – and thus also the related outputs and outcomes – cover reducing risks related to legacy stockpiles, as well as current pesticide use and reducing the risk of renewed accumulation of pesticide waste. The outcomes of the different components would logically lead to the main project outcome as defined in the ToC; reduced risks from hazardous agrochemicals, especially POPs and related wastes, and strengthened capacity and ownership for life cycle management of pesticides.
35. During the discussions with the STA and the international consultant on IPM, it was noted that one element is missing in the components; within some countries it will be necessary to strengthen laboratory capacity and the capacity to take and analyse samples. This is currently not part of the project and is a complex issue (with clear budget implications) that will need further discussion, possibly also with other initiatives in the region. It is not expected that FAO can take the lead position in this discussion, but they would like to contribute to developing a solution in the long term.
36. It can be expected that the application of the Project Outcome would lead to Intermediate State 1 and on to Intermediate State 2 and 3, and then lead to Impact 1 and 2. The project is expected to lead to reduced risks from hazardous chemicals, especially POPs and related wastes, and strengthened capacity and ownership for life cycle management of pesticides (Project Outcome). In order for long-lasting results to be achieved, it will be necessary that additional complementary activities related to sustainable management of pesticides and legacy stocks are implemented, as many activities in the project are pilot projects and trials, have limited duration or are one-time trainings. This is captured in Intermediate State 1. Intermediate State 1 would ideally lead to increased food security due to reduced use of

pesticides and the implementation of safe alternatives in agricultural practices (Intermediate State 2), and also to reduced adverse impacts of releases of pesticides to the environment, mitigating the risks of surface water and air contamination, as well as soil degradation (intermediate State 3, which is also a global benefit as mentioned in the ProDoc). In the long run the Intermediate States would lead to enhanced environmental sustainability of agri-food systems and enhanced livelihoods in project countries and more generally to an improved environmental and health situation and biodiversity in project countries (and worldwide).

37. It is important to note that the project is responsible for achieving the outputs and outcomes. Intermediate states, as well as impacts (long-term results that can take a long time to be achieved), are expected to be part of the longer-term possible results (going beyond project scope and duration), and the MTR assesses the likelihood that these results could be realized.

Drivers and assumptions

38. Drivers were not specified in the ProDoc. The Result Matrix in Appendix 1 has a column with “Assumptions”. Risks are defined in chapter 3.2 on “Risk Management”. The MTR team has used these risks and assumptions to define several of the assumptions for the ToC, and also tried to logically extract possible drivers from the narrative text of the ProDoc. Several of the risks have been rephrased under assumptions, for example the risk of insufficient funds for safeguarding of major contaminated sites, the disposal of POPs and other project activities (see the listed assumptions and drivers for the ToC below).
39. Some assumptions in the ProDoc are actually drivers, since a driver can be considered as a significant external factor over which the project, or its stakeholders/partners, has (or could have) some degree of control or influence. For example, one of the assumptions as defined in the ProDoc under outcome 2 is that the “Governments of Azerbaijan, the Kyrgyz Republic and Tajikistan are willing to review and amend national legislation.” The commitment of these governments to the objectives of the project is something that the project has some control over, as several ministries are government counterparts in the project. Therefore one of the drivers in the reconstructed ToC is as follows: “Governments (the executing partners) are committed to the project objectives and provide pro-active support, information and guidance.”
40. For the reconstructed ToC, the following assumptions and drivers were established:

Assumptions (from Outputs to Outcomes):

- Project executing partners (government counterparts) and other stakeholders are willing to participate and are open to cooperation and providing support;
- The political situation in project countries is stable and there is strong political support;
- Governments and civil society are open to cooperation (specifically related to disposal);
- Financial resources are adequate;
- Project activities can be implemented during the COVID19 pandemic.

Assumptions (Project Outcome to Intermediate States and Impact):

- Funding is made available by governments and organizations for continued risk reduction measures, awareness-raising and capacity building activities;
- Adequate (inter)governmental cooperation;
- Disposal options complying with requested standards are/become available.

Drivers (from Outputs to Outcomes):

- Active FAO support and strategic guidance are provided to increase cooperation and networking and build sustainable capacity in the countries;
- Governments (the executing partners) are committed to the project objectives and provide pro-active support, information and guidance;
- Stakeholders show an active interest and are open to change behaviours;
- Active awareness raising of stakeholders and active promotion of environmentally friendly practices by FAO and project partners;
- Disposal options complying with requested standards become available.

Drivers (Project Outcome to Intermediate States and Impact):

- Stakeholders continued interest, commitment, and support (e.g. by governments, FAO);
- Continuation of awareness-raising and capacity building activities;
- Financing provided by governments and (inter)national organizations;
- Governments institutionalise adequate chemical management, enforcement and supervision capacity;
- International technical consultants are available and provide support to countries.

41. In the table below, a comparison between the results of the ProDoc versus the reconstructed ToC, as well as a justification for reconstruction, is provided:

Table 3 : Comparison table between results matrix in the ProDoc and the developed ToC

ProDoc		Reconstructed TOC		Justification for reconstruction and comments
Impact		Impact	<p><u>Impact 1:</u> 1. Enhanced environmental sustainability of agri-food systems and enhanced livelihoods in project countries.</p> <p><u>Impact 2:</u> 2. Improved environment and health situation and biodiversity in project countries (and worldwide).</p>	<p>No long-term impact was defined in the narrative text or the Result Matrix of the ProDoc. However, reduced risks from hazardous agrochemicals, and especially from POPs and related wastes, and strengthened capacity and ownership for life cycle management of pesticides, can in the long run (via Intermediate States 1, 2 and 3) be expected to lead to enhanced environmental sustainability of agri-food systems and enhanced livelihoods in project countries, and more generally to an improved overall environmental and health situation in project countries (and beyond, as reduced risks from POPs creates a global benefit).</p>

ProDoc		Reconstructed TOC		Justification for reconstruction and comments
Global benefits	Reduce the adverse impacts of the release of pesticides to the environment, mitigating the risks of service water contamination and soil degradation.	Intermediate States (IS)	<u>IS 1:</u> 1. Additional, comprehensive and sustainable management of pesticides and legacy stocks.	Intermediate State 3 is based on the global benefits as mentioned in the ProDoc; risk reduction related to past and current (obsolete) pesticides and HHPs will lead to reduced adverse impacts of releases of pesticides to the environment, thus mitigating the risks of releases to air, soil and water. The project goal is to reduce POPs releases from obsolete pesticide stockpiles and contaminated sites, and improve pesticide management. For this to lead to the long-lasting results (impacts) as described above, it will be necessary that the pilot projects and trials that are implemented within the project will be broadened and extended. This is captured in IS 1.
Overall project goal	The project objective is to reduce POPs releases from obsolete pesticide stockpiles and contaminated sites and strengthen the capacity for the sound management of pesticides.		<u>IS 2:</u> 2. Increased food security due to reduced use of pesticides and the implementation of safe alternatives in agricultural practices. <u>IS 3:</u> 3. Reduced adverse impacts of releases of pesticides to the environment, mitigating the risks of surface water and air contamination as well as soil degradation.	
Out-comes	<p><u>Component 1:</u> 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.</p> <p><u>Component 2:</u> 2. Regulatory framework and institutional capacity for sound pesticide management strengthened in five countries.</p> <p><u>Component 3:</u> 3. Farmers will use IPM alternatives to Highly Hazardous Pesticides</p>	Out-comes	<p><u>Direct Outcomes:</u> <u>Component 1:</u> 1. 900 tonnes of POPs and obsolete pesticides are safeguarded and eliminated in an environmentally sound manner; risks from obsolete stocks, contaminated sites and empty pesticide containers are further quantified and reduced; and capacity on safeguarding, disposal, contaminated sites and empty container management is strengthened.</p> <p><u>Component 2:</u> 2. Strengthened regulatory framework and strengthened institutional capacity for sound</p>	All outcomes as defined in the ProDoc have been used for the ToC. Some outcomes have been rephrased to align them better to the definitions of outcomes as used by FAO, to make more explicit the causal pathways from outputs to outcomes, and to stress that it is very important that lasting capacity is built within this project, that awareness is raised and that ownership within the country is strengthened. Additionally, one overall project outcome has been defined based on the original project objective, to show the anticipated ultimate result of the project to which the

ProDoc		Reconstructed TOC		Justification for reconstruction and comments
	<p>(HHP), and reduce pesticide application frequencies.</p> <p><u>Component 4:</u> 4. Project results are shared between project countries and outside stakeholders.</p>		<p>pesticide management.</p> <p><u>Component 3:</u> 3. Increased capacity and awareness on and use of Integrated Pest Management (IPM) and alternatives to Highly Hazardous Pesticides (HHP).</p> <p><u>Component 4:</u> 4. Increased awareness and ownership of stakeholders and beneficiaries on project results and methodologies.</p> <p><u>Project Outcome:</u> 1. Reduced risks from hazardous agrochemicals, especially POPs and related wastes, and strengthened capacity and ownership for life cycle management of pesticides.</p>	<p>outcomes of the individual components are expected to lead. Again, in the project outcomes, strengthened capacity and ownership for life cycle management of pesticides is stressed.</p>
Outputs	<p><u>Component 1:</u> 1.1. National inventory of obsolete pesticides and associated wastes finalized in 3 countries. 1.2. Risk reduction and disposal strategy for sound management of obsolete and POPs pesticides completed. 1.3. 900 metric tonnes of obsolete and POPs pesticides are safeguarded and disposed of in Azerbaijan, Kyrgyzstan and Tajikistan. 1.4. Risks associated with one critical contaminated site in one country are reduced. 1.5. Container management capacity developed in the region and risks of empty containers reduced in Azerbaijan. 1.6. High risk behaviors by exposed populations</p>	Outputs	<p><u>Component 1:</u> 1.1. Increased knowledge on stockpiles of obsolete pesticides and related materials through updated and detailed inventories (developed for Azerbaijan, Kazakhstan, Kyrgyzstan and Tajikistan). 1.2. A regional Risk Reduction and Disposal strategy for sound management of obsolete and POPs pesticides completed. 1.3. 900 metric tonnes of obsolete and POPs pesticides are safeguarded and disposed of in an environmentally sound manner. 1.4. Pilot projects (in at least 3 countries) for reducing risks of a critical contaminated site conducted. 1.5. Strategy for container management developed</p>	<p>This ToC follows the different components as defined in the ProDoc as they are formulated mostly in a coherent way. However, one output has been deleted (original output 4.1) as this is an operational output referring to execution and administrative aspects of the project. Additionally, one output has been added (output 2.4) as the baseline assessment of HHP use and impact of climate change had not been defined in the original ProDoc, whereas the project is currently working on these issue. Outputs have been rephrased, again to phrase the outputs more in line with the definition of outputs as used by FAO, and also because the outputs have changed</p>

ProDoc	Reconstructed TOC	Justification for reconstruction and comments
<p>are quantified and reduced.</p> <p><u>Component 2:</u> 2.1. Revised legal frameworks in line with the International Code of Conduct developed. 2.2. Registration procedures and capacity strengthened by training and collection and consideration of field data on pesticide use and impacts. 2.3. Field data on PPE and spray operations is used to provide advice to farmers.</p> <p><u>Component 3:</u> 3.1. Pest and disease monitoring to guide plant protection decisions in key crop(s) established in 3 countries (AZE, KYR, TAJ). 3.2. Integrated pest management practices tested, validated, and promoted to male and female farmers. 3.3. Quantify and promote the benefits of IPM and alternatives to HHPs, to farmers and pesticide management decision makers.</p> <p><u>Component 4:</u> 4.1. Project monitoring system fulfils all applicable donor and stakeholder reporting requirements. 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.</p>	<p>for all countries and pilot projects (in at least 3 countries) to reduce risks of empty containers conducted. 1.6. KAP surveys and communication strategies developed and implemented to reduce high risk behaviors by exposed populations for approximately 3 high risk sites.</p> <p><u>Component 2:</u> 2.1. Proposals for revised legal frameworks in line with the International Code of Conduct on Pesticide Management developed in three countries. 2.2. Registration procedures and capacity improved through training, and collection and consideration of field data on pesticide use and impacts. 2.3. Field data on PPE use and spraying operations are used to provide training on better practices to extension service providers and farmers.</p> <p><u>Component 3:</u> 3.1. Pest and disease monitoring plans to guide plant protection decisions in key crop(s) developed. 3.2. Integrated pest management and other alternative practices tested, validated, and promoted to male and female farmers. 3.3. Quantification and promotion of the benefits of IPM and alternatives to HHPs to farmers and pesticide management decision makers.</p> <p><u>Component 4:</u></p>	<p>slightly (e.g. more pilot projects on container management or contaminated soil management than originally foreseen) and to make the output more explicit (e.g. legal frameworks will not necessarily be revised within the (duration of) the project, but proposals for revisions will be developed).</p>

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ProDoc		Reconstructed TOC		Justification for reconstruction and comments
			4.1. Project evidence and lessons are widely disseminated and promoted (for consideration in pesticide management and agriculture policy making) to key national and international audiences.	

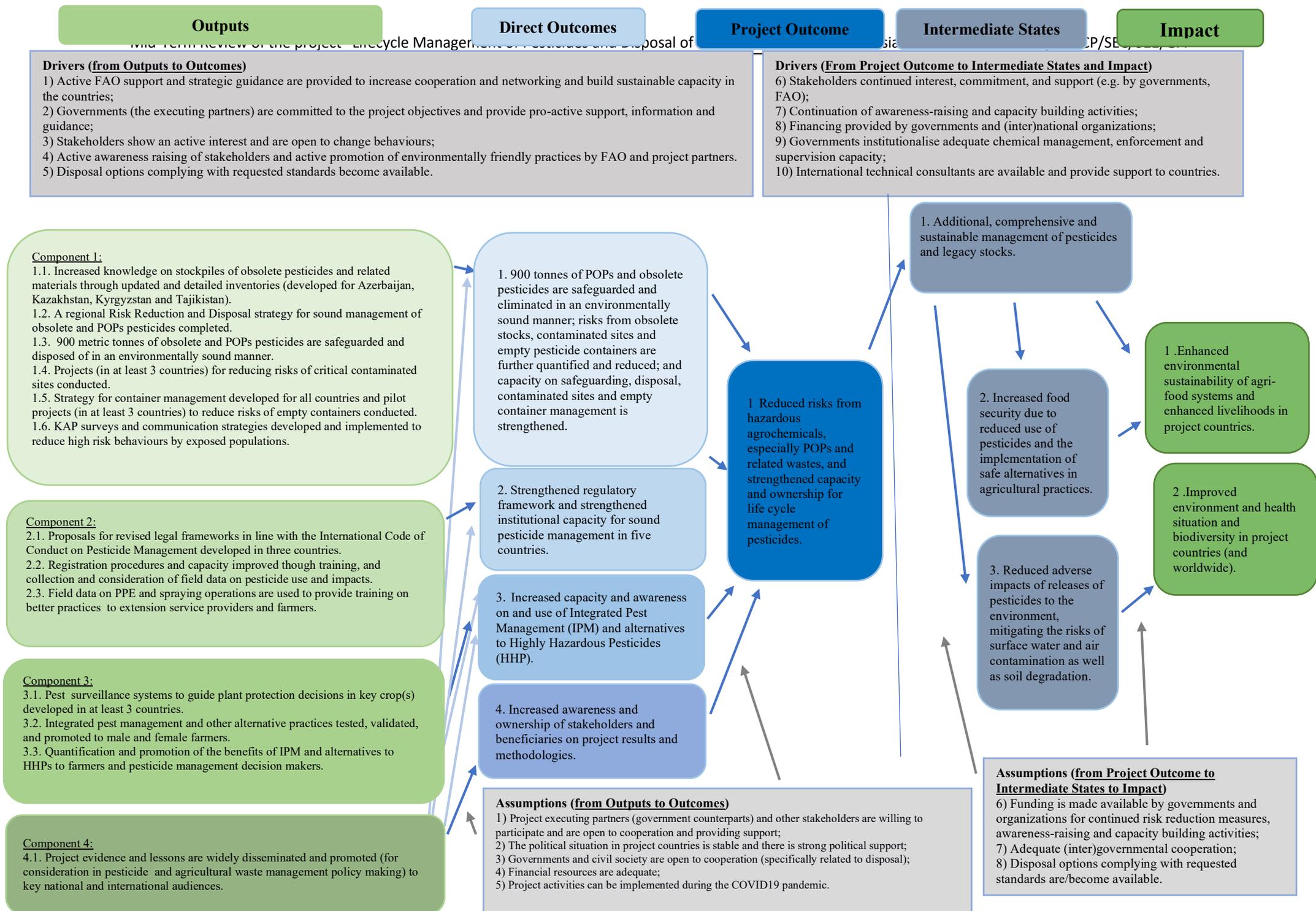


Figure 1 : Theory of Change

4. Key findings and MTR questions

4.1 Relevance

MTR question 1 – Relevance:

Is the project still relevant to the country, beneficiaries and donor? To what extent are the project objectives relevant and suited to the priorities, policies and strategies of the executing and implementing agencies, donors, stakeholders and target groups? Are there any other relevant initiatives in the country that can support the planned results of the project to be achieved?

Finding 1. The project is fully in line with national priorities (such as the National Implementation Plans), as well as the GEF strategic priorities (GEF-5 focal area strategies), other interventions (mainly UNEP and UNIDO projects), and with the FAO Strategic Framework. The relevance and importance of the project have been confirmed in interviews with the government counterparts and other stakeholders. The Ministry of Agriculture and Forestry in Turkey indicated that the country does not need huge support on the management of POPs pesticide wastes and remediation of contaminated sites.

Finding 2. The cooperation of FAO with other initiatives in the region, the UNEP and UNIDO projects, are considered essential in achieving the project results, specifically related to potentially realising disposal options in Kazakhstan, Kyrgyzstan and Tajikistan. A Memorandum of Understanding with UNEP is currently being developed and close cooperation with UNIDO is also planned, for instance through establishing a joint coordination mechanism.

42. The project is in line with priorities of the Stockholm Convention National Implementation Plans (NIP) for the Management of Persistent Organic Pollutants, the GEF-5 focal area strategies, and several national plans and policies, and also is aligned to the FAO Strategic Framework.
43. **The Stockholm Convention National Implementation Plans (NIPs)** were transmitted by all countries according to the following time schedule:
- Azerbaijan – 01/11/2017 (addressing Conference of Parties (COP) 5 amendments);
 - Kazakhstan – 30/04/2015 (addressing COP 4 amendments);
 - Kyrgyzstan – 09/04/2020 (addressing COP 5 amendments);
 - Tajikistan – 14/11/2007 (initial NIP);
 - Turkey – 30/11/2016 (addressing COP 6 amendments).
44. The project is in line with **the GEF-5 Focal Area Strategy on Chemicals**. The goal of the GEF-5 strategy for chemicals is to promote the sound management of chemicals throughout their life-cycle in ways that lead to the minimization of significant adverse effects on human health and the global environment. The long term impact of GEF interventions is a reduction in the exposure to POPs and other PTS (Persistent Toxic Substances) of humans and wildlife. The main indicator for this reduction of exposure is a decrease in the observed concentrations of specific POPs chemicals in the environment. The project fits under Outcome 1.4 "POPs waste prevented, managed, and disposed of, and POPs contaminated sites managed in an

environmentally sound manner", indicator 1.4.2 "Amount of obsolete pesticides, including POPs, disposed of in an environmentally sound manner; measured in tons."

45. The project is also in line with several national policies, strategies and action plans of the five countries involved in the project. Some of the main strategies and plans are mentioned below. The project is consistent with the priorities, strategies and national action plans of Turkey as it covers the issues of pesticide management, container management systems, and integrated pest management. For example, as specifically stated in the **2019-2023 Strategic Plan of the Ministry of Agriculture and Forestry of Turkey (updated in 2022)**, Turkey targets to implement the projects on biological and biotechnical control methods by using local resources to reduce the use of pesticides against harmful organisms in crop production. Moreover, a registration and tracking system is planned to be implemented within the strategy for the effectiveness of the pre-harvest pesticide control program.
46. **The National Development Strategy of Tajikistan for the period to 2030** is a key policy document of the country, which mentions handling hazardous pesticides and POPs among the priority areas of the country. One of the activities planned under this strategy is "to develop measures to replace hazardous chemicals with alternative, less dangerous, chemicals". It also well recognizes "the problems of chemical and uranium waste" as a critical issue to be addressed.
47. **The Kyrgyz National Development Strategy for 2018-2040** does not include specific provisions on POPs but includes aspects on food safety. In 2020, the Government of Kyrgyzstan prepared a **National Review on the Implementation of the Sustainable Development Goals (SDGs)**, where the absence of technical options for safe disposal of POPs and obsolete pesticides is mentioned; "In the country and in the Central Asian region, technical opportunities for safe disposal of POPs and obsolete pesticides do not exist. The current monitoring system does not provide for necessary laboratory control of applied fake and smuggled pesticides. Relevant regulations are not supported by implementation mechanisms." The review also has a paragraph describing how to address this challenge: "Conduct research on impact of chemical pollutants on various social groups and assessment of risks of such impact; Development of a set of measures for proper management of chemicals; Reducing risks of negative impact of uranium and toxic waste through re-cultivation activities at tailings and mining dumps".
48. A crucial strategy for Azerbaijan is the **Strategic Vision and Roadmap for Azerbaijan Agriculture**, approved by the decree of the President of the Republic of Azerbaijan, dated December 6, 2016. This document includes nine strategic objectives. The most relevant for this project are "Strategic objective 1: Increasing institutional capacity for ensuring sustainable food security", "Strategic Objective 5: Improve agricultural science, education, and extension services", and finally "Strategic objective 7: Environmental protection, sustainable utilization of natural resources, and management of impact by natural factors on agriculture".
49. The **Environmental Code of the Republic of Kazakhstan** is the main strategic document in the field of environmental regulation in the country and was adopted in January 2021. The Code has a separate Article (402) on handling and disposal of POPs, which requires safe handling, storage and disposal of POPs containing materials and waste. **The Concept for development of the Agro-Industrial Complex of the Republic of Kazakhstan for 2021-2030**, the strategic sectoral development document, states the importance of controlling and

registering pesticides in the country and developing and supporting organic agriculture practices, including the need to go away from the use of pesticides and other dangerous chemicals.

50. There are two initiatives in the region that are of specific interest for the FAO project. The first one is the **GEF UNEP project** "Demonstration of Non-thermal Treatment of DDT Wastes in Central Asia (Kyrgyz Republic and Tajikistan)" (GEF ID 9421). The second one is the **GEF UNIDO project** "Regional Demonstration Project for Coordinated Management of ODS (Ozone Depleting Substances) and POPs Disposal in Ukraine, Belarus, Kazakhstan and Armenia" (GEF ID 5300). The GEF UNIDO project intends to build a mini incinerator in Kazakhstan for elimination of ODS and POPs. Both UNIDO and FAO have expressed interest in cooperation in Kazakhstan, for example by setting up a joint coordination mechanism. At present, FAO and UNEP are developing a Memorandum of Understanding (MoU) for cooperation in Kyrgyzstan and Tajikistan within a strategic partnership. The MoU mentions potential areas of cooperation, including in assessing and developing co-processing capability for POPs and related wastes, and in risk reduction activities of contaminated sites (please see also chapter 4.2 - Effectiveness).
51. The project is also fully consistent with the **strategic objectives of FAO**. FAO identified five priorities on which it is best placed to intervene. This project fits mostly with the second strategic objective "Make agriculture, forestry and fisheries more productive and sustainable".
52. All persons who were interviewed during the MTR (including government counterparts, FAO, and other key partners) confirmed the continued relevance of the project and the importance of implementing the project activities. The Ministry of Agriculture and Forestry in Turkey indicated that the country does not need huge support on the management of POPs pesticide wastes and remediation of contaminated sites.

4.2 Effectiveness

MTR question 2 – Effectiveness:

To what extent has the project delivered on its outputs, outcomes and objectives?

Finding 3. The outputs and outcomes of the project have not been fully achieved at the mid-term point of the project. Important progress has been made for some outputs, e.g. inventories (1.1), regional disposal strategy (1.2), bioremediation trial in Kyrgyzstan (1.4), assessments/feasibility studies on container management (1.5), assessment of legal frameworks (2.1), and IPM field trials and alternatives (especially in Kyrgyzstan and Turkey) (3.2).

Finding 4. A crucial issue within the project is related to component 1, output 1.3. As per the GEF Tracking Tool, the project is targeting to dispose of 900 tonnes of obsolete pesticides, including POPs pesticides, in an environmentally sound manner. Currently there are no disposal options for Kazakhstan, Kyrgyzstan and Tajikistan. It is therefore essential that the FAO project cooperates closely with the UNEP and UNIDO projects as these projects also consider disposal options in these countries. For Azerbaijan, a definite decision on conducting

a test burn in the Holcim cement still needs to be taken. In principle the test burn is planned to be conducted in 2022.

Finding 5. Obsolete Pesticide inventories in Azerbaijan, Kyrgyzstan and Tajikistan were conducted, but have not been submitted to government authorities for approval (yet), although the inventories for Azerbaijan and Kyrgyzstan were sent to government counterparts for information purposes. A comprehensive inventory is planned to be initiated in Kazakhstan soon after the inception of the project in the country. Due to the size of the country and the high number of hotspots, the inventory in Kazakhstan will take more than one year. In Turkey, since most of the legacy pesticides were disposed, the project did not foresee any inventory study.

Finding 6. A bioremediation trial study has been set up successfully in Kyrgyzstan in cooperation with the Kyrgyz Manas University and similar trials are planned to be initiated in Tajikistan and Kazakhstan. Contaminated site remediation activities are in its initial stage. Planning for (mini-) landfill remediation in Tajikistan started. In Azerbaijan, contaminated site investigations are being conducted in two selected areas. Further remediation activities will require well-organized planning to achieve project targets in a timely manner. A pesticide container and agricultural plastic waste management strategy for Azerbaijan, Kyrgyzstan, Tajikistan and Turkey was prepared by an international consultant and pilot projects will be designed and implemented in all countries in the next phase. Work on container management will also be undertaken in Kazakhstan, once the project is operative.

Finding 7. IPM field trials have been successfully implemented in Kyrgyzstan and Turkey. These trials will be continued in 2022. In Azerbaijan an IPM field trial has been conducted in 2021. It was however decided to first focus on capacity building in the country in order to increase understanding of IPM principles. In Tajikistan, the work focused on developing a potato seed bank based on IPM methods to enhance national seed autonomy. Trainings on IPM principles were also provided. As the activities in Tajikistan were not well reported and documented, it was difficult for the MTR team to validate and triangulate the work implemented.

Finding 8. Legal assessments on pesticide management were prepared for Azerbaijan, Kyrgyzstan and Tajikistan. Workshops for each of the countries are planned to be held in 2022, and suggestions for updates of the legal frameworks will also be prepared this year. A regional legal assessment report is under preparation and is planned to be finalized soon. In 2021, an assessment of existing legislation relevant to the establishment of a Container Management System (CMS) was made. The assessment demonstrates that relevant regulations are widely absent.

Finding 9. The project has not achieved outputs and outcomes yet, although progress has been made for most outputs. The assumptions and drivers of the ToC developed during the MTR are partly in place. The likelihood that the project will make a contribution to the higher level, longer-term intended changes and impacts are considered moderately likely, provided that the project is extended to allow the outputs and outcomes to be achieved, and important steps are taken in building capacity in the countries.

53. The project was officially approved in 2016, and started in October 2018, after the first two countries had signed the project document with FAO (Turkey in December 2017 and Azerbaijan in September 2018). However, during the initial phase of the project, few activities were implemented. In early 2020 the project gained some speed, but soon after the COVID-19 pandemic started and this caused renewed delays in the project. Most stakeholders who

were interviewed indicated that the pandemic affected the project, most specifically as it became more difficult to have face-to-face meetings, workshops and trainings. This not only caused delays, but also affected productive communication between FAO, government counterparts and other stakeholders. Nevertheless, the interviewees also mentioned that quite a few activities could be implemented although less than could have been expected if there had been no pandemic.

54. Kyrgyzstan joined the project in February 2019 and Tajikistan in May 2019. In these countries activities have also been implemented (see below). Kazakhstan signed the project only in August 2021. Since then discussions have been taken place and plans for implementation are being developed. No actual activities have been conducted. The Inception Workshop is planned for April 2022. The interviews held during the MTR with the Kazakh stakeholders showed that all components of the project are very relevant for the country and that it is important to achieve all outputs (see also below under 4.3 - Efficiency).
55. Currently, now all countries have signed the project agreements and the COVID-19 pandemic restrictions overall have been relaxed, the project is gaining momentum. The Results Matrix from the original ProDoc is currently being updated to align the matrix better to the present-day situation of the project. Since the planned project results are highly relevant for the government counterparts and other stakeholders, there is sufficient evidence (based on the interviews with stakeholders conducted) that the project can achieve the project outputs and outcomes, but only if the project implementation period is extended.
56. The main questions for the project are related to output 1.3; disposal of obsolete pesticides. For Kyrgyzstan and Tajikistan there are currently no disposal options. It is not possible to export the waste to licensed facilities abroad as neighbouring countries do not allow the transit of hazardous waste. In addition, this is not an economic and sustainable solution in view of the sheer amounts to treat. The two countries have cement kilns and co-processing may be an option but it would require investments and time, and according to some interviewees there is opposition to co-processing in cement kilns, especially in Kyrgyzstan. It is clear that more discussion would be needed within the countries, and that these discussions would need to be conducted together with the UNEP project as this project looks at disposal options, including the potential disposal methodology i-SCWO (Super Critical Water Oxidation, a non-combustion alternative technology). For Kyrgyzstan a national dialogue is planned to discuss with all major stakeholders the possibilities for disposal and how these can be realised. In absence of disposal options in Kyrgyzstan during the project lifetime, the FAO project foresees to at least safeguard stocks and bring them to a licensed temporary storage. For Tajikistan, it is planned to remediate a mini-landfill and to build temporary storage at the Vakhsh landfill in order to store here the excavated materials from the mini landfill. It is as yet not clear if disposal could take place within the lifetime of the (extended) project.
57. As discussed, important activities have been implemented in all countries, except Kazakhstan. These activities are briefly described below per component/outcome. Progress towards each outcome is also captured in Appendix 6 “Results matrix showing achievements at mid-term and MTR observations”.
58. The four components of the ProDoc are the following:

- Component 1: Reduction of releases from POPs and other obsolete pesticides posing high risk to public health and the environment.
 - Component 2: Strengthening the legal, institutional and regulatory framework for pesticide life cycle management.
 - Component 3: Pesticide use and pesticide risk reduction through pest monitoring and promotion of IPM.
 - Component 4: Project achievements and lessons monitored and widely shared for maximum influence.
59. **Component 1:** Obsolete stockpile inventories in Azerbaijan, Kyrgyzstan and Tajikistan have been conducted. The inventory for Tajikistan has not been fully finalized (data need to be consolidated with previous inventory data) and cleared or approved by government counterparts. The inventory reports of Azerbaijan and Kyrgyzstan have been finalized and sent to government counterparts for information purposes; the reports have not been officially approved. As Kazakhstan joined the project only recently, the inventory study has not yet been initiated; the national counterparts are however committed to conducting a full-scale inventory. As the country has the largest territory of the project countries, and according to the initial findings there are more than 700 hotspots in the country that have to be inventoried, this may create a huge burden on the implementation of other project activities in the country. A regional disposal strategy has been developed that is expected to guide many of the project decisions on POPs management.
60. For Azerbaijan, a test burn in the Holcim cement kiln is being prepared. Safeguarding of 217 tonnes of waste located at the Jangi landfill has been contracted and is planned to be conducted in April/May 2022. The 217 tonnes will be repackaged into 30-liter drums; this is necessary as these 30-liter drums can be processed during the test burn. Discussions on the test burn have been going on for some time and no definite decisions have been taken, but FAO plans to conduct the test burn in 2022. FAO is currently discussing with the GEF whether the GEF would agree to co-processing in cement kilns. This decision will be crucial for the project, as currently only in Azerbaijan a potential disposal option is available. In case of success, experience from Azerbaijan could be replicated in the other project countries.
61. The project-initiated cooperation with the Kyrgyz Manas University on bioremediation of POPs pesticides in soil and has had good results (99% of the 19 types of POPs pesticides were eliminated in approximately 6 months) that encourage upscaling of the pilot study to other parts of the country and to other countries.
62. The project has the aim to remediate pilot sites in some of the project countries. Remediation work will cover site assessment and excavation of some of the buried wastes. The project currently has not yet gone beyond selecting and initial assessment of potential sites.
63. All project countries have a common problem related to obsolete pesticides, namely empty pesticide containers that are not managed properly. For this purpose, an international expert prepared the strategy document "Container Management Systems and Agricultural Plastic Waste Assessment Report for Azerbaijan, Kyrgyzstan, Tajikistan and Turkey" to assess the problem in the countries. Based on this strategy, demonstration projects on container management will be developed for and implemented in all countries. Similar work shall be undertaken in Kazakhstan.

