



# PROJECT IDENTIFICATION FORM (PIF)<sup>1</sup>

PROJECT TYPE: Full-sized Project

TYPE OF TRUST FUND: GEF Trust Fund

## PART I: PROJECT IDENTIFICATION

Project Title:	Lifecycle Management of Pesticides and Disposal of POPs Pesticides in Central Asian Countries and Turkey		
Country(ies):	Azerbaijan, Kazakhstan, Kyrgyz Republic, Tajikistan and Turkey	GEF Project ID: <sup>2</sup>	5000
GEF Agency(ies):	FAO (select) (select)	GEF Agency Project ID:	613306
Other Executing Partner(s):	Azerbaijan - Ministries of Agriculture, Environment and Health; Kazakhstan - Ministries of Agriculture, Environment and Health; Kyrgyz Republic - State Agency on Environment Protection and Forestry in collaboration with the Ministries of Agriculture and Health; Tajikistan - Committee on Environmental Protection in collaboration with the Ministries of Agriculture and Health; Turkey - Ministry of Agriculture and Rural Affairs.	Submission Date:	2012-09-11
GEF Focal Area (s):	Persistent Organic Pollutants	Project Duration (Months)	48
Name of parent program (if applicable): ➤ For SFM/REDD+ <input type="checkbox"/>		Agency Fee (\$):	773,014

### A. FOCAL AREA STRATEGY FRAMEWORK<sup>3</sup>:

Focal Area Objectives	Expected FA Outcomes	Expected FA Outputs	Trust Fund	Indicative Grant Amount (\$)	Indicative Co-financing (\$)
(select) CHEM-1	Outcome 1.4 POPs waste prevented, managed, and disposed of, and POPs contaminated sites managed in an environmentally sound manner.	Output 1.4.2 Strategies for disposal of obsolete pesticides and remediation of contaminated sites developed and implemented.	GEFTF	7,786,986	29,400,000
(select) (select)			(select)		
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(select) (select)			(select)		
(select) (select)			(select)		
(select) (select)	Others		(select)		

<sup>1</sup> It is very important to consult the PIF preparation guidelines when completing this template.

<sup>2</sup> Project ID number will be assigned by GEFSEC.

<sup>3</sup> Refer to the reference attached on the Focal Area Results Framework when filling up the table in item A.

Sub-Total		7,786,986	29,400,000
Project Management Cost <sup>4</sup>	GEFTF	350,000	3,000,000
<b>Total Project Cost</b>		<b>8,136,986</b>	<b>32,400,000</b>

## B. PROJECT FRAMEWORK

**Project Objective: To safeguard and safely dispose of POPs and obsolete pesticides posing high risk to public health and the environment, and to implement sound pesticide management programme in Central Asia countries and Turkey**

Project Component	Grant Type	Expected Outcomes	Expected Outputs	Trust Fund	Indicative Grant Amount (\$)	Indicative Cofinancing (\$)
1. Management of obsolete pesticide	TA	<p>Obsolete pesticides are quantified, risks are assessed, high risk locations are safeguarded and materials sent for disposal</p> <p>(About 900 tons disposed of)</p>	<p>1.1 National inventory of obsolete pesticides and associated wastes completed and validated in Azerbaijan, Kyrgyzstan and Tajikistan;</p> <p>1.2 A regional pesticide stocks data base developed using FAO-developed Pesticide Stock Management System (PSMS);</p> <p>1.3 Environmental risk assessment completed using FAO PSMS to develop national Environmental Assessment and Environmental Management Plans (including a safeguarding and disposal strategies) to include obsolete pesticides, contaminated containers and contaminated sites;</p> <p>1.4 Safeguarding of high risk stocks completed in Azerbaijan, Kyrgyzstan and Tajikistan;</p> <p>1.5 Obsolete stocks from high risk sites sent for environmentally sound disposal.</p> <p>1.6 Regional training on inventory, risk assessment and safeguarding conducted (20 people trained)</p>	GEFTF	5,650,000	14,000,000
2. Pesticide risk reduction and life-cycle management	TA	Institutional framework for pesticide risk management and life	2.1 Pesticide legislation and registration procedures and opportunities for	GEFTF	1,686,986	14,100,000

<sup>4</sup> GEF will finance management cost that is solely linked to GEF financing of the project.

		cycle management strengthened  Risks from use of highly hazardous pesticides quantified and reduced	harmonisation identified;  2.2 National legislation and regulatory frameworks revised and harmonized. Drafts presented to governments for adoption;  2.3 Post registration enforcement of regulations improved through a detailed analysis of the pesticide life-cycle in target countries and development and implementation of a capacity building plan;  2.4 Alternatives to Highly Hazardous Pesticides (HHPs) adopted and promoted at national level; and regional communications and awareness strategies developed and implemented.			
3. Monitoring and Evaluation	TA	Project results monitored and evaluated effectively and "best practices" and "lessons learned" disseminated	3.1 Country level and regional M&E plans developed and implemented. Reports published;  3.2 Mid-term and final evaluations conducted;	GEFTF	450,000	1,300,000
	(select)			(select)		
	(select)			(select)		
	(select)			(select)		
	(select)			(select)		
	(select)			(select)		
	(select)			(select)		
	(select)			(select)		
Sub-Total					7,786,986	29,400,000
Project Management Cost <sup>5</sup>				(select)	350,000	3,000,000
<b>Total Project Costs</b>					<b>8,136,986</b>	<b>32,400,000</b>

**C. INDICATIVE CO-FINANCING FOR THE PROJECT BY SOURCE AND BY NAME IF AVAILABLE, (\$)**

Sources of Cofinancing	Name of Cofinancier	Type of Cofinancing	Amount (\$)
GEF Agency	FAO Turkey Partnership	Grant	10,000,000
GEF Agency	FAO TCPs	Grant	1,500,000
GEF Agency	FAO Locust Programme	Grant	1,600,000

<sup>5</sup> Same as footnote #3.