64. **Component 2:** Legal assessments on pesticide management were prepared by an international consultant in cooperation with a national consultant for Azerbaijan, Kyrgyzstan and Tajikistan respectively. The legal assessments for Azerbaijan and Kyrgyzstan have been fully finalised and have been cleared by FAO LEG. The Tajikistan legal assessment is expected to be finalised in spring 2022. Workshops for each of the countries are planned to be held in 2022, and suggestions for updates of the legal frameworks will also be prepared this year. In 2021, an assessment of existing legislation relevant to the establishment of a Container Management System (CMS) was made. The assessment demonstrates that regulations are mostly missing and when Container Management Systems will be established, there needs to be adequate focus on developing such regulations.
65. Additionally, the report "Gender, Socio-Economic and Health Dimensions of the Use of Pesticide and Management in Central Asia and Turkey; The status in the Republic of Azerbaijan, in the Kyrgyz Republic, in the Republic of Tajikistan and in the Republic of Turkey" has been drafted in 2021, based on questionnaires distributed and interviews organized in the project countries. The report aims to assess the risk that pesticides pose to farmers and vulnerable groups, especially to rural women and children. The report contains a series of general recommendations based on which specific measures can be taken for the implementation of sustainable, inclusive, and gender-transformative approaches in rural development and agriculture. These are planned to be implemented in all countries starting in 2022.
66. Also, an assessment of HHPs included in the list of registered pesticides started at the end of 2021. The registration lists of the five countries will be reviewed against the eight HHP criteria as defined by FAO and WHO. The consultant involved finalised the list of identified HHPs for Azerbaijan and Kazakhstan, and is working on the list for Turkey. It is expected that a workshop will be organized by June 2022. This initial assessment is important as HHPs will be identified and this is a first step towards improving the situation in the different countries. The lists are based on registered pesticides, and it is expected that the final report will include a chapter on illicit products as these may also exist in some countries. The project plans to discuss with the relevant ministries work to facilitate phase-out of certain HHPs. Finally, the project supports a study on the impact of climate change on the occurrence of pests and diseases in countries of the REU region. The report was published in late 2021 and is being translated into Russian.
67. **Component 3:** IPM field trials have been conducted in Azerbaijan, Kyrgyzstan and Turkey. In Azerbaijan, field trials were undertaken with tomatoes and cucumbers, and training was provided to around 150 farmers. In Kyrgyzstan, an agreement was signed with the Kyrgyz National Agrarian University in March 2020. Trials using traditional, IPM and organic agriculture on five key crops (corn, potato, sugar beet, wheat, and kidney beans) were implemented near Bishkek. Preliminary results at the end of the second season show that harvest rates were highest in the IPM plots, followed by the conventional and then the organic plots. In the Isparta region in Turkey, trials with conventional, IPM and organic approaches in apple orchards have been conducted in 2020 and 2021, involving 30 beneficiary apple producers with almost 70 ha of apple orchards. Several trainings were organized, for example on IPM, and on how to enhance marketability for low-input apple production. The trials in Isparta showed a pesticide use reduction in IPM orchards by on average 70 % in the control of codling moth. It is planned that the IPM field trials will be continued in 2022 in Turkey and Kyrgyzstan to confirm results from the previous years. In

- Azerbaijan the project team decided to first focus on capacity building on IPM within the government counterpart Agrarian Services Agency, before the trials can be continued.
68. The COVID-19 pandemic showed how dependent Tajikistan is on the import of quality seeds. Therefore it was decided to focus the work on developing a potato seed bank based on IPM methods to enhance national seed autonomy (the work undertaken through the Ministry of Agriculture was done in cooperation with EU and the Japan International Cooperation Agency (JICA) projects). In 2021, the project provided 20 MT of potato seeds to the seed banks established in 2020 in Tajikistan. These were distributed to peasant farms and small holders engaged in seeds growing and multiplication. Using IPM knowledge and skills, the targeted farmers managed to grow seed potatoes and harvested in totally 500 MT, which is considered to be a very good result. Part of the harvest is returned by the farmers to the seed bank for use in the next year, while the rest is sold on the market. Ten field missions to the project sites of the two districts Shahrison and Nurobod were organized. Together with the Ministry of Agriculture, FAO and JICA staff, they met targeted farmers and conducted a series of on-site trainings on Integrated Pest Management principles. In the frame of the project, two cooperatives were established; one in the Shahrison district and another one in the Nurobod district. Within the project a greenhouse equipped with drip irrigation was built. The greenhouse is planned to be used for production of vegetable crops using IPM approaches throughout all seasons. It was difficult for the MTR to assess the activities in Tajikistan under Component 3, as the activities are not well documented. The MTR Team could therefore not find compelling evidence on the benefits from the activities and resources for this component, and could not well validate and triangulate the information received during interviews. In 2022, the project plans to provide training on IPM to farmers, prepare a National Action Plan on IPM and set up demonstration plots in orchards. It will be important for the project team to provide evidence of the benefits of the work conducted within Component 3 in Tajikistan, and to focus on building capacity on IPM in the country as the capacity is still low. Kazakhstan stakeholders indicated that conducting IPM trials will be important for their country as well, and they would like to implement these during the project.
69. A draft sub-regional IPM Strategy is being developed. This strategy is planned to guide the development of IPM National Action Plans in Azerbaijan, Kyrgyzstan and Tajikistan in 2022.
70. In 2021, a baseline assessment of existing pest surveillance systems was started in Azerbaijan, Kyrgyzstan and Tajikistan. It is planned to set up a series of trainings in 2022 as a follow-up to this assessment. A technical webinar on Pest Surveillance for Sustainable Agriculture was held in February 2021 (116 participants).
71. **Component 4:** Several FAO guidelines and materials were translated into Turkish, Russian and Azerbaijani. To raise awareness among the younger generation on the risks by pesticides a Kids Story Book was developed and the FAO Activity Book translated into Azerbaijani and Turkish. The project's website went online in later 2021. Also, three regional webinars were held: on POPs disposal options (21 participants), on CMS (170 participants), and on Pest surveillance (116 participants). It was mentioned by several interviewees that few publications and knowledge products have been prepared to showcase the results of the project. Many interviewees noted that visibility needs to be strengthened and results already produced by the project should be disseminated to a wider audience. Additionally, it is not clear how the different materials translated are used by the recipients.

72. A Project Steering Committee (PSC) was organized in May 2021. Several stakeholders interviewed mentioned that they are not aware of the work of the PSC, or sometimes found it difficult to assess the work of the PSC, as there has been only one meeting. The work of the PSC needs to be intensified. A second PSC will be organized in June 2022.
73. **All components:** One of the issues that has been mentioned by several stakeholders in different countries is the need to strengthen laboratory capacity laboratory capacity and the capacity/equipment to take and analyse samples. This is currently not included in the project. FAO indicated that they cannot take the lead position but can discuss the development of sustainable laboratory services and analysis competence to contribute to a solution.

Likelihood of impact

74. The MTR assesses the likelihood that the project will make a substantive contribution to the longer-term intended changes and impacts as presented in the developed Theory of Change. The likelihood of impact being achieved in the future is assessed based on the internal logic of the project, the assessment of effectiveness, and verification of drivers and assumptions. As mentioned, important progress has been made for some of the outputs; therefore, some progress has been made towards achieving the four direct outcomes. The progress towards achieving outcomes and long-term results and impact is still limited.
75. Most of the drivers from outputs to outcomes (see chapter 3 – Theory of Change) are partly in place. FAO overall provides active support and strategic guidance to increase cooperation and networking and build sustainable capacity in the countries. However, in some cases limited communication and the long internal and hand-over processes have slowed down the project (see also chapter 4.6 – Factors affecting Performance, 'Project partnerships and stakeholder engagement', and 'Communication, visibility, knowledge management and knowledge products'). Due to changes in ministries, the project has been delayed and communication therefore at times was limited, but overall the governments provide support and are committed to the project objectives. Other implementing stakeholders in the project who were interviewed during the MTR (such as organizations -planned to be- involved in IPM activities, NGOs, universities and research institutes) have shown an active interest in the project. Some stakeholders indicated that communication between partners needs to be strengthened to achieve a better understanding of how activities under different components and outputs complement each other and contribute to the overall objective of the project. Within some activities active awareness raising and training of stakeholders has been undertaken, for example, in Turkey during the IPM trials. In other countries and within other activities, active awareness raising of stakeholders still needs to be (further) organized during planned activities, such as remediation of contaminated sites, safeguarding, pilot projects for container management, and IPM activities. Finally, the last driver "disposal options complying with requested standards become available" is not in place yet. The project will actively try to achieve this through cooperation with UNEP and UNIDO projects in Kazakhstan, Kyrgyzstan and Tajikistan, and it is expected that a test burn in a cement kiln in Azerbaijan will be organized in 2022.
76. The drivers from outcomes to long term results are of course not yet in place but an assessment can be made of several of these drivers on the likelihood that these drivers become reality. It can be expected that stakeholders will continue to be interested and committed; the interviewees overall showed a great interest in the project and its objectives, realizing the relevance for their countries. If the project focuses on building capacity within

the country and taking steps to ensure that capacity will be sustained after project end, then it is likely that awareness raising and capacity building will be continued after the project. This means that governments will institutionalise adequate chemical management, enforcement and supervision capacity. The project is not yet in the stage where capacities have been adequately built and therefore it is too early to say if these drivers are feasible. However, the project team indicated that capacity building is a priority, and an extension of the project would provide opportunities to the project team to build capacity and to include elements on sustainability of project results into the different strategies and action plans that are or will be developed within the project. Regarding financing provided by governments and (inter)national organizations, it can be said that this will be more difficult in some countries than in others, depending on the economic situation in the countries and the priorities set by the governments.

77. The assumptions from output to outcome are partially in place, or not in place yet. Government counterparts and other stakeholders are willing to participate and are open to cooperation. In some countries the political situation has affected the project (e.g. through restructuring within ministries or changes of governments) but overall the main involved ministries have shown support to the project objectives. Government counterparts and civil society organizations are open to cooperation. However, the situation regarding disposal is not clear. There has been opposition in the past towards high-temperature treatment in for example Kazakhstan and Kyrgyzstan. In Kyrgyzstan, the project intends to set up a national dialogue including all relevant stakeholders from all sectors of society to discuss amongst others what would be acceptable disposal options for the country. The financial resources within the project are adequate (although there may be unexpected costs during complex activities such as safeguarding and disposal), but the resources that will be necessary after the project to achieve longer term results will depend on financing provided by governments and (inter)national organizations; in some countries this will be an issue, certainly for costly activities such as safeguarding and disposal. At the moment the COVID-19 pandemic does not affect the project as it did the last two years. However, the pandemic is unpredictable and therefore it is not clear if the current situation will remain.
78. The assumptions from outcomes to longer term results include funding made available, which as discussed in the previous paragraph may be problematic in some countries. Cooperation between ministries can be expected to some degree, although some interviewees mentioned that inter-ministerial cooperation should be strengthened in some of the project countries. Finally, of course disposal options should remain available (and/or other disposal options should become available) beyond project life-time in order for the countries to be able to dispose of their (remaining) stocks.
79. In conclusion, the MTR team assesses the likelihood that the project will make a contribution to the higher level, longer-term intended changes and impacts as moderately likely, provided that the project is extended which will allow the outputs and outcomes to be achieved, and important steps are taken in building capacity in the countries.

4.3 Efficiency

MTR question 3 – Efficiency:

To what extent has the project been implemented efficiently and cost effectively? Has management been able to adapt to any changes and conditions and improve the efficiency of project implementation?

Finding 10. As there have been delays at the start of and during the project, it is not possible to implement the project activities by the current end date of the project (October 2022). The reasons for the delays are the late signature of countries joining the project, restructuring in ministries, changes in staff (both within FAO and country counterparts), the restrictions related to the COVID-19 pandemic, and generally long hand-over and approval processes.

Finding 11. The project considers cost-effectiveness through building on existing FAO projects and partnerships, and by seeking cooperation with other initiatives (UNEP and UNIDO projects). Cost effectiveness is also one of the important considerations in tender processes that have been and will be organized within the project.

80. It is clear that the project cannot be implemented by the current end date of the project (October 2022). There are several reasons for this. First of all, the project started late. The project was officially approved in 2016, and started in October 2018, after the first two countries had signed the project agreement with FAO. In this period, few activities were implemented. Secondly, once the project gained some speed in early 2020, the COVID-19 pandemic started and this caused additional delays in the project. The third reason is the restructuring and changes in ministries (in Azerbaijan, Kazakhstan, Kyrgyzstan and Tajikistan) which took time and sometimes slowed down the project, specifically in Kyrgyzstan. Additionally, Kazakhstan joined the project only in August 2021. This was in part due to the restructuring within the Ministry of Agriculture and COVID-19, but also because the Ministry of Agriculture decided that since component 1 of the project is such an essential and large part of the project, and the Ministry of Ecology is responsible for these topics in the country, it would be better that the Ministry of Ecology would take over project responsibility. Also, within FAO several staff changes have taken place (for example in country offices in Tajikistan and Turkey) which affected the project. And finally, it was mentioned that long hand-over and internal approval processes within FAO, and within some government counterparts, caused some delays in the implementation of activities.
81. The project is in alignment with other FAO and government departments' work and therefore the project is building upon existing institutions, agreements, partnerships, and there are adequate synergies and complementarities with other initiatives (see also chapter 4.1 - Relevance). For example, the project is building on previous (FAO and other organizations') interventions, such as the FAO EC 040 project "Improving capacities to eliminate and prevent recurrence of obsolete pesticides as a model for tackling unused hazardous chemicals in the former Soviet Union" and the FAO Turkey Partnership Programme 035 "Initiative for Pesticides and Pest Management in Central Asia and Turkey". The project considers cost-effectiveness through cooperation with other running FAO projects (for example, the locust programme in Tajikistan) as well as by seeking cooperation with projects that have complementarities with the FAO project, mainly the UNEP and UNIDO projects.
82. Additionally, cost-effectiveness is one of the important considerations in tender processes, for example the tender process for safeguarding of 217 tonnes of obsolete pesticides in Azerbaijan. And finally, due to COVID-19 fewer physical meetings could take place and less travel was conducted, which is in principle cost-effective. However, as many interviewees

mentioned, the fact that less physical meetings could be organized also slowed down the project and made effective communication more difficult.

83. Within the field trials on IPM, cost effectiveness and economic benefits are measured, and is one of the criteria for deciding whether IPM can be a successful alternative in the country compared to conventional (and organic) methods.
84. The MTR team considers that it was not realistic to do the project within four years as planned at project design, due to the complexity of Component 1 and duration of safeguarding and disposal activities, planned involvement of five countries, and many project activities. It could have been expected that the start-up phase would be slow, also as two countries needed to sign before activities could really start.

4.4 Sustainability

MTR question 4 – Sustainability:

To what extent are there financial, institutional and governance, socio-political and/or environmental risks to sustaining project results in the long-term?

Finding 12. The project has made progress on some activities, such as inventories, assessments on container management, and legal framework, bioremediation and the IPM trials in Azerbaijan, Kyrgyzstan and Turkey. However, ensuring and focusing on sustainability of the results needs to be done during the remaining part of the project.

Finding 13. Environmental sustainability is assessed as highly likely, as the project intends to safeguard and/or dispose of (over) 900 metric tonnes of POP stockpiles that have been degrading the environment for years, and to demonstrate and promote IPM as an alternative to extensive use of pesticides. Risks to the environment can be high in case of accidents or exposure during safeguarding and disposal activities, but these risks can be mitigated by following FAO, international and national standards, and using experienced service providers.

Finding 14. The government counterparts at the moment do not always have the capacity to undertake all project activities. Interviewees pointed out that it is important to ensure that capacity will be built within the project and sustained after the project ends. Government counterparts may sometimes lack institutional sustainability, for example, due to regular changes in staff, restructuring, and other priorities in their work.

Finding 15. The (pilot, demonstration and trial) activities currently implemented and planned to be implemented within the project, have a potential for replication and upscaling, as the design of such activities can be improved based on the lessons learned from these pilot activities. However, at the same time sustainability of such activities can become challenging if during project implementation no timely discussions and agreements are made between FAO, the government counterparts and relevant stakeholders on responsibilities of replication and upscaling and on ownership after project end. Financial sustainability is an issue for some countries, specifically when it concerns costly operations such as safeguarding and disposal.

Finding 16. The risks that were defined at project design are still valid and can affect sustainability of project results if they are not mitigated timely and effectively, specifically lack of disposal options, lack of technical capacity and the risk that capacity is not sustained,

insufficient funds for project activities, and lack of awareness about obsolete pesticides' problems among populations and decision makers.

85. The MTR assesses financial, socio-political, institutional/governance and environmental sustainability. The ProDoc contains a chapter on Sustainability of Results. This chapter briefly describes social, environmental, financial and economic sustainability as well as sustainability of capacities developed.
86. Environmental sustainability is assessed as highly likely, as the project intends to safeguard and/or dispose of (over) 900 metric tonnes of POP stockpiles that have been degrading the environment for years, and to demonstrate and promote IPM as an alternative to extensive use of pesticides. The environmental and health benefits of the project therefore can be considerable if these results are achieved. The ProDoc additionally mentions that "contaminated land remediation activities will remove the contamination source, and prevent any further leaching into the environment including groundwater sources. To promote sustainability of these activities, local technical staff will be trained in the safeguarding of obsolete stocks, investigation and remediation of sites, ensuring they have the knowledge to safeguard any further chemicals identified".
87. Under the paragraph on sustainability of capacities developed, it is once more mentioned that the project wants to ensure that capacities will be developed in order for project-initiated activities to be continued after the project ends. For instance, the project plans to focus on "strengthening national institutional capacity and pesticide management skills; the cooperation with national stakeholders and NGO representatives to promote alternatives to highly hazardous pesticides to prevent building up of future stocks through increased public awareness of the risks of pesticides; and the training of key national stakeholders in container management, to ensure capacity exists to implement the strategy over the long term". Many of the stakeholders mentioned in interviews that it is important that capacity is built and maintained, and FAO also prioritises capacity building initiatives. There are many (pilot, demonstration and trial) activities on for instance IPM and alternatives to chemical pesticides, on contaminated sites and container management that are either currently implemented or are planned to be implemented. The ProDoc mentions that the results of all these activities will be assessed and the design of activities improved based on the results of the project. Lessons learned and knowledge gained from these activities will be documented "in a form that will maximise learning and sharing by project stakeholders and beyond". Thus far, the project has not developed many knowledge products (see also 4.5 – Factors affecting Performance, 'Communication, visibility, knowledge management and knowledge products'), although some guidelines have been translated and were distributed. It is important that the project team ensures that knowledge products and guidelines are not only distributed but that also the use of these projects is assessed within the project; only when it is clear that these products are actively used by government counterparts and other stakeholders, they can lead to sustained increase of knowledge and capacity.
88. The (pilot, demonstration and trial) activities mentioned in the previous paragraph, have a potential for replication and upscaling, as the design of such activities can be improved based on the lessons learned from these pilot activities. However, at the same time sustainability of such activities can become problematic if during project implementation no timely discussions and agreements are made between FAO, the government counterparts and relevant stakeholders on responsibilities of replication and upscaling and on ownership (including an assessment of financial aspects). Therefore, it is recommended that the project

team includes aspects related to sustainability and upscaling in the regional strategies that are developed (for instance on disposal, and on IMP and alternatives to chemicals) and in the action plans that will be developed in each country.

89. For disposal, the project focuses on more sustainable solutions for disposal of obsolete pesticides at national level rather than one-time exports of wastes. Therefore co-processing of obsolete pesticides at cement kilns is pursued as a national solution as high-temperature incinerators will not exist in the region for the foreseeable future.. The FAO Project Coordination Unit are discussing this issue with GEF to ensure their agreement for using this option and conducting a test burn in the Holcim cement kiln in Azerbaijan.
90. Within this criterion, the MTR also assesses whether the risks identified in the ProDoc are still valid. The overall risk rating according to the PIR is medium, and the overall Project Risk classification under Environmental and Social Safeguards is classified as high. In the ProDoc a risk assessment was made within chapter 3.2. Eleven risks were identified, and mitigation measures proposed. An update on these mitigation measures is provided in the PIRs. The risks identified at project design are very relevant to the project and are as follows:
 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.
91. Fortunately, Kazakhstan has now signed the project agreement and this means all five countries have now joined the project. However, delays have been caused by the late signing of countries. The mitigation measures that were proposed in the ProDoc (participatory planning of the project, setting strict deadlines) as well as measures taken as described in the PIRs (numerous calls, sending the project agreement to Kazakhstan) have not (significantly) contributed to the signing of the agreements. The signing of project agreements to a large degree seems to depend on internal procedures and discussions within ministries and external circumstances (political changes, ministry restructuring, COVID-19) on which FAO does not have much influence. However, reasons for the delays in signing the project agreement at the start of the project could not be fully clarified, as many persons involved at the time have left their positions.
 2. Lack of disposal options in the Central Asian Region means that safeguarded stocks will not be able to be finally disposed.
92. There is a lack of disposal options in Kazakhstan, Kyrgyzstan and Tajikistan. As discussed previously, cooperation with other projects (UNEP and UNIDO) is essential for potentially realizing disposal options in Kyrgyzstan, Tajikistan and Kazakhstan. In Azerbaijan, a test burn is planned for 2022. Interviewees have mentioned that it is possible or even probable that stocks cannot be eliminated during the lifetime of the project (also when the project is extended) in Kyrgyzstan and Tajikistan (and possibly Kazakhstan as they have not yet started to implement activities). If this remains the case, the MTR team suggests that as a back-up plan the project should secure safeguarding of obsolete pesticides (of larger amounts than 900 tonnes, as safeguarding costs less than disposal) in UN approved packaging and temporary storage in a licensed facility within the project (and disposal of the safeguarded stocks at a later stage).
 3. Political instability in project countries.

93. There is instability in project countries which has affected the project, especially in Kyrgyzstan where restructuring of ministries following a change of government has taken a long time and delayed the project considerably. Also in Azerbaijan and Tajikistan restructuring of ministries and changes within ministries affected the project. The PIR for June 2021- June 2021 mentions: "The environment in which the project had to operate in 2020/2021 was challenging, marked by COVID-19, the 44-days war between Armenia and Azerbaijan, and a full-scale restructuring of the government in Kyrgyzstan respectively re-organizations within ministries in Azerbaijan and Tajikistan." FAO also seeks to cooperate with for example universities and other actors in order to be able to continue part of the project activities in case the project is stalled due to instability in countries. Of course, such changes cannot always be predicted and it can be expected that instability and changes within ministries may affect the project also in the remaining period of the project. This also means that institutional memory and institutional capacity built within the project may be partly lost. Therefore, it is important, as discussed above, that the project includes aspects related to sustainability and upscaling in the regional strategies that are being developed and in the action plans that will be developed in each country, in order to mitigate effects related to instability and changes in ministries.
4. Contradiction between national and international legislation/ standards; and between ministries.
94. The legal assessments that have been prepared show the gaps of the current legislation against the International Code of Conduct on Pesticide Management and make suggestions to close these gaps. Workshops for each country will be organized where all stakeholders can provide feedback and suggestions will be discussed in-depth.
5. Lack of technical capacity (personnel and equipment) in project countries, including staff mobility.
95. Lack of technical capacity and the need for capacity building are mentioned by many of the stakeholders. The project team intends to focus on capacity building, for instance by providing training and Training of Trainers. Training within the IPM trials has taken place and is planned to be continued. In Azerbaijan, capacity of the Agrarian Services Agency on IPM will be built first before it will be decided on how to continue IPM trials or demonstration farms. As also mentioned under risk 3 above, it will be important to ensure that capacity built within the project will be sustained; including sustainability aspects into strategies and work plans can help to contribute to this.
6. Objections and non-cooperation with disposal activities by governments and civil society in project and transit countries.
96. Objections and opposition to disposal activities are also important risks, specifically in Kyrgyzstan. Kyrgyzstan is currently setting up a national dialogue to discuss possible options and approaches for disposal and reach a national consensus on the best strategy for the country. Some interviewees suggested it would be good to invite international experts to some of the national dialogue meetings to share experiences on disposal options from other countries and regions.
7. Insufficient funds for safeguarding of major contaminated sites, the disposal of POPs and other project activities.

97. Within the project, it is expected that there are sufficient funds to deliver the project outputs and achieve the outcomes, although there can be unexpected high costs within complex safeguarding and disposal activities. As mentioned previously, financial sustainability for safeguarding of major contaminated sites, the disposal of POPs and other project activities is problematic for most countries. The PIR for July 2020 – June 2021 additionally mentions that funds for safeguarding and remediation will always remain insufficient until governments develop funding and taxation mechanisms for legacy wastes. The project team plans to provide support to develop such mechanisms during the remaining part of the project.
8. Accidents and exposure during safeguarding, transport and handling of wastes and empty containers.
98. As the risks to the environment and health can be significant if accidents and exposure occur, FAO only works with experienced waste management companies with a proven track record and which will operate according to best international practices. For the safeguarding in Azerbaijan, the waste management company has prepared an Environment, Health and Safety plan and will train local workers before the start of the work in order to reduce the risks and to build up national capacity.
9. Lack of awareness about OP problems among populations and decision makers.
99. Until now few structured communication and awareness raising activities have been implemented, although training and awareness raising has been conducted during IPM trials in Turkey. Currently a regional communication strategy is prepared. It is expected that awareness raising will be conducted in a structured way, also taking into consideration gender aspects, during all (demonstration, pilot and trial) activities on safeguarding, disposal, contaminated sites, container management, improvement of spraying practices and IPM. Within Component 4 of the project it is also expected that project results and lessons learned will be compiled and widely distributed to all relevant stakeholders, including decision makers.
10. Climate risks such as heavy winters and hot summers, crop calendars disruption or increase of pest invasions.
100. Mitigation measures that are mentioned in the ProDoc are related to safeguarding; these are planned to be conducted in spring and autumn to avoid extreme heat or cold. For the safeguarding in Azerbaijan, it was mentioned that working hours may be adapted in case of severe weather conditions. With relation to IPM trials, the PIR mentions that seeds and cultivation methods adapted to the climate zone will be selected. Additionally, the project is supporting a study on the impact of climate change on the occurrence of pests and diseases in countries of the REU region. The report was published in late 2021 and is being translated into Russian.
11. Low existing use and uptake of alternative technologies by producers.
101. The PIR for July 2020 – June 2021 mentions the following: "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." Although the IPM trials have shown interesting results, these trials will need to be continued and the results widely spread. In Tajikistan no IPM trials have been implemented and Kazakhstan is

yet to start. For Azerbaijan it is planned to first focus on capacity building of the Azerbaijan Agrarian Services Agency on IPM to increase understanding in IPM and alternatives. In the chapter on Replicability and Scaling Up, the ProDoc states the following: “Once pilot activities are executed the results will be assessed, and the design of activities improved based on the results of pilots. This approach will ensure activities are well developed, locally appropriate, and replicable in areas and regions not explicitly included in the project.” This also means that if IPM field trials are not implemented or not fully implemented, it will be more difficult to gather enough relevant data for improving the design of activities. The regional strategy on IPM that is being developed can support the uptake of IPM practices through the development of National Action Plans. It is planned that this strategy may include case studies from Turkey and Kyrgyzstan, as these trials are a good example for the region.

The following risk has been added in the PIR:

12. Slow down or inability of implementing some activities due to COVID-19.
102. COVID-19 has affected the project and caused delays in implementation of activities and also reduced the effectiveness of communication as few face-to-face meetings and trainings could be held. At the moment of writing this report (March 2022) the situation has improved and it is expected that physical meetings can be organized (for instance the next PSC will take place in Baku), and that there are no longer restrictions to organizing project activities. Of course, the pandemic is still ongoing and this situation may deteriorate again.

4.5 Factors affecting performance

MTR question 5 – Factors affecting performance:

What are the main other factors affecting the project in reaching its results, and how are they affecting the project’s performance?

Project design and readiness:

Finding 17. The project document was adequately designed and relevant stakeholders were identified at project design. As the project document was designed in 2013, an update of the Results Matrix is currently prepared to reflect the present-day situation in the project. There have been substantial delays in starting the project, in part due to the late signing by some countries.

Quality of project execution and management arrangements:

Finding 18. The project execution and administration framework and arrangements within FAO are well established and of good quality, and the communication lines and decision-taking procedures are mostly clear. Overall, these frameworks support the progress being made in the project well. However, many interviewees explained that there are often long internal approval procedures and bureaucracy that can affect project efficiency and sometimes causes unclarities in communication between the different parties.

Project oversight by FAO as the GEF Agency and national partners:

Finding 19. Overall, FAO has provided satisfactory quality of supervision, guidance and technical backstopping for the activities implemented. The project’s governance and supervision model as developed during project design is structured, but in reality the structures and the communication between government counterparts, FAO and other

stakeholders have been more ad hoc. Stakeholders indicated that they found it difficult to assess the work of the PSC, as there has been only one meeting. The work of the PSC needs to be strengthened and intensified, and more structured mechanisms for communication on national level are needed for properly engaging all stakeholders.

Financial management and co-financing:

Finding 20. Summary expenditure reports per component/outcome and per country were provided to the MTR team. The overall expenditure is still low; the expenditure for component 3 and for project management are respectively 47.4 % and 49.7 %. The project management component should be considered when the project is extended to ensure that expenditure for this budget line will remain within budget. The total amount of co-finance generated until June 2021 is much higher than the amounts pledged at project design, as the Ministry of Agriculture of Turkey provided large amounts of co-finance.

Project partnerships and stakeholder engagement:

Finding 21. Stakeholders were overall engaged adequately but, in some cases, there has been a lack of interaction. Restructuring within ministries has at times also complicated communication and engagement. Several interviewees expressed the need for more structured communication with and between project counterparts and stakeholders, as this will help to create a common understanding of the stakeholders on project activities and their specific roles, and will increase a better understanding of their contribution to the overall project objectives and outcomes.

Communication, visibility, knowledge management and knowledge products:

Finding 22. Few structured communication and awareness raising activities have been implemented, and few publications and knowledge products have been prepared to showcase the results of the project. More attention on this is needed (and planned). Many interviewees noted that visibility needs to be strengthened and results already produced by the project should be disseminated to a wider audience.

Monitoring and Evaluation

Finding 23. Monitoring and Evaluation is mostly done through the Project Progress Reports (FAO internal reports) and Project Implementation Reviews (to the GEF). Overall, these reports provide adequate information about the project. The updated Result Matrix that is currently being developed should be incorporated into the M&E processes. It is not clear in how far gender-disaggregated indicators for the monitoring and evaluation mechanism are identified.

Project design and readiness

103. The ProDoc was overall adequately designed. However, it was designed in 2013, and therefore not all information provided is currently relevant. For example, some organizations mentioned in the ProDoc are at present not active anymore. Also, some topics are described only briefly, for instance the information provided on sustainability.
104. The developed ToC from project outputs and outcomes on to the long term results, which is for a large part based on the outputs and outcomes as well as the narrative text at project design, shows the causal logic between the different elements and the pathways. The most relevant stakeholders were adequately identified at project design. The Results Matrix (annex 1 of the ProDoc) is overall clear, although indicators are often not SMART and baseline

information not always correct. It is also clear that the matrix needs to be updated to align the matrix with the current situation (e.g. the number of countries involved in certain outputs, a more exact description of indicators, and changes in or new milestones). The project team has been working on an update of the matrix (particularly indicators and milestones), which is planned to be presented at the next PSC in June 2022. This proposed Result Matrix is planned to be finalised based on comments made at the PSC.

105. There have been substantial delays at the start of the project. As mentioned previously, the project was approved in 2016, and started in October 2018 after the first two countries had signed the project agreement with FAO. However, during the initial phase of the project, few activities were implemented. In early 2020 the project gained some speed, but soon after the COVID-19 pandemic started and this caused additional delays in the project. This means that the project approved in 2016 (and already developed in 2013), only really started to function in 2019/2020. It is therefore clear that "readiness" of the project must be assessed as unsatisfactory. The late signature of the project agreements is partly due to bureaucracy within ministries as well as within FAO. Some interviewees mentioned that this process generally (also within other projects) takes a long time. Additionally, it was also mentioned that staff changes (in ministries as well as FAO) affected the late start of the project. It is at this stage difficult to assess the exact reasons for the late signature, as many persons at that time working in ministries and in FAO have moved to other positions or are not working anymore at the ministries or FAO. For Kazakhstan, which signed in August 2021, several reasons were mentioned. Firstly, restructuring within the Ministry of Agriculture delayed the process. Secondly, the Ministry of Agriculture decided that since Component 1 of the project is such an essential and large part of the project, it would be better that the Ministry of Ecology would take over the project responsibility. And finally, COVID-19 also caused some additional delays in the discussions and providing the signature for the project agreement.

Quality of project execution and management arrangements

106. Within this criterion, the MTR team assesses the performance of project management and the project executing partners in managing and delivering the project, including operational and administrative arrangements. The MTR also looks at whether management responsibilities and reporting lines are clear to the extent to which decision-making has been transparent and timely.
107. The project execution and administration framework and arrangements within FAO are well established and of good quality, and the communication lines and decision-taking procedures are clear. Overall, these frameworks support the progress being made in the project well. However, several interviewees (from all countries) explained that there are often long internal approval procedures and bureaucracy that can sometimes affect project efficiency. For stakeholders including government counterparts it is at times not clear what the status of a report or activity is and when it will be finalised. Stakeholders not immediately involved in an activity but with a high interest to be informed about the results of the activity, feel that it is necessary they are kept better informed throughout the process and not only at the end when a strategy/report or activity has been finalised.
108. For two countries, Tajikistan and Turkey, the FAO National Project Team Leaders left their position and have been replaced. The government counterparts noted that this has led to an improved and more regular communication with FAO, and mentioned that this is beneficial for the project. However, it was also noted that it has taken considerable time for the new

National Project Team Leaders to be contracted and start their work. Currently the executing partner relationships in all countries are maintained satisfactorily by FAO. Even so, it is recommended to strengthen the communication and coordination mechanisms within the project (see also below under "Project partnerships and stakeholder engagement"), and where possible to shorten internal procedures or when this is not possible, to keep stakeholders more regularly and thoroughly updated.