Other Multilateral Agency (ies)	USAID	Grant	2,000,000
GEF Agency	FAO Regular Programme	In-kind	800,000
National Government	Azerbaijan, Kazakhstan, Kyrgyzstan, Tajikistan	Grant	4,000,000
National Government	Turkey	Grant	3,300,000
National Government	All	In-kind	9,200,000
(select)		(select)	
(select)		(select)	
<b>Total Cofinancing</b>			<b>32,400,000</b>

**D. GEF/LDCF/SCCF RESOURCES REQUESTED BY AGENCY, FOCAL AREA AND COUNTRY<sup>1</sup>**

GEF Agency	Type of Trust Fund	Focal Area	Country Name/Global	Grant Amount (a)	Agency Fee (b) <sup>2</sup>	Total c=a+b
FAO	GEF TF	Persistent Organic Pollutants	Regional (Azerbaijan, Kazakhstan, Krygzystan, Tajikistan and Turkey)	8,136,986	773,014	8,910,000
(select)	(select)	(select)				0
(select)	(select)	(select)				0
(select)	(select)	(select)				0
(select)	(select)	(select)				0
(select)	(select)	(select)				0
(select)	(select)	(select)				0
(select)	(select)	(select)				0
(select)	(select)	(select)				0
<b>Total Grant Resources</b>				<b>8,136,986</b>	<b>773,014</b>	<b>8,910,000</b>

<sup>1</sup> In case of a single focal area, single country, single GEF Agency project, and single trust fund project, no need to provide information for this table

<sup>2</sup> Please indicate fees related to this project.

## **PART II: PROJECT JUSTIFICATION**

### **A. DESCRIPTION OF THE CONSISTENCY OF THE PROJECT WITH:**

#### **A.1.1 The GEF focal area/LDCF/SCCF strategies:**

The proposed project is consistent with the GEF-5 focal area strategy for chemicals. In particular, through the management, prevention and disposal of POPs waste and the management of contaminated sites in an environmentally sound manner, the project will contribute to Objective 1.

#### **A.1.2. For projects funded from LDCF/SCCF: the LDCF/SCCF eligibility criteria and priorities:**

#### **A.2. National strategies and plans or reports and assessments under relevant conventions, if applicable, i.e. NAPAS, NAPs, NBSAPs, national communications, TNAs, NIPs, PRSPs, NPFE, etc.:**

Azerbaijan, Kazakhstan, Kyrgyzstan, Tajikistan and Turkey have ratified conventions related to POPs and chemicals, including: the Rotterdam Convention on the prior informed consent procedure for certain hazardous chemicals and pesticides in international trade; the Basel Convention on the control of trans-boundary movement of hazardous wastes and their disposal (except Tajikistan) and the Stockholm Convention on Persistent Organic Pollutants. In addition, they have framework laws on environmental protection and laws on plant protection.

All project countries have prepared and submitted their National Implementation Plans (NIPs) to the Secretariat of the Stockholm Convention. All the NIPs prioritized issues of obsolete stocks and pesticide management. The project will address the following priorities identified in the NIPs:

- (i) Detailed inventory of POPs, obsolete pesticides and associated wastes including contaminated soils and empty pesticides containers;
- (ii) Safeguarding and environmentally sound disposal of POPs and obsolete pesticide stocks;
- (iii) Detailed investigation and remediation of high risk contaminated sites;
- (iv) Development of a harmonized system for the management of pesticides in Central Asia;
- (v) Strengthening of national/regional regulatory and institutional frameworks for the management of pesticides and their enforcement;
- (vi) Capacity building in the area of pesticide management; and
- (vii) Establishment of regional cooperation on pesticide issues in Central Asia.

### **B. PROJECT OVERVIEW:**

#### **B.1. Describe the baseline project and the problem that it seeks to address:**

Most populations of Central Asia are rural and therefore dependant on agriculture as a primary source of income. During the Soviet period, pesticides were provided by Governments through centralized purchasing programmes. During this period Government policy decreed that pesticides application was mandatory on most crops without any needs assessment or concern for pesticide residue accumulation in the final food crop. The centralized management strategy resulted in oversupply and application of pesticides with increased accumulation of unused obsolete stocks year on year.

After independence from the former Soviet Union, these countries were left with large quantities of obsolete pesticides including POPs and associated wastes (contaminated soils, equipment and materials and empty containers). Many of the obsolete pesticides have been disposed of in inappropriate burial sites or have been dumped in industrial landfill sites. In some instances purpose built concrete bunkers have been constructed but these are now showing signs of leakage with contamination of the surrounding environment with the associated risk to public health. In summary the vast majority of materials have been disposed of in an unsound manner or are currently kept in unsuitable storage locations. All countries are aware of the serious health and environmental risks posed by POPs, obsolete pesticides and associated wastes. As reflected in the NIPs, the countries are also aware of existing barriers to addressing their risks, which include lack of/ or limited technical, institutional, legal and financial capacities.



In the past 20 years of political transition since the breakup of the Soviet Union, countries in Central Asia have each created their own distinct political and economic systems and focused on their own national development priorities. These political attitudes have created a challenging context for international cooperation and the development of a regional strategy to protect natural resources, specifically surface and ground water.

To address issues related to the Soviet legacy of agricultural and environmental pollution, each project participating country will adopt a two component strategy: 1. management of obsolete pesticides, POPs and associated waste resulting in risk reduction; and, 2. implementation of national pesticide life-cycle management programmes aimed at improved pesticide management in the future.