Project oversight by FAO as the GEF Agency and national partners

109. Overall, FAO has provided satisfactory supervision, guidance and technical backstopping for the activities implemented thus far. The different activities (e.g. inventories, IPM trials, bioremediation, legal and container management assessments, preparation of a regional strategy on disposal) have been implemented adequately. The MTR team unfortunately could not assess the activities implemented within Tajikistan under component 3, as no reports were received (see also under 4.2 - Effectiveness).
110. The project's governance and supervision model as developed at project design is clear. The importance of the Project Steering Committee is being stressed and at national level the ProDoc mentions that a "Project Operational Manual will be developed, ..., which will set out the specific roles and inputs of the governments to the project. This will include allocation of responsibility for day-to-day support to the execution of activities under each different component, specific arrangements for provision of in kind contributions and other inputs, and any specific requirements including on import of equipment". National Project Teams were planned to be set up, including a national coordinator from the ministry that signed the agreement with FAO, national focal points from other ministries, and component team leaders on a when-actually-employed basis. In reality the implementation arrangements have been less structured and are different in each country. In Azerbaijan, National Project Steering Committee meetings have been organized, but overall the communication between government counterparts and FAO have been more ad hoc.
111. At the start of the project a regional Inception Workshop and national Inception Workshops have been organized. It is expected that the national Inception Workshop for Kazakhstan will be held in April 2022. In May 2021, a Project Steering Committee Meeting has been organized. The next PSC is planned for June 2022. Stakeholders indicated that they found it difficult to assess the work of the PSC, as there has been only one. The work of the PSC needs to be strengthened and intensified in order to ensure a more clear oversight on the project.

Financial management and co-financing

112. A summary expense report was supplied to the MTR team by component and by country. Since there is one outcome per component, the overview also provides expenditure per outcome. The total expenditure is currently at 20.3 % of the total budget, which reflects that the project has met with delays and Kazakhstan has only recently joined the project (and no activities have been implemented yet in this country). Also, the bulk of expenditures is related to safeguarding and disposal, which is now planned for the second part of the project. Within Component 3 most progress has been made. The summary report per component and year also clearly confirms that as the start of the project implementation of activities was slow, expenditures in 2018 and 2019 were also low.
113. It should be noted that the costs for project management are almost 49.7%. This needs to be considered when the project is extended. Some suggestions were provided by FAO on

how it can be ensured that project management will remain within the budget limits. For example, some costs can be covered by other projects that have recently become operational.

Table 4 : Project expenditure per component (as of 31 December 2021)

Component	Estimated cost at design						Expenditure ratio actual/planned	Remaining Budget
		2018	2019	2020	2021	Total		
Component 1: Reduction of releases from POPs and other obsolete pesticides posing high risk to public health and the environment	5,532,958	0	27,556.78	170,901.14	543,569,89	742,027.81	13.4%	4,790,930.19
Component 2: Strengthening the legal, institutional and regulatory framework for pesticide life cycle management	713,894	0	37,509.01	59,427.04	37,975,01	134,911.06	18.9%	578,982.94
Component 3: Promotion of Integrated Pest Management (IPM) alternatives to Highly Hazardous Pesticides (HHP) and awareness rising	1,054,350	0	14,363.76	241,094.70	244,753,69	500,212.15	47.4%	554,137.85
Component 4: Project achievements and lessons monitored and widely shared for maximum influence	449,200	0	42,166.23	11,456.64	32,401,09	86,023.96	19.2%	363,176.04
Project Management	386,584		21,259.16	77,436,91	93,257.41	191,953.48	49.7%	194,630.52
TOTAL	8,136,986	0	142,854.94	560,316,43	951,957.09	1,655,128.46	20.3%	6,481,857.54

Table 5 : Project expenditure per country (as of 31 December 2021)

Country	Comp. 1	Comp. 2	Comp. 3	Comp. 4	Project Management	TOTAL
	5.532.958	713.894	1.054.350	449.200	386.584	8.136.986
Azerbaijan	387,211	12,228	98,867	8,973	566	507,845
Kazakhstan	0	0	0	0	0	0
Kyrgyzstan	98,434	7,677	111,968	5,597	9,645	233,322
Tajikistan	27,844	10,644	89,948	11,103	30,998	170,537
Turkey	18,520	2,390	104,636	8,591	3,574	137,711
Regional	210,015	101,976	94,808	51,745	147,170	605,714
Total	742,025	134,915	500,226	86,009	191,953	1,655,129
Expenditure ratio	13.4%	18.9%	47.4%	19.2%	49.7%	20.3%
Remaining Balance	4,790.933	578,979	554,124	363,191	194,631	6,481,857

114. A co-finance table can be found in Appendix 7 of this report. At the start of the MTR, the project team was requested to provide co-finance numbers for the mid-term point of the project. A request was sent to countries to provide updated co-finance numbers in March 2022. However, the most recent co-finance numbers in the annexed table are from the latest PIR (June 2021), as the process to obtain co-financing numbers from the government counterparts takes long and could not be provided in time to be included in this report.
115. The co-finance generated until June 2021 is already more than pledged at project design mainly because of high contributions from the Ministry of Agriculture in Turkey. The planned co-finance was USD 38,300,000 and the co-finance already provided is USD 58,279,309. These high amounts of co-finance show the relevance of the project aims for Turkey. For the project it is important to try to ensure that the amounts of co-finance that have been pledged by other government counterparts and FAO will also be provided by the end of the project.

Project partnerships and stakeholder engagement

116. At project design, a stakeholder analysis has been included in the ProDoc within section 4: Implementation and Management Arrangements. The stakeholders were adequately identified, but it is not clear from the ProDoc how the different stakeholders were involved when the project was designed.
117. In general, the stakeholders who were interviewed during the MTR showed a strong commitment to the expected results of the project. Only in a few cases, the response of stakeholders was slow; even though there were few cases where stakeholders did not show an interest to be interviewed or responded slowly, it must be noted that these stakeholders are key stakeholders and their active and timely participation in MTR would have provided a meaningful contribution to this MTR report.
118. Stakeholders were overall engaged adequately but, in some cases, there has been a lack of interaction. Restructuring within ministries, especially in Kyrgyzstan, has at times also complicated communication and engagement. Due to restructuring and staff changes, institutional memory is partly lost and this may lead to a decrease in the understanding of the project's aims, objectives and work done to date. Several interviewees expressed the need for more structured communication with and between project counterparts and stakeholders. For example, it was mentioned that stakeholders were not regularly informed about project progress within activities they were not directly involved in but which were of interest to them. In one case, stakeholders involved in overlapping activities were not aware of each other. Some stakeholders lack the bigger picture of the project and their role in it. Communication between the stakeholders should be strengthened to bring all involved to a common understanding of the project activities and their specific roles. This will also help build ownership over the project results and better understanding of their contribution to the overall project objectives and outcomes.
119. There have been Inception Workshops (regional and national for Azerbaijan, Kyrgyzstan, Tajikistan and Turkey) and one PSC meeting. The next PSC is planned for June 2022. Respondents sometimes found it difficult to assess the work of the PSC, as there has been only one meeting. The work of the Committee needs to be intensified. Additionally, suggestions were made to improve communication between FAO, government counterparts and other stakeholders. In Azerbaijan, National Project Steering Committees are organized, but overall communication between national stakeholders is ad hoc. Interviewees suggested

to set up more regular working group meetings, provide update sheets, or set up an interactive platform (for regional exchange of experience). The PSC is a good platform for coordination, but its function is less action-oriented, and serves more formal coordination, approval and decision-taking processes. There is no clear mechanism in place on how the PSC can contribute to resolving practical issues. More structured communication on national level can improve communication between stakeholders and additionally contribute to discussing and resolving these practical issues.

Communication, visibility, knowledge management and knowledge products

120. Component 4 of the project "Project achievements and lessons monitored and widely shared for maximum influence" is planned to strengthen and support the results of the other three components through communicating results and raising knowledge and awareness of the key stakeholders and beneficiaries of the project. The project document also mentions that "for each component or pilot project a communication strategy will be developed that will identify the main target groups, messages and appropriate delivery mechanisms, including budget". Recently, a national technical coordinator was appointed in Turkey who will help to develop a (regional) communication strategy.
121. Thus far, few structured communication and awareness raising activities have been implemented, as most pilot and demonstration projects, as well as safeguarding, disposal and remediation of contaminated sites have yet to take place. When these activities are implemented, sensitizing the population should have specific gender focus. In line with the draft report "Gender, socio-economic and health dimensions of the use of pesticide and management in Central Asia and Turkey" (see below under 4.6 - Cross-cutting dimensions, 'Gender and equity').
122. Few publications and knowledge products have been prepared to showcase the results of the project. More attention on this is needed (and planned). Many interviewees noted that visibility needs to be strengthened and results already produced by the project should be disseminated to a wider audience.
123. Several FAO guidelines have been translated into Turkish, Russian and Azerbaijani. To raise awareness among the younger generation on the risks posed by pesticides both a Kids Story Book was prepared and the FAO Activity Book translated into Azerbaijani and Turkish. Several national news pieces on project activities were published and the project website went online in the second half of 2021. An assessment of how these publications are used by the stakeholders and whether these communication tools support sustainable project results has not (yet) been undertaken but is strongly recommended to assess whether these publications contribute to the capacity of stakeholders and whether the publications are actively used.
124. As is also explained above under "Project partnerships and stakeholder engagement", communication between partners needs to be strengthened to achieve a better understanding of how activities under different components and outputs complement each other and contribute to the overall objective of the project. Some suggestions were made; for example, besides the PSC and NSC (in Azerbaijan), organize working groups and workshops in countries where all project stakeholders are invited, invite specific international experts on certain topics who can explain their experiences and give recommendations, prepare regular update sheets, and organize an interactive platform so regional experience can be shared.

Monitoring and Evaluation

125. The ProDoc contains a chapter on Monitoring, Evaluation and Reporting and a summary M&E Plan, indicating the type of M&E activity, responsible parties, timeframe and budget. Reporting is done through the Project Progress Reports (internal FAO reports) and Project Implementation Reports (to GEF). Overall, these reports provide adequate information about the project. As is mentioned in chapter 4.2 on Effectiveness, the activities under component 3 in Tajikistan (on the seed banks and training provided) have not been well documented.
126. As mentioned previously, the Results Matrix is being adjusted; outputs, outcomes, indicators and milestones are updated. The original Results Matrix was developed in 2013 and although the objectives of the project have not changed, the matrix was outdated. Original indicators were not always SMART and the milestones do not reflect the work that is being conducted in the project today. Once the new matrix is finalized, the project team needs to ensure that the M&E reporting integrates the updated indicators and milestones.
127. It is not clear in how far gender-disaggregated indicators for the monitoring and evaluation mechanism are identified. Although some stakeholders indicated that the project considers gender aspects, there is no structured and comprehensive collection of gender disaggregated data. The observations and recommendations from the gender expert for the MTR (see also Appendix 9) as well as the findings and recommendations from the report “Gender, socio-economic and health dimensions of the use of pesticide and management in Central Asia and Turkey” need to be considered in the M&E work of the project team. The involvement of an M&E expert and the expert’s close collaboration with a gender expert is therefore considered crucial.

4.6 Cross-cutting dimensions

MTR question 6 – Cross-cutting dimensions:

To what extent have gender considerations been taken into account in project design and implementation? Have environmental and social risks been identified and are appropriate mitigation measures taken?

Gender and equity:

Finding 24. The project at design targets women as specific beneficiaries and is in compliance with the relevant FAO and GEF gender policies. Until the mid-term point of the project, aspects related to gender and vulnerable groups have been considered only in a limited way in the project’s implementation. However, recently the report “Gender, socio-economic and health dimensions of the use of pesticide and management in Central Asia and Turkey” has been drafted, which provides comprehensive and valuable information on gender and pesticides and allows the project team to design proper actions in the near future. For these actions, the involvement of a gender expert in the project needs to be more sustainable.

Environmental and social standards:

Finding 25. The project document contains an Environmental and Social Screening (ESS) checklist. The chapter on Risk Management also mentions environmental risks related to safeguarding and disposal, and the chapter on Environmental Impact Assessment describes the different mitigation measures to counteract these risks. For the safeguarding in Azerbaijan, necessary precautions have been arranged, including development of a Health, Safety and

Environmental Plan. All work is expected to be conducted in line with Stockholm and Basel Convention requirements, and FAO's Environmental Management Tool Kits.

Gender and equity

128. The project at design targets women as specific beneficiaries and is in compliance with the relevant FAO and GEF gender policies. Female farmers as project beneficiaries are specifically highlighted under output 1.5 (Container management capacity developed in the region and risks of empty containers reduced in Azerbaijan) and 3.2 (Integrated pest management alternatives tested, validated, and promoted to male and female farmers), but the issue of gender is mentioned throughout the project document.
129. Women and vulnerable groups are mentioned repeatedly in the ProDoc. For example, the ProDoc mentions that "Due to migration of men as laborers to Russia and Ukraine, women constitute an important proportion of the agricultural labour force and are exposed to high pesticide residues in handling produce. Women may also produce food for family consumption but use pesticides intended for other crops, not in accordance with the intended uses and conditions, exposing themselves and their families to high levels of residues. The project will explicitly target women, children and seasonal workers through the pesticide surveillance pilot, and ensure that women are represented in all project component activities through partnerships with civil society organizations in training and awareness-raising activities. By improving the pesticide registration, labelling and packaging systems, the project will improve risk communication to all pesticide users and vulnerable groups will be explicitly considered in the training and activities on registration." And for the empty container management campaign, the ProDoc clarifies that "the campaign will also focus on vulnerable groups such as women and children who are often the ones using the containers for food and water storage in the home, and are thus exposed to pesticide residues in old containers."
130. During implementation gender aspects were considered only in a general and limited way. However, in late 2021 the report "Gender, socio-economic and health dimensions of the use of pesticide and management in Central Asia and Turkey" has been prepared. It is expected that recommendations from the above-mentioned report will be implemented. This report provides comprehensive and useful information on gender and pesticides and allows the project team to design proper actions in the near future.
131. The MTR team also considers that the involvement of a gender expert in the project activities should be more sustainable. If this is not possible, FAO should set up a backup mechanism. The gender expert needs to work closely with the experts developing communication and awareness raising strategies and the expert responsible for the M&E mechanisms. Currently, a regional communication strategy is being developed by the National Technical Consultant in Turkey. As there is a need to prepare communication plan and outreach strategies that consider increasing rural women's (and children's) access to knowledge and participation in project activities, these aspects should be included in the regional strategy and other national communication strategies that will be developed.
132. The MTR team was supported by a gender consultant, who has provided a series of observations and recommendations that can be found in Appendix 9, and the recommendations are also included in chapter 5 – Conclusions and recommendations.

Environmental and Social Safeguards

133. The ProDoc contains a Project Environmental and Social Screening (ESS) checklist. Environmental and Social Risks have additionally been identified in Section 3 of the ProDoc. The following risks are described for the safeguarding and disposal operations:
- Lack of disposal options in the Central Asian Region means that safeguarded stocks cannot be finally disposed of;
 - Objections and non-cooperation with disposal activities by governments and civil society in project and transit countries;
 - Insufficient funds for safeguarding of major contaminated sites, the disposal of POPs and other project activities;
 - Accidents and exposure during safeguarding, transport and handling of wastes and empty containers;
 - Lack of awareness about OP problems among populations and decision makers.
134. In chapter 3.1 on Environmental Impact Assessment it is mentioned that there is potential for environmental impairment particularly in the event of an accident during safeguarding and elimination of obsolete pesticides. To mitigate these risks the project follows FAO's Environmental Management Tool Kits (EMTK) for the assessment, safeguarding, transportation and disposal of obsolete pesticides. Environmental Management Plans (EMPs) will be developed that describe the national strategy how to deal with the obsolete pesticides stocks as well as related materials, and that will consider all potential risks and develop mitigation strategies. The EMP will cover options for repackaging of obsolete pesticides, safeguarding of stocks of obsolete pesticides, collection, transportation and safe storage/handling of empty containers, transportation and intermediate storage of stocks of obsolete pesticides; and decontamination of heavily pesticide-contaminated sites. The ProDoc additionally states that the methodologies set out in the EMTK have been used in similar FAO projects since 2003 and no adverse environmental impacts have resulted when they have been utilized.
135. Key activities of the project, including safeguarding, disposal, and remediation, require compliance with several national and international standards. Therefore, due diligence should be observed for all major activities in the project. All work during safeguarding, transport, disposal and handling of wastes and empty containers are planned to be conducted in compliance with the relevant international standards and directives, the Stockholm and Basel Conventions, as well as the relevant FAO EMTKs. For safeguarding in Azerbaijan, which is planned to be conducted in spring 2022, necessary precautions are taken and a Health, Safety and Environmental Plan has been developed. Local people will be trained before the start of the safeguarding work by the safeguarding company Veolia to ensure that capacity is built and that proper safety measures will be followed, including properly wearing Personal Protective Equipment (PPE).

136.

5. Conclusions and recommendations

5.1. Conclusions

137. Based on the findings of the project, the MTR team has drawn the following main conclusions:

Conclusion 1 (Relevance): The project is strategically highly relevant and in line with national priorities as well as donor strategic priorities, existing interventions, and with the FAO Strategic Framework. The interviewees confirmed the continued relevance of the project and the project activities for their country.

Interviewees in all countries, both government counterparts and other stakeholders, confirmed that the project is very relevant for their countries and in line with national strategies and action plans (such as the National Implementation Plans for the Stockholm Convention, as well as other national strategies and action plans on environment and agriculture). Also the stakeholders in Kazakhstan, where no activities have been implemented yet as they joined the project only in August 2021, are committed to achieving all project results for their country and region. The Ministry of Agriculture and Forestry in Turkey indicated that the project is very relevant, although the country does not need huge support for all project outputs and outcomes, for example on the management of POPs pesticide wastes (as those have been largely disposed of within earlier projects) and remediation of contaminated sites.

The project also is in line with the GEF-5 Focal Area Strategy on Chemicals. The project fits under Outcome 1.4 “POPs waste prevented, managed, and disposed of, and POPs contaminated sites managed in an environmentally sound manner”. The project is also fully consistent with the strategic objectives of FAO. This project fits mostly with the second strategic objective of FAO: “Make agriculture, forestry and fisheries more productive and sustainable”. The project is building on previous interventions implemented by FAO as well as by other organizations.

There are two initiatives in the region that are of specific interest for the FAO project as there are complementarities in activities and because these projects can contribute to potentially realizing disposal options in Kazakhstan, Kyrgyzstan and Tajikistan. The first one is the GEF UNEP project “Demonstration of Non-thermal Treatment of DDT Wastes in Central Asia (Kyrgyz Republic and Tajikistan)”. The second one is the GEF UNIDO project “Regional Demonstration Project for Coordinated Management of ODS and POPs Disposal in Ukraine, Belarus, Kazakhstan and Armenia”. Both UNIDO and FAO have expressed interest in cooperation in Kazakhstan, for example by setting up a joint coordination mechanism. At present, FAO and UNEP are developing a Memorandum of Understanding for cooperation in Kyrgyzstan and Tajikistan. The MoU mentions potential areas of cooperation, including cooperating in assessing and developing co-processing capability for POPs and related wastes, and cooperating on risk reduction activities for contaminated sites.

(see Findings 1,2, 4)

Conclusion 2 (Effectiveness): Although the project is delayed, good progress is being made for some outputs, e.g. inventories (1.1), regional disposal strategy (1.2), bioremediation trial in Kyrgyzstan (1.4), assessments/feasibility studies of container management (1.5), assessment of legal frameworks (2.1), and IPM field trials and alternatives (3.2). A main issue is (the lack of) disposal options in Kazakhstan, Kyrgyzstan

and Tajikistan. Discussion is ongoing and cooperation with the UNEP and UNIDO projects is required to potentially realise disposal options for Kazakhstan, Kyrgyzstan and Tajikistan. A decision on the test burn in Azerbaijan is taking time and should be decided as soon as possible.

As there have been delays in the project, outputs (and outcomes) of the project have not been fully achieved at the mid-term point of the project. Important progress has been made regarding several outputs, especially for inventories (1.1), regional disposal strategy (1.2), bioremediation trial in Kyrgyzstan (1.4) assessment studies on container management (1.5), assessment of legal frameworks (2.1), and IPM field trials and alternatives (3.2).

The IPM field trials were most successfully implemented in Kyrgyzstan and Turkey, and these will be continued in 2022. In Azerbaijan, a field trial was started in 2021. The project team decided that for 2022 it is more relevant to first focus on capacity building on IPM within the government counterpart Agrarian Services Agency, before actual IPM field work can be further implemented or demonstration farms can be set up. The COVID-19 pandemic showed how dependent Tajikistan is on importing of seeds. Therefore it was decided to focus the work on developing a potato seed bank based on IPM methods to enhance national seed autonomy. However, the MTR team could not find convincing evidence on the benefits of these activities, as the activities have not been documented well.

A crucial issue within the project is related to Component 1, output 1.3. Currently there are no disposal options in Kazakhstan, Kyrgyzstan and Tajikistan. It is therefore essential that the FAO project cooperates closely with the UNEP and UNIDO projects as these projects also consider disposal options in these countries. For Azerbaijan, a definite decision on conducting a performance test burn at the Holcim cement kiln needs to be taken as it is taking a long time and affects the efficiency of the project. In principle the test burn is planned to be conducted in 2022.

Obsolete Pesticide inventories in Azerbaijan, Kyrgyzstan and Tajikistan were conducted, but the inventory reports have not been approved by the government counterparts (yet). In Azerbaijan and Kyrgyzstan the inventory report were sent to the government counterparts for information purposes, and in Tajikistan the report still needs to be finalized and sent to the governments. A comprehensive inventory is planned to be conducted in Kazakhstan. Due to the size of the country and the high number of hotspots, the inventory in Kazakhstan will take a considerable time. In Turkey, since most of the legacy pesticides were disposed of over the last years, the project did not foresee any inventory study.

A soil remediation trial study has been set up in Kyrgyzstan in cooperation with the Kyrgyz Manas University and similar trials are planned to be initiated in Tajikistan and Kazakhstan. The bioremediation trial in Kyrgyzstan has been successful (99% of the 19 types of POPs pesticides were eliminated within 6 months) and encourage upscaling of the pilot study in the country and to other countries.

All project countries have a common problem , i.e. empty pesticide containers that are not managed properly. Therefore, an international expert prepared a strategy document "Container Management Systems and Agricultural Plastic Waste Assessment Report for Azerbaijan, Kyrgyzstan, Tajikistan and Turkey" to assess the problem in the countries. Based on this strategy, demonstration projects on container management will be developed for and implemented in all countries.

(see Findings 2, 3, 4, 5, 6, 7, 8, 9)

Conclusion 3 (Efficiency): Due to the very late start of the project, late signature of countries joining the project, the limited activities at the start of the project (partly due to only two countries having joined the project at that time), the COVID-19 pandemic, restructuring within some ministries, staff changes (both within FAO and country counterparts), the project is delayed.

Due to these delays, the outputs and outcomes cannot be achieved by the current end date of the project (October 2022). The project started late; the project was officially approved in 2016, but started only in October 2018 after the first two countries had signed the project agreement with FAO. Initially few activities were implemented. Once the project gained some speed in early 2020, the COVID-19 pandemic started and this caused additional delays in the project, although many activities could continue (at a lower pace). Restructuring and changes in ministries (in Azerbaijan, Kazakhstan, Kyrgyzstan and Tajikistan) took time and slowed down the project, especially in Kyrgyzstan. Within FAO several staff changes have taken place which affected the project. It was mentioned that long hand-over and internal approval processes within FAO, and within some government counterparts, caused some delays in the implementation of activities.

Kazakhstan joined the project only in August 2021. This was in part due to the restructuring within the Ministry of Agriculture and COVID-19, but also because the Ministry of Agriculture decided that since Component 1 of the project is such an important and large part of the project, and the Ministry of Ecology is responsible for these issues in the country, it would be better that the Ministry of Ecology would take over project responsibility.

(see Findings 10, 11)

Conclusion 4 (Sustainability): Sustainability of (institutional) capacities need further attention during the remaining part of the project and measures should be taken to ensure that capacities built are sustained. Additionally, sustainability and upscaling of project results should also be further considered and these aspects need to be reflected in the different strategies and action plans that are being developed in the project. The risks to achieving environmental sustainability are considered to be low to medium when the international and national requirements are respected and closely monitored.

The government counterparts and other stakeholders do not always have the capacity to support and undertake all project activities. Some interviewees pointed out that it is important to ensure that capacity will be developed within the project and sustained after the project ends, both for government counterparts as well as other stakeholders and beneficiaries of the project. Government counterparts sometimes lack institutional sustainability, for example, due to regular changes in staff, restructuring, and other priorities in their work.

Trainings have been provided and are continued to be provided in the project, which support the building of capacities in the countries. Important FAO guidelines have been translated into relevant languages. The project team has adequate focus on building capacities. For example, under Component 3 the project team recently decided to first focus on building capacities on IPM within the main government counterpart, the Azerbaijan Food Safety Agency, before considering field trials or demonstration farms. However, it is important that efforts are being made that the capacities built will be maintained also after project end. This will remain difficult in some instances, due to possible future ministry restructurings and regular staff changes. Some measures can be taken to assess and support sustainability of project activities, for example evaluating the use of important strategies and (translated) guidelines by government counterparts and other stakeholders, and incorporation of sustainability aspects into the

different action plans (for example the National Action Plans on IPM) and strategies that are being developed in the project.

The (pilot, demonstration and trial) activities currently implemented and planned to be implemented within the project, can potentially be replicated and upscaled, as the design of such activities can be improved based on the lessons learned from these pilot activities. However, at the same time sustainability of such activities can become challenging if during project implementation no timely discussions and agreements are made between FAO, the government counterparts and relevant stakeholders on responsibilities for replication and upscaling and on ownership after project end (including an assessment of financial aspects, institutional sustainability, sustainability of capacities, and environmental sustainability).

Environmental sustainability is assessed as highly likely, as the project for example intends to safeguard and/or dispose of (over) 900 metric tonnes of POP stockpiles that have been degrading the environment for years, and to demonstrate and promote IPM as an alternative to extensive use of pesticides. The risks to environmental sustainability are considered to be low to medium when the international and national requirements are closely monitored and due diligence is observed for major activities in the project, such as safeguarding and disposal.

(see Findings 12, 13, 14, 15, 16)

Conclusion 5 (factors affecting project performance): Overall, FAO has provided satisfactory quality of supervision, guidance and technical backstopping for the activities implemented. Stakeholders were overall engaged adequately but, in some cases, there has been a lack of interaction. Several interviewees expressed the need for more structured and regular communication with and between project counterparts and stakeholders, as this will help to create a mutual understanding of the stakeholders on project activities and their specific roles, and will increase a better understanding of their contribution to the overall project objectives and outcomes. Additionally, there are often long internal approval procedures and bureaucracy within FAO (but also government counterparts) that can sometimes affect project efficiency and causes unclarities in communication between the different parties.

The project execution and administration framework and arrangements within FAO are well formed and of good quality, and the communication lines and decision-taking procedures are mostly clear. Additionally, FAO has provided satisfactory quality of supervision, guidance and technical backstopping for the activities implemented. However, several interviewees (from all countries) explained that there are often long internal approval procedures within FAO that can sometimes affect project efficiency and sometimes causes unclarities in communication between the different parties. Several country counterparts remarked that it is necessary to keep them informed during FAO internal discussions and not only at the end when a report is approved or a decision taken. Restructuring within ministries has at times also complicated communication and engagement.

Stakeholders were overall engaged adequately but, in some cases, there has been a lack of interaction. Restructuring within ministries, especially in Kyrgyzstan, has at times also complicated communication and engagement; institutional memory is partly lost and this can lead to a decrease in the understanding of the project's aims and objectives. Several interviewees expressed the need for more structured communication with and between project counterparts and stakeholders. For example, it was mentioned that stakeholders were not regularly informed about project progress within activities they were not directly involved in but which were of interest to them. Some stakeholders do not have a clear overview of the project and their role in it. Communication between the stakeholders should be strengthened

to bring all involved to a common understanding of the project activities and their specific roles. This will also help build ownership over the project results and better insight of their contribution to the overall project objectives and outcomes. Besides National Project Steering Committees (which is operational in Azerbaijan only), it was suggested to set up working groups on specific topics including representatives of relevant specialized organizations and international experts, to provide update sheets and to set up an interactive platform for regional exchange of experience. The PSC is a good platform for coordination, but its function is less action-oriented, and serves more formal coordination, approval and decision-taking processes. More structured communication on national level can improve communication between stakeholders and additionally contribute to discussing and resolving practical issues.

(see Findings 18, 19, 21, 22)

Conclusion 6 (factors affecting project performance): Few structured communication and awareness raising activities have been implemented, as most pilot and demonstration projects as well as safeguarding, disposal and remediation of contaminated sites have yet to take place. In addition, few publications and knowledge products have been prepared to showcase and inform stakeholders about the results of the project. For the remaining part of the project, it is important to develop and implement a regional communication strategy as well as national communication, awareness raising and outreach strategies, in order to raise the awareness and capacities of project stakeholders and beneficiaries, including women and vulnerable groups.

Within the IPM field trials in Isparta, Turkey, several awareness raising meetings were conducted and materials developed. However, overall, few awareness raising activities have taken place. It is expected that several pilot projects will be implemented in the next period of the project, for instance on container management, and that activities related to safeguarding, remediation of contaminated sites and disposal will be set up. Raising awareness of local stakeholders and project beneficiaries is an important aim of the project and preparing and implementing national communication and awareness raising strategies in a structured way will support awareness raising and change in behaviours of the local population. When these activities are implemented, sensitizing the population should have specific gender focus in line with the recommendations of the draft report “Gender, socio-economic and health dimensions of the use of pesticide and management in Central Asia and Turkey” .

Few publications and knowledge products have been prepared to present the results of the project. Interviewees noted that visibility needs to be strengthened and results already produced by the project should be disseminated to a wider audience.

Several FAO guidelines have been translated into Turkish, Russian and Azerbaijani. To raise awareness among the younger generation on the risks posed by pesticides both a Kids Story Book was prepared and the FAO Activity Book translated into Azerbaijani and Turkish. Several national news pieces on project activities were published and the project website went online in the second half of 2021. An assessment of how these publications are used by the stakeholders and whether these communication tools support sustainable project results has not (yet) been undertaken but it is strongly recommended to assess whether these publications contribute to the capacity of stakeholders and how, and whether the publications are actively used.

(see Finding 22)

Conclusion 7 (gender): The project document targets women as specific beneficiaries and is in compliance with the relevant FAO and GEF gender policies. During implementation these aspects were considered in a limited way. The recently drafted report “Gender, socio-economic and health dimensions of the use of pesticide and management in Central Asia and Turkey” provides comprehensive and valuable information on gender and pesticides and allows the project team to design proper actions for the remaining part of the project.

The project at design targets women as specific beneficiaries and is in compliance with the relevant FAO and GEF gender policies. Female farmers as project beneficiaries are specifically highlighted under output 1.5 (Container management capacity developed in the region and risks of empty containers reduced in Azerbaijan) and 3.2 (Integrated pest management alternatives tested, validated, and promoted to male and female farmers), but the issue of gender is mentioned throughout the project document.

The report “Gender, socio-economic and health dimensions of the use of pesticide and management in Central Asia and Turkey” that has been developed in the project provides comprehensive and valuable information on gender and pesticides and allows the project team to design proper actions in the near future.

Many of the activities in which gender aspects are planned to be considered and awareness raising of the local population is expected to be conducted (such as contaminated sites remediation, safeguarding, disposal, container management, IPM field trials) still need to take place or have only partially been implemented. Therefore, during implementation gender aspects have been considered only in a limited way thus far.

The MTR team considers that the involvement of a gender expert in the project activities should be more sustainable. The gender expert needs to work closely with the experts developing communication and awareness raising strategies and the specialist responsible for the M&E mechanisms. Currently, a regional communication strategy is being developed. As there is a need to prepare communication plans and outreach strategies that consider increasing rural women’s (and children’s) access to knowledge and participation in project activities, these aspects should be included in the regional strategy and other national communication strategies that will be developed.

(See Finding 24)

5.2. Recommendations

<p>Recommendation 1 (Efficiency)</p>	<p>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 capitalise on all the preparatory work done so far. For Kazakhstan, it is necessary to have additional discussions (on accelerating/intensifying activities, running activities in parallel, potential follow-up project) between the government counterparts and FAO on short notice as for this country all activities still need to be implemented.</p>
<p>Rationale for recommendation: The project has been delayed due to several reasons: First of all, the project started late. The project was officially approved in 2016, and started in October 2018, after the first two countries had signed the project agreement with FAO. Initially few</p>	

activities were conducted. Secondly, once the project gained some speed in early 2020, the COVID-19 pandemic started and this caused additional delays in the project. The third reason is the restructuring and changes in ministries (in Azerbaijan, Kazakhstan, Kyrgyzstan and Tajikistan) which took time and sometimes slowed down the project, especially in Kyrgyzstan. Additionally, Kazakhstan joined the project only in August 2021. This was in part due to the restructuring within the Ministry of Agriculture and COVID-19, but also because the Ministry of Agriculture decided that since Component 1 of the project is such a significant part of the project, and as the Ministry of Ecology is responsible for these topics in the country, it would be better that the Ministry of Ecology would take over the project responsibility. Also, within FAO several staff changes have taken place which affected the project. And finally, it was mentioned that long hand-over and internal approval processes within FAO, and within some government counterparts, caused some delays in the implementation of activities.

The project is relevant to all stakeholders and in line with GEF, FAO and national priorities. The stakeholders confirmed that achieving the outputs and outcomes of the project is very important. Considering all of the above, the MTR team considers that the project results can be achieved if the project is extended.

Most interviewees suggested an extension of 2 to 2,5 years. It is therefore recommended that the project be extended until in minimum December 2024. However, as Kazakhstan joined the project only in August 2021, it is additionally recommended to start discussions with the government counterparts and stakeholders in Kazakhstan as soon as possible (during the Inception Workshop in April 2022 and the PSC in June 2022) to define how the project could be accelerated (for instance run the inventory in parallel in different regions) and what other possibilities there are for achieving the outputs and outcomes (for instance, developing a follow-up project, setting priorities. etc.).