It should be noted that with respect to point 1 above the countries have ratified international conventions linked to this component. In addition, inventories were initiated in all project countries during NIP preparation under the Stockholm convention and have since continued using international, bilateral and /or national resources. In general the preliminary inventories cover only 20 to 50% of the total obsolete pesticides in each country. The current status of POPs and obsolete pesticide stockpiles in the region was assessed through an FAO supported regional meeting held in Bishkek, Kyrgyzstan, 20-28 June 2011. The results are summarized below:

**In Azerbaijan**, an estimate of **10,900 Tons** of obsolete pesticides including POPs are scattered in 59 zones (Rayons). The sites include the burial site of Janji and 32 other similar sites. In 2007, The Government of Azerbaijan allocated \$USD 4Millions to inventory and repack obsolete pesticides from emergency sites posing assessed as posing a high risk to public health and the environment. These efforts continued to 2010 with World Bank assistance and additional funds from the government. A quantity of leaking liquid pesticides were repacked and new pesticide stores were constructed for their temporary storage. In addition efforts were made to secure the burial site at Janji to prevent access by animals and rural populations.

**In Kazakhstan**, obsolete pesticides including POPs are located in 14 regions/ oblasts. The materials are stored in 18 polygons (constructed burial sites) with an additional 1010 pesticides stores of which 78 stores are already declared as emergency sites. As of June 2011, the Government of Kazakhstan inventoried the quantity of obsolete pesticides in Actubinskaya (2 polygons and 52 stores), Eastern – Kazakhstan (2 polygons & 6 stores), Akmolinskaya (3 polygons ) and Pavlodarskaya (2 polygons & 30 stores) . About 60 other stores were inventoried in eight other regions/oblasts. The inventory, as of June 2011, officially communicated to FAO by the Ministry of agriculture is estimated at **16,676 tons** and covers only about 20 % of the national inventory. A GEF-financed project led by the World Bank will support the disposal of part of these materials and this project will make the necessary linkages to avoid duplication of effort.

**In Kyrgyzstan**, obsolete pesticides including POPs are in 40 zones. A total of 3 burial sites and 204 stores have been identified to-date. The Government of Kyrgyzstan nominated the National coordination Committee for the Stockholm Convention on POPs, in 2003. In 2007 – 2008 the committee initiated the inventory of obsolete pesticides at the burial site of Osh, the main agricultural region of Kyrgyzstan, with financial assistance from the Government of The Netherlands. This work continued during 2008-2009 in 35 burial sites in Djalalabad with assistance from the World Bank. To-date about **3,628 tons** have been inventoried. There are no appropriate storage facilities for central storage of obsolete pesticides in Kyrgyzstan and so the risk of contamination remains.

**In Tajikistan**, obsolete pesticides have been identified in 68 zones (Oblasts). 68 sites and 2 burial sites have been identified. **15,160 tones** of obsolete stocks have been inventoried during the NIP preparation under the Stockholm convention and with World Bank assistance in 2009. According to the Government officials , this inventory covers only 45% of the territory.

**In Turkey**, in 2007, about 11 tons of DDT were inventoried , repacked, stored in a pesticide store owned by Ministry of Agriculture in Ankara. This stock of DDT was shipped to Germany for incineration in 2008.. 2,100 tons are currently repacked and stored in Izmit under appropriate storage conditions awaiting

safe disposal. The disposal will be carried out under a GEF financed UNIDO/UNDP project recently submitted/approved.

In summary, currently, about 48,500 tons are inventoried in the project countries. It is estimated that this represents 20 to 50 % of the total stockpiles in the territory, except in Turkey where the inventory can be considered as final. Most obsolete pesticides are in insecure storage conditions and constitute a serious threat to environment, health, water quality and biodiversity. The cost of the disposal of the total estimated quantities of POPs and obsolete pesticides has been estimated at 250- 300 Million US\$.

With respect to point 2 above (Pesticide life-cycle management) efforts have been made in recent years to improve pesticides management in the region through introducing and implementing the *International Code of Conduct on the Distribution and Use of Pesticides* (the Code). In that context, pesticides residues analysis in soil and water conducted in Azerbaijan, Kazakhstan and Tajikistan have revealed high contaminations by pesticides, above international standards. Consequently, the countries have moved away from centralized purchasing systems and have imposed controls on the import of pesticides so reducing the quantities of pesticides available in the market and the associated risks to human health and the environment. As an example, in Kazakhstan 35,000 to 40,000 tons of pesticides were imported annually during the Soviet period, compared to an average of 15,000 tonnes/year of agricultural pesticides during 2001-2006. Similar trends were observed in Kyrgyzstan and Tajikistan. Unfortunately, these measures have stimulated a trade in and illegal traffic of existing POPs, other obsolete pesticides and substandard products for use in agriculture in the region.

Despite the efforts highlighted above, there are inadequate technical, institutional and financial capacities at national and regional level which are necessary to properly manage useable pesticides, dispose of obsolete stocks and clean up contaminated sites. In particular:

- (i) obsolete pesticide inventories are incomplete and therefore the magnitude of the problem and their impact on the environment and public health is not known. This is an essential first step in the development of a plan for safeguarding and final disposal;
- (ii) there are no systems to prioritize remedial action at sites according to the level of risk presented to populations and the environment;
- (iii) institutions do not have appropriate tools for pesticide life cycle management, including tools for control of imports and illegal traffic of POPs and obsolete pesticides within and among neighbouring countries; quality control, commercialization control, etc;
- (iv) the capacity for enforcement of existing pesticide legislation and regulations is weak;
- (v) awareness on issues linked to pesticides and management of chemicals is low.

Turkey is an exception to this general situation in that it has recently updated its pesticide legislation and regulations in line with the EU and is developing appropriate institutional infrastructure for regulatory enforcement. Turkey's participation in the project is therefore very important as this will allow Central Asian countries to benefit from its experience in the area of pest and pesticides management. Turkey is also a large agricultural trade partner with the Central Asian countries which makes regional cooperation in strengthening sound pesticide management logical.

A number of initiatives at the national and regional level have been undertaken or are on-going and support the proposed project outlined herein. They have been / are being implemented by a variety of partners including NGOs, FAO, the World Bank and others. All aim to link to the overall aim of improved management of pesticides and POPs in the region. The existing initiatives include:

1. Milieucontact International project on safe repackaging and storage of about 100 tons of obsolete pesticides in Kyrgyzstan;
2. GEF co-financed project on capacity building for POPs and obsolete pesticides prevention and disposal in Eastern Europe, Caucasus and Central Asia (EECCA) countries including Azerbaijan, led by FAO. The main components of this project include development of awareness raising plans, training of national experts in inventory, safeguarding and safe storage of high risk pesticide stocks;



3. World Bank-led GEF financed project in Tajikistan on elimination of POPs pesticide stockpiles (about 800 tons) and
4. World Bank-led GEF project on elimination of POPs wastes in Kazakhstan.

**Baseline projects:** In addition to these GEF supported activities with which this project will develop the necessary linkages, FAO is involved with a series of other related projects which will act as direct co-finance to this proposal. The projects link together to form a regional programme for POPs and pesticide management in the target countries and the wider region. As such the incremental activities described in the following sections will build on the following on-going and planned activities which address some of the priorities identified above and make up the baseline project:

1. **FAO / Turkish Partnership Programme:** The need for greater collaboration and coordination at the regional level has already been recognized by the countries in Central Asia. Based on their recommendation, a regional initiative has been developed on pest and pesticide management funded under the FAO/Turkey Partnership Programme (FTPP) Phase 1. The FFTP phase 1 has a budget of USD 10 million. It is funding about 30 projects in Central Asia countries ( Azerbaijan, Kazakhstan, Kyrgyzstan, Tajikistan, Turkmenistan and Uzbekistan) on capacity building for food security and rural poverty reduction for the period 2009-2013..FTPP phase 2 is expected to start in May 2013 for the period 2013- 2018 to continue with same activities initiated under the first phase. Under FFTP phase 1, the following activities in Central Asia and Turkey have been initiated: (i) regional training on inventory of POPs and obsolete pesticides and associated wastes (contaminated soils, empty containers and contaminated materials); (ii) regional training on inventory data entry into FAO Pesticides Stock Management System (PSMS); and (iii) review of existing pesticide legislation and regulations in line with international standards and the international code of conduct on the distribution and use of pesticides; and iv) capacity building needs assessment for pest and pesticides management in each country. This regional initiative will provide a strong baseline for the proposed GEF project.
2. **FAO / EC project:** The approval of the EC funded FAO managed project Improving Capacities to Eliminate and Prevent Recurrence of Obsolete Pesticides as a Model for Tackling Unused Hazardous Chemicals in the Former Soviet Union in December 2011 provides a regional framework in which this sub-regional project for Central Asia can site. The EC funded project will provide complimentary funding to the GEF project to allow countries to address the issues of obsolete pesticides and pesticide life-cycle management in a coherent and coordinated manner. This regional context provides an opportunity for the countries in Central Asia to collaborate with countries in the Caucasus and Eastern Europe with an aim of greater regional integration and ultimately greater regional cooperation in the area of pesticides management;
3. **FAO / USAID Locust Programme in Caucasus and Central Asia (CCA):** In order to improve locust management and pesticides risk reduction in CCA countries, FAO initiated preliminary needs assessment through FAO Regular Programme and Technical Cooperation Project. A follow-up five year programme (up to 2015) supported by the United States Agency for International Development (USAID) has been developed. The programme aims to improve national and regional locust management in CCA and the management of pesticides used for locust control.
4. **FAO Technical Cooperative Programme:** Through the FAO Technical Cooperative Programme (TCP) a regional allocation of US\$9M has been made in the current biennium (2012 / 2013) to support priority areas at country level. Projects are already approved in Azerbaijan Kazakhstan, Tajikistan, Kyrgyzstan and Turkey related to pest and pesticide management .. Over the life of this project it is expected that a further three TCP supported projects will be approved in this subject area in the current and next biennium. These projects will integrate into the overall regional framework for pest and pesticide management established under this project.



5. **FAO Regular Programme:** The project will be under the overall implementation management of the FAO Regional Offices in Budapest and Ankara along with support from the Plant Production and Protection Division (AGP) at FAO Head Quarters in Rome. Regional plant protection officers will support the implementation of the project. Activities planned under the Rotterdam Convention, IPPC and Code of Conduct on the Distribution and Use of Pesticides will also feed into the project and provide co-finance to the overall project.

The development of a regional approach to the problems in Central Asia will therefore link with the national and Regional initiatives which are currently active in the wider geographical area. The proposed project will also build on and link directly with the other ongoing activities (FAO, UNEP, UNDP and World Bank-led projects ) as they come on line. This project will make the necessary linkages to the EC / FAO project through participation in a single overall programme steering committee and will also benefit from the technical support provided to the region as a whole from the EC supported programme.

**B. 2. Incremental /Additional cost reasoning: describe the incremental (GEF Trust Fund) or additional (LDCF/SCCF) activities requested for GEF/LDCF/SCCF financing and the associated global environmental benefits (GEF Trust Fund) or associated adaptation benefits (LDCF/SCCF) to be delivered by the project:**

Obsolete pesticides and pesticides management is a serious issue in Central Asia. While international organizations and several actors in this field have provided assistance and contributed to raising awareness and have addressed part of the problem, their activities have mostly been carried out on an ad hoc basis. There has not been a systematic regional effort to address the POPs and obsolete pesticide issues. Without the proposed intervention (GEF contribution and co-financing), ad hoc activities will likely continue and most of these will be at national level. These will not effectively address key issues such as illegal traffic and use which require a regional solution. An opportunity for synergy and regional cooperation to address the POPs pesticides problem in the region would be missed.