Sub-recommendations for this recommendation are related to the costs for project management as well as the update of the ProDoc’s Results Matrix:

a) The costs for the project management budget line are almost 49.7% at the mid-term point of the project. If the recommendation to extend the project is followed, the project team should consider this and propose solutions if a budget deficit is foreseen. Some suggestions were provided by FAO on how it can be ensured that project management will remain within the budget limits. For example, some costs can be covered by other projects that have recently become operational.

b) It is recommended to finalise the update of the ProDoc’s outdated Results Matrix as soon as possible and present it at the next PSC. The original Results Matrix was developed in 2013 and although the objectives of the project have not changed, the original indicators were often not SMART and the milestones do not reflect the work that is being conducted in the project today. The timeline of the new Results Matrix needs to be aligned to the extended duration of the project.

Responsibility	PMU, FAO PTF, FAO GEF Coordination Unit
Proposed timeframe	As soon as possible
Cross-references	Findings 1, 3, 4, 5, 9, 11 Conclusion 1, 2, 3

Recommendation 2 (Factors affecting performance, communication)	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.
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Rationale for recommendation: The stakeholders who were interviewed during the MTR showed commitment to the expected results of the project. Most stakeholders are engaged adequately, but some interviewees mentioned there has been a lack of communication. There are several reasons for this. First of all, there have been changes in ministries which at times has complicated and disrupted interaction and engagement. Additionally, also within FAO staff changes have taken place, for instance in Tajikistan and Turkey the National Project Team Leader left and it took time to replace them and start up regular communication with the government counterparts and other stakeholders.

Interviewees conveyed the need for more structured communication with and between project counterparts and stakeholders. It was mentioned that stakeholders were not regularly informed about project progress within activities they were not directly involved in but which were of interest to them. Some stakeholders lack the bigger picture of the project and their role in it. Communication between the stakeholders should be strengthened to bring all involved to a common understanding of the project activities and their specific roles. This will also help build ownership over the project results and better understanding of their contribution to the overall project objectives and outcomes. Some suggestions were made on how to improve communication. For example, besides the PSC and NSC (operational in Azerbaijan), it was proposed to organize working groups in countries where all project stakeholders are invited, and meetings to which specific (international) experts on certain topics are invited who can explain their experiences and give recommendations. Additionally, it was proposed that regular update sheets may be prepared, and to set up an interactive platform so regional experience can be shared.

There have been Inception Workshops (regional and national) and one PSC meeting. The next PSC is planned for June 2022. Respondents sometimes found it difficult to evaluate the work of the PSC, as there has been only one meeting. The PSC is a good platform for project coordination, but its function is less action-oriented, and concentrates on more formal coordination, approval and decision-taking procedures. More structured communication on national level can improve communication between stakeholders and additionally contribute to discussing and resolving practical issues.

Responsibility	PMU, LTO
Proposed timeframe	As soon as possible
Cross-references	Findings 18, 19, 21, 22 Conclusion 5

Recommendation 3 (Factors affecting performance, communication)	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.
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Rationale for recommendation: The project document discusses the importance of communication and awareness raising, and this was also stressed by several interviewees. Component 4 of the project (Project achievements and lessons monitored and widely shared for maximum influence) is planned to strengthen and support the results of the other three components through communicating results and raising knowledge and awareness of the key stakeholders and beneficiaries of the project.

In Turkey, awareness raising was done within the IPM field trials in Isparta. However, until the mid-term point of the project few structured communication and awareness raising activities have been conducted, also as most pilot and demonstration projects as well as safeguarding, disposal and remediation of contaminated sites have yet to be implemented. Recently, a national

technical coordinator was appointed in Turkey who will help to develop a regional communication strategy. It may also be expected that for specific activities, targeted awareness raising and outreach strategies will be prepared. When activities from these strategies are implemented, sensitizing the population should have specific gender focus in line with the draft report “Gender, socio-economic and health dimensions of the use of pesticide and management in Central Asia and Turkey” that has been prepared within the project.

Few publications and knowledge products have been prepared to present the results of the project. Many interviewees observed that visibility needs to be strengthened and results already produced by the project should be distributed to a wider audience, which will also help to raise awareness.

Several FAO guidelines have been translated into Turkish, Russian and Azerbaijani. An assessment of how these publications are used by the stakeholders and whether these communication tools support sustainable project results and increase knowledge and awareness has not been undertaken. The MTR team strongly recommends assessing at a later stage in the project when more publications have been prepared whether these publications contribute to the knowledge and capacity of stakeholders and whether the publications are actively used.

In summary, the MTR team recommends to a) develop and implement a regional communication strategy, as well as targeted awareness raising and outreach strategies on national level; b) to ensure that these strategies consider increasing rural women’s (and children’s) access to knowledge and participation in project activities (with support from a gender expert, see also recommendation 10); c) to assess whether publications and guidelines produced and translated within the project are actively used and increase knowledge and awareness of stakeholders.

Responsibility	PMU, LTO
Proposed timeframe	Regional communication strategy as soon as possible Other strategies when required
Cross-references	Findings 22, 24 Conclusion 6

Recommendation 4 (Sustainability)	FAO to continue 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.
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Rationale for recommendation: The project document emphasises that capacities will be developed during the project in order for project-initiated activities to be continued after the project ends. Many stakeholders mentioned in interviews that it is important that capacity is built and maintained, and FAO also prioritises capacity building initiatives. There are many (pilot, demonstration and trial) activities on for instance IPM and alternatives to chemical pesticides, on contaminated sites and container management, that are either currently implemented or are planned to be implemented. These activities can potentially be replicated or upscaled, as the design of such activities can be improved based on the lessons learned from these pilot activities. However, sustainability of such activities can become difficult if FAO, the government counterparts and relevant stakeholders do not timely discuss responsibilities of replication and upscaling and ownership (including an assessment of financial aspects, institutional sustainability, sustainability of capacities and knowledge management, and environmental sustainability). Therefore, it is recommended that the project team includes aspects related to sustainability and upscaling in the (regional) strategies that are developed (for instance on disposal, and on IMP and alternatives to chemicals) and in the national action plans that will be developed in each country.

Responsibility	PMU, FAO PTF
Proposed timeframe	Within the next two years
Cross-references	Findings 12, 13, 14, 15, 16 Conclusion 4

Recommendation 5 (Environmental and Social Safeguards)	Ensure 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).
<p>Rationale for recommendation: The project has different implementing countries with different pesticide control and waste management regulations as well as different practices in safeguarding, licencing, transportation, transboundary movement and disposal standards. This may cause confusion during the implementation phase of the project. In some cases, an environmentally sound option may not be socially and economically the best-fit option for countries, and less environmentally sound options may be preferred. It is clear that FAO has a standard procedure to check that all project activities are in line with national and international rules and regulations.</p> <p>The MTR has assessed that the project should be careful on potentially conflicting stipulations in legally binding instruments, e.g. national laws and internationally accepted agreements. In order to avoid the unintended consequences of this, it is recommended that the project conducts due diligence processes prior to initiation of major activities such as safeguarding, transportation/transboundary movement and disposal. Additionally, this can also be implemented for remediation works and container management demonstration activities.</p>	
Responsibility	PMU, LTO, FLO
Proposed timeframe	When required
Cross-references	Findings 13, 16 Conclusion 4

Recommendation 6 (Effectiveness)	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.
<p>Rationale for recommendation: The project has different implementing countries with different conditions, and therefore obsolete pesticide inventory studies were conducted separately in coordination with relevant national institutions. In Kazakhstan, the inventory study has not yet started as the country joined the project only in August 2021. Due to this complicated situation, inventory studies were conducted using a silo approach, without interaction between countries including exchange of experiences and lessons learned.</p> <p>However, the determined amount of wastes and number of hotspots in these countries cannot be managed with the existing budget or within the duration of the project. Thus, the collected inventory data should be kept safe in a systematic manner and should be easily accessible in future projects to avoid duplications and loss of information.</p>	

<p>The MTR recommends that the project establishes a database that will collect all inventory data in one place with a unified data collection system.</p> <p>Additionally, as a sub recommendation, the project team should plan the inventory work in Kazakhstan very effectively through considering parallel inventory groups and giving an active coordination role to national partners so that national FAO staff have more dedicated time to keep implementing other activities of the project.</p>	
Responsibility	PMU, LTO
Proposed timeframe	As soon as possible
Cross-references	Finding 5 Conclusion 2

Recommendation 7 (Effectiveness)	FAO to focus on the disposal of 900 tonnes of OPs. 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.
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Rationale for recommendation: One of the project’s ultimate goals is to achieve its Global Environmental Benefit target; disposal of 900 tonnes of POPs pesticides in the project countries. However, this target may not be achieved due to the following reasons:

- POPs destruction technologies that are accepted by the GEF are not available at national level;
- Hazardous waste export (in compliance with Basel Convention rules) for final disposal is not possible due to geographical limitations, also because neighbouring countries do not accept hazardous waste transit, and also for economic reasons in view of the very large volumes;
- There is public opposition in some project countries to thermal destruction technologies.

Due to the above-listed reasons, the project should rely on third parties’ investments/projects that might bring alternative options on the table. However, relying on unrealized third-party investments may risk project achievements. For this reason, it is recommended to establish a coordination group to monitor other projects’ (UNEP, UNIDO) developments.

If the project has the possibility to dispose wastes in certified facilities complying with Basel Convention Technical Guidelines, the first preference should be to focus on disposal of 900 tonnes of obsolete pesticides. But if the first option is not possible due to external reasons, then the project can opt for securing the wastes in licenced storage facilities with UN-approved packaging for future disposal activities after the project ends. In this case, it will be important to obtain a letter of intent for completion of disposal from the government authority.

In the latter option, the project should consider the safeguarding of more than 900 tonnes of obsolete pesticides to achieve value-for-money within the project.

Additionally, as a sub-recommendation, the project should conclude the discussion on conducting a test burn trial in Azerbaijan in order for the disposal target to still be achievable.

Responsibility	PMU, LTO, FLO, PTF
Proposed timeframe	As soon as possible
Cross-references	Findings 4, 13 Conclusion 1, 2

Recommendation 8 (Effectiveness)	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 trials, potentially through promoting commercialization of these technologies in project countries.
<p>Rationale for recommendation: The stockpile inventories showed that there are several hotspots in project countries that contain both buried stockpiles and contaminated soil. Although stockpiles might be eliminated with different POPs destruction technologies, remediation of contaminated soil may be very costly if it is treated the same way. For this reason, long term and cheaper solutions for environmentally sound management of contaminated soils are needed. The project has an important intervention on this matter in close cooperation with the Kyrgyz Manas University that received promising results for in-situ elimination of 19 different types of POPS pesticides with 99% efficiency in six months. However, the research team has just completed first field trials and further trials should be upscaled in order to spread this application over the country and maybe to neighbouring countries. The MTR recommends that the project supports the university on upscaling these trials. A good option for this is going through a commercialization process and providing technical and financial assistance on how to establish partnerships opportunities between Private Sector and Academia.</p>	
Responsibility	PMU, LTO
Proposed timeframe	As soon as possible
Cross-references	Finding 6 Conclusion 2

Recommendation 9 (Effectiveness)	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”.
<p>Rationale for recommendation: The project has developed a container management strategy that covers the situation analysis for the project countries. As the target of the strategy is to increase the collection rate of the pesticide containers for environmentally sound management, the project is planning to conduct demonstration activities in countries. Within Component 3, the project is working on IPM trials and reduction of pesticide use. However, the MTR team observed that the Container Management Strategy is presuming the condition that the amount of pesticide container waste generated in the countries will not change. Therefore it is focusing on how to collect and dispose of the remaining containers. At the same time, during the consultations, it is observed that national counterparts are only considering strategies on how to collect pesticide containers. The MTR has assessed that the project should ensure the life cycle management of pesticide containers from the use stage to final disposal stage. Also, the project should consider waste minimization and focus on how to reduce the generation of the containers in their demonstration projects. In this sense, it is recommended to consider some innovative circular options such as demonstrating pest-control services with “product as a service approach”. The Product as a service approach will prevent uncontrolled dumping and uncontrolled spreading of pesticide containers, as well as decrease the usage of small volume/high number of containers.</p>	

Responsibility	PMU, LTO
Proposed timeframe	As soon as possible
Cross-references	Finding 6 Conclusion 2

Recommendation 10 (Gender)	Ensure that recommendations provided by the MTR gender consultant to increase gender mainstreaming in the project are implemented, 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.
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Rationale for recommendation: The project at design targets women as specific beneficiaries and is in compliance with the relevant FAO and GEF gender policies. The report “Gender, socio-economic and health dimensions of the use of pesticide and management in Central Asia and Turkey” that has been developed in the project provides comprehensive and valuable information on gender and pesticides and enables the project team to design proper actions in the near future.

During project implementation gender aspects were considered in a limited way thus far. There is no specific information about how and in what way the project team plans to engage women and vulnerable group during the project activities.

The gender MTR expert has therefore developed the following recommendations, as also provided in Appendix 9 of the MTR report:

- To increase the effectiveness of the report on “Gender, Socio-Economic and Health Dimensions of the Use of Pesticide and Management in Central Asia and Turkey”, specific field studies should be conducted in the regions identified under component 1 and in Kazakhstan. In addition, additional field work for the targeted farmers under Component 2 and Component 3 is recommended. During the field work, demographic data, agricultural practices (including spraying practices as stated in the ProDoc), women’s needs, access to knowledge and technology, and socio-economic indicators should be investigated based on the project target regions;
- The aforementioned field studies would support gender-disaggregated baseline data under all components. Based on the field studies, it is recommended to identify gender-disaggregated indicators (including as much as possible socio-economic aspects) for the monitoring and evaluation mechanisms;
- It is recommended that the results of gender efforts and gender-disaggregated data should be shared with the governmental bodies through Steering Committee Meetings and strategies/road maps and actions plans to be prepared within the project. Increased awareness of the decision-makers would enable to consider gender concerns in the macro context;
- A Communication Strategy (Communication and Outreach Strategy) covering the activities to be held for the project stakeholders should be prepared as early as possible and include specific outreach channels for the rural communities;
- It is recommended to conduct stakeholder mapping exercises especially ensuring the equal participation of rural women or women representatives of relevant bodies, involvement of women NGOs and/or other relevant institutions. This exercise should be a part of the Communication Strategy (Communication and Outreach Strategy);

<ul style="list-style-type: none"> • A gender action plan should be prepared for the forthcoming project activities and the plan should be synchronized with the Communication Strategy and the M&E timeline. Timing of the action plan is critical and should be prioritized; • A gender expert or a backup mechanism is recommended to ensure overall coordination of gender-related activities, action plan preparation, reporting, provision of gender-disaggregated data, and supporting M&E and communication activities in project countries. The expert is expected to work closely with the communication specialist in designing and implementing communication and outreach activities, and with the M&E expert; • Gender awareness trainings are recommended for the project staff and the sub-contractors working at field level. 	
Responsibility	PMU, LTO
Proposed timeframe	As soon as possible
Cross-references	Finding 24 Conclusion 7 Appendix 9

6. Lessons learned

At the mid-term point of the project there are not yet many lessons learned, as it is too early in the project’s implementation. The MTR prepared the following lessons learned (which are related to the Factors affecting Performance) based on the feedback provided by the interviewees:

Lesson Learned 1	When it can be expected that a project can be influenced by lengthy administrative procedures, and complex organizational structures, it is necessary to plan the timeframe of the project more realistically.
<p>Context: The project was delayed at the start, in part due to the late signature by countries. It was mentioned by some stakeholders that it can usually take some time before a project can start, as countries need to sign and only then project activities can start to be implemented. This means that it can be expected that the start phase of complex and multi country/regional projects can be delayed, and that in the start-up phase only part of the countries can really start to implement activities. A late start can also affect on implementation of activities and changes in priorities and dynamics in the countries. It is necessary to plan the timeframe of the project realistically and allow for a longer start-up phase.</p> <p>Interviewees mentioned that it sometimes takes a long time before reports and assessments are approved, decisions are taken, or work plans developed and initiated. Documents and reports cannot be handed over to government counterparts and this causes delays. These delays can hamper follow up activities, for which these documents should be used as a basis and reference. Long administrative processes have an adverse impact on project implementation and such procedures need to be well-planned and completed in a timely manner.</p>	
Cross-references	Finding 10, 18 Conclusion 2, 5

Lesson Learned 2	It is important to keep executing partners, as well as other stakeholders, updated regularly to make them aware of and keep them engaged in the project.
<p>Context: Stakeholders in the countries (except for Kazakhstan as here the project is just starting) stated that at times they have not been regularly or clearly informed about progress of the project activities. Therefore, more consultations and discussions with the government counterparts and stakeholders could be organized through e.g. National Steering Committee meetings and working groups on national level where all project stakeholders are invited. Communication with and between the stakeholders should be structured and regular, so all stakeholders understand the status of project activities and their specific roles and responsibilities. This will also help to keep stakeholders engaged in the project and improves the stakeholders’ understanding of their contribution to the overall project results.</p> <p>A more systematic approach to communication, and exchange of experiences also has the potential of increasing the visibility of the project.</p>	
Cross-references	Finding 18, 21 Conclusion 5

Lesson Learned 3	Ownership over project results is jeopardised by lack of institutional memory and frequent changes in government structures.
Context:	

Within Azerbaijan, Kyrgyzstan and Tajikistan there have been changes and restructuring in governments. These have affected the efficiency of the project. Especially in Kyrgyzstan, the restructuring has taken a long time and slowed down the project. Due to the changes in the ministries and the changes of staff it has been noted that cooperation and communication within the project had to be (partly) re-started and that institutional memory is affected, as well as understanding of and ownership on project results. Therefore there is sometimes limited understanding among executing partners on how to sustain, replicate and scale up results produced by the project.

Cross-references	Finding 10 Conclusions 3, 5
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7. Appendices

Appendix 1. Terms of reference for the MTR (May 2021)

**Terms of Reference
for the
Mid-Term Review**

**Lifecycle Management of Pesticides and
Disposal of POPs Pesticides in CA
countries and Turkey Project**

**GCP/SEC/011/GFF
GEF ID 5000**

**FOOD AND AGRICULTURE ORGANIZATION OF THE UNITED NATIONS
Sub regional Office for Central Asia**

October 2021

Acronyms and abbreviations

BH	Budget holder
FAO	Food and Agriculture Organization of the United Nations
FLO	Funding Liaison Officer
FPMIS	Field Project Management Information System
FPU	Field Programme Unit
FAO-GEF CU	FAO GEF Coordination Unit
LTO	Lead Technical Officer
LTU	Lead Technical Unit
MoA	Ministry of Agriculture
MTR	Mid-term Review
RPC	Regional Project Coordinator
NSC	National Steering Committee
NTL	National Team Leader
PIR	Project Implementation Report
PSC	Project Steering Committee
PTF	Project Task Force
RM	Mid-term Review Manager
RO	Regional office
SEC	Sub regional Office for Central Asia
SO	FAO Strategic Objective
ToC	Theory of Change
TOR	Terms of Reference

1. Background and context of the project

1. The FAO-GEF sub regional project GCP/SEC/011/GFF “Lifecycle Management of Pesticides and Disposal of POPs Pesticides in Central Asian (CA) countries and Turkey” (GEF Project ID: 5000) is a four-year intervention of the Food and Agriculture Organization of the United Nations (FAO) and the Global Environment Facility (GEF – funded through GEF 5). It is implemented in four countries of Central Asia, Azerbaijan, Kazakhstan, Kyrgyzstan, Tajikistan, and Turkey with a total GEF grant of USD 8,136,986 and a total co-financing commitment of USD 38,300,000. The project aims to address the issues related to obsolete pesticides and pesticides management in the region.
2. Central Asia, which was an important center for agriculture and particularly cotton production during Soviet times, with mandatory pesticide application and over-supply had a large portion of the world’s quantities of obsolete pesticides. Many of the obsolete pesticides had been disposed of in inappropriate burial sites or dumped into industrial landfill sites. In some instances concrete bunkers (called “sarcophagi”), were constructed, but these were not environmentally sound disposal options and showed signs of leakage with contamination of the surrounding environment and associated risk to public health. Sites contaminated by both organized and illegal burials resulted in mass exposure incidents, e.g. people were hospitalized

after consuming contaminated meat from cows, which drank water from the site, and deaths of animals which were poisoned by contaminated water.

3. In 2013, an estimate of 10,900 tonnes of obsolete pesticides including POPs were scattered in 59 districts (Rayons) in Azerbaijan. In Kazakhstan, obsolete pesticides including POPs were located in 14 regions/oblasts. The materials were stored in 18 polygons with an additional 1,010 pesticides stores of which 78 stores were already declared as emergency sites. In Kyrgyzstan, obsolete pesticides including POPs were found in 40 districts. A total of 3 burial sites and 204 stores were identified. In Tajikistan, obsolete pesticides were identified in 68 regions. 68 sites and 2 burial sites were identified. 15,160 tonnes of obsolete stocks were inventoried. In Turkey, in 2007, about 11 tonnes of Dichlorodiphenyltrichloroethane (DDT) were inventoried, repacked, and stored in a pesticide store owned by the Ministry of Agriculture. This stock of DDT was shipped to Germany for incineration in 2008 and 2,100 tons were repacked and stored in Izmit awaiting safe disposal in the country. In summary, at the time of formulation, about 48,500 tons of POPs were inventoried in the project countries.
4. It was estimated that the sum of these inventories represented 20 to 50 % of the total stockpiles in the territory, except in Turkey where the inventory was considered as final.
5. Formulation of the project started in 2013 when several international organizations including WB, UNEP, UNIDO, and other actors in the field had provided assistance to contribute to raising awareness and addressing these issues, mostly on an ad hoc basis and leaving a systematic regional effort to address the POPs and obsolete pesticide issues lacking. Weaknesses in the capacities of responsible institutions and actors to effectively manage pesticides and associated wastes throughout their life-cycle, and gaps in the legal and regulatory framework in the region led to the accumulation of obsolete pesticides stockpiles and contamination of sites. Common and major issues existed in pesticide registration and risk assessment, where regulatory and technical requirements such as the FAO specifications and equivalence were hardly known, and in pesticide labelling and packaging, resulting in extremely poor risk communication to users. Pesticide use surveillance and monitoring were largely absent, and in the cases where issues were detected, there were no mechanisms for regulatory follow up, through de-registration or re-registration mechanisms. At the same time, farmers' knowledge relating to cropping systems (e.g. suitable adapted cultivars for all crops and systems, machinery for sowing and harvesting, balanced fertilization, appropriate irrigation systems) was limited and the use of available information on alternative crop production methods is underutilized.

1.1 Description of project, objectives and components

6. The **GCP/SEC/011/GFF "Lifecycle Management of Pesticides and Disposal of POPs Pesticides in CA countries and Turkey"** project builds on the detailed assessments and priorities identified in the above mentioned projects (need to develop national disposal capacities, national/regional disposal strategies, as well as approaches to deal with the large volumes of POPs-contaminated soils) by building capacity and delivering field activities on pesticide life cycle management as well as addressing POPs contamination problems in a systematic and coordinated way, seeking synergy and regional cooperation on the issue of regional disposal options in particular in order to create long term capacity and eventually allowing all the wastes to be destroyed in an environmentally sound manner.
7. The Project objective is to "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 Turkey”. The Project addresses the key issues through the following components:

- **Component 1: Safeguarding and safe disposal of POPs and other obsolete pesticides and associated wastes posing high risk to public health and the environment** (safe destruction of up to 900 tonnes of POPs and obsolete pesticides and remediate a pesticide-contaminated site). This includes updating national inventories of obsolete pesticides (OP); developing national management strategies of obsolete pesticides, empty pesticide containers and contaminated soils; safeguarding and disposing of obsolete pesticides, including an assessment of national disposal options; assessing and managing contaminated sites; introducing national systems to manage empty pesticide containers; and undertaking risk communication in communities at risk by pesticides wastes;
 - **Component 2: Pesticide life cycle management:** strengthening the institutional and regulatory framework for managing pesticides through their life cycle. This includes a review of the legal framework for pesticides management; strengthening pesticide registration systems; acquire gender-disaggregated data on pesticide spraying practices and Personal Protection Equipment (PPE) use; and promote improved spraying practices;
 - **Component 3: Alternatives to HHP:** increasing the successful uptake of alternatives to chemical pesticides on key crops. This includes an assessment of climate change on the prevalence of pests and diseases; strengthening pest and disease monitoring; and implement Integrated Pest Management (IPM) field trials to quantify the benefits of improved agricultural practices including reduced use of Highly Hazardous Pesticides (HHPs). These three components are supported by a horizontal project management.
 - **Component 4: Monitoring and evaluation:** This component informs project execution decisions and create the necessary conditions for beneficiary knowledge and participation in project activities.
8. Key stakeholders and direct beneficiaries of the project are the **line Ministries of the recipient countries, non-governmental organizations** including Milieukontakt International (MKI), the International HCH and Pesticides Association (IHPA), Green Cross Switzerland (GCCH), Blacksmith Institute (BI) and Pesticide Action Network UK (PAN UK); **local communities** living near rehabilitated obsolete pesticide stores and severely contaminated sites; **farming communities** particularly women and children that work in the farms and vulnerable groups including seasonal workers and their families; **local industries** including pesticide, bio-pesticide, recycling and cement kiln companies and private sector stakeholders relating to all the project activities and pilot projects; **research institutions and universities as well as international organizations and funders** including UNEP Chemicals, UNIDO, the World Bank, European Bank for Reconstruction and Development (EBRD), OSCE, the Secretariats of the Rotterdam, Basel and Stockholm Conventions, and others.
9. The project is expected to deliver significant and immediate *global environmental benefits* through the safe disposal of approximately 900 tonnes of extremely high-risk stocks of POPs and other obsolete pesticides. One highly contaminated site will be remediated. The disposal of POPs and clean-up of contamination sources will reduce releases of hazardous products into the immediate but also global receiving environmental media – air, land and water.

Through demonstrating container management and raising awareness among the general public and the region’s regulators about the risks inherent in re-using containers for domestic

purposes, specifically for storing foodstuff and drinking water, project activities will further reduce the adverse impacts of the release of pesticides to human health and the environment.

Improving pesticide regulations and enhancing capacity to implement them will contribute to wider use of pesticides that are less hazardous both to human health and the environment, improved quality control of pesticides, and to better managed use of hazardous pesticides. Ultimately, all of these outcomes will lead to reduced releases of highly hazardous pesticides into the receiving environment.

In this context the project targets to build the technical capacity for environmentally sound disposal options for POPs and other hazardous wastes in the Central Asian region and safeguard and dispose of 900 tonnes of POPs and other obsolete pesticides; improve national legislations to comply with international standards; improve data requirements for pesticide registration; reduce pesticide application frequency in the recipient countries; increase the capacities of the extension services on pest and disease prevalence; help farmers to apply IPM methods and become familiar with alternative pest control methods; and increase the high level commitment from countries to life-cycle management of pesticides.

10. The Project was endorsed by the GEF CEO in October 2016 and became operational on 15 October 2018, following signature of the project agreement by Turkey (in February 2017), Azerbaijan (in September 2018). Kyrgyzstan and Tajikistan also signed the GCP Agreement in 2019 (in February and May respectively) and joined the project. Finally, Kazakhstan signed the project document in August 2021.
11. FAO is the GEF Implementing Agency (IA) for the project. As the GEF IA, FAO maintains project oversight to ensure that GEF policies and criteria are adhered to and that the project meets its objectives and achieves expected outcomes in an efficient and effective manner.
12. FAO also acts as the Executing Agency for the project. FAO Sub-regional Office for Central Asia (SEC) acts as the Budget Holder (BH) unit, which is responsible for the timely operational, administrative and financial management of the project, under the overall responsibility of the Sub-regional Coordinator.
13. A multi-disciplinary FAO **Project Task Force (PTF)** led by the Budget Holder (BH) was established during the identification phase as an FAO internal mechanism to oversee all stages of the project life-cycle and has been updated and extended at the beginning of the implementation phase. PTF provides technical guidance through the Lead Technical Officer (LTO) to the Project Team for the implementation of the project, contributes to specific project activities as required through technical support and backstopping, and troubleshoots if implementation issues arise. A Senior Technical Advisor (STA) supports the BH in management and coordination of the project in the region as well as day-to-day execution of the project. The **Field Programme Unit (FPU)**, based at the Sub-regional Office for Central Asia, supports the project team handling project operations, budget management and compliance with donor requirements, through an International Field Programme and Operations Specialist and a Programme Associate.
14. The Country Offices in Azerbaijan, Kazakhstan, Kyrgyzstan and Tajikistan also support the BH in project execution through national work plans and field budget authorizations. The **Funding Liaison Officer (FLO)**, located at the FAOGEF Coordination Unit, advises the PTF on alignment with the resource partner requirements. FLO manages resource partners' specific requests for information on projects and liaises with the PTF and FAO Departments accordingly. In each recipient country, the project is led by a **National Team Leader (NTL)** recruited by FAO and acting as near full-time national technical advisor, supporting the project implementation in country and collaborating with the regional team.

15. Project activities in each country are also supported by National Steering Committees (NSC). The level of involvement of NSCs in the implementation process vary among the countries, while some NSC are active, some are not as functional as others.
16. To allow for regional coordination and joint decision making, a Project Steering Committee (PSC) has been established to support the project by monitoring the quality and timeliness of the execution of project activities and delivery of outputs, and propose adjustments as necessary. The PSC consists of higher-level government representatives, who are empowered to make decisions on the budget and implementation of the project. The PSC meets on an annual basis, and guide and oversee implementation of the project.
17. The regional Inception workshop was conducted in February 2019 and the implementation started in Turkey, Azerbaijan, and Kyrgyzstan. Tajikistan joined the project in May 2019. The Year 2020 was a challenging year for the project due to the COVID-19 pandemic that affected the entire globe with a lot of restrictions. In 2021, significant effort was made for engagement of Kazakhstan to the project. The project agreement has been signed in August 2021 and currently preparatory activities are ongoing.

1.2 Project stakeholders and their role

18. The project executing partners of the project are:
 - Azerbaijan: Ministries of Agriculture, Ecology and Natural Resources, Ministry of Emergency Situations, Ministry of Health and Azerbaijan Food Safety Agency (established in 2018);
 - Kazakhstan: Ministry for Ecology, Geology and Natural Resources;
 - Kyrgyzstan: Ministry of Agriculture; Ministry of Natural Resources, Ecology and Technical Supervision; and Ministry of Health (as per latest changes following government reorganization in spring 2021);
 - Tajikistan: State Committee on Environmental Protection in collaboration with the Ministries of Agriculture and Health;
 - Turkey: Ministry of Agriculture and Forestry
19. Following meetings were held at regional, national and local levels during the formulation phase with participation of the representatives of the executing partners and other stakeholders, including Millieucontact International (MKI), The International HCH and Pesticide Association (IHPA), Green Cross Switzerland (GCCH), Black Smith Institute (BI), and Pesticide Action Network UK (PAN UK):
 - Project Preparation Inception Workshop Report on 19-21 February 2014 in Ankara, Turkey;
 - Consultation mission on 8-14 June 2014, in Ankara, Turkey;
 - Consultation mission on 16-22 June 2014, in Dushanbe, Tajikistan;
 - Project Final Review Workshop on 20-24 October 2014 in Antalya, Turkey.

The Project continues to cooperate with many of these organizations as listed in Table 1.

20. Key stakeholders and direct beneficiaries included in the project are:
 - **Line Ministries of the recipient countries:** These national institutions implement activities at the national level, and are coordinated through the Project Steering Committee and STA

to ensure close links with national institutions and government activities via Focal Points from each participating Ministry.

- **Non-governmental organizations:** Key non-government stakeholders include international NGOs and Pesticide Action Network UK (PAN UK). These were all involved in delivering and coordinating different project components in baseline projects and have developed methodologies and approaches that were shared with the project, particularly in communications, community monitoring, contaminated land remediation, and information sharing and advocacy. In addition, MKI and GCCH supported project management and execution in various projects, working through civil society networks in the countries and providing technical assistance, M&E, and project coordination functions.
- **Local communities:** Local communities living near rehabilitated obsolete pesticide stores and severely contaminated sites are obvious beneficiaries from the implementation of Outcome 1 of this project, which will directly target them for communications and risk reduction activities. In addition, due to the persistence of many of the chemicals in the environment, the wider rural and urban populations are also indirect beneficiaries from the removal of materials and containment of pollution.
- **Farming community:** Farming communities are key beneficiaries through reduced risks of exposure to pesticides. Women and children that work in the farms will benefit from reduced exposure to pesticides through adoption of improved pest management practices and general improvements in pesticide management via increased awareness about the risk of pesticides. Vulnerable groups including seasonal workers and their families will be explicitly targeted.
- **Local industry:** Local industries including pesticide, bio-pesticide, recycling and cement kiln companies are all considered to be important stakeholders. Private sector stakeholders relating to all the project activities and pilot projects will be identified and engaged during project implementation.
- **Research institutions/universities:** Research institutes and/or universities will be involved as implementing partners in pilot projects for testing, validating and promoting IPM alternatives through experimental trials and open field days for various stakeholders (e.g. farmers, advisors, researchers etc.).
- **International organizations and funders:** Financing and implementing organizations on obsolete pesticides and pesticide management in the region will be engaged to ensure continuing coordination between initiatives and cost sharing, including: Intergovernmental organizations like UNEP Chemicals, UNIDO, the World Bank, European Bank for Reconstruction and Development (EBRD), OSCE, the Secretariats of the Rotterdam, Basel and Stockholm Conventions, and others.