With regard to global environmental benefits, the project will dispose of about 900 tonnes of POPs and obsolete pesticides and remediate contaminated sites which pose an immediate threat to human health and the global environment. The project formulation has used a unit rate of USD 7000 per metric tonne to cover safeguarding and disposal costs. This figure reflects the very high unit rate transport costs from the target countries to the waste management companies currently operating in Europe. If, during the life of the project, there is an opportunity to utilize a regional facility unit rates will decrease and the amount of materials sent for disposal will increase accordingly. This will be recorded in the project EMP developed post inventory of all affected sites. The project will also link with the planned survey of regional disposal technologies to be completed as part of the EC regional project listed above. The project, through strengthening the capacity for sound lifecycle management of pesticides will contribute to the prevention of future accumulations of POPs and obsolete pesticide stocks.

With support from GEF and co-financing, the project will address the key issues mentioned in the previous sections through the following activities:

**Component 1. Management of Obsolete Pesticides, POPs and Associated Wastes.**

This component comprises a set of Outputs linked to effective management of obsolete pesticides and associated wastes. The strategy proposed has been developed by FAO over the past 15 years of implementation of similar projects in other regions, including projects supported by GEF such as the Africa Stockpiles Programme. The focal areas which this component includes are (i) Inventory (ii) Risk Assessment; (iii) Safeguarding; and, (iv) Environmentally sound disposal. The component will cover these aspects for obsolete pesticides / POPs waste, contaminated materials due to improper disposal (soils

etc) and pesticide contaminated container waste. The following sections look in more detail at each of these outputs from the project:

(i). Inventory: The primary objective of this component is to complete national inventory of obsolete pesticides and associated wastes in Azerbaijan, Kyrgyzstan and Tajikistan and to develop a regional data base accessible to donors and other international and national organisation for further management of these obsolete stocks. The POPs and obsolete pesticide inventories in Central Asian countries are currently incomplete. There is no comprehensive picture of the quantity, characteristics and conditions of obsolete pesticides in the project countries. Without this information, it is difficult to develop an appropriate solution for the obsolete pesticides problem. Representatives from Ministries of Agriculture, Public Health and Environment of the project countries participated in a regional inventory training organized by FAO in Bishkek, Kyrgyzstan, during 20-28 June 2011. During this regional training, an inventory planning exercise was completed with each country to be implemented August 2011 – December 2012. This inventory implementation is being planned under the Initiative for Pesticides and Pest Management in Central Asia and Turkey (FTPP) outlined previously.

(ii) Risk Assessment: During the proposed project the inventory data will be validated and made available through the FAO developed Pesticide Stock Management System (PSMS) data base system to all stakeholders from public and private sectors. The system is designed to allow the risk-based prioritization of all affected sites based on the FAO technical guidance "Environmental Management Tool Kit". Emergency sites and stores posing high risk to public health and the environment will be identified and these will be prioritized. A series of national level Environmental Assessment and Environmental Management Plans (EMPs) will be developed which defined the safeguarding and disposal strategies to be adopted in each case.

(iii) Safeguarding: Based on the EMP high risk locations will be safeguarded in Azerbaijan, Kyrgyzstan and Tajikistan. An important part of Component 1 will be regional training on safeguarding, transport and safe storage of hazardous chemicals. The Training of Trainers (ToT) approach will be used so that skills can be delivered to an expanding group thereby ensuring sustainability.

(iv) Disposal: Disposal of about 900 tons of already packed stock from Azerbaijan is also planned under this project. Based on the current tenders for disposal of obsolete pesticides in Europe, the estimated unit rate cost per tonne (1000kg) is USD4,000 - USD4,500 including safeguarding, transport and incineration. The issue of long transport distances may result in this price rising as fuel costs fluctuate (this will be assessed in the EMP development). Access to any capacity developed in the Region under related projects will be explored in order to mitigate this risk. Linkage of this tendering process to similar works under FAO management elsewhere in the Eastern Europe, Caucasus and Central Asia region will also be maximized to ensure the best possible price for disposal services based on economies of scale.

In addition to the inventory, EMP development, safeguarding and disposal of pesticide stocks the project will also look to develop a series of site specific environmental management plans (EMPs) for heavily contaminated sites which pose an immediate risk to public health and the environment. This will result in remediation of the sites by application of local technologies in Azerbaijan as a demonstration project which can be used as a model in other project countries. This work will link with similar work being undertaken by FAO and other GEF Agencies in countries such as Botswana, Mozambique and Vietnam to ensure consistency of approach and application of lessons learnt.

The final area of focus under Component 1 will be the management of pesticide containers. Empty pesticide containers are a source of environmental contamination and a significant threat to human health in the majority of developing countries. They are frequently reused, sometimes for food and water storage, and so pose a significant threat to human health. It is estimated that there is significant quantities of empty pesticide containers in circulation in each of the target countries due to a lack of a strategic programme to remove them from the supply chain once the pesticide has been used. The project will therefore look to complete a pilot programme on pesticide container management aimed at dealing with legacy stockpiles of containers plus the development of a sustainable system for all future pesticide containers generated nationally. The pilot will then act as a model for replication in the other countries in

the region. The selection of the target country will be informed through the completion of the national inventory process outlined above. The demonstration project will include an initial technical and financial feasibility study followed by the training of relevant national stakeholders on collection, cleaning, crushing and recycling will be conducted. Involvement of the private sector will be sought as their participation will be important in the development and implementation of a sustainable scheme.

Component 1 is co-financed by FTTP (regional training on inventory, risk assessment and safeguarding and the use of PSMS), Government contributions (disposal activities) and the EC / FAO programme on improving capacities to tackle obsolete pesticides and other hazardous chemicals in the former Soviet Union outlined above.

## **Component 2. Pesticide Risk Reduction and Life-Cycle Management**

Dealing with the legacy of past mis-use of pesticides is of little value on its own if there is no programme to improve pesticide management in the future. This is the main mechanism for preventing future accumulations of obsolete stockpiles and offers a mechanism for the reduction of risk associated with the pesticide life-cycle. Component 2 will therefore focus in four main areas of activity (i) pesticide regulation; (ii) pesticide life-cycle analysis; (iii) promotion of lower risk alternatives; and, (iv) awareness raising / communications. The following text highlights the activities to be completed in each of these areas:

(i) Pesticide regulation: The participating countries have legal instruments regulating the placement of pesticides in the market but these legal frameworks are not sufficient, and are different between countries. This heterogeneity leads to different levels of health protection, trade obstacles and difficulties to cooperate at the regional level. To have a better understanding of national legal and regulatory frameworks, a review of national legislation and regulations governing the different areas of pesticide management in the countries is being planned and is underway under the FTTP. Through the analysis, gaps and weaknesses in the legislation and regulatory frameworks, good practices and opportunities for cooperation will be identified. Based on this information the national legislation and regulatory frameworks will be revised and harmonized and drafts presented to the governments for adoption. The pesticide legislation and regulations of Turkey, which have recently been updated and harmonized with those of EU, will serve as a reference model for the Central Asia countries.

Pesticide registration systems will also be evaluated and the possibility of developing a harmonized registration system for Central Asian countries and Turkey will be explored. Currently all project countries are preparing their current lists of registered pesticides to be uploaded into pesticides stock management system (PSMS) and will be made available to the countries for information exchange in this area and specifically to improve the control of illegal traffic of POPs, other obsolete pesticides and sub standard pesticides products.

This activity will be co financed by FTTP (analysis of current regulatory and legislative frameworks) and Government contributions.

(ii) Pesticide life-cycle analysis: One of the key issues in Central Asia is the illegal use and trade of banned pesticides. The old system of state subsidy and supply resulted in farmer dependency. The new system of supply through sales has resulted in some farmers looking to access illegal products due to lack of financial resources. In some cases this has resulted in illegal access to burial sites of obsolete pesticides and other stocks for use in agriculture. There is also a problem linked to illegal traffic of pesticides from neighbouring countries such as Tajikistan, Kyrgyzstan and Kazakhstan. As an example, about 17 tons of DDT were illegally imported into Tajikistan and documented by custom services. Currently Central Asian countries do not have adequate capacity for sound pesticide management including inspection and quality control of pesticides at import, distribution and use in each country. These weaknesses will contribute to the potential pollution of transboundary rivers, lakes and ground water and will contribute to the problem of ecosystem degradation.



Under this regional project, an analysis of pesticide management throughout their lifecycle will be carried out in each country to identify weaknesses and capacity building needs for inspection and quality control. This will guide the preparation of a clear capacity building plan which is expected to include:

1. Training of national plant protection officers on inspection and quality control using FAO /WHO standards to prevent illegal trade of banned pesticides ;
2. Identification of key entry points, origins and timing of illegal traffic;
3. Establishment of a regional network , operational for the inspection and quality control of pesticides between Kazakhstan and Kyrgyzstan and between Kyrgyzstan and Tajikistan;
4. Improvement of the existing laboratory analytical capacities for the quality of pesticides products according to FAO /WHO specifications and fertilizers and residues analysis of pesticides in water according to WHO standards. In this regard, a national laboratory with analytical capacities for pesticides residues and quality control is being developed in Bishkek, Kyrgyzstan; and
5. Establishment of a Network for monitoring the quality of transboundary Darya river in Kazakhstan, Kyrgyzstan and Tajikistan in collaboration Oregon State university and building on the experience developed and lessons learned in Western Africa along Niger River to protect water resources and to prevent the degradation of ecosystems.

Information on registered pesticides will be updated in the Pesticide Stock Management System (PSMS) and made available to all project countries to support enforcement of regulations and sound pesticide management.

This component will be co-financed by FTTP (development of a communication strategy, gap analysis of current pesticide management practices and capacity building needs ) and FAO Technical Cooperation Programme grants.

(iii) Promotion of Lower Risk Alternatives: Control of registration and post registration enforcement of life-cycle management will require the promotion and supply of lower risk alternatives to Highly Hazardous Pesticides (HHPs) currently in use. Banning or restricting the supply of a pesticide can result in a supply vacuum unless there is access to the lower risk alternative. This in-turn will require the promotion of alternative production methods employing strategies such as Integrated Pest Management (IPM) and / or the registration of the lower risk alternative (including any field trials) plus the supply of the alternative to the farmer through the government extension service (in the case of IPM) and the sales distribution network (in the case of lower risk pesticides). All of this takes time. This activity therefore has an important role in ensuring that farmers have access to lower risk pest control agents and strategies while maintaining or improving agricultural production levels.

(iv) Awareness raising and communications: All of the efforts to reduce risks related to the pesticide life-cycle will fail unless there is a comprehensive and systematic communications and awareness raising strategy linked to all aspects of Component 1 and Component 2. Work in other regions funded by GEF (ASP) has resulted in the development of a manual on the development of such a strategy based on identification of target groups, key messages, message delivery methods and collection of feedback on behavioural change of end users / suppliers and regulators. These national awareness and communications strategies provide a strong tool to allow the potential future impact of the project at local level to be estimated. The strategy can be considered as providing the adhesive which holds the overall life-cycle management component together into a coherent component

### **Component 3. Monitoring and Evaluation**

Under this component systematic evaluations of the project will be conducted and M&E reports produced in accordance with a project M&E plan which will be developed during project preparation. The component will be co-financed through Government contributions.



**B.3. Describe the socioeconomic benefits to be delivered by the Project at the national and local levels, including consideration of gender dimensions, and how these will support the achievement of global environment benefits (GEF Trust Fund) or adaptation benefits (LDCF/SCCF). As a background information, read Mainstreaming Gender at the GEF."**

The project will have health benefits through the safeguarding and disposal of POPs pesticides from high risk sites, the remediation of heavily contaminated sites and the development of container management systems. These activities will reduce or remove the risk of contamination of food, water, land and animals as well as people who are directly exposed to the chemicals. The immediate beneficiaries will therefore be the communities living and working close to obsolete pesticide stores and the wider community that is indirectly exposed to contamination through food and water. In addition, the strengthening of the institutional framework and limiting access to banned products will reduce impact on farmers during application of the chemical and also on consumers who may be exposed to harmful residues in food. The promotion of alternatives to HHPs and awareness creation will also provide an opportunity for risk reduction from future pesticide exposure.