21. An initial stakeholder analysis are captured in Table 1.

Table 1- Stakeholder analysis matrix

Key stakeholders (disaggregated as appropriate) ¹	What is their role in the project?	What is the reason for their inclusion in or exclusion from the MTR?	Priority for MTR (1-3) ²	How and when should they be involved in the MTR?
Executing Agency- FAO Units				
Field Programme Unit (FPU) of FAO Sub regional Office for Central Asia (SEC) Ms Naoko Sakai Nil Darilmaz	Operating unit of the project;	Get information on project background and implementation status and management procedures	1	In the inception phase and during the MTR
Lead Technical Officer based in Regional Office for Europe and Central Asia, Tania Santivanez	Technical oversight of the project	Get information on project background and implementation status	1	In the inception phase and during the MTR
Funding Liaison Officer (FAOGEF Unit) Hernan Gonzalez	Project oversight as per donor requirements	Get information on project background and implementation status	1	In the inception phase and during the MTR
Plant Production and Protection Division (NSP), Pest and Pesticide Management Team Oxana Perminova	Support LTO in technical oversight of the project	Get information on project background and implementation status	2	In the inception phase and during the MTR
Senior Technical Advisor Stephan Robinson	Day to day execution of the project and supervision of country teams	Get information on implementation status	1	In all phases of the MTR
National Project Team Leaders AZE: Shahin Isayev KAZ: N/N KGZ: Elaman Diusheev TJK: Masuda Saidova + Shahzod Avazov TUR: Birim Mor	Day to day execution of the project at national level	Get information on implementation status	1	In all phases of the MTR
FAO Representatives in the beneficiary countries AZE: Melek Cakmak KAZ: Kairat Nazhmidenov KGZ: Adnan Quereshi TJK: Oleg Guchgeldiyev TUR: Viorel Gutu	Support the operating unit for national activities of the project;	Get information on implementation status and confirm the beneficiaries at local level	1	In the inception and reporting phases
Beneficiary Governments				

¹ the contact details of key stakeholders is given in the Annex 2

² 1 = essential; 2 = desirable; 3 = if time and resources allow

Key stakeholders (disaggregated as appropriate) ¹	What is their role in the project?	What is the reason for their inclusion in or exclusion from the MTR?	Priority for MTR (1-3) ²	How and when should they be involved in the MTR?
Azerbaijan: <ul style="list-style-type: none"> Mr. Jafar Maharramov (Ministry of Agriculture) Mr. Jamal Guliyev (Azerbaijan Food Safety Agency) 	PSC members representing their countries and with voting rights	Project beneficiary	1	Data collection and reporting phases
Kyrgyzstan: <ul style="list-style-type: none"> Kenjebaev Dyikanbai (Agriculture) Bakai Jumakadyr (Environment) 	PSC members representing their countries and with voting rights	Project beneficiary	1	Data collection and reporting phases
Tajikistan <ul style="list-style-type: none"> Abdusalom Juraev (Environment) Nigina Anvari (Agriculture) 	PSC members representing their countries and with voting rights	Project beneficiary	1	Data collection and reporting phases
Turkey: <ul style="list-style-type: none"> Dr. Yunus Bayram (Agriculture) Dr. Nesrin Çakir Arican (Agriculture) 	PSC members representing their countries and with voting rights	Project beneficiary	1	Data collection and reporting phases
Indirect stakeholders				
Holcim Azerbaijan Ali Huseynov	Private Cement Company. Project conducted technical and management assessment of their cement kiln for disposal of POPs pesticides	Technical solution provider	1	Data collection phase
Veolia FS Leith Watson	Waste management company safeguarding store house at Jangi landfill	Technical solution provider	1	Data collection phase
GIZ Tajikistan	Interested in agricultural waste management		2	Data collection phase
Other UN Agencies working in the region (UNEP, UNIDO): Mijke Herzog, Baurzhan Nassimullin (both UNEP) Ana Acuna Dengo (UNIDO)	Cooperation between related GEF projects in POPs management	Seek for possibilities for future cooperation	2	Data collection phase
FSD	Implementing partner	Collaboration partner	2	Data

Key stakeholders (disaggregated as appropriate) ¹	What is their role in the project?	What is the reason for their inclusion in or exclusion from the MTR?	Priority for MTR (1-3) ²	How and when should they be involved in the MTR?
Matt Wilson	of UNEP project	on contaminated soil		collection phase
IHPA John Vijgen	Developed waste road map under 040 project which is used by this project			
PAN UK Sheila Willis	Webinar presentation, worked on health and pesticide issues in 040 project	Collaboration partner on health and social impacts by pesticides	2	Data collection phase
Black Smith Institute (new name: Pure Earth) Petr Sharov	Developed REAs under 040 project and REA Handbook	Collaboration partner on contaminated soil	2	Data collection phase
Project implementing partners and recipients				
Crop Protection Associations in all countries Andrew Ward (CLI)	Project implementing partner	Receive feedback on field activities	1	Data collection phase
Isparta Young Businessmen Association,	Project implementing partner Turkey	Receive feedback on field activities	1	Data collection phase
Isparta Fruit Research Institute,	Project implementing partner Turkey	Receive feedback on field activities	1	Data collection phase
Kyrgyz-Turkish Manas University, Tinatin Doolotkeldieva	Project implementing partner Kyrgyzstan	Receive feedback on field activities	1	Data collection phase
Public Association “Independent Ecological Expertise” Kyrgyzstan, Oleg Pechenyuk	Project implementing partner Kyrgyzstan	Receive feedback on field activities	1	Data collection phase
Kyrgyz National Agrarian University,	Project implementing partner Kyrgyzstan	Receive feedback on field activities	1	Data collection phase
Peshsaf Tajikistan, Umidjon Ulugov	Project implementing partner Tajikistan	Receive feedback on field activities	1	Data collection phase
Agrarian Services Agency (Azerbaijan)	Project implementing partner Azerbaijan	Receive feedback on field activities	1	Data collection phase
Farmers groups in TUR, AZE, KGZ	Various project implementing partners and training recipients	Receive feedback on field activities	1	Data collection phase
FFS in Tajikistan	Project implementing partners and training	Receive feedback on field activities	1	Data collection

Key stakeholders (disaggregated as appropriate) ¹	What is their role in the project?	What is the reason for their inclusion in or exclusion from the MTR?	Priority for MTR (1-3) ²	How and when should they be involved in the MTR?
	recipients			phase

22. The formulation stage considers that the project is aligned with FAO Strategic Objective 2: Increase and improve provision of goods and services from agriculture, forestry and fisheries in a sustainable manner and GEF Strategic Objective CHEM-1 Outcome 1.4 - POPs waste prevented, managed and disposed of, and POPs contaminated sites managed in an environmentally sound manner.

Also the formulation of the project was in line with following regional and national priorities:

- **Regional Priority 1** - Empowering smallholders and family farms for improved rural livelihood and poverty reduction
- **Regional Priority 3** - Sustainable natural resources management under a changing climate.
- **Azerbaijan:**
 - Azerbaijan UNDAF Strategic Priority Area 2: Strengthening Institutional Capacities and Effective Public and Social Services; Strategic Priority Area 3: Improving Environmental Management and Resilience to Hazards and Disasters.
 - CPF (2013-2015): Priority Area 2: Protection and sustainable management of natural resources.
- **Kazakhstan:**
 - CPF (2014-17):
Priority Area 2: Animal health and livestock production, pasture management and phytosanitary
Outcome 3: Phytosanitary system improved and capacity of national institutions to control plant pests and diseases and application of environmentally safe measures enhanced.
Output 3.4: Inventory of obsolete pesticides conducted to arrange their disposal and establish the environment safe for food production.
 - Environmental sustainability as covered in UNDAF.
- **Kyrgyzstan:**
 - UNDAF Outcome 3: By 2022, communities are more resilient to climate and disaster risks and are engaged in sustainable and inclusive natural resource management and risk-informed development.
 - CPF (2018-2022): Priority Area 3: Sustainable natural resource management, and resilience to climate change and disasters.
- **Tajikistan:**
 - UNDAF Outcome 6: People in Tajikistan are more resilient to natural and human-induced disasters and benefit from improved policy and operational frameworks for environmental protection.

- **Turkey:**

- United Nations Development Cooperation Strategy Outcome: 1.3) By 2020, improved implementation of more effective policies and practices for all men and women on sustainable environment, climate change, biodiversity by national, local authorities and stakeholders, including resilience of the system/communities to disasters.

1.3 Theory of change

23. A theory of change has not been developed during the formulation phase because there was no obligation when the project was formulated in 2013.
24. The MTR team should reconstruct a preliminary theory of change after the fact as part of the inception report, based on the project's logframe and review of other project documents. The TOC is expected to be developed and confirmed during the MTR by the evaluation team.

1.4 Implementation progress and main challenges faced to date

25. The FAO-GEF Project Implementation Report (PIR) in June 2021 showed that the overall project implementation progress and progress towards achieving objectives/ outcomes is satisfactory while project achieved satisfactory results under Component 3: Pesticide use and risk reduction through pest monitoring and promotion of alternatives.

Status by outcomes are given below.

26. **Outcome 1 - 900 tons 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**

National obsolete pesticide inventories were finalized in Azerbaijan and Tajikistan, while work is coming to an end in Kyrgyzstan. Inventory data provide important input for further planning on safeguarding, contaminated site remediation, and development of national waste management strategies.

Assessments of disposal options available in the region as well as of possibilities to export wastes to a third country for disposal continued. One national option in Azerbaijan has been investigated in detail against the relevant Basel Convention Technical Guidelines, as the government expressed the importance of a national disposal option in view of the large POPs volumes (> 36'000 MT) to be treated. The plant is deemed technically able to treat POPs waste; is already co-processing other hazardous waste streams; and management and staff are well-organized, trained, and skilled. Azerbaijan has already centralized most of its obsolete pesticides at the Jangi landfill (10'000 MT). The highest-risk part consists of liquid polidofen in highly-corroded metal drums located in an above-ground store house.

To reduce health and environmental risks from the leaking drums until disposal becomes possible, it was decided to jump-start safeguarding. Following an international tender, a safeguarding contract on 217 MT of materials has been concluded. Preparatory activities started, with safeguarding planned for the October - December 2021 period and hopefully the national disposal option becoming permitted soon afterwards.

A baseline assessment on current national systems for management of empty pesticides containers and agricultural plastic wastes was undertaken. Based on the information, a country-by-country work plan has been formulated to start the preparations of CMS pilot projects in later 2021. The pilot projects are to start with the agricultural season 2022.

Data from prior contaminated soil assessments were collected and compiled. Based on the data and the existing FAO guidelines on pesticide contaminated soils management, a project-wide strategy on contaminated soil was developed including a pilot project in each project country demonstrating one aspect of soil remediation. E.g. a trial on bio-remediation of POPs-contaminated soil started in Kyrgyzstan, based on very good laboratory data published by Manas University in January 2021.

A draft project disposal strategy was formulated, providing FAO and the countries a longer-term outlook on how to manage agricultural wastes based on existing possibilities. Work under Outcome 1 is coordinated with the related GEF projects in TJK, KGZ (UNEP, GEF ID 9421) and KAZ (UNIDO, GEF ID 5300).

27. Outcome 2 - Regulatory and institutional framework for pesticide management strengthened in five countries

The legal, institutional and regulatory framework for pesticide life-cycle management was reviewed in Azerbaijan and Kyrgyzstan and compared against the Code of Conduct. Similar work is ongoing in Tajikistan. In a next step, it is planned to develop model legislation for the countries to close any eventual gaps identified. Most evidently, regulations on pesticides container management will have to be developed.

An assessment of the state of pesticide registration system in Tajikistan was conducted to identify the necessary actions needed to redevelop a state registration system. Assessment of gaps in other national pesticide registration systems is ongoing.

A study on gender, socio-economic and health dimensions of pesticide use and management in Central Asia and Turkey was undertaken. The report is currently under final review.

In addition, data on HHP use are collected in Azerbaijan and a study on HHP use in Kyrgyzstan is under preparation. In Turkey, trainings on better spraying practices for farmers and technical staff as well as on setting up a mobile inspection unit to check spraying equipment are under preparation.

Several handbooks and guidelines are under translation/were translated into Russian and Turkish. The materials provide important input for the further development of pesticide registration systems.

28. Outcome 3 - Promotion of Integrated Pest Management (IPM) alternatives to Highly Hazardous Pesticides (HHP) and awareness rising

The project participated in a study with Bonn University on the impact of climate change on the occurrence of pests and diseases in the coming decades. The final report provides valuable information for MoAs on changes in the coming years in pest and disease patterns and how to prepare best for their management. In addition, an assessment of the current state of pest and disease monitoring systems is under preparation.

Work on promoting sustainable agricultural production patterns continued in all project countries in order to reduce pesticide use and the related risk of future accumulation of new amounts of obsolete pesticides. Field trials are to quantify the advantages of IPM vs traditional or organic agriculture and to promote reduced pesticide applications. In the reporting period, IPM application in apple orchards in Turkey showed that IPM could produce better quality apples despite using less pesticides (only three spraying rounds instead of thirteen as in the conventional field). In the trial orchard where pheromone dispensers were applied, all apples remained intact, whereas the damage rate in the conventional orchard was 69 %. The trials are now replicated on a larger scale in commercial apple orchards, with 75,000 pheromone

dispensers distributed to 30 beneficiary farmers and technical support provided throughout the season. In addition, several trainings on IPM and marketing of better food are being held. For example, 200 fruit producers were trained in Ankara as well as a five-day online training of trainers (ToT) was held for 110 extension specialists to discuss the IPM methods for controlling the main plant pests and diseases in the Ankara region. Also, a training of trainers on increasing marketability of low-input apple products was held in Isparta for 40 representatives of local stakeholders. A document was prepared related to the results of the above-mentioned ToT to describe further actions to be done by local stakeholders. Further, a series of FAO guidelines related to IPM, better spraying practices and empty container management was translated for the first time into Turkish. In Azerbaijan, trial plots were established on tomato and cucumber to test and compare IPM vs conventional practices and to promote different techniques to decrease pesticides use. In addition, training courses, guidelines and recommendations on IPM based on the demonstration trials and national needs are under development. Finally, alternatives to the use of HHPs are assessed and promoted. In Kyrgyzstan, comparison trials with five selected crops were conducted. In tomato, pesticide use could be reduced by 45 %, with a harvest yield slightly higher than in conventionally grown tomatoes. In other crops, results are less clear for now. Planned student trainings had to be postponed in 2020 due to COVID-19, but since May 2021 the field trainings with the Kyrgyz Agrarian University can take place. In Tajikistan, work planned for 2020 had to be refocused. COVID-19 showed how dependent Tajikistan is on imported seeds. So instead of the planned IPM trials, work focused on developing a potato seed bank based on IPM methods to enhance national seed autonomy. In 2020, the project contributed with 20 tonnes to the seed bank, while in 2021 an additional 15 tonnes were provided. In 2020, 100 tonnes of new seed potatoes were obtained and if all goes as planned, the seed bank in two years should be able to cover about 1/3 of national potato seed needs. A 30 % reduction of pesticide use in potato trial fields was noted between 2020 and 2021. In addition, equipment for production of bio-pesticides was procured and provided to the relevant National Research Institute.

Also, work is ongoing to establish a baseline in all the countries of pesticides being used in crop production including HHPs.

29. Outcome 4- Project achievements and lessons monitored and widely shared for maximum influence

Activities on project visibility and sharing of lessons learnt continued. The series of English-Russian-Turkish webinars included webinars on POPs disposal options for Central Asia (21 participants), Container Management Systems (170 participants from 34 countries on 5 continents) and on Pest surveillance (116 participants). Various information leaflets, brochures and hand-outs were produced and distributed during various IPM trainings. For a younger audience, a Kids Story Book which shows the impact of indiscriminate use of pesticides was developed in Turkish and English and the FAO Activity Book (also for children) was translated into Azerbaijani and Turkish.

To provide guidance to the FAO country offices and national stakeholders and to ensure a strategic outlook and consistency in the operational work, the project disposal strategy and the project IPM strategy were developed. Various national and regional news pieces are published on a regular base.

The Project Website was developed and will go online in 3Q/2021.

30. Project management

Regular Team Calls to coordinate work are held every second week. Tools for activity and financial management and tracking have been developed. The last regional project steering

committee meeting was held on 26 May 2021 and the preparations for the Mid-term Review are ongoing (MTR planned for the September/October 2021 period).

Progress in generating the project outputs and the action plan for 2022 are provided in the attached Project Implementation Report (PIR) 2021.

Planned delivery for 2021 was USD 2,000,000 and the total delivery as at end-September 2021 was USD 1,709,895. The project delivery is affected by the general slow down by COVID-19, and the technical/political complexity of safeguarding/disposal work and some of the procurement coupled by FAO rigid review and approval processes.

2. MTR purpose and scope

31. According to the GEF requirements, during formulation, the MTR was planned to be carried out when the project reached approximately the halfway point of its implementation period (tentatively October 2020). Due to the COVID-19 situation in all project countries, the MTR was postponed to September 2021. The objective of the MTR is to review progress and effectiveness, relevance, efficiency and sustainability of the project implementation in terms of achieving the project **outcomes** and outputs. The MTR will also identify any possible problems or challenges faced by the project, understand their causes and also understand the project strengths to overcome them. Finally, the MTR will make recommendations for improvement or corrective measures in case of need, to overcome challenges and ensure the expected results are achieved by the end of the project.
32. The MTR will be instrumental to critically review the project’s end-targets and strategic trajectory of the project implementation, and support its fine-tuning to adapt and to address the present priorities and political circumstances in the project countries. This is due to the fact that the Project Document had been developed in 2013, and a large amount of time passed until it was endorsed and became operational in the project countries. Several governmental, institutional and regulatory changes occurred in the meantime in the beneficiary countries. So it would be useful to assess the current relevance of the project and of its strategy.
33. The MTR also aims to identify potential high risks that may hamper the achievement of the project targets; assess progress towards the objectives (outcome and outputs); and, recommend specific strategies to improve the project implementation. The MTR process will be organized virtually due to the COVID-19 related travel restrictions in the project countries: the MTR team (international Team Leader, International Technical MTR Consultant and National Consultants in each beneficiary country), will involve regional and national stakeholders and project partners for the MTR data collection through virtual interviews and online meetings as well as face to face interviews, as long as it is possible in a safe manner. Safety of stakeholders, consultants or FAO staff will be a priority not to put anyone in harm’s way.
34. Findings and recommendations of this MTR will be instrumental for adapting to the current context in the project countries and to update where needed project design in full consultation with PTF and FLO, regional partnership approach and execution strategy for the remaining period of the project.
35. Although the project was endorsed by GEF CEO on October 2016, in fact the project inception period was in October 2018 due to delays in approval of the project by the recipient countries. There are further delays in implementation of the project in Kazakhstan, due to internal political and organizational changes in the key partner ministries. Due to this fact, the MTR team will be requested to review the current project progress and to advise on potential extension of the

project implementation period, considering the donor expectations and available project budget for the amendment period.

Box 1: Main purpose and intended users of the MTR

Purpose		Intended User
<p>Accountability: to respond to the information needs and interests of policy makers and other actors with decision-making</p>	<p>Inform decision making</p> <p>Provide accountability</p>	<p>GEF and other donors</p> <p>FAO GEF CU and FAO management</p> <p>Govt National Partners</p>
<p>Improvement: Project improvement and organisational development provides valuable information for managers or others responsible for the regular project operations</p>	<p>Improve project</p>	<p>Project Management, PMU, PTF, FAO GEF CU, PSC</p>
<p>Enlightenment: In-depth understanding and contextualising the project/program and its practices. Normally caters to the information needs and interest of program staff and sometimes participants</p>	<p>Contribute to knowledge</p>	<p>FAO GEF CU, FAO staff and future developers and implementers</p>

36. The mid-term review aims to assess the status of the Project in terms of its achievements and challenges, while developing corrective actions to ensure that the Project will be on track in achieving its desired results within the remaining period. As such, the MTR process will involve the Project Task Force (including the FAO Country Offices in beneficiary countries), the Project Management Unit, country and technical teams, and main beneficiaries and stakeholders of the project at regional level as well as the national stakeholders. They will also be the main users of the mid-term review report and will specifically benefit from the findings and recommendations on how to further improve the project design to address the current national priorities and development context and the implementation of activities.
37. The *primary intended users* of the project MTR are the stakeholders that will actually use the findings, lessons learned and recommendations of the MTR. This includes the Budget Holder (BH) and designated MTR Manager (RM), Project Senior Technical Advisor (STA) and National Project Managers (PMU), national project counterparts, Project Task Force (PTF) including the Funding Liaison Officer (FLO) and the Lead Technical Officer (LTO), members of the Project Regional and National Steering Committee (PSC), GEF, UNCCD and other stakeholders. The BH/RM, the PMU and the PTF should seek to elaborate the purpose of the MTR in a consultative manner, in collaboration with all primary intended users, including identifying how they intend to use the MTR results. However, it should be noted that the utility of the MTR and related products may vary by stakeholder and the BH/RM and PTF will need to negotiate and reach overall agreement among the primary intended users on the main purpose or purposes of MTR, and its intended use.

38. The MTR will look at the achieved results at output level against the project indicators, identify the challenges and issues and analyze the potentials risks for attaining the target outcomes within the remaining time frame. To support the analysis of results achievement, the processes included and followed by the Project and the procedures that have been established will also be explored. The time frame of the MTR will cover 4 months, from November 2021- February 2022. All the four project components will be included in the MTR.
39. Considering the COVID-19 pandemic related travel restrictions in the project countries, the meetings will be arranged virtually between the project stakeholders, partners, beneficiaries and the MTR team. The MTR Team Leader will participate in the virtual meetings to the extent possible. Interview methods will be used to collect first-hand information and to triangulate with other findings. The secondary information will be collected through documents.

3. MTR objective and key questions

3.1 MTR objectives

40. The main objective of the MTR is to assess the relevance of the project activities and outputs with the current development context, regional and national priorities in the project countries, to review its progress in achieving outcomes, the cost-effectiveness and efficiency, the strategy for stakeholder engagement and regional/national partnerships, the likelihood of sustainability and potential for long-term impact, the high risk factors that affected its performance and delivery to date, to advise on potential extension of the project implementation period, as well as examining cross-cutting dimensions such as gender and equity concerns.
41. The MTR will follow the MTR Guide for FAO-GEF projects and take into account the following GEF evaluation criteria:
 - A. **Relevance:** the extent to which the intervention's design and intended results are consistent with local, national, sub-regional and regional environmental and development priorities and policies and to GEF and FAO strategic priorities and objectives; its complementarity with existing interventions and relevance to project stakeholders and beneficiaries; its suitability to the context of the intervention over time.
 - B. **Effectiveness:** the degree to which the intervention has achieved or expects to achieve results (project outputs, outcomes, objectives and impacts, including Global Environmental Benefits) (GEF, 2019c) taking into account key factors influencing the results, including an assessment of whether sufficient capacity has been built to ensure the delivery of results by the end of project and beyond and the likelihood of mid- and longer-term impacts.
 - C. **Efficiency:** the cost-effectiveness of the project and timeliness of activities; the extent to which the intervention has achieved value for resources by converting inputs (funds, personnel, expertise, equipment, etc.) into results in the timeliest and least costly way compared with alternatives.
 - D. **Sustainability** the (likely) continuation of positive effects from the intervention after it has ended and the potential for scale-up and/or replication; analysis on financial, socio-political, institutional and governance, or environmental risks to sustainability of project results and benefits; any evidence of replication or catalysis of project results.
 - E. **Factors affecting performance – the main factors to be considered are:**

- project design and readiness for implementation (e.g. sufficient partner capacity to begin operations, changes in context between formulation and operational start);
- project execution, including project management (execution modality as well as the involvement of counterparts and different stakeholders);
- project implementation, including supervision by FAO (BH, LTO and FLO), backstopping, and general PTF input;
- financial management and mobilization of expected co-financing;
- project partnerships and stakeholder involvement (including the degree of ownership of project results by stakeholders), political support from government, institutional support from operating partners (such as regional branches of agricultural extension services or forestry authorities);
- communication, public awareness and knowledge management; and
- application of an M&E system, including M&E design, implementation and budget.

F. **Cross-cutting dimensions** – considerations such as gender, indigenous-peoples and minority-group concerns and human rights; the environmental and social safeguards applied to a project require, among other things, a review of the Environmental and Social Safeguards (ESS) risk classification and risk-mitigation provisions identified at the project’s formulation stage.³

3.2 MTR questions

42. MTR questions should be corresponding to one or more GEF evaluation criteria drawing on the draft ToC to be developed by the MTR. In assessing these criteria, the MTR will gather evidence through the use of questions. MTR questions will be based on the project objectives and on the ToC and will be sufficiently broad but at the same time help focus the MTR, telling a comprehensive story by presenting the MTR’s main findings. MTR questions will be agreed upon by the BH/RM and principal stakeholders and refined in consultation with the MTR team during the inception phase.
43. Depending on the size of the MTR, each question can be divided into sub-questions, creating a MTR Matrix⁴. The MTR team will be responsible for developing the evaluation matrix. Example questions for each of the criteria listed above are given in Box 2.

Box 2 – Examples of MTR questions

<p>1.Relevance (rating required)</p>	<p>Are the project outcomes congruent with the GEF focal areas/operational program strategies, FAO Countries or Subregional priorities, countries priorities and beneficiaries need?</p> <p>Has there been any change in the relevance of the project since its design, such as new national policies, plans or programs that affect the relevance of the project objectives and goals? If so, are there any changes that need to be made to the project to make it more relevant?</p>
<p>2. Effectiveness</p>	<p>(Delivery of results) To what extent has the project delivered on its outputs,</p>

³ FAO applies an online screening system during the project design phase. This is mandatory, even if the project was approved before FAO adopted the GEF Policy on Agency Minimum Standards on Environmental and Social Safeguards (GEF, 2011) in February 2015, as FAO had already applied the Environmental Impact Assessment Guidelines in 2011 (FAO, 2012a) to screen and rate the risks of every FAO project. Consequently, the MTR team should review and confirm the ESS assessments and risk status at mid-term and any changes suggested, if needed. The most recent GEF guidance can be found in GEF (2019b). A GEF project should not cause any harm to the environment or to any stakeholder and, where applicable, will take measures to prevent and/or mitigate any adverse effects.

⁴ See Annex X of the MTR Guidance Document for a MTR Matrix template.

<p>Achievement of project results (rating required)</p>	<p>outcomes, and objectives, and what, if any, wider results has the project had at regional and global levels to date? Were there any unintended results? Is there any evidence of environmental stress reduction and environmental status change (reflecting Global Environmental Benefits), or any change in policy/legal/regulatory framework? To what extent can the attainment of results be attributed to the GEF-funded component?</p> <p>(Likelihood of impact) Are there any barriers or other risks that may prevent future progress towards and the eventual achievement of the project's intended longer-term impacts, and what can be done to improve the likely achievement of positive impacts from the project? To what extent may the progress towards long-term impact be attributed to the project?</p>
<p>3.Efficiency (rating required)</p>	<p>To what extent has the project been implemented efficiently, cost-effectively, and management been able to adapt to any changing conditions to improve the efficiency of project implementation?</p> <p>To what extent has the project built on existing agreements, initiatives, data sources, synergies, complementarities with other projects and partnerships, etc., and avoided duplication of similar activities of other groups?</p> <p>Is the project cost-effective? How does the project cost/time versus output/outcomes equation compare to that of similar projects?</p>
<p>4.Sustainability (rating required)</p>	<p>(Sustainability) What is the likelihood that the project results will continue to be useful or will remain after the end of the project? What are the key risks that may affect the sustainability of the project results and benefits (consider financial, socio-economic, institutional and governance, and environmental)?</p> <p>(Replication and catalysis) What project results, lessons and experiences generated by the project have been replicated (experiences are repeated and lessons applied in different geographic areas) or scaled up (experiences are repeated and lessons applied in the same geographic area but on a much larger scale and funded by other sources), or are likely to be in the near future?</p>
<p>5.Factors affecting progress (rating required)</p>	<p>(Project design) Is the project design appropriate for delivering the expected outcomes? Is the project's logic coherent and clear? To what extent are the project's objectives and components, clear, practical and feasible within the time-frame?</p> <p>(Project execution and management) To what extent did the executing agency effectively discharge its role and responsibilities related to the management and administration of the project? What have been the main challenges in relation to the management and administration of the project? How well have risks been identified and managed? What changes are needed to improve delivery in the second half of the project?</p> <p>(Financial management and Co-financing) What have been the challenges related to the financial management of the project? To what extent has the pledged co-financing been delivered, and has there been any additional leveraged co-financing provided since implementation began? How has any short fall in co-financing or materialization of greater than expected co-financing affected project results?</p>

	<p>(Project oversight, implementation role) To what extent has FAO delivered on project identification, concept preparation, appraisal, preparation, approval and start-up, oversight and supervision?</p> <p>(Partnerships and stakeholder engagement) Have other actors, such as civil society, indigenous population or private sector, been sufficiently involved in project design and implementation, and what has been the effect of their involvement/non-involvement on the project results? What are strengths and challenges of the project’s partnerships?</p> <p>(Communication and knowledge management) How effective has the project been in communicating and promoting its key messages and results to partners, stakeholders and a general audience? How can this be improved?</p> <p>(M&E design) Is the M&E plan practical and sufficient?</p> <p>(M&E implementation) Does the M&E system operate as per the M&E plan? Has information been gathered in a systematic manner, using appropriate methodologies? To what extent has information generated by the M&E system during project implementation been used to adapt and improve project planning and execution, achievement of outcomes and ensure sustainability? How can the M&E system be improved?</p>
<p>6. Cross-cutting dimensions</p>	<p>(Gender and minority groups) To what extent were gender considerations taken into account in designing and implementing the project? Has the project been designed and implemented in a manner that ensures gender equitable participation and benefits?</p> <p>(Environmental and social safeguards) To what extent were environmental and social concerns taken into consideration in the design and implementation of the project?</p>

4. Methodology

44. The MTR will adhere to the UNEG Norms & Standards (UNEG, 2016) and align with the FAO–GEF MTR Guide and annexes detailing methodological guidelines and practices. The MTR will adopt a consultative and transparent approach, keeping internal and external stakeholders informed throughout the MTR process. The evidence and information gathered will be triangulated to underpin its validity and analysis and to support its conclusions and recommendations.
45. Taking into account the travel limitations imposed by the COVID-19 pandemic, this MTR will be undertaken remotely to minimize epidemiologic risks. As safety is a key priority, no stakeholders, consultants or project staff will be put in harm's way. In this context, International Team Leader and International Technical Consultant will work remotely from their duty station doing a desk review of project documentation which will be supported by remote semi-structured interviews using communication tools such as email, Skype, Zoom, WhatsApp and other convenient electronic tools. National consultants hired for the MTR will be responsible to conduct interviews face-to-face (where possible and authorized) or by using tools such as phone, Skype, Zoom or other means, following guidelines that are in place locally. The MTR Team Leader and the International Technical Consultant will join the virtual meetings and interviews as agreed or required. To aid the interview process of different stakeholders, the

MTR team will produce a detailed evaluation matrix in which indicators and judgment criteria will be identified in relation to the MTR's main questions.

46. The use of videos, photos, etc. is encouraged and is part of collecting MTR evidence. All collected data (including photos/videos) will be remotely shared with the MTR Team Leader. Where it is technically possible and relevant, the National consultants will organize field video-calls from project sites to help International consultant to observe directly relevant project outputs and activities on the ground. Observations made during these visits accompanied by photos and short videos should be also documented in the MTR reports.
47. The main MTR tools and methods will include the following:
 - A desk-review of existing project documentation and reports (see below the standard list). The MTR team will develop and propose the project's Theory of Change (ToC) after the desk-review. The ToC will outline the multiple linkages between the project objectives, outputs and outcomes to the national goals, and will support the evaluation process.
 - Remote semi-structured interviews with key stakeholders, including representatives of FAO project taskforce members, PSC members, the operational partners, key national and international consultants, important service providers, etc. Alternatively, where stakeholders cannot be interviewed due to restrictions relating to the COVID-19 pandemic, an online questionnaire may be applied. The first draft of the MTR report will be developed based on the desk-review and the interviews and will be shared with FAO and national partners for comments.
 - Field visit – in case the COVID-19 situation allows - to the project sites (will be carried out to verify project implementation and results in the field and to collect feedback from local partners). Face-to-face interviews and meetings will be carried out during the field visits. If the field visits cannot be conducted, virtual visits will be organized with support by the national consultants and the project teams in the countries will provide videos, photographs and other relevant evidence from the field to enable a proper assessment of achievement. Field missions and evidences from the field will be significant inputs for the MTR report.
48. Final decisions about the specific design and methodology for the MTR should emerge from consultations during the inception phase between the RM and MTR Focal point, the MTR consultants and key stakeholders on what is appropriate and feasible in order to meet the MTR's purpose and objectives and answer the MTR's questions.

5. Roles and responsibilities

49. The **Budget Holder (BH)** is accountable for the MTR process and report and is responsible for the initiation, management and finalization of the MTR. An **MTR Manager (RM)** has been designated to act on his behalf.
50. With the assistance of the project's **Lead Technical officer (LTO)** and the **GEF Coordination Unit (FAO-GEF CU) – FLO and MTR focal point and guidance from this document**, the BH/RM is responsible for the drafting and finalization of the ToR. This TOR should be based on document review, discussions with PTF and if possible, a face-to-face meeting with LTO to get a good understanding of the project. The BH/RM is also responsible for the identification of the MTR team members, briefs of the MTR team on the MTR methodology and process, and takes the lead in organizing the MTR virtual missions. The BH/RM review the draft and final MTR reports, along with the **FAO-GEF CU's MTR Focal Point for Quality Assurance purposes**

in terms of presentation, compliance with the ToR and timely delivery, quality, clarity and soundness of evidence provided and of the analysis supporting conclusions and recommendations in the MTR report.