In Central Asia, women and children are involved in agricultural production. As part of the project, a regional communication strategy will be developed and will reach out women and children to make them aware of the threat posed by over-use of pesticides in food production and of the re-use of empty containers. Consultations with women NGO groups will be undertaken to ensure the project takes into account the specific needs of women and actively seeks to identify opportunities for women.

By reducing the exposure of the communities to POPs pesticides, the project will be contributing to delivery of the global environmental benefits expected under the POPs focal area.

**B.4 Indicate risks, including climate change risks that might prevent the project objectives from being achieved, and if possible, propose measures that address these risks to be further developed during the project design:**

Risk	Rating	Mitigation
High transport costs make shipment for overseas disposal uneconomic	High	Distances involved for transportation of stocks to environmentally sound disposal facilities in Western Europe are vast. Costs per tonne of waste will be high. Lack of local disposal options in the short term makes this a major risk to the implementation of the project. This can be mitigated by grouping procurement for disposal services in a number of countries into a single contract linked with other projects active in the Region under FAO management. This allows for a more overall balanced transport rate based on economies of scale.
Prolonged storage of stocks resulting in increased costs due to deterioration of packaging	High	The project will adopt a strategy of removal of all stocks currently safeguarded under related activities plus a cradle to grave approach for all stocks safeguarded under this project. Net result will be all stocks considered under this project will be sent for disposal and long term storage will be avoided.
Governments do not endorse updated pesticide policy during lifetime of project.	High	With relation to future management of pesticides this is a high risk. For management of the obsolete stocks it is less of a risk to the immediate objectives of risk reduction through elimination. Continued advocacy and awareness raising within government and end users has proven effective in encouraging governments to amend policies which are not sustainable.
Lack of reliable data on pesticide trade and use	Moderate	Centralized government purchase of inputs has the advantage of providing good records on amounts produced, used and stored. Access to the data will be an

		issue however. Current import data is available from Customs based on charges for duty on entry. Linkages to this stakeholder will therefore be an important component of Component 2.
Lack of private sector and NGO support	Moderate	NGO partners are currently engaged through the GEF EECCA project. Pesticide industry will need to come on board as part of the project implementation strategy. Product stewardship initiatives lend themselves to support of projects of this type and are generally seen as a win / win opportunity for government and pesticide industry to collaborate.
Natural disasters, conflict and other force majeure	Medium	The area is subject to earthquakes and extremes of weather which can result in floods, fires and other natural disasters. A number of the countries remain in dispute over borders and resources. The project can't develop mitigation plans to address these risks and will need to operate in a reactive rather than proactive mode in these circumstances as and when issues arise.

**B.5. Identify key stakeholders involved in the project including the private sector, civil society organizations, local and indigenous communities, and their respective roles, as applicable:**

Key stakeholders and their respective roles will be further defined during project preparation.

Key stakeholders	Roles
Ministries of Environment/Agriculture in collaboration with Ministries of Health and other relevant ministries	Lead the preparation, management and implementation of the project and ensure close collaboration with other ministries and stakeholders.  Support coordination of pesticide management activities within the countries and ensure regional collaboration.  Staff from relevant ministries will participate in capacity building/training activities.
NGOs / Civil Society Organizations	Will be mainly involved in the development and implementation of the communication strategy to raise awareness on the impact of pesticides to human health and the environment, and to promote alternatives.
Farmers and communities	As users of pesticides, participate in activities related to raising awareness on the impacts of POPs pesticides and the promotion of alternatives to hazardous pesticides.
Private Sector	Support the development and implementation of the container management systems and other project activities as appropriate.

**B.6. Outline the coordination with other related initiatives:**

As mentioned, there is a number of ongoing activities in the region including:

1. FAO-led GEF project on Capacity Building on Obsolete and POPs Pesticides in EECCA Countries including Azerbaijan;

2. The FAO / EC project on Capacity Building in the ex-Soviet Union. This project will act as a focal point for pesticide management activities under FAO in the Eastern Europe, Caucasus and Central Asia regions and covers 11 ex-Soviet republics and the Russian Federation;
3. FAO-led USAID/DCHA/OFDA on locust emergency prevention and risk mitigation –Caucasus and Central Asia component;
4. Integrated Pest Management (IPM) in Central Asia project funded by FAO Technical cooperation programme and executed by the International Centre for Agricultural Research in the Dry Areas (ICARDA);
5. UNEP-led GEF project on introducing alternatives to the use of DDT for fighting malaria in Georgia, Kyrgyzstan, Tajikistan;
6. UNDP / UNIDO GEF project for Turkey to establish regional waste management and POPs treatment capacity;
7. World Bank-led GEF projects under preparation in Tajikistan; Kazakhstan.

FAO-GEF project and UNEP-GEF project are executed by the International NGO, Green Cross Switzerland in collaboration with the Dutch NGO Milieucontact and the International HCH and Pesticides (IHP) Forum. These partners are also executing agents for the FAO / EC project. This project will take advantage of information and outputs from these related initiatives. For instance, in the prioritization of emergency sites for remedial and disposal action, the project will take into consideration the disposal conducted under the World Bank– / GEF projects.

Under the FAO / EC project (ii above) a regional programme steering committee and supporting technical committee will be established. All countries included in this project will be invited to attend meetings of these groups in order to integrate as closely as possible the activities under this project with those of the wider FAO programme in the region and globally. Representatives of the UNEP DDT Alternatives project will also be part of this structure leading to maximisation of cross linkages to ensure optimum impact. The first Steering Committee meeting of this project is confirmed for September 27 / 28 in Moldova. 10 of the 12 project countries have so far confirmed attendance at the meeting. They will be joined by representatives from UNEP Chemicals, UNDP and the World Bank so allowing exchange of information and coordination of activities at country level in a single forum.

In addition, under the FAO / EC project, FAO is currently formulating a series of inter-agency agreements (MOUs) to define the role and activities of agencies in the region. Discussions are advanced with UNEP Chemicals. Discussions are on-going with the World Bank projects in Belarus and Kazakhstan (plus the agriculture competitiveness project in Moldova) on how FAO can support the implementation of these projects. Likewise FAO and UNDP have agreed to collaborate on the POPs work planned for Georgia to ensure integration of the FAO / EC project with UNDP plus the UNEP DDT project. Discussions with UNDP on how to collaborate in Armenia are similarly on-going. Contact has also been made with the UNIDO GEF unit in Vienna to similarly build a solid foundation for collaboration in the region. In this regard FAO is committed to ensuring coordination of work with other GEF agencies to ensure maximum impact at country and regional level. In this regard the proposed project will review the status of any regional projects to develop treatment capacity and link with these initiatives.

Specific mechanisms for coordination will be elaborated during project preparation.

### **C. DESCRIBE THE GEF AGENCY'S COMPARATIVE ADVANTAGE TO IMPLEMENT THIS PROJECT:**

FAO, through the pesticide reduction group, has a long history of successful implementation of projects focusing on POPs and obsolete pesticides. The FAO programme for the prevention and elimination of obsolete pesticides has been operational since 1994. Although the initial focus of the programme was Africa and the Near, FAO's work on POPs and pesticide management has expanded to all regions, including Central Asia. The programme was a key driver in the development of the Africa Stockpiles Programme (ASP) and received a GEF grant under phase 1 of the programme for hosting the ASP Technical Support Unit (TSU). FAO has developed a wide range of management systems and guidelines to assist countries in the implementation of pesticide disposal and management projects.

In Additionally, FAO has long experience and provides technical assistance in: Integrated Pest Management (IPM) to reduce reliance on chemical pesticides and to promote sustainable farming systems; safe migratory pest control which is a major source of obsolete pesticide stockpiles; and pesticide legislation and regulatory aspects in countries to meet international standards.

**C.1 Indicate the co-financing amount the GEF agency is bringing to the project:**

FAO, through its regular programme activities linked to the Code of Conduct on Distribution and Use of Pesticides, the activities of the Rotterdam Convention and the IPPC will provide a significant level of cash and in-kind co-finance to this project. It is also anticipated that further cash co-finance will be secured from the FAO TCP mechanism in the current and next (2014 – 2015) biennium. The indicative amount is USD 2.3 million in cofinancing.

**C.2 How does the project fit into the GEF agency's program (reflected in documents such as UNDAF, CAS, etc.) and staff capacity in the country to follow up project implementation:**

This project falls under FAO Strategic Objective 1 on sustainable intensification of agricultural production, Organization Result 3 "risks from pesticides are sustainably reduced at national, regional and global levels". The project is consistent with priorities identified in UNDAFs - Capacity building for integrated pest management to contribute to the goal of raising agricultural productivity (Tajikistan); capacity building for management safeguarding and disposal of hazardous waste including POPs pesticides (Azerbaijan and Kazakhstan); and strengthening policy formulation and implementation capacity for the protection of the environment (UN Development Cooperation Strategy Turkey).

With respect to staff capacity in the region, FAO has a Regional Office in Budapest, Hungary responsible for Eastern Europe, Caucasus and Central Asia. This office is supported on the ground via a Sub-Regional Office for Central Asia in Turkey and a network of FAO Representations in Azerbaijan, Kyrgyzstan and Tajikistan. The project will be supported specifically by the regional plant production and protection officer, the field programme support and monitoring officer, regional and country operations staff and other technical staff as required. Additional technical support will be provided by FAO staff from the Plant Production and Protection Division, the Legal Office, Investment Centre Division and other technical units, as necessary, in Rome.



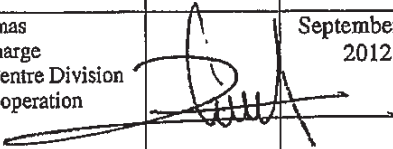
**PART III: APPROVAL/ENDORSEMENT BY GEF OPERATIONAL FOCAL POINT(S) AND GEF AGENCY(IES)**

**A. RECORD OF ENDORSEMENT OF GEF OPERATIONAL FOCAL POINT (S) ON BEHALF OF THE GOVERNMENT(S):** (Please attach the Operational Focal Point endorsement letter(s) with this template. For SGP, use this OFP endorsement letter).

NAME	POSITION	MINISTRY	DATE (MM/dd/yyyy)
Hussein Baghirov	Minister	MINISTRY OF ECOLOGY AND NATURAL RESOURCES - AZERBAIJAN	04/01/2011
Turmagambetov Majit	Vice Minister	MINISTRY OF ENVIRONMENT - KAZAKHSTAN	04/01/2011
Biymyrza Toktoraliev	Director	STATE AGENCY ON ENVIRONMENT AND FORESTRY OF KYRGYZ REPUBLIC TAJKISTAN	01/04/2011
Talbak Salimov	Chairman of the Committee	COMMITTEE ON ENVIRONMENT PROTECTION - TAJIKISTAN	17/03/2011
Lutfi Akca	Undersecretary	MINISTRY OF ENVIRONMENTAL AND FORESTRY - TURKEY	01/04/2011

**B. GEF AGENCY(IES) CERTIFICATION**

This request has been prepared in accordance with GEF/LDCF/SCCF policies and procedures and meets the GEF/LDCF/SCCF criteria for project identification and preparation.

Agency Coordinator, Agency name	Signature	DATE (MM/dd/yyyy)	Project Contact Person	Telephone	Email Address
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