51. The **FAO-GEF CU** will appoint a focal point to provide technical backstopping through the MTR process, including guidance and punctual support to the BH/RM and MTR Team on technical issues related to GEF and the MTR. This can also include support in identifying potential MTR team members⁵, participation in interview panels, and briefing the MTR team on the MTR process, relevant methodology and tools. The GCU also follows up with the BH to ensure the timely preparation of the Management Response.
52. The **RM appointed by the BH** is responsible for initiating the MTR process and supporting the MTR team during its work. The BH and RM are required to participate in meetings with the MTR team, where required, make available information and documentation as necessary, and comment on the ToR and report. Involvement of different members of the PTF will depend on respective roles and participation in the project. The BH is also responsible for leading and coordinating the preparation of the FAO Management Response and the associated Follow-up Report to the MTR, supported in this task by the LTO and other members of the PTF. Further details on the Management Response and the Follow-up Report are provided in the MTR Guidance Document.
53. The **National Team Leaders (NTL)** shall facilitate the participation of Government partners in the MTR process and support the PMU to ensure good communication on the MTR across Government. The Project Steering Committee (PSC) facilitates Government and other partner and stakeholder participation in the MTR process.
54. The **MTR Team** is responsible for further developing and applying the MTR methodology, producing a brief MTR inception report, conducting the MTR, and for producing the MTR report. All team members will participate in briefing and debriefing virtual meetings, discussions, virtual field visits, and will contribute to the MTR with written inputs to both the draft and final versions of the MTR report (the MTR Team Leader has overall responsibility for delivering the MTR report). The MTR team will agree with the GCU MTR focal point on the outline of the report early in the MTR process, based on the template provided in Annex 12 of the MTR Guidance Document. The MTR Team is free to expand the scope, criteria, questions and issues listed above, as well as develop its own MTR tools and framework, within time and resources available and based on discussions with the BH/RM, consults the BH and PTF where necessary. The MTR Team Leader is fully responsible for the MTR report, which may not reflect the views of the Government or of FAO. Although an MTR report is not subject to technical clearance by FAO, the BH/RM and GCU do provide Quality Assurance of all MTR reports.
55. The MTR Team Leader guides and coordinates the MTR Team members in their specific work, **discusses** their findings, conclusions and recommendations and leads on the preparation of the draft and the final report, consolidating the inputs from the team members with his/her own work.
56. **More** detailed guidance on the roles and responsibilities of the key individuals and groups involved with the MTR is given in the main MTR Guide (Annex 2).

5.1 MTR team composition and profile

57. The specific skills, competencies and characteristics needed in the MTR team specific to the

⁵ The BH/RM should be responsible for the administrative procedures related to the ET's recruitment.

MTR and the expected structure and composition of the evaluation team, including roles and responsibilities of the MTR Team members, are set out in the attached ToRs for the individual consultants.

58. The project will involve one MTR Team Leader (an International Evaluation consultant with regional GEF projects experience), one International Technical MTR Consultant and five national MTR consultants (based in Azerbaijan, Kazakhstan, Kyrgyzstan, Tajikistan and Turkey) to support data collection in each of the project country in Central Asia. Due attention will be paid to gender balance in the MTR team during selection process.
59. The MTR consultants should have been independent from the project and from any organizations that have been involved in designing, executing or advising any aspect of the project that is the subject of the MTR.
60. The MTR Team Leader will have the following minimum technical requirements:
 - Relevant experience in evaluation of FAO or GEF projects: A minimum of 5 years of evaluation experience is required, preferably including evaluating large, regional or global programmes and using a Theory of Change approach;
 - A university degree in social sciences, administration, chemistry, environmental sciences, international development or any other relevant area is required, an advanced degree in the same areas is desirable;
 - Working knowledge of English required and working knowledge of Russian and/or Turkish will be an asset.
61. International Technical MTR Consultant will have the following minimum technical requirements:
 - A university degree in chemistry, environmental sciences, international development or other relevant chemicals area is required and an advanced degree in the same areas is desirable
 - Minimum of 10 years of relevant experience and sound understanding on management of hazardous wastes including POPs;
 - Five years of relevant experience in supporting, designing, planning and/or conducting evaluations;
 - Knowledge of FAO and GEF work/procedures, or other UN agencies, would be an asset;
 - Working knowledge of English required and working knowledge of Russian and/or Turkish will be an asset.
62. The national consultant will have the following experience:
 - A university degree in agriculture, chemistry, environmental sciences, international development or other relevant chemicals area is required and an advanced degree in the same areas is desirable;
 - Three years of experience in a relevant technical area and a good understanding of the national and/or local context, as appropriate;
 - Ideally, experience in supporting, designing, planning and/or conducting evaluations;
 - knowledge of FAO and GEF work/procedures, or other UN agencies, would be an asset as would appropriate language skills (English and national language).
63. Both international and national consultants are expected to demonstrate the following

competencies:

- results focus
- teamwork
- excellent communication skills (both written and oral) in English
- building effective relationships
- knowledge sharing and continuous improvement

5.2 MTR products (deliverables)

64. This section describes the key MTR products the MTR team will be accountable for producing. At the minimum, these products should include:

- MTR inception report.** An inception report should be prepared by the MTR team before beginning the fully-fledged data collection exercise that details the MTR Team’s understanding of what is being assessed and why. It serves as a map and reference in planning and conducting a MTR. It also serves as a useful tool for summarizing and visually presenting the MTR design and methodology for discussions with stakeholders. It details the GEF evaluation criteria/questions that the MTR seeks to answer (in the form of a MTR Matrix); data sources and data collection methods; analysis tools or methods appropriate for each data source and data collection method; and the standard or measure by which each question will be evaluated. The inception report should include a proposed schedule of tasks, activities and deliverables, and designate a team member with the lead responsibility for each task or product.
- Draft MTR reports.** The project team, BH/RM, GCU and key stakeholders in the MTR should review the draft MTR report to ensure accuracy and that it meets the required quality criteria through two rounds of review, one internal to the project and FAO (**zero draft**) followed by review by key external partners and stakeholders (**first draft**).
- Final MTR report.** This should include an executive summary and be written in English. Supporting data and analysis should be annexed to the report when considered important to complement the main report. Translations in other languages of the Organization, if required, will be FAO’s responsibility. Further guidance on the development of the MTR report is given in the MTR Guidance Document and annexes.
- A draft two-page summary** of key findings, lessons, recommendations and messages from the MTR report, to be reviewed by the RM and PMU. The summary will be disseminated to the wider public for general information on the project’s results and performance to date. This can be posted as a briefing paper on the project’s website but more creative and innovative multimedia approaches, such as video, photos, sound recordings, social media, short stories (for suitable cases or country studies), infographics or even comic or cartoon format, may be more effective depending on the circumstances.
- Participation in knowledge sharing events, e.g. stakeholder debriefings, if relevant.

6. MTR timeframe

65. This section lists and describes all tasks and deliverables and associated roles and responsibilities of the key MTR individuals and groups, indicating for each the due date or time frame (e.g. briefings, draft report, final report), as well as who is responsible for its completion.

Task	When/ Duration	Responsibility
TOR preparation	3 months before MTR Field mission (virtual)	BH/RM, LTO, FLO, PMU and GCU MTR focal point
ToR finalization	2 months before the MTR field Mission (virtual)	BH/RM
Team identification	2 months before the MTR field mission (virtual)	BH/RM, LTO, FLO and GCU MTR focal point
Team recruitment	1 month before MTR field mission	BH/ PMU
Data collection arrangements and organization of the agenda/travel itinerary in each country for possible field mission of national consultants	1 month before MTR field missions	BH/RM, project team and MTR Team
Reading background documentation	2 weeks before MTR virtual meetings	MTR Team for preparation of the MTR
Briefing of MTR Team	2-3 weeks before MTR virtual meetings	BH/RM, when necessary supported by PTF and FAO-GEF CU
MTR inception Report	2 weeks before the MTR virtual	MTR team
Quality assurance and clearance of the MTR inception report	Before the MTR virtual meetings	BH/RM and the FAO-GEF CU MTR focal point
MTR virtual meetings – confirmation of interviews, meetings and visits (by NCs)	3-4 weeks	MTR Team with support of PMU
Production of first draft for circulation	1 weeks after field data collection/interviews	MTR Team
Circulation and review of first (zero) draft of MTR report	1 week - 10 days for review	BH/RM, PMU, FAO-GEF CU MTR focal point, LTO for comments and quality control (organized by BH/RM)
Production of second draft of MTR report	1 week for the inclusion of feedback	MTR Team
Circulation of second draft of MTR report	1 week to 10 days for review	BH/RM and key external stakeholders (organized by BH/RM)
Production of final MTR report	1 week for the inclusion of final feedback	MTR team
Management Response (MR)	1 month after the Final report is	BH

	issued	
Submission of the MTR report, MR and updated tracking tools to the GEF	After completion of the QA and clearance of the Final report and MR	FAO-GEF CU
Follow-up report in PPR or PIR	6 months after the Management response is issued	BH

66. The data collection in five recipient countries (Azerbaijan, Kazakhstan, Kyrgyzstan, Tajikistan and Turkey) and regional level will be conducted in parallel, if possible during January- February 2022 period. A detailed schedule for the data collection phase will be developed during the inception phase in consultation with the RM and PTF.

Appendix 2. MTR national consultants interview schedules

Azerbaijan:

Date and Time	Name of person(s) and position	Organization
15.02.2022, 15.00 – 16.30	Shahin Isayev, National Team Leader	FAO, Azerbaijan
18.02.2022, 10.00 – 12.00	Jafar Maharramov, deputy director	Ministry of Agriculture, The Agrarian Services Agency
01.03.2022, 08.00 – 10.00	Javidan Guliyev, head of division	Azerbaijan Food Safety Agency
18.02.2022, 14.00 – 16.00	Yashar Karimov, head of division	Ministry of Ecology and Natural Resources
12.03.2022, 10.00 – 12.00	Ali Huseynov, Executive director	Holcim Azerbaijan

Kazakhstan:

Date and Time	Name of person(s) and position	Organization
04.03.2022, 14:00	Ms. Saltanat Bayeshova National Project Team Leader, Kazakhstan	FAO
17.03.2022, 15.00	Assel Kasenova, Head of the Department of State Policy in Waste Management Assel Rakhimova, Chief Expert of the Industrial Waste Department of the Department of State Policy in Waste Management	Ministry of Ecology, Geology and Natural Resources of the Republic of Kazakhstan
15.03.2022, 15:00	Almat Suleimenov, Expert of the State Inspection Committee in the agro-industrial complex Kuanysh Beisengazievich, Expert of the State Inspection Committee in the agro-industrial complex	Ministry of Agriculture of the Republic of Kazakhstan
16.03.2022, 15:00	Anar Sarsenova, Director of Waste Management Department	JSC "Zhasyl Damu"
09.03.2022	Dmitry Kalmykov, Director of Development	"Ecomuseum" NGO
11.03.2022	Nurzhanova Asil Arunovna, Professor, Doctor of Biological Sciences	Institute of Plant Biology and Biotechnology
11.03.2022	Evgeny Klimov, International network coordinator	IFOAM EURO-ASIA IFOAM

Kyrgyzstan:

Date and Time	Name of person(s) and position	Organization
31.01.2022, 13:00	Mr. Elaman Diusheev, National Project Team Leader, Kyrgyzstan	FAO
21.02.2022, 14.00 – 15.30	Tinatin Doolotkeldieva, Head of department	Kyrgyz-Turkish Manas University
21.02.2022, 15.30 – 16.30	Rustam Baltabev, Executive director	Association for Development of Agroindustrial Complex
22.02.2022, 10.00 – 11.30	Abdybek Asanaliev, Head of department	Kyrgyz National Agrarian University
22.02.2022, 14.00 – 15.30	Kenjebaev Dyikanbai, Director	Department of Chemicalization, Plant Protection and Quarantine, Ministry of Agriculture of the Kyrgyz Republic
24.02.2022, 10.00 – 11.30	Mars Amanaliev, Director	Ozone center
25.02.2022, 10.00 – 11.30	Oleg Pechenyuk, Head	Public Association “Independent Ecological Expertise” Kyrgyzstan
25.02.2022, 14.00 – 15.30	Bakai Jumakadyr, Director	Center for State Regulation in the field of Environmental Protection and Ecological Safety, Ministry of Natural Resources, Ecology and Technical Supervision

Tajikistan:

Date and Time	Name of person(s) and position	Organization
08.02.2022, 15.00	Ms. Masuda Saidova, Former National Project Team Leader	FAO
14.02.2022, 14:00	Mr. Nurali Saidov, National Project Team Leader	FAO
01.03.2022, 15:00	Mr. Abdusalim Juraev, Director of State Institutions National Center for the Implementation of the Stockholm Convention on Persistent Organic Pollutants	Committee on Environmental Protection of Tajikistan
09.03.2022, 10:00	Mr. Umedjon Ulughov	Public Organisation ‘Peshsaf’
06.04.2022, 10.00	Mr. Odiljon Homidov, Head	State Institution of the State Commission on Variety Testing and Variety Protection, Ministry of Agriculture of the Republic Tajikistan

Turkey:

Date and Time	Name of person(s) and position	Organization
19.01.2022, 15.00 – 16.00	Cem ERDOĞAN, National Team Leader	FAO, Turkey
24.01.2022, 14.00 – 16.00	Birim MOR, National Technical Consultant in Turkey	FAO, Turkey
27.01.2022, 14.00 – 16.00	Dr. Yunus BAYRAM, Deputy General Manager Dr. Nesrin ÇAKIR ARICAN, Head of Department of Plant Protection Products Osman ARI, Engineer	Ministry of Agriculture and Forestry, Turkey
04.02.2022, 09.30 – 10.30	Özge ÇİÇEK, General Secretary	Association of Ecological Agriculture Organization, Turkey
04.02.2022, 14.00 – 15.00	İsmail KARACA, Full time Professor	Isparta University of Applied Sciences, on behalf of Farmer Groups of Turkey
09.02.2022, 14.00 – 15.00	Ertuğrul Hilmi DOLUNAY, Engineer Ayşe ÇETİN, Engineer	Ankara Provincial Directorate of Ministry of Agriculture and Forestry, Turkey
10.02.2022, 15.00 – 16.00	Şerif ÖZONGUN, Manager Mehmet Sedat SEVİNÇ, Head of Department	Isparta Fruit Research Institute, Turkey
02.03.2022, 13.00 – 13.30	Tahir İNCE, Headman of Village	Eyüpler village, Isparta, on behalf of Farmer Groups

Appendix 3. Stakeholders interviewed during the MTR

	Name	Organization/Position/Role in the project
FAO:		
1	Mr. Viorel Gutu	Budget Holder, Sub-Regional Coordinator for Central Asia/FAOR Turkey
2	Ms. Tania Santivaney	Lead Technical Officer, Agricultural Officer, REU
3	Mr. Hernan Gonzalez	Funding Liaison Officer (FAOGEF Unit)
4	Mr. Stephan Robinson	Senior Technical Advisor of the project
5	Ms. Naoko Sakai	International Field Programme Operations Specialist
6	Ms. Nil Darilmaz	Programme Associate
7	Ms. Oxana Perminova	HQ Technical Officer
8	Mr. Baogen Gu	Senior Agriculture Officer
9	Mr. Hafiz Muminjanov	Agricultural Officer at HQ- LTO during the PPG Phase
10	Mr. Shahin Isayev	National Project Team Leader Azerbaijan
11	Ms. Saltanat Bayeshova	National Project Team Leader, Kazakhstan
12	Mr. Elaman Diusheev	National Project Team Leader, Kyrgyzstan
13	Mr. Nurali Saidov	National Project Team Leader, Tajikistan
14	Mr. Cem Erdogan	National Project Team Leader, Turkey
15	Ms. Birim Mor	National Technical Consultant in Turkey
16	Mr. Kaan Evren Basaran	Programme/Operations Specialist, FAO Azerbaijan
17	Ms. Dinara Rakhmanova	Assistant FAOR (Programme) in Kyrgyzstan
18	Mr. Oleg Guchgeldiyev	FAO Representative in Tajikistan
19	Ms. Aysegul Selisik	Assistant FAOR (Programme) in Turkey
20	Ms. Zhanyl Bozayeva	Programme Officer in FAO Office in Kazakhstan.
21	Ms. Damla Oner	Procurement Associate
Stakeholders Azerbaijan		
22	Mr. Javidan Guliyev	Azerbaijan Food Safety Agency Head of division
23	Mr. Ali Huseynov	Holcim Azerbaijan Executive director
24	Mr. Yashar Karimov	Ministry of Ecology and Natural Resources Head of division
25	Mr. Jafar Maharramov	Ministry of Agriculture, The Agrarian Services Agency Deputy director
Stakeholders Kazakhstan		

	Name	Organization/Position/Role in the project
26	Ms. Nurzhanova Asil Arunovna	Institute of Plant Biology and Biotechnology Professor, Doctor of Biological Sciences
27	Mr. Kuanysh Beisengazievich	Ministry of Agriculture of the Republic of Kazakhstan Expert of the State Inspection Committee in the agro-industrial complex
28	Mr. Dmitry Kalmykov	"Ecomuseum" NGO Director of Development
29	Ms. Assel Kasenova	Ministry of Ecology, Geology and Natural Resources of the Republic of Kazakhstan Head of the Department of State Policy in Waste Management
30	Mr. Evgeny Klimov	IFOAM EURO-ASIA International network coordinator
31	Ms. Assel Rakhimova	Ministry of Ecology, Geology and Natural Resources of the Republic of Kazakhstan Chief Expert of the Industrial Waste Department of the Department of State Policy in Waste Management
32	Ms. Anar Sarsenova	JSC "Zhasyl Damu" Director of Waste Management Department
33	Mr. Almat Suleimenov,	Ministry of Agriculture of the Republic of Kazakhstan Expert of the State Inspection Committee in the agro-industrial complex
Stakeholders Kyrgyzstan		
34	Mr. Mars Amanaliev	Ozone center Director
35	Mr. Abdybek Asanaliev	Kyrgyz National Agrarian University Head of department
36	Mr. Rustam Baltabev	Association for Development of Agro-industrial Complex Executive director
37	Mr. Kenjebaev Dyikanbai	Ministry of Agriculture of the Kyrgyz Republic Director of the Department of Chemicalization, Plant Protection and Quarantine
38	Ms. Tinatin Doolotkeldieva	Kyrgyz-Turkish Manas University Head of department
39	Mr. Bakai Jumakadyr	Ministry of Natural Resources, Ecology and Technical Supervision Director of the Center for State Regulation in the field of Environmental Protection and Ecological Safety
40	Mr. Oleg Pechenyuk	Public Association "Independent Ecological Expertise" Kyrgyzstan Director
Stakeholders Tajikistan		

	Name	Organization/Position/Role in the project
41	Mr. Abdusalim Juraev	Committee on Environmental Protection of Tajikistan Director of State Institutions National Center for the Implementation of the Stockholm Convention on Persistent Organic Pollutants
42	Mr. Odiljon Homidov	Public Organisation 'Peshsaf'
43	Ms. Masuda Saidova	FAO Tajikistan, Former National Project Team Leader
44	Mr. Umedjon Ulughov	Head of the State Institution of the State Commission on Variety Testing and Variety Protection, Ministry of Agriculture of the Republic Tajikistan
Stakeholders Turkey		
45	Mr. Osman Ari	Ministry of Agriculture and Forestry, Turkey Engineer
46	Dr. Yunus Bayram (Mr.)	Ministry of Agriculture and Forestry, Turkey Deputy General Manager
47	Dr. Nesrin Çakir Arican (Ms.)	Ministry of Agriculture and Forestry, Turkey Head of Department of Plant Protection Products
48	Ms. Ayşe Çetin	Ankara Provincial Directorate of Ministry of Agriculture and Forestry, Turkey Engineer
49	Ms. Özge Çiçek	Association of Ecological Agriculture Organization General Secretary
50	Mr. Ertuğrul Hilmi Dolunay	Ankara Provincial Directorate of Ministry of Agriculture and Forestry, Turkey Engineer
51	Mr. Tahir İnce	Eyüpler village, Isparta, on behalf of Farmer Groups Headman of Village
52	Mr. İsmail Karaca	Isparta University of Applied Sciences, on behalf of Farmer Groups of Turkey Full time Professor
53	Mr. Şerif Özongun	Isparta Fruit Research Institute, Turkey Manager
54	Mr. Mehmet Sedat Sevinç	Isparta Fruit Research Institute, Turkey Head of Department
International consultants (IC)		
55	Ms. Zsofia Bossanyi	IC on gender
56	Mr. Russell Cobban	IC on safeguarding, contaminated soil
57	Mr. Alexander Efimkin	IC on CMS
58	Ms. Zsuzsanna Keresztes	IC on IPM
59	Ms. Irina Kireeva	IC on legal assessments
60	Ms. Alejandra Loayza	IC on HHPs

	Name	Organization/Position/Role in the project
61	Mr. Ed Verhamme	IC on co-processing
International organizations/companies		
62	Ms. Ana Acuna Dengo	UNIDO International Project Coordinator
63	Ms. Mijke Hertoghs	UNEP Regional Coordinator for Chemicals, Waste and Air Quality
64	Mr. Baurzhan Nassimullin	UNEP
65	Mr. John Vijgen	International HCH and Pesticides Association Director
66	Mr. Leith Watson	Veolia Commercial Manager
67	Mr. Matt Wilson	FSD Head of Operations
68	Ms. Sheila Willis	PAN UK Head of International Programmes
69	Andrew Ward	CroLife International Director of Stewardship

Appendix 4. MTR matrix (review questions and sub-questions)

Evaluative questions	Indicators	Sources	Methodology
1. Strategic relevance			
<u>Key question:</u> To what extent are the project objectives relevant and suited to the priorities, policies and strategies of the executing and implementing agencies, donors, stakeholders and target groups?			
<u>Sub-questions FAO:</u> - Is the project in line with FAO's mandate and how? - Is the project responding to FAO strategic framework and programme of work, and how (qualitative and quantitative contributions)?	- Degree of alignment with FAO strategic documents	- Project document - PIR progress report - FAO strategy documents - Project staff	- Desk-review of documents - Interviews with FAO staff - Interviews with GEF FAO CU staff
<u>Sub-questions GEF:</u> - Is the project responding to GEF strategic priorities, and how (qualitative and quantitative contributions)?	- Degree of alignment with GEF strategic documents	- Project document - PIR progress report - GEF strategy documents - Project staff	- Desk-review of documents (GEF policies and strategies) - Interviews with FAO staff - Interviews with GEF FAO CU staff
<u>Sub-questions countries/regions:</u> - Is the project responding to the stated environmental concerns and needs of the countries/region?	- Degree of alignment with national and (sub) regional plans, strategies, policies, and agreements	- Project document - PIR progress report - National/ regional strategies and agreements - Project staff - project partners	- Desk-review of documents - Interviews with FAO project team - Interviews with main executing partners
<u>Sub-question synergy with other initiatives:</u> - To what extent did the project, at design and/or mobilization phase, take account of ongoing and/or planned initiatives? - To what extent did the project team make efforts to ensure that the project is complementary to other interventions, and optimize any synergies?	- Degree of potential synergies identified - Absence of duplication of efforts - Potential duplications identified at design stage - Degree of identified complementarities with other projects	- Project document - PIR progress report - Relevant document of other projects - Project staff - Project partners	- Desk-review of documents; - Interviews with FAO project team and other FAO staff - Interviews with other stakeholders
2. Effectiveness – progress towards results			
<u>Key question:</u> To what extent did the project achieve the expected (reconstructed) outputs (and outcomes) at mid-term?			

Evaluative questions	Indicators	Sources	Methodology
<p>Output level</p> <ul style="list-style-type: none"> - Were outputs and milestones delivered on time and as planned according to the mid-term targets? If not, what were the reasons of delay/changes? - What is the quality of these outputs? - Have there been any changes in the planned activities or outputs? If so, what changes, and why? - To what extent do the outputs contribute to their planned outcomes? - What are the main challenges in achieving outputs? - How useful, relevant and appropriate do beneficiaries find the outputs (planned to be) produced by the projects? - Which factors contributed to the achievement of outputs (and/or what were the reasons outputs were not achieved)? - Would these have been achieved without the direct involvement of the GEF FAO project? Why (not)? - How did COVID-19 influence the project? 	<ul style="list-style-type: none"> - Concrete examples of milestones and outputs achieved (and being used by end users) - Involvement of stakeholders in the production/achievement of outputs - Coherence of project design and implementation approach 	<ul style="list-style-type: none"> - Project document - PIR progress report - Project staff - Project partners - Other project documents - GEF tracking tool 	<ul style="list-style-type: none"> - Desk-review of documents - Interviews with FAO project team - Interviews with main executing partners - Interviews with other stakeholders
<p>Outcome level</p> <ul style="list-style-type: none"> - Have any outcomes (as per the reconstructed ToC) already been achieved? - Are these outcomes a result of project intervention? - Would these have been achieved without the direct involvement of FAO? Why? 	<ul style="list-style-type: none"> - Level of achievement of specific activities and outputs - Number of exchanges with stakeholders/beneficiaries and participation in meetings and workshops - Coherence of project design and implementation approach - Number and quality of capacity building activities undertaken within the project. 	<ul style="list-style-type: none"> - PIR progress report - Project staff - Project partners - Project document - Other project documents 	<ul style="list-style-type: none"> - Desk-review of documents - Interviews with FAO project team - Interviews with main executing partners - Interviews with other stakeholders
<p>Impact/longer-term results</p> <ul style="list-style-type: none"> - What is the likelihood of expected positive longer-term impacts to be realized and remain? - To what extent have any possible negative effects/barriers been identified in the project as risks? - What are the barriers that may prevent progress towards and achievement of the longer-term objectives? 	<ul style="list-style-type: none"> - Level of achievement of specific activities and outputs - Coherence of project design and implementation approach 	<ul style="list-style-type: none"> - PIR progress report - Project staff - Project partners - Project document - Other project documents 	<ul style="list-style-type: none"> - Desk-review of documents - Interviews with FAO project team - Interviews with main executing partners - Interviews with other stakeholders

Evaluative questions	Indicators	Sources	Methodology
<ul style="list-style-type: none"> - How successful is the project thus far in playing a catalytic role and/or promoting the scaling up or replication of project results? 			
3. Efficiency			
<p><u>Key question:</u> To what extent and how are cost-effectiveness and timeliness considered during project implementation? How do these factors affect project performance?</p>			
<p><u>Sub-questions:</u></p> <ul style="list-style-type: none"> - Are any cost or time-saving measures put in place to maximise results within the secured budget and agreed project timeframe? - Does the project make use of / build upon pre-existing institutions, agreements and partnerships, data sources, etc. to increase project efficiency? How? - What factors have caused delays (if any) and have affected project execution, costs and effectiveness? How? - Has the project team shown adaptive management to changing circumstances to improve the efficiency of project implementation? - Are events leading to completion of activities/outputs sequenced efficiently? - What is the role of the project's and FAO's superordinate governance structure and management approach on its efficiency? 	<ul style="list-style-type: none"> - Number of project extensions and amendments, and budget adjustments - Number of agreements with partners - Number and quality of measures to mitigate delays - Timeliness of report submission - Coherence of project design and implementation approach - Specific activities conducted 	<ul style="list-style-type: none"> - Project document - PIR progress report - Project staff - Project partners - Project document - Other project documents 	<ul style="list-style-type: none"> - Desk-review of documents, including financial reports and procurement plans - Interviews with FAO project team - Interviews with main executing partners - Interviews with other stakeholders
4. Factors affecting performance			
Project design and readiness			
<ul style="list-style-type: none"> - Is the project design adequate for delivering the expected outcomes within the planned timeframe? - Are appropriate measures taken to either address weaknesses in the project design or respond to changes that took place between project approval, securing of the funds and project mobilisation? Which measures? - What was the nature and quality of engagement with stakeholder groups by the project team during project preparation? 	<ul style="list-style-type: none"> - Number and quality of appropriate measures taken (if necessary) - Quality of partner agreements - Implementation approach 	<ul style="list-style-type: none"> - Project document - PIR progress report - Project staff - Project partners - Other project documents 	<ul style="list-style-type: none"> - Desk-review of documents - Interviews with FAO project team - Interviews with main executing partners - Interviews with other stakeholders

Evaluative questions	Indicators	Sources	Methodology
<ul style="list-style-type: none"> - What process was followed to assess the capacities of implementing partners and develop the partnership agreements? - Were initial staffing and financing arrangements sufficient to drive implementation? 			
Quality of project execution and management arrangements			
<ul style="list-style-type: none"> - Is project management by FAO pro-active and responding timely and adequacy to any issues encountered within the project? - Are the project management arrangements in line with the arrangements defined at project design? If not, what was the reason for this change? - What have been the main challenges and successes in managing the project until now? - What is the nature of communication and collaboration with stakeholders? - How are risks identified and managed? Did this require use of problem-solving and/or project adaptation? How? 	<ul style="list-style-type: none"> - Number of issues complicating sound project implementation solved timely (as opposed to unsolved issues) - (Amount of) evidence of adaptive management being applied - Coherence of project design and implementation approach 	<ul style="list-style-type: none"> - Project document - PIR progress report - Project staff - Project partners - Other project documents 	<ul style="list-style-type: none"> - Desk-review of documents - Interviews with FAO project team - Interviews with main executing partners - interviews with other stakeholders
Project oversight by FAO as the GEF Agency and national partners			
<ul style="list-style-type: none"> - To what extent and how do FAO and partners provide oversight, supervision, and backstopping? - To what extent and how is the Project Steering Committee involved in decision making? - What is the nature of communication and collaboration with stakeholders? 	<ul style="list-style-type: none"> - Implementation approach - Number of exchanges with stakeholders/beneficiaries 	<ul style="list-style-type: none"> - Project document - PIR progress report - Project staff - Project partners - Other project documents 	<ul style="list-style-type: none"> - Desk-review of documents - Interviews with FAO project team - Interviews with main executing partners - Interviews with other stakeholders
Financial management and co-financing			
<ul style="list-style-type: none"> - Is the project implemented in compliance with FAO/GEF financial management standards and procedures? - Is the project's key financial information complete (including co-finance overview)? - Is the actual expenditure report up to date? - To what extent are the project expenditures in line with the corresponding approved budget? - To what extent has the planned co-financing been provided until mid-term? 	<ul style="list-style-type: none"> - Approval of contracting documents, project reports and financial reporting (including co-finance) - Alignment of expenditures during project implementation with approved budget 	<ul style="list-style-type: none"> - Project document - PIR progress report - Financial progress reports - Project staff - Project partners - Other project documents 	<ul style="list-style-type: none"> - Desk-review of documents - Interviews with FAO project team and FAO staff - Interviews with main executing partners - Interviews with other stakeholders

Evaluative questions	Indicators	Sources	Methodology
<ul style="list-style-type: none"> - Has any additional co-finance been leveraged? - What changes, if any, have been made to the projects' budget and why? - Have any financial management challenges been identified, and, if so, how are they being handled? 			
Project partnerships and stakeholder engagement			
<ul style="list-style-type: none"> - Were all important project stakeholders properly identified at project design and duly involved in project design, implementation, and decision-making? - What consultation and communication mechanisms are put in place to ensure an active stakeholder engagement and ownership? Are these effective? - What is the level of support provided to maximize collaboration and coherence between stakeholders? - What measures are taken to ensure inclusion and participation of all defined groups, including gender groups? 	<ul style="list-style-type: none"> - Number of stakeholders identified and actively involved in project implementation - Number of stakeholders satisfied with the stakeholder participation 	<ul style="list-style-type: none"> - Project document - PIR progress report - Project staff - Project partners - Other project documents 	<ul style="list-style-type: none"> - Desk-review of documents - Interviews with FAO project team and FAO staff - Interviews with main executing partners - Interviews with other stakeholders
Communication, visibility, knowledge management and knowledge products			
<ul style="list-style-type: none"> - How is learning and experience sharing communicated between project partners and interested groups? - How effective is the project in communication key messages to stakeholders and beneficiaries? Is this being monitored? - Which (public) awareness activities have been/will still be undertaken during project implementation? - To what extent do they influence attitudes and capacities, or shape behavior among project stakeholders, including local population? How? Is this being monitored? - To what extent are (existing) communication channels and networks used effectively, including meeting the differentiated needs of gendered or marginalized groups? 	<ul style="list-style-type: none"> - Operative communication strategy - Degree of awareness of stakeholders - Number and quality of communication activities implemented 	<ul style="list-style-type: none"> - Project document - PIR progress report - Project staff - Project partners - Other project documents 	<ul style="list-style-type: none"> - Desk-review of documents - Interviews with FAO project team and FAO staff - Interviews with main executing partners - Interviews with other stakeholders
Monitoring and Evaluation (M&E), including M&E design, implementation and budget			
<ul style="list-style-type: none"> - To what extent were the monitoring plans designed to track progress against SMART indicators? - To what extent are the allocated funds adequate for monitoring purposes? - To what extent are the monitoring plans operational? - To what extent does the monitoring system/methodology 	<ul style="list-style-type: none"> - Quality of monitoring plan - Number and quality of monitoring documents - Number and quality of reports delivered in line with reporting requirements 	<ul style="list-style-type: none"> - Project document - PIR progress report - Project staff - Project partners - Other project documents 	<ul style="list-style-type: none"> - Desk-review of documents - Interviews with FAO project team and FAO staff - Interviews with main executing partners - Interviews with other

Evaluative questions	Indicators	Sources	Methodology
facilitate the timely tracking of results and progress towards project objectives? - To what extent is the information, generated by the monitoring methodologies, used to adapt and improve project execution, achievement of outcomes and ensure sustainability? - Were the PIR and progress reports prepared adequately and timely? - To what extent have other FAO and donor reporting requirements been fulfilled? - Does the monitoring methodology/system monitor stakeholder involvement and gender-disaggregated data?	- Number and quality of approved reports		stakeholders
5. Sustainability of project results			
<u>Key question:</u> How do socio-political, financial, institutional and environmental factors affect the probability of project outcomes being maintained and developed after the project ends?			
<u>Sub-questions:</u> - What is the level of ownership, interest and commitment of the main stakeholders? - What is the likelihood that the project achievements will be taken forward by the main stakeholders? - What is the likelihood that capacity development efforts continue? How will increased capacity be sustained? - To what extent are project outcomes dependent on future funding to sustain the benefits they bring? - What efforts are being made to secure funding for future complementary activities? - To what extent are institutional frameworks, policies, and legal and accountability frameworks in place and are they considered robust enough to support the sustainability of project outcomes? - Are there any adverse environmental factors that could hinder the achievement of project outcomes and long-term results? - What are the key risk factors that may affect the sustainability of project results?	- Implementation approach - Development of exit strategies/risk mitigation strategies - Number of follow-up activities already initiated by stakeholders involved in the project	- Project document - PIR progress report - Project staff - Project partners - Other project documents	- Desk-review of documents - Interviews with FAO project team and FAO staff - Interviews with main executing partners - Interviews with other stakeholders

Evaluative questions	Indicators	Sources	Methodology
- Is an exit strategy prepared or is this planned to be done?			
6. Cross cutting issues – equity issues (e.g. gender, youth, vulnerable groups) and environmental and social safeguards (ESS)			
Equity issues (e.g. gender, youth, vulnerable groups)			
<ul style="list-style-type: none"> - To what extent does the project intervention adhere to FAO and GEF policies and strategies for gender and human rights? - Has a gender analysis been undertaken for the project, and, if so, is it used in implementation of project activities? - Have indicators been developed to measure how men and women are impacted by the activities and results? - To what extent does project design, implementation, project structure and monitoring take into consideration: <ul style="list-style-type: none"> * Possible inequalities (especially gender-related) * Specific vulnerabilities of disadvantaged groups (such as women, youth, children) * Responsiveness to gender issues? - Does the project promote gender equality and women’s empowerment? If so, how? 	<ul style="list-style-type: none"> - Number of gender and human rights stakeholders identified and actively involved in project implementation - Number of stakeholders satisfied with the stakeholder participation realized - Evidence that sensitivity in gender has been observed in project design, implementation and monitoring of activities, including gender distribution in participation in project activities and events 	<ul style="list-style-type: none"> - Project document - PIR progress report - Project staff - Project partners - Other project documents - FAO and GEF gender and human rights policies 	<ul style="list-style-type: none"> - Desk-review of documents - Interviews with FAO project team and FAO staff - Interviews with main executing partners - Interviews with other stakeholders
Environmental and social safeguards (ESS)			
<ul style="list-style-type: none"> - To what extent are FAO’s requirements, with respect to environmental and social safeguards, met (through the process of environmental and social screening at project approval stage, risk assessment and management) of potential environmental and social risks and impacts associated with project and programme activities? Has an ESS (and ESMF/ESMP) plan been prepared? - Is the Environmental and Social Risks Form as annexed to the project document monitored? - To what extent are the following activities carried out: <ul style="list-style-type: none"> * Review of risk ratings on a regular basis; * Monitoring of project implementation for possible safeguard issues; * Providing responses to safeguard issues. 	<ul style="list-style-type: none"> - Frequency of review of risk ratings - Number/quality of monitoring reports that include monitoring of safeguard issues - Evidence of adequate responses to safeguard issues 	<ul style="list-style-type: none"> - Project document - PIR progress report - Project staff - Project partners - Other project documents 	<ul style="list-style-type: none"> - Desk-review of documents - Interviews with FAO project team and FAO staff - Interviews with main executing partners - Interviews with other stakeholders

Appendix 5. List of documents consulted (Reference list)

- Project Document “Lifecycle Management of Pesticides and Disposal of POPs Pesticides in Central Asian countries and Turkey”;
- Project Inception Report;
- Report Project Steering Committee (May 2021);
- Five Six-monthly FAO project progress reports (PPR);
- GEF Project Implementation Review (PIR) reports (July 2019 – June 2021, and July 2021 – June 2021);
- Draft updated Result Matrix;
- List of stakeholders;
- List of project sites and site location maps ;
- Project Identification Form (PIF);
- STAP Scientific and Technical screening of the Project Identification Form (PIF);
- Project Review Sheet;
- Co-finance letters from FAO and ministries of the five participating countries;
- Project Environmental and Social Screening (ESS) checklist;
- PowerPoint annual work plan 2022;
- Work Plan 2020 and 2021, with budget;
- Signed project documents for all five participating countries;
- Letter of Agreements with the Agrarian Services Agencies, Association for Development of Agroindustrial Complex, Independent Ecological Expertise, Kyrgyz national Agrarian University, Kyrgyz Turkish Manas University, Ankara Provincial Directorate, Association of Ecological Agriculture, Fruit Research Institute, Isparta Young Businessmen Association;
- Back to Office Reports from FAO staff;
- Minutes of Project Task Force Meetings;
- GEF ID 5000 Tracking Tool;
- Draft Sub-regional strategy for promotion of Integrated Pest Management;
- FAO evaluation guidance documents;
- HHP Identification Azerbaijan (Excel sheet);
- National Implementation Plans for the Stockholm Convention via:
<http://chm.pops.int/Implementation/NationalImplementationPlans>
- *Strategic Vision and Roadmap for Azerbaijan Agriculture*;
- Draft report: *Inventory report obsolete pesticides (OP), Chui, Talas, Naryn, Issyk-Kul, Jalal-Abad, Osh and Batken oblasts, Kyrgyzstan*;
- Zsófia Bossányi, *Gender, Socio-Economic And Health Dimensions Of The Use Of Pesticide And Management In Central Asia And Turkey - The status in the Republic of Azerbaijan, in the Kyrgyz Republic, in the Republic of Tajikistan and in the Republic of Turkey (GCP/SEC/011/GFF)*, FAO Regional Office for Europe and Central Asia (draft);
- FAO and University of Bonn. 2021. *Climate change impacts on 20 major crop pests in Central Asia, the Caucasus and Southeastern Europe*. Ankara, FAO.
<https://doi.org/10.4060/cb5954en>
- Alexander Efimkin. 2021. *Container Management Systems and Agricultural Plastic Waste Assessment Report for Azerbaijan, Kyrgyzstan, Tajikistan and Turkey*.
- FAO Regional Office For Europe and Central Asia, *Regional POPs Wastes Management and Disposal Strategy*.
- *Inventory Report, Current status at sites storing obsolete and prohibited pesticides in the Republic of Azerbaijan*, November 2022.
- Alternate Resource Partners. 2020. *Assessment Report Evaluation of the suitability of the*

- Holcim Azerbaijan cement kiln (Garadagh) for co-processing of obsolete pesticides and related wastes.*
- IHPA. *Improved Pesticides and Chemicals Management Eastern Europe, Caucasus, Central Asia.*
 - Shamil Huseynov, Irina Kireeva. *National Legal Report – Azerbaijan, Analyses of legislation relevant for Pesticides & Waste.* FAO.
 - Oleg Pechenyuk, Irina Kireeva. *Legislation relevant for Pesticides & Waste, National Legal Assessment Report(Kyrgyz Republic).* FAO.
 - MSc. Zsuzsanna Keresztes. 2020. *The status of pest management system, A framework to develop a National Action Plan/Strategy promoting Integrated Pest Management.* FAO.
 - GEF. *GEF5 Focal Area strategies.*
 - FAO. 2021. *Strategic Framework, 2022-31.* Rome.
 - FAO. 2019. *Regional Gender Equality and Action Plan for Europe and Central Asia 2019–2022.* Budapest. 100 pp.

Some of the websites consulted regularly are:

<https://www.thegef.org/>

<http://www.pops.int/>

<https://www.fao.org/>

<https://croplife.org/>

Appendix 6. Results matrix showing achievements at mid-term and MTR observations

The Result Matrix presented here is the original Result Matrix from the ProDoc. It should be noted that this matrix is outdated and most indicators are not SMART. The project team is currently (April 2022) updating the Result Matrix to reflect the present-day situation of the project. The fourth column (Level at PIR (self-reported), June 2021) has been copied from the latest PIR (July 2020 – June 2021).

Project strategy	Indicator	Baseline level	Level at PIR (self-reported) June 2021	Mid-term target	End-of-project target	Mid-term level assessment	Achievement rating (outcomes) and Justification for rating
Component 1: Reduction of releases from POPs and other obsolete pesticides posing high risk to public health and the environment							
Outcome 1.1 900 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	a) Technical capacity available for environmental ly sound disposal options for POPs and other hazardous wastes in the Central Asian region	There is currently no environmentally sound option for disposing of POPs wastes, as there are no internationally acceptable facilities and export is prohibited in the three of the project countries (KAZ, KYR and TAJ). A PPG feasibility study in all 5 countries indicates cement kilns could be technically possible, if export continues to be prohibited. A follow up investigation of KYR facilities is underway (GCP/RER/040/EC). There are also other projects in the region (active and proposed) that aim to pilot SCWO, build new HTI and upgrade	- The draft Disposal Strategy was developed, providing a guideline to project countries and FAO country offices on the sustainable management and disposal of obsolete pesticides, empty containers and contaminated soils; - AZE: Azerbaijan government clearly expressed that it wants a national disposal option as in view of the large amounts to be disposed of an export option is not economic, besides that it does not create sustainability for disposal of annual arisings of wastes. A national disposal option was technically assessed against relevant Basel Convention Technical Guidelines and national legislation. The facility is deemed technically able to treat POPs waste; is already co-processing other hazardous waste streams; and management and staff are well-organised, trained, skilled. Results were presented to AZE government. In a next step, a performance test needs to be undertaken, based on the results the AZE government can then issue an operations license; - AZE: As a backup plan to the case a national options fails, Iran’s Basel Convention FP was repeatedly contacted re transit of POPs wastes to a third country for disposal, but no answer has been received to date. The other neighbouring countries do not allow transit of wastes;	Year 1: Follow up investigation on the feasibility of POPs pesticides disposal in AZE, TJK and TUR completed Political advocacy on lifting of export ban organized Year 2: Disposal strategy (new technology in the region or export) agreed	Year 3: Test destruction in new regional facility completed		<u>Moderately Satisfactory:</u> Important preparatory activities to reach this outcome have been taken. For example, inventories have been conducted in Azerbaijan, Kyrgyzstan and Tajikistan and assessments on container management systems in the countries have been developed. Also, a successful bioremediation trial was set up in Kyrgyzstan. Safeguarding of 217 tonnes of obsolete pesticides is planned to be conducted in Azerbaijan in April/May 2022. There are however still important issues to resolve regarding disposal options in Kazakhstan, Kyrgyzstan and Tajikistan, and a decision on a test burn in Azerbaijan needs to be taken and the test burn conducted. Capacities are planned to be built during the safeguarding, disposal, contaminated sites,

Project strategy	Indicator	Baseline level	Level at PIR (self-reported) June 2021	Mid-term target	End-of-project target	Mid-term level assessment	Achievement rating (outcomes) and Justification for rating
		existing HTI	<p>- KGZ, TJK: Assessments of national disposal options need to be set within the frame of wider national waste management strategies. Those are widely absent, and physical meetings are needed to initiate the process due to the sensitivity around various topics (concerns re. high-temperature treatment, health and environmental impacts, transport, long-term storage, regulation, enforcement), but travel is currently not possible because of COVID-19. Work is coordinated in both countries with UNEP SCWO project (GEF ID 9421);</p> <p>- KGZ: A national dialogue is needed to define publicly acceptable disposal options. Without a societal consensus there is a high risk that development of waste management infrastructure fails due to protests (see e.g. aborted WB high-temperature incinerator project in Kazakhstan);</p> <p>- TJK: Two national disposal options are shortlisted for further assessment of compliance with Basel Convention Technical Guidelines;</p> <p>KGZ, TJK: Options for transit assessed. Only options, though with a very low chance to be realisable, are to China or through Uzbekistan-Turkmenistan further to Europe. Way forward to be discussed with governments.</p>				<p>container management and other activities.</p>
	b) 900 tonnes of POPs and other obsolete pesticides safeguarded and disposed of		<p>- AZE: Inventory update finished and results shared with government (350 MT of obsolete pesticides; buried amount of 98 MT; 10'000 MT at Jangi landfill; 26'000 MT of contaminated soil).</p> <p>- AZE: Safeguarding tender for 217 MT of liquid POPs pesticides at Jangi landfill finished, safeguarding contract signed on 8 June 2021. Preparatory activities started, field mobilisation expected August 2021.</p> <p>- KGZ: Inventory update in progress. Initial data show substantial issues with non-secured obsolete pesticides and hitherto unknown landfills;</p>	<p>Year 1: National inventories updated and validated in AZE, KAZ, and TJK</p> <p>Year 2: Risk reduction and disposal strategies for obsolete stocks adopted in AZE,</p>	<p>Year 3: Inventoried stocks safeguarded in AZE, KGZ, and TJK (if disposal options in KGZ and TJK available).</p> <p>Start of disposal in AZE (KGZ and TJK)</p>		

Project strategy	Indicator	Baseline level	Level at PIR (self-reported) June 2021	Mid-term target	End-of-project target	Mid-term level assessment	Achievement rating (outcomes) and Justification for rating
			<p>- TJK: Inventory update finished (55 sites). This work adds to data established under earlier projects, thereby providing a first national inventory. Very few sites left needing safeguarding (total around 1 MT), however, almost 200 mini-landfills located in communities and providing direct health and environmental exposure need urgent remediation;</p> <p>- Development of a first national obsolete pesticides inventory shall be started in KAZ as soon country has accessed the project;</p> <p>- AZE, KGZ, TJK, TUR: Baseline of current management systems for empty pesticide containers established (annually generated plastic volumes range from 20 - 3'000 MT; various potential recycling and disposal facilities exist; CMS is not covered by existing legal frameworks; some countries have up to 50 percent of illicit pesticides being traded). Work plan for introducing CMS in each country in 2H/2021 developed;</p> <p>- Regional strategy for remediating contaminated soil sites developed based on available data from prior projects (TUR: No baseline data available on locations and volumes of contaminated soil; AZE: has substantial volumes of contaminated soils. TJK; main issue is the approx. 200 mini-landfills; KGZ: has limited number of sites, information needs update). Seminar on FAO contaminated soil management cycle organised jointly with UNDP Turkey. Planned activities in each country being discussed with governments; KGZ: Field trials of bio-remediation of POPs contaminated soil started based on prior, highly successful lab results by Manas University.</p>	KAZ and TJK and start of implementation	Year 4: Disposal of min. 900 MT completed in AZE (KGZ and TJK)		
	c) % of populations engaging in high-risk behaviours	Communication strategies in KGZ have identified exposure routes from stockpile sites in communities	• AZE, KGZ, TJK: Preparatory work done, implementation to start in parallel to field work starting later in the year.	Year 1: KAP survey to describe behaviours and	Year 4: KAP survey indicates declines of 30-50 % in high-		

Project strategy	Indicator	Baseline level	Level at PIR (self-reported) June 2021	Mid-term target	End-of-project target	Mid-term level assessment	Achievement rating (outcomes) and Justification for rating
	that expose them to sources of obsolete pesticides	through children’s behaviours and illegal excavation of products. Similar and other exposure routes have not been formally documented or quantified in any country.		set baseline % of respondents Year 2-3: Communication activities designed and implemented in 3 countries	risk behaviours compared to 1st KAP.		
<u>Output 1.1:</u> National Inventory of obsolete pesticides and associated wastes finalized in 3 countries	1. Tonnes of identified stocks entered and validated in PSMS	Current PSMS data based on PPG/ GCP/RER/040/EC: GCP/RER/035/TUR: AZE 10.354 tonnes South KAZ Oblast 0,5. tonnes KYR 333 tonnes TAJ 1.239 tonnes TUR 2.235 tonnes Estimates - not identified and need analysing Inventory training done in KAZ during PPG	- National inventory updates finalised in AZE and TJK - KGZ inventory update started - Preparatory work for KAZ first national inventory started	Year 1: Sampling and analysis of inventoried stocks and update of PSMS for AZE, KYR and TA Year 2: National inventory in Kazakhstan completed			
<u>Output 1.2:</u> Risk reduction and disposal strategy for sound management of obsolete and POPs pesticides completed	2. Number of EAs and EMPs adopted 3. Disposal capacity	3 Environmental Assessments and Management Plans drafted for AZE, KYR and TAJ. A PPG Feasibility Study (5 countries) identifies cement manufacturing capacity which could be modified to dispose of obsolete pesticides. A second phase study	- Regional disposal strategy developed - National disposal option in AZE assessed and deemed able to treat POPs wastes, needs now to undergo performance test against criteria established by the Basel Convention Technical Guideline and national legislation - Export options investigated	Year 1: EAs and EMPs updated for 3 countries Assessment of feasibility of new technology for ESM in AZE, TAJ and TUR Advocacy for transboundary	Year 3: 4 EAs and 4 EMPs adopted		

Project strategy	Indicator	Baseline level	Level at PIR (self-reported) June 2021	Mid-term target	End-of-project target	Mid-term level assessment	Achievement rating (outcomes) and Justification for rating
		for KYR is underway (FAO EC project)		movements/ export Year 2: 3 EA and EMPs adopted 1 (KAZ) drafted			
<u>Output 1.3:</u> 900 metric tonnes of obsolete and POPs pesticides are safeguarded and disposed in AZE and KYR and TAJ	4. Tonnes of wastes a) safeguarded and b) destroyed	Central store renovation and repackaging of 150 tonnes of obsolete and POPs pesticides in KYR (UNEP DDT project)	AZE: Safeguarding tender for 217 MT of liquid POPs pesticides finished, safeguarding contract signed on 8 June 2021. Preparatory activities started, field mobilisation expected August 2021.	Year 2: 60t DDT safeguarded in KYR by UNEP DDT project	Year 3: Tender(s) for waste disposal and safeguarding services 900 tonnes safeguarded in AZE/KYR / TAJ Year 4: 900 tonnes destroyed from AZE (plus KYR and TAJ if disposal is possible)		
<u>Output 1.4:</u> Risk associated with one critical contaminated site in one country is reduced	5. Rapid Environmental Assessment score for the site has reduced	IHPA has estimated that there are 400 000 tonnes of contaminated soils in AZE, KAZ, KYR and TAJ	- Regional strategy for remediating contaminated soil sites developed - Activities planned in each country being discussed with governments and implementation initiated - Bio-remediation trials on POPs contaminated soil in KGZ started	Year 1: Selection of one critical contaminated site in one country Year 2: Tender for risk reduction on 1	Year 3: Risk reduction measures at one critical contaminated site in one Country implemented		

Project strategy	Indicator	Baseline level	Level at PIR (self-reported) June 2021	Mid-term target	End-of-project target	Mid-term level assessment	Achievement rating (outcomes) and Justification for rating
				critical contaminated site Contractor for risk reduction measures selected			
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) practicing triple rinsing	Triple rinsing is not practised in the region	- Baseline of current management systems for empty pesticide containers established - Work plan for introducing CMS in each country in 2H/2021 developed	Year 1: Container management review carried out in in AZE Year 2: Identification of commonalities for all countries and development of regional strategy for container management	Year 4: Completion of container management pilot in AZE		
	7. Number of containers collected in AZE	No collection system in place Baseline to be gathered during inception		Year 1: Targets to be set during inception Year 2: Start of pilot implementation of strategy for container management in AZE			

Project strategy	Indicator	Baseline level	Level at PIR (self-reported) June 2021	Mid-term target	End-of-project target	Mid-term level assessment	Achievement rating (outcomes) and Justification for rating
<u>Output 1.6:</u> High risk behaviours by exposed populations are quantified and reduced	8. Proportion of high risk populations practicing high risk behaviours which expose them to obsolete pesticides	Anecdotal evidence and media reports of major exposure incidents, but no systematic description of high risk populations or behaviours Good networks of national NGOs in 040 project	AZE, KGZ, TJK: Preparatory work done, implementation to start once related field works start later in the year	Year 1: Training for national NGOs on KAP, Identification of likely exposure routes, and KAP done in 15 villages per country Year 2: Communication Strategy developed and rolled out in KGZ, TAJ, AZE	Year 3: As Year 2 Year 4: KAP survey in same 45 Villages 50% reduction in respondents reporting Behaviour (e.g. children playing, taking products, etc.)		
Component 2: Strengthening the legal, institutional and regulatory framework for of pesticide life cycle management							
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 Azerbaijan and Tajikistan (EC project) and Kyrgyz Republic (FTPP) have identified specific gaps in the existing laws, and recommend development of secondary legislation	- AZE, KGZ: Legal review finalised and cleared by FAOLEG; - TJK: Legal review under elaboration; - Regional synthesis report drafted.	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		<u>Moderately Satisfactory:</u> First essential steps have been taken to achieve this outcome by developing baseline assessments and reports. Concrete steps to revise/strengthen the legal framework and institutional capacity have yet to be taken. Legal assessments on pesticide management were prepared for Azerbaijan, Kyrgyzstan and Tajikistan. Additionally, a report on the status of "Gender, Socio-Economic and Health

Project strategy	Indicator	Baseline level	Level at PIR (self-reported) June 2021	Mid-term target	End-of-project target	Mid-term level assessment	Achievement rating (outcomes) and Justification for rating
	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	<ul style="list-style-type: none"> • Regional report on spraying practices, PPE use, gender differences, and the socio-economic and health dimensions of pesticide use and management in Central Asia and Turkey drafted and in final review. The report forms the basis for defining follow-on steps in the frame of the project; - Information collection on eventual HHP use ongoing in AZE and under preparation in KGZ; - TJK: Initial review of pesticide registration system done. Work plan to re-develop national registration system to be developed; - Assessment of gaps in other national pesticide registration systems ongoing; - Several handbooks and guidelines under translation/translated into Russian and Turkish: <ul style="list-style-type: none"> ◦ FAO guidelines on pesticides management; ◦ The International Code of Conduct on Pesticide Management; ◦ Guidelines on Prevention and Management of Pesticide Resistance; ◦ Guidance on Pest and Pesticide Management Policy Development, ◦ Guidelines for Personal Protection when Handling and Applying Pesticides; ◦ Guidelines on Highly Hazardous Pesticides; ◦ FAO guidelines on agro-ecology; ◦ Agroecology in Europe and Central Asia: an overview; ◦ Activity book: Healthy Plants, Healthy Planet; ◦ Pesticide registration toolkit; ◦ IPM strategy. 	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		Dimensions of the Use of Pesticide and Management in Central Asia and Turkey” has been drafted in 2021. Finally, an assessment of Highly Hazardous Pesticides (HHPs) included in the list of registered pesticides started at the end of 2021. The consultant involved finalised the list of identified HHPs for Azerbaijan and Kazakhstan, and is working on the list for Turkey.

Project strategy	Indicator	Baseline level	Level at PIR (self-reported) June 2021	Mid-term target	End-of-project target	Mid-term level assessment	Achievement rating (outcomes) and Justification for rating
<u>Output 2.1:</u> Revised legal frameworks in line with the Code of Conduct developed	9. Number of identified nonconformances between national legislation and Code	Azerbaijan legal assessment: 5 Tajikistan legal assessment: 8 Kyrgyz Republic: 5	- AZE, KGZ: Legal review finalised and cleared by FAOLEG - TJK: Legal review under elaboration; - Regional synthesis report drafted	Year 2: 2 drafts of revised legislation for national consultation (AZE, TAJ)	Year 3: 3rd national consultation 2 drafts submitted to governments Year 4: 3 drafts submitted to parliament		
<u>Output 2.2:</u> 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 regulations in Tajikistan, Turkey, and Kazakhstan	Turkey: no Operator exposure assessment Kazakhstan: As above, no pesticide specifications Tajikistan: As above, outdated list of registered products; no labelling or packaging requirements	- TJK: Initial review of pesticide registration system done - Assessment of gaps in other national pesticide registration systems ongoing - Information collection on eventual HHP use ongoing in AZE and under preparation in KGZ - Translation of FAO guidelines into Turkish and Russian as base for the further development of pesticide registration systems	Year 1: Operator exposure training in Turkey & Tajikistan Training on metoo products in Tajikistan Year 2: Packaging and labelling training (TAJ) Draft of registration regulation requires exposure assessment (TUR) Specification training (KAZ)	Year 3: List of registered products in Tajikistan updated and published 5 operator exposure assessments for hazardous products in Tajik conditions Year 4: 10 assessments in Tajikistan All new AI dossiers contain operator exposure		

Project strategy	Indicator	Baseline level	Level at PIR (self-reported) June 2021	Mid-term target	End-of-project target	Mid-term level assessment	Achievement rating (outcomes) and Justification for rating
					assessment and PPE (TUR) Registration requires pesticide specification (KAZ)		
<p><u>Output 2.3:</u> Field data on PPE and spray operations is used to provide advice to farmers</p>	<p>11.Current and best case operator exposures quantified</p>	<p>Extension services do not cover detailed spray operations (e.g. nozzles for drift reduction, targeted spray)</p>	<p>- Regional report on spraying practices, PPE use, gender differences, and the socio-economic and health dimensions of pesticide use and management in Central Asia and Turkey drafted and in final review</p>	<p>Year 1: Identify critical crops Field surveys of current spraying operations</p> <p>Year 2: Comparison of predicted (output 2.2) and actual exposures Best practices proposed</p>			
	<p>12.Dissemination of results to extension advisors & farmers including # of publications/ events</p>	<p>Province-level directorates of agriculture annual events</p>		<p>Targets to be set in inception</p>			

Project strategy	Indicator	Baseline level	Level at PIR (self-reported) June 2021	Mid-term target	End-of-project target	Mid-term level assessment	Achievement rating (outcomes) and Justification for rating
Component 3: Pesticide use and risk reduction through pest monitoring and promotion of alternatives							
Outcome 3: Farmers will use IPM alternatives to Highly Hazardous Pesticides (HHP), and reduce pesticide application frequencies	a) Reduction in pesticide application frequency in four countries	Conventional pesticide applications do not consider pest pressures Alternatives are not widely known so the only option considered is often pesticides	- Initial results: KGZ: In tomato, pesticide use could be reduced by 45 %, with a harvest yield slightly higher than in conventionally grown tomatoes. In other crops, results are less clear for now. TJK: 30 % reduction of pesticide use in potato trial fields between 2020 and 2021. TUR: Initial results in Isparta show a decrease by 70 % in pesticide use in codling moth control with pheromone traps along with increasing yield. Results for AZE will become available at the end of field season 2021.	Year 1: Data collected on conventional pesticide application rates Year 2 - 3: Monitoring of pesticide use in target sites in all countries	Year 4: 20 % reduction in pesticide application compared to conventional approach; reported to policy makers		<u>Moderately Satisfactory:</u> IPM trials have been implemented successfully in Kyrgyzstan and Turkey. In Azerbaijan it has been decided (after one year of IPM field work) to first focus on capacity building and understanding of IPM principles. In Tajikistan no IPM trials have been implemented, for this country it was decided to focus the work on developing a potato seed bank based on IPM methods to enhance national seed autonomy. The results of this work are not well documented, therefore the benefits are not fully clear.
	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 advice for treatments. The availability of advice to farmers is rather low in most countries	- Study on impact of climate change on occurrence of pests and diseases finalised; - Webinar on pest surveillance held (116 participants); - Assessment of the state of pest and disease monitoring systems in the region under preparation.	Year 2: National training of at least 10 extension agents per country	Year 3 - 4: pest monitoring data entered in forecasting models and extension advice provided to farmers		
	c) Farmers applying IPM methods and familiar with alternative pest control methods	TCP project data on farmer practices in preparation The use of IPM alternatives to conventional pesticides by farmers is limited or not practiced in all countries.	- Guideline on developing national IPM action plans developed. Information collection is ongoing to develop the various national action plans to introduce and promote IPM; - IPM trials are ongoing in all countries in collaboration with government bodies and research institutes. The trials compare results from IPM vs. organic and conventional agriculture (yields, amount of pesticide use, marketability, economics); ensure mainstreaming of IPM activities into governmental strategies; and aim at sustainability of work beyond project lifetime;	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		

Project strategy	Indicator	Baseline level	Level at PIR (self-reported) June 2021	Mid-term target	End-of-project target	Mid-term level assessment	Achievement rating (outcomes) and Justification for rating
			<p>- AZE: Trial plots were established for tomatoes and cucumbers; training courses, guidelines and recommendations on IPM based on demonstration trials and national needs are under development; alternatives to the use of HHPs are assessed and promoted;</p> <p>- KGZ: Comparison trials with five selected crops were conducted in 2020 and 2021. Students field trainings had to be cancelled in 2020 due to COVID-19, but started now in 2021;</p> <p>- TJK: Potato seed banks applying IPM approach were established to support national seed autonomy and to enhance food security during the global pandemic interrupting international trade networks. Equipment for production of bio-pesticides to substitute chemical pesticides procured and provided to relevant National Research Institute;</p> <p>- TUR: IPM trials in fruit production undertaken in Isparta for comparison of IPM to conventional practices and in Ankara for IPM promotion among producers. Initial results in Isparta show a decrease by 70 % in pesticide use in codling moth control along with increasing yield. Also, production costs in IPM are promisingly lower than in conventional practices. 200 fruit producers participated in an outdoor training/visit programme. A five-day online training of trainers was held for 110 extension specialists to discuss IPM methods for controlling the main plant pests and diseases in Ankara. In April 2021, 75'000 pheromone dispensers were distributed to 30 beneficiary farmers in Isparta. They are being supported technically in terms of IPM implementations in their orchards. In June 2021, a training of trainers on increasing marketability of low-input apple product was held in Isparta for 40 representatives of local stakeholders.</p>				

Project strategy	Indicator	Baseline level	Level at PIR (self-reported) June 2021	Mid-term target	End-of-project target	Mid-term level assessment	Achievement rating (outcomes) and Justification for rating
<u>Output 3.1:</u> Pest and Disease monitoring to guide plant protection decisions in key crop(s) established in 3 countries (AZE, KYR, TAJ)	13.Number of advisors (M/F) trained and number of farms participating	AZE, KYR, TAJ have district agronomists but no pest monitoring is systematically conducted or training of advisors. NGOs, farmers unions or private advisors exist in some countries	<ul style="list-style-type: none"> - Study on impact of climate change on pests and diseases finalised - Assessment of the state of pest and disease monitoring systems in the region under preparation - Webinar on pest surveillance (116 participants) 	Year 1 National workshop to identify priority crops and regions Year 2 Minimum 10 extension advisors trained per country = 30	Year 3 100 farmers participating per country Data entered to forecasting models, treatment advice given Year 4: 100 farmers (M/F) Data entered		
	14.Frequency of pesticide applications reduced	DEXiPM has data on treatment frequency index for certain cropping systems. These will be confirmed when priority crops selected.		Year 1 Priority crops selected and baseline survey conducted Year 3 Pesticide input and yields compared with conventional fields Year 4 pesticide input and yields compared with conventional fields			
<u>Output 3.2</u> Integrated pest management practices tested,	15.Number of farmers (M/F) participating in IPM demonstration	FAO/TCP/3403 FFS in three pilot areas in Chui region (Kemin, Chui and Issyk-Ata) = 45 farmers Kazakhstan has institutes	<ul style="list-style-type: none"> - Guideline on developing national IPM action plans developed - IPM trials ongoing in all countries - AZE: Pilot plots established on tomato and cucumber to compare IPM, organic and conventional practices; training courses, guidelines and 	Year 1: Update and continue existing FFS in KYR Identify IP	Year 3: 165 farmers 50 farmers in KAZ/???		

Project strategy	Indicator	Baseline level	Level at PIR (self-reported) June 2021	Mid-term target	End-of-project target	Mid-term level assessment	Achievement rating (outcomes) and Justification for rating
validated and promoted to male and female farmers	sites and applying methods in their own fields	doing research on IPM alternatives	<p>recommendations on IPM based on demonstration trials and national needs are under development; alternatives to the use of HHPs are assessed and promoted</p> <ul style="list-style-type: none"> - KGZ: Comparison trials with five selected crops conducted in 2020 and 2021, includes student field trainings - TJK: Potato seed banks applying IPM approach established to support national seed autonomy and to enhance food security during the global pandemic interrupting international trade networks. Equipment for production of bio-pesticides to phase out need for agrochemicals procured and provided to relevant National Research Institute - TUR: IPM trials in fruit production undertaken in Isparta for comparison of IPM to conventional practices and in Ankara for IPM promotion among producers. Initial results in Isparta show a decrease by 70 % in pesticide use in codling moth control along with increasing yield. Also, production costs in IPM are promisingly lower than in conventional practices. In the trial orchard where pheromone dispensers were applied, all apples remained intact, whereas the rate of damage in the conventional orchard was 69 %. 200 fruit producers participated in an outdoor training/visit programme. In addition, a five-day online training of trainers was held for 110 extension specialists to discuss IPM methods for controlling the main plant pests and diseases in Ankara. In April 2021, 75'000 pheromone dispensers were distributed to 30 beneficiary farmers in Isparta. They are being supported technically in terms of IPM implementations in their orchards. In June 2021, a training of trainers on increasing marketability of low-input apple product was held in Isparta for 40 representatives of local stakeholders. A document was prepared related to the results of above mentioned 	<p>and priority crops</p> <p>Year 2: 165 farmers Establish trials in KAZ</p>	Year 4: 165 farmers		

Project strategy	Indicator	Baseline level	Level at PIR (self-reported) June 2021	Mid-term target	End-of-project target	Mid-term level assessment	Achievement rating (outcomes) and Justification for rating
			ToT to describe further actions to be done by local stakeholders.				
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 comparisons for trained and untrained farmers	Data collected by current TCP project on profit, health or pesticide use by trained farmers	- Data collection is ongoing in each IPM trial to quantify benefits	Year 1: Review and collate Trained farmer data from FFS			
	17. Dissemination of results and experience			Year 1: Study tour to KAZ and/or TUR	Year 4: Publication of comparison results (IPM/conventional/pest monitoring) Field visit by other countries		
Component 4: Project achievements and lessons monitored and widely shared for maximum influence							
Outcome 4: Project results are shared between project countries	a) Number of project monitoring reports as per requirements	None	- Regular Team Calls held every second week; - LoA tracking table in use; - Finance and activity tracking tools in use; - PIR 2020 submitted; - PPR 2020 submitted; - PIR 2021 developed.	Year 1: 1 PIR, 2 progress Year 2: 2 PIR, 4 progress, 1 MTR	Year 4: 3 PIR, 7 progress, 1 final report, 1 MTR, 1 Evaluation		<u>Moderately Satisfactory:</u> Several FAO guidelines and materials were translated into Turkish, Russian and Azerbaijani. To raise awareness among the younger generation on the risks

Project strategy	Indicator	Baseline level	Level at PIR (self-reported) June 2021	Mid-term target	End-of-project target	Mid-term level assessment	Achievement rating (outcomes) and Justification for rating
and outside stakeholders	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	<ul style="list-style-type: none"> - First regional PSC held in virtual format on 26 May 2021. AZE, KGZ, TJK and TUR participated, Project approach, past activities, work plan 2021 and related budget were discussed and approved; - Three regional webinars held: POPs disposal options (21 participants); CMS (170 participants); Pest surveillance (116 participants); - Seminar on FAO contaminated soil management cycle held jointly with UNDP Turkey; - Information leaflets, brochures and hand-outs on various pests, diseases and IPM approach produced and distributed during trainings; - Kids Story Book developed to raise awareness in the young generation on the risks of pesticide use; FAO Activity Book (also for children) translated into Azerbaijani and Turkish; - Several handbooks and guidelines under translation/translated into Russian and Turkish; - Reference book on natural plant protection practices under development (in English and Turkish); - Various national news pieces published; - Project website developed (in approval process). 		<p>Year 3: High level representatives of all countries attend PSC meetings</p> <p>Year 4: 5 roadmaps for life cycle management published</p>		by pesticides a Kids Story Book was developed in Turkish and English and the FAO Activity Book was translated into Azerbaijani and Turkish. The project’s website went online in later 2021. It was mentioned by several interviewees that more publications and knowledge products need to be prepared to showcase the results of the project. It is not clear how the different materials translated are used by the recipients.
<u>Output 4.1:</u> Project monitoring system fulfils all applicable donor and stakeholder reporting requirements	18.Quality and timely project reports.	Project results framework with outcome and output indicators and targets.	<ul style="list-style-type: none"> - Regular Team Calls every second week - LoA tracking table in use - Finance and activity tracking tools in use - PIR 2020 submitted - PPR 2020 submitted - PIR 2021 developed 	<p>Year 1: Two six-monthly progress reports. Annual project implementation review report</p> <p>Year 2: Two six-monthly progress reports. Annual project implementation review report</p>	<p>Year 3: Two six-monthly progress reports. Annual project Implementation review report</p> <p>Year 4: Two six-monthly progress reports</p>		

Project strategy	Indicator	Baseline level	Level at PIR (self-reported) June 2021	Mid-term target	End-of-project target	Mid-term level assessment	Achievement rating (outcomes) and Justification for rating
	19.Midterm and final evaluation reports	None		Year 2: Mid-term evaluation and report	Annual project Implementation review report. Final evaluation and report		
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		<ul style="list-style-type: none"> - Three regional webinars held: POPs disposal options (21 participants); CMS (170 participants); Pest surveillance (116 participants) - Seminar on FAO contaminated soil management cycle - Information leaflets, brochures and hand-outs on various pests, diseases and IPM approach produced and distributed at trainings - Kids Story Book developed to raise awareness of young generations on the risks of pesticide use; FAO Activity Book (also for children) translated into Azerbaijani and Turkish 	Year 1: 1 Director level participant at SC meeting. 2 high level participants at IHPA Forum Year 2: 3 Directors @ SC	Year 3: 5 Directors @ SC. 5 high level participants at IHPA Forum Year 4: 5 Directors @ SC		
	21.Media coverage of publications and awareness materials		<ul style="list-style-type: none"> - A series of handbooks and guidelines under translation/translated into Russian and Turkish - Reference book on natural plant protection practices under development (in English and Turkish) - Various national news pieces published - Project website developed (in approval process) - National communication road maps elaborated 	Targets to be set during inception			

Indicator assessment key

Green = Achieved	Yellow = On target to be achieved	Red = Not on target to be achieved
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* As presented in the results framework in the original project document or subsequently updated by the Project Steering Committee (PSC) at project inception

Appendix 7. Co-financing table

Sources of co-financing	Name of co-financer	Type of co-financing	Amount confirmed at CEO endorsement/ approval		Actual amount materialized from last PIR (until June 2021)		Expected minimum total disbursement by the end of the project
			Cash	In kind	Cash	In kind	
Nat. Gov.	Azerbaijan MoA	Contribution		2,000,000		1,970,145	2,000,000
Nat. Gov.	Azerbaijan MoA	Contribution		1,600,000		488,552	1,600,000
Nat. Gov.	Azerbaijan MoE	Contribution		1,400,000			1,400,000
Nat. Gov.	Kazakhstan government	Contribution		3,000,000			3,000,000
Nat. Gov.	Kyrgyzstan MoA	Contribution		650,000		770,000	650,000
Nat. Gov.	Kyrgyzstan SAEPP	Contribution		350,000		70,000	350,000
Nat. Gov.	Tajikistan MoA	Contribution		650,000		80,375	650,000
Nat. Gov.	Tajikistan CEP	Contribution		350,000		21,131	350,000
Nat. Gov.	MoA Turkey	Contribution	3,000,000			33,643,893	33,643,893
Nat. Gov.	MoA Turkey	Contribution		3,300,000		13,422,823	13,422,823
GEF Agency	FAO FTTP, FTFP	Contribution		10,000,000		15,858	10,000,000
GEF Agency	FAO TCP	Contribution		2,400,000		1,459,331	2,400,000
GEF Agency	FAO Locust	Contribution		7,000,000		4,234,737	7,000,000
GEF Agency	FAO Regular	Contribution		600,000			600,000
GEF Agency	FAO 040	Contribution		1,000,000		327,060	1,000,000
GEF Agency	FAO STDF	Contribution		1,000,000		1,077,164	1,000,000
NGO	Tajikistan various	Contribution				257,650	257,650
Bilat. Aid	Tajikistan EC	Contribution				280,190	280,190
Bilat. Aid	Tajikistan JICA	Contribution				160,400	160,400
		TOTAL	3,000,000	35,300,000	0	58,279,309	
				38,300,000		58,279,309	79,764,956

Appendix 8. GEF evaluation criteria rating table and rating scheme

GEF criteria/sub-criteria	Rating	Summary comments
A. STRATEGIC RELEVANCE		
A1. Overall strategic relevance	HS	The project is strategically relevant and fully in line with national and regional priorities, as well as with GEF and FAO strategic objectives.
A1.1. Alignment with GEF and FAO strategic priorities	HS	The project adheres to the GEF-5 Focal Area Strategy on Chemicals and Waste. The project fits under Outcome 1.4 "POPs waste prevented, managed, and disposed of, and POPs contaminated sites managed in an environmentally sound manner".
A1.2. Relevance to national, regional and global priorities and beneficiary needs	HS	The project is in line with national strategies and action plans. The Ministry of Agriculture and Forestry of Turkey indicated that not all outputs are fully relevant for them and that they do not need (much) support on for instance the management of POPs pesticide wastes and remediation of contaminated sites. For the other countries the project is highly relevant and government counterparts overall are committed to achieving all outputs and outcomes, and therefore the MTR has assessed the relevance to national priorities and beneficiary needs as highly satisfactory.
A1.3. Complementarity with existing interventions	HS	There are two initiatives in the region that are of specific interest for the FAO project, and have complementary and overlapping activities. These projects will also be crucial for potentially realising disposal options in Kazakhstan, Kyrgyzstan and Tajikistan; the GEF UNEP project "Demonstration of Non-thermal Treatment of DDT Wastes in Central Asia (Kyrgyz Republic and Tajikistan)" (GEF ID 9421) and the GEF UNIDO project "Regional Demonstration Project for Coordinated Management of ODS and POPs Disposal in Ukraine, Belarus, Kazakhstan and Armenia" (GEF ID 5300). FAO and UNEP are developing a Memorandum of Understanding for cooperation in Kyrgyzstan and Tajikistan. Both UNIDO and FAO will also cooperate closely, for example by setting up a joint coordination mechanism in Kazakhstan.
B. EFFECTIVENESS		
B1. Overall assessment of project results	MS	There have been delays in the project, which means that the outputs and outcomes cannot be achieved by the current end date of the project (October 2022). There has been important progress for some outputs, e.g. inventories (1.1), regional disposal strategy (1.2), bioremediation trial in Kyrgyzstan

GEF criteria/sub-criteria	Rating	Summary comments
		(1.4), assessments/feasibility studies on container management (1.5), assessment of legal frameworks (2.1), IPM strategy and IPM field trials and alternatives, specifically in Kyrgyzstan and Turkey (3.2). However, there are still important issues to solve related to disposal, and large activities to be implemented on safeguarding, test burn in Azerbaijan, contaminated sites remediation and container management. Additionally, capacities of stakeholders need to be built in order for the project to reach its objectives.
B1.1 Delivery of project outputs	MS	There have been several delays in the project, due to the late start of the project, late signature of the project agreement by countries, staff changes, ministry restructuring, long approval and hand-over processes, and also COVID-19 (although of course the pandemic is beyond the control of the project and thus has not been considered in rating progress). Important progress has been made for some outputs, e.g. inventories (1.1), regional disposal strategy (1.2), bioremediation trial in Kyrgyzstan (1.4), assessments/feasibility studies on container management (1.5), assessment of legal frameworks (2.1), IPM strategy and IPM field trials and alternatives (3.2).
B1.2 Progress towards outcomes and project objectives	MS	There has been progress towards all outcomes. However, as the outputs have not been achieved (fully), and are rated as Moderately Satisfactory, the progress towards the outcomes and project results are also rated as Moderately Satisfactory. The MTR considers that the outcomes can be fully achieved, if the project is extended (until in minimum December 2024), and the recommendations from this MTR are implemented.
- Outcome 1: 900 tonnes of POPs and obsolete pesticides are safeguarded and eliminated in an environmentally sound manner; risks from obsolete stocks, contaminated sites and empty pesticide containers are further quantified and reduced; and capacity on safeguarding, disposal, contaminated sites and empty container management is strengthened.	MS	Important preparatory activities to reach this outcome have been taken. For example, inventories have been conducted in Azerbaijan, Kyrgyzstan and Tajikistan and assessments on container management systems in the countries have been developed. Also, a bioremediation trial was set up in Kyrgyzstan. Safeguarding of 217 tonnes of obsolete pesticides is planned to be conducted in Azerbaijan in April/May 2022. There are, however, still important issues to resolve regarding disposal options in Kazakhstan, Kyrgyzstan and Tajikistan, and a decision on a test burn (performance test) in Azerbaijan needs to be taken and the test burn conducted. Capacities are planned to be built during the safeguarding, disposal, contaminated sites, container management and other activities.

GEF criteria/sub-criteria	Rating	Summary comments
<p>- Outcome 2: Strengthened regulatory framework and strengthened institutional capacity for sound pesticide management.</p>	MS	<p>First essential steps have been taken to achieve this outcome by developing baseline assessments and reports. Concrete steps to revise/strengthen the legal framework and institutional capacity have yet to be taken. Legal assessments on pesticide management were prepared for Azerbaijan, Kyrgyzstan and Tajikistan. Additionally, a report on the status of “Gender, Socio-Economic and Health Dimensions of the Use of Pesticide and Management in Central Asia and Turkey” has been drafted in 2021. Finally, an assessment of Highly Hazardous Pesticides (HHPs) included in the list of registered pesticides started at the end of 2021. The consultant involved finalised the list of identified HHPs for Azerbaijan and Kazakhstan, and is working on the list for Turkey.</p>
<p>- Outcome 3: Increased capacity and awareness on Integrated Pest Management (IPM) and alternatives to Highly Hazardous Pesticides (HHP).</p>	MS	<p>IPM trials have been implemented successfully in Kyrgyzstan and Turkey. In Azerbaijan it has been decided (after one year of IPM field work) to first focus on capacity building and understanding of IPM principles. In Tajikistan no IPM trials have been implemented, for this country it was decided to focus the work on developing a potato seed bank based on IPM methods to enhance national seed autonomy. The results of this work are not well documented; therefore the benefits are not fully clear.</p>
<p>- Outcome 4: Increased awareness and ownership of stakeholders and beneficiaries on project results and methodologies.</p>	MS	<p>Several FAO guidelines and materials were translated into Turkish, Russian and Azerbaijani. To raise awareness among the younger generation on the risks by pesticides a Kids Story Book was developed in Turkish and English and the FAO Activity Book was translated into Azerbaijani and Turkish. The project’s website went online in later 2021. It was mentioned by several interviewees that more publications and knowledge products need to be prepared to showcase the results of the project. It is not clear how the different materials translated are used by the recipients.</p>
<p>- Overall rating of progress towards achieving objectives/ outcomes</p>	MS	<p>As progress towards achieving the individual outcomes have all been assessed as Moderately Satisfactory, it follows that the overall rating is also considered Moderately Satisfactory.</p>
<p>B1.3 Likelihood of impact</p>	Not rated at MTR	-
<p>C. EFFICIENCY</p>		
<p>C1. Efficiency</p>	MS	<p>As there have been delays at the start of and during the project, it is not possible to implement</p>

GEF criteria/sub-criteria	Rating	Summary comments
		the project activities by the current end date of the project (October 2022). The reasons for the delays are the late signature of countries joining the project, restructuring in ministries, changes in staff (both within FAO and country counterparts), the restrictions related to the COVID-19 pandemic, and generally long hand-over and approval processes. The project considers cost-effectiveness through building on existing FAO projects and partnerships, and by seeking cooperation with other initiatives (UNEP and UNIDO projects).
D. SUSTAINABILITY OF PROJECT OUTCOMES		
D1. Overall likelihood of risks to sustainability	ML	The MTR assesses that it is moderately likely that there are risks to sustainability, for instance sustainability of capacities built and financial sustainability. There are some measures that can be taken to mitigate these risks, for example by incorporating sustainability aspects into the different strategies and national action plans that are being developed within the project.
D1.1. Financial risks	ML	Financial sustainability is an issue for some countries, specifically when it concerns costly operations such as safeguarding and disposal, depending also on the economic situation and priorities in the country. The last Project Identification Report (PIR) additionally mentions that funds for safeguarding and remediation will always remain insufficient until governments develop funding and taxation mechanisms for legacy wastes. The project team plans to provide support to develop such mechanisms during the remaining part of the project.
D1.2. Socio-political risks	ML	There is (political) instability in project countries which has affected the project, especially in Kyrgyzstan where restructuring of ministries has taken a long time and delayed the project. Also in Azerbaijan and Tajikistan restructuring of ministries and changes within ministries affected the project.
D1.3. Institutional and governance risks	ML	Changes in ministries (see D1.2) indicates that institutional memory and institutional capacity built within the project may be partly lost. Additionally, capacities built within government counterparts may be lost due to staff changes. Therefore it is important that the project includes aspects related to sustainability and upscaling in the regional strategies that are developed and in the action plans that will be developed in each country, in order to mitigate effects related to instability and changes in ministries.

GEF criteria/sub-criteria	Rating	Summary comments
D1.4. Environmental risks	ML	Risks to the environment and health can be significant if accidents and exposure occur. However, these risks can be mitigated by complying with national and international standards. FAO only works with experienced waste management companies with a proven track record and which operate according to best international practices. For the safeguarding in Azerbaijan, the waste management company has prepared an Environment, Health and Safety plan and will train local workers before the start of the work in order to reduce the risks and to build up national capacity.
D2. Catalysis and replication	ML	The (pilot, demonstration and trial) activities currently implemented and planned to be implemented within the project, have a potential for replication and upscaling. However, sustainability of such activities can become problematic if during project implementation no timely discussions and agreements are made between FAO, the government counterparts and relevant stakeholders on responsibilities of replication and upscaling and on ownership after project end (including an assessment of financial aspects, institutional sustainability, sustainability of capacities, and environmental sustainability).
E. FACTORS AFFECTING PERFORMANCE		
E1. Project design and readiness	MU	The project document was adequately designed and relevant stakeholders were identified at project design. As the project document was designed in 2013, an update of the results matrix is currently prepared to reflect the present-day situation in the project. There have been substantial delays in starting the project, in part due to the late signing of some countries. Accordingly, a limited number of activities were implemented during the first period of the project.
E2. Quality of project implementation	S	There has been important progress for some outputs, e.g. inventories (1.1), regional disposal strategy (1.2), bioremediation trial in Kyrgyzstan (1.4), assessments/feasibility studies of container management (1.5), assessment of legal frameworks (2.1), IPM strategy and IPM field trials and alternatives in Azerbaijan, Kyrgyzstan and Turkey (3.2). Overall, the MTR considers that the activities that have been implemented are implemented well and with a satisfactory level of quality. In Tajikistan, the development of a potato seed bank based on IPM methods to enhance national seed autonomy

GEF criteria/sub-criteria	Rating	Summary comments
		in Tajikistan, has, however, not been well documented.
E2.1 Quality of project implementation by FAO (BH, LTO, PTF, etc.)	S	Overall, FAO has provided satisfactory quality of guidance and technical backstopping for the activities implemented until the mid-term point of the project.
E2.2 Project oversight (PSC, project working group, etc.)	MS	FAO has mostly provided satisfactory quality of supervision, guidance and technical backstopping for the activities implemented. The project’s governance and supervision model as developed during project design is structured, but in reality the structures and the communication between government counterparts, FAO and other stakeholders have been more ad hoc. Stakeholders indicated that they found it difficult to assess (the (results of) the work of the PSC, as there has been only one meeting and not everyone was aware of its existence. More structured mechanisms for communication on national level are needed for properly engaging all stakeholders.
E3. Quality of project execution	S	The project execution and administration framework and arrangements within FAO are well established and of good quality, and the communication lines and decision-taking procedures are mostly clear. Overall, these frameworks support the progress being made in the project well. However, several interviewees (from all countries) explained that there are often long internal approval procedures and bureaucracy that can sometimes affect project efficiency and sometimes causes unclarities in communication between the different parties.
E3.1 Project execution and management (PMU and executing partner performance, administration, staffing, etc.)	S	The project execution and administration framework and arrangements within FAO are well established and of good quality, and the communication lines and decision-taking procedures are mostly clear. Overall, these frameworks support the progress being made in the project well. Long internal approval and hand-over processes can delay the project at times.
E4. Financial management and co-financing	S	Financial overviews of the project (per component/outcome and per country) were provided to the MTR team as well as an overview of co-finance overview from the last PIR. The MTR team did not note any specific issues related to financial management, and there is good cooperation between the relevant FAO staff members working on this.
E5. Project partnerships and stakeholder engagement	MS	Stakeholders were overall engaged adequately but, in some cases, there has been a lack of

GEF criteria/sub-criteria	Rating	Summary comments
		interaction. Restructuring within ministries has at times also complicated communication and engagement. Several interviewees expressed the need for more structured communication with and between project counterparts and stakeholders, as this will help to create a common understanding of the stakeholders on project activities and their specific roles, and will increase a better understanding of their contribution to the overall project objectives and outcomes.
E6. Communication, knowledge management and knowledge products	MS	Few structured communication and awareness raising activities have been implemented (mostly during the IPM trials in Turkey), and few publications and knowledge products have been prepared to showcase the results of the project. More attention on this is needed. Many interviewees noted that visibility needs to be strengthened and results already produced by the project should be disseminated to a wider audience.
E7. Overall quality of M&E	MS	Both design and implementation of M&E are adequate. There is no structured and comprehensive collection of gender disaggregated data. The original Result Matrix is being updated to reflect the present-day reality of the project, and indicators are being revised to make them more SMART.
E7.1 M&E design	MS	The design of M&E as described in the project document is satisfactory. It describes the monitoring responsibilities, M&E reporting and contains an M&E plan, including type of activity, responsible parties, time frame and budget. Gender aspects have not been included in the M&E at project design, and the indicators in the Result Matrix are not always SMART.
E7.2 M&E plan implementation (including financial and human resources)	MS	Reporting is conducted through the Project Progress Reports (FAO reports) and Project Implementation Reviews (to GEF). Overall, these reports provide sufficient information about the project. Although some stakeholders indicated that the project considers gender aspects, there is no structured and comprehensive collection of gender disaggregated data. Currently the national technical coordinator for Turkey is updating the M&E mechanism, and the updated Results Matrix is expected to be reflected therein.
E8. Overall assessment of factors affecting performance	MS	The quality of project implementation is satisfactory. However, more attention is needed on stakeholder engagement, more structured communication between government counterparts,

GEF criteria/sub-criteria	Rating	Summary comments
		FAO and other stakeholders, awareness raising, and visibility of the project.
F1. Gender and other equity dimensions	MS	The project at design targets women as specific beneficiaries and is in compliance with the relevant FAO and GEF gender policies. The report “Gender, socio-economic and health dimensions of the use of pesticide and management in Central Asia and Turkey” that has been developed in the project provides comprehensive and valuable information on gender and pesticides and allows the project team to design proper actions in the near future. During project implementation gender aspects were thus far considered in a limited way.
F2. Human rights issues	MS	Human rights issues focus on the position of women and vulnerable groups – see F1.
F2. Environmental and social safeguards	S	Environmental and social safeguards are adequately considered in the project document. All work during safeguarding, transport, disposal and handling of wastes and empty containers are planned to be conducted in compliance with the relevant international standards and directives, the Stockholm and Basel Conventions, as well as the relevant FAO’s EMTKs. For safeguarding in Azerbaijan, a Health, Safety and Environmental Plan has been developed.
Overall project rating	MS	

Appendix 9: Gender report and recommendations

Gender Considerations in Lifecycle Management of Pesticides and Disposal of POPs Pesticides in Central Asian countries and Turkey (GCP/SEC/011/GFF)

Methodology

Gender issues were handled as a cross cutting issue during the MTR process and a gender analysis was conducted to obtain gender-sensitive monitoring and evaluation data. Developed by FAO in 1993, the Socio-Economic and Gender Analysis (SEAGA) approach analyzes socio-economic patterns and participatory identification of women’s and men’s priorities and potentials. The tool help clarify the division of labor within a community, including divisions by gender and other social characteristics and facilitate the understanding of resource use and control, as well as participation in community institutions (ILO 2009). In line with the FAO SEAGA approach, gender analysis was conducted from the field level (micro - households), intermediate level (meso – sectors and institutions), and policy and plan level (macro – policies and plans). The findings of the gender analysis were categorized in line with the principles of contextual analysis. The analysis was carried out as a separate complementary action during the MTR process.

Research questions are structured as follows:

Research Question	To what extent have cross-cutting issues been considered in the formulation and implementation of the project?
	Has the project contributed to meeting GEF and FAO's gender equality objectives?
	What are broader impacts/changes the project is achieving concerning women and men?
Specific Questions	Is there any new policy document or strategy designed to promote gender equality in pest management?
	What impact is the project having on women and men and their gendered power dynamics?
	How does the project engage with women and girls?
	How is risk and risk mitigation being managed?
	Are there any collaborations built with women NGOs or farmer organizations?

Table 1: The main and specific research questions

Gender analysis was conducted through desk review and online interviews. A set of interviews was held with:

Name	Title
Stephan Robinson	Senior Technical Advisor (STA) on Pesticide Management
Birim Mor	National Technical Coordinator for Turkey
Eylem Dogan	National MTR Consultant
Zoirjon Mahmudzoda	National MTR Consultant
Gaukhar Maikenova	National MTR Consultant
Nazira Saipjanova	National MTR Consultant
Sandra Molenkamp	MTR Team Leader
Zsófia Bossányi	Gender Expert

Qualitative data and desk review sources were examined through contextual analysis concerning the research questions. Analyzed data were interpreted considering the context of gender assessment. The findings are structured as follows:

Has the project contributed to meeting GEF and FAO's gender equality objectives?

The project is consistent with GEF Policy on Gender Mainstreaming (PL/SD/02) and FAO gender policies (2013 and 2020-2030). During the project implementation, new policies have come into effect by GEF and FAO. In November 2017, the GEF adopted a new Policy on Gender Equality (GEF/C.53/04) (GEF, 2017b). The policy introduces new principles and requirements to mainstream gender in designing, implementing and evaluating GEF programs and projects¹. In this context, six entry points were identified in project implementation. These priorities are structured in table 2.

The FAO Policy on Gender Equality was updated in 2019 to align policy with the most recent international frameworks and commitments². The policy aims to achieve equality between women and men in sustainable agriculture and rural development to eliminate hunger and poverty. In order to achieve this goal, a total of four objectives guide FAO's work. These objectives can be seen in Table 2.

The contribution of project components (in terms of implementation principles) to the GEF and FAO priorities is structured in the table below:

GEF Policy on Gender Equality / Priority Areas	Comp 1	Comp.2	Comp.3	Comp.4
<i>1.Supporting women's improved access, use, and control of resources, including land, water, forest, and fisheries.</i>	✓	✓	✓	✓
<i>2.Enhancing women's participation and role in natural resources decision-making processes, with women as agents of change at all levels.</i>	✓	✓	✓	✓
<i>3.Targeting women as specific beneficiaries.</i>	✓	✓	✓	✓
<i>4.Investing in women's skills and capacity.</i>	✓	✓	✓	✓
<i>5.Encourage gender mainstreaming efforts that are guided by the COPs in activities linked to the conventions for which the GEF serves as a financial mechanism.</i>	✓	✓		
<i>6.Seek targeted collaboration around knowledge and analytical efforts</i>	✓	✓	✓	✓
Objectives of FAO Gender Policy				
<i>1.Women and men have equal voice and decision-making power in rural institutions and organizations to shape relevant legal frameworks, policies, and programmes.</i>	✓	✓	✓	✓
<i>2.Women and men have equal rights, access to and control over natural and productive resources to contribute to and benefit from sustainable agriculture and rural development.</i>	✓	✓	✓	✓

¹ GEF Gender Implementation Strategy, 2018:1: A new GEF Policy on Gender Equality based on three areas: contributing to equal access to and control of natural resources of women and men, improving the participation and decision-making of women in natural resource governance, targeting socio-economic benefits and services for women. The policy adopted two-track approaches: Promote gender-responsive approaches and results across all GEF programs and projects and efforts to leverage strategic entry points (related to the GEF-7 programming strategy) linked to targeted programs and projects help achieve global environmental benefits and catalyze system change.

² FAO Policy on Gender Equality (2020-2030), 2020: 2

3. *Women and men have equal rights and access to services, markets and decent work and equal control over the resulting income and benefits.*

4. *Women’s work burden is reduced by enhancing their access to technologies, practices and infrastructure and by promoting an equitable distribution of responsibilities, including at household level.*

✓	✓	✓	✓
		✓	✓

Although female farmers as project beneficiaries are specifically highlighted under output 1.5 (Container management capacity developed in the region and risks of empty containers reduced in Azerbaijan) and 3.2 (Integrated pest management alternatives tested, validated, and promoted to male and female farmers), it is seen that the issue of gender is emphasized throughout the project document. The project document is gender mainstreamed.

What are the broader impacts/changes the project is achieving in relation to women and men?

Due to the nature of the project, outputs would directly contribute to protecting women and men’s health against the negative effects of PoPs. In this context, the project carries the highest priority in terms of health as one of the fundamental human rights and a burning need of rural women.

Through the project, women are expected to protect themselves from the negative effects of the POPs, safely use spraying practices, and increase their knowledge and awareness of their agricultural activities. In this manner, the knowledge and technology gap between women and men will be reduced and women’s involvement in socio-economic life will increase.

All components would contribute to achieving the results and providing on-the-ground data, which are valuable for policy-making. Gender efforts are being carried out in the regional context and results are expected through the Road Map and Action Plans to increase the broader effects.

Is there any new policy document or strategy designed to promote gender equality in pest management?

A report on Gender, Socio-Economic and Health Dimensions of the Use of Pesticide and Management in Central Asia and Turkey, was prepared as one of the initial activities of the project (under Component II). Although there were some constraints such as COVID-19 restrictions during the data collection process, the report provides comprehensive and valuable information on gender and pesticides. Good timing of the report allows the project team to design proper actions in the near future.

The report was prepared by a gender expert and provided a situation analysis of female and male farmer’s agricultural practices, poisoning experiences, pesticide use and interventions. Interviewees for the report were identified through the project team. The report (page 21) states that the questionnaire interviews were conducted over the phone in Kyrgyzstan and Azerbaijan, in local languages and Russian. In Tajikistan, data was collected in the field, while in Turkey, online questionnaires were sent out and independently filled out by experts. In addition to survey data, country information was collected during a focus group meeting with Turkish experts and reflections from the data gathering personnel in Kyrgyzstan and Azerbaijan.

It can be concluded that it would be good to conduct complementary fieldwork, especially considering the population living in regions selected by the project under Component 1. That kind of specific information would contribute to understanding the dynamics of the target beneficiaries in detail. In addition, since Kazakhstan has been on board as of August 2021, the fieldwork should cover the selected regions in the country.

Have women and men's needs, priorities, and constraints been considered during the design and implementation?

The project was designed from a gender equality perspective. Special actions have been designed to promote gender equality including the inclusion of women and women's access to knowledge and technology. A report on gender dimensions and pest management was prepared which is a meaningful and effective action. The report provides recommendations but extra attention is needed for the upcoming activities. To what extent the findings of the report will be used for forthcoming gender-related activities is not clear. A gender action plan is needed to be implemented, as well as reporting and monitoring forthcoming project activities.

It is not clear if the report's findings would contribute to identifying gender-disaggregated indicators for the monitoring and evaluation mechanism. The M&E expert's close collaboration with the gender expert would be significant. In addition, it is recommended that the gender-responsive M&E activities should also include socio-economic indicators.

The contract duration of the existing gender expert is limited. It is concluded that the involvement of a gender expert in the project activities is a must.

What impact is the project having on women and men and their gendered power dynamics?

Women's vulnerabilities and effects of POPs well-explained in the report on "Gender, Socio-Economic and Health Dimensions of the Use of Pesticide and Management in Central Asia and Turkey". As a result of the project, it is clear that women will have access to knowledge and technology and their position in their households and socio-economic environment will be increased through awareness activities and potential marketing studies for IPM practices. In addition, the preparation of a roadmap based on a strong field data would enable policy-makers to aware of gender issues and implement gender-responsive actions.

How does the project engage with women and girls?

The project engages with women and children primarily through field activities. The main entry points for the interaction are surveys, trials, trainings and awareness-raising activities. The project staff will be in the field but some additional supports will be taken through LoAs. In that context, experience and knowledge of the sub-contractors or stakeholders in the field would be crucial.

Based on the interview results, it is concluded that the project staff has not participated in gender-related trainings since the very beginning of the project. Capacity and awareness of the project staff are also critical to conduct relevant activities, especially in the field.

Specific information is limited about how and in what way the project team will engage the vulnerable groups or stakeholders during the project activities. In that context, the recruitment of

a Communication and Outreach Expert or a clear Terms of Reference for the communication activities to be held under the project components is essential. There is a need to prepare a Communication Plan and Outreach Strategy that considers increasing rural women's (and children's) access to knowledge and participation in project activities.

How is risk and risk mitigation being managed?

The project focuses on POPs which is already a precarious environmental subject. All protective measures including training, safely disposal of pesticides, inventories and raising awareness are considered part of project components.

Under Component 2, specific emphasis was given to farmers' spraying practices and using personal protection equipment (PPE) at community level. These activities have not started yet.

Are there any collaborations built with women NGOs or farmer organizations?

IPM trials have started with the participation of farmers and some farmer groups. However, it is seen that there is no engagement with women NGOs and farmer organizations, so far. It is expected that the newly prepared Communication Strategy will include a comprehensive list of stakeholders involved in the community-related actions of project implementation. To initiate such a strategy there is a need to conduct a Stakeholder Mapping Exercise with a specific methodology including all relevant actors.

Recommendations

In the light of the findings, recommendations can be structured as follows:

- To increase the effectiveness of the report on "Gender, Socio-Economic and Health Dimensions of the Use of Pesticide and Management in Central Asia and Turkey", specific field studies should be conducted in the regions identified under Component 1 and in Kazakhstan. In addition, additional field work for the targeted farmers under Component 2 and Component 3 is recommended. During the field work, demographic data, agricultural practices (including spraying practices as stated in the ProDoc), women's needs, access to knowledge and technology, and socio-economic indicators should be investigated based on the project target regions.
- The aforementioned field studies would support gender-disaggregated baseline data under all components. Based on the field studies, it is recommended to identify gender-disaggregated indicators (including as much as possible socio-economic aspects) for the monitoring and evaluation mechanisms.
- It is recommended that the results of gender efforts and gender-disaggregated data should be shared with the governmental bodies through Steering Committee Meetings and Road Maps and Actions Plans to be prepared under Component 2. Increased awareness of the decision-makers would enable to consider gender concerns in the macro context.
- Communication Strategy (Communication and Outreach Strategy) covering the activities to be held for the project stakeholders should be prepared as early as possible and include specific outreach channels for the rural communities.

- It is recommended to conduct stakeholder mapping exercises especially ensuring the equal participation of rural women or women representatives of relevant bodies, involvement of women NGOs and or other relevant institutions. This exercise should be a part of the Communication Strategy (Communication and Outreach Strategy).
- A gender action plan should be prepared for the forthcoming project activities and the plan should be synchronized with the Communication Strategy and the M&E timeline. Timing of the action plan is critical and should be prioritized.
- A gender expert or a backup mechanism is recommended to ensure overall coordination of gender-related activities, action plan preparation, reporting, provision of gender-disaggregated data, and supporting M&E and communication activities in project countries. The expert is expected to work closely with the communication specialist in designing and implementing communication and outreach activities and the M&E expert.
- Gender awareness trainings is recommended for the project staff and the sub-contractors (LoAs) working at field level.