



PROJECT IDENTIFICATION FORM (PIF)

PROJECT TYPE: Full-sized Project
THE GEF TRUST FUND

Submission Date: April 3, 2009
Re-submission Date: April 22, 2009

PART I: PROJECT IDENTIFICATION

GEF PROJECT ID¹: PROJECT DURATION: 36 MONTHS

GEF AGENCY PROJECT ID: 606880

COUNTRY(IES): Eritrea

PROJECT TITLE: Prevention and Disposal of POPs and Obsolete Pesticides in Eritrea Phase II

GEF AGENCY(IES): FAO

OTHER EXECUTING PARTNER(S): Ministry of Agriculture, Ministry of land, Water and Environment of Eritrea.

GEF FOCAL AREA (S)²: Persistent Organic Pollutants

GEF-4 STRATEGIC PROGRAM(S): POPs-SP1, SP2 & SP3 (see preparation guidelines section on exactly what to write)

NAME OF PARENT PROGRAM/UMBRELLA PROJECT (if applicable): AFRICA STOCKPILES PROGRAMME - PHASE II

INDICATIVE CALENDAR*	
Milestones	Expected Dates mm/dd/yyyy
Work Program (for FSP)	06/30/2009
CEO Endorsement/Approval	06/30/2010
Agency Approval Date	08/30/2010
Implementation Start	10/30/2010
Mid-term Evaluation (if planned)	04/30/2012
Project Closing Date	10/30/2013

* See guidelines for definition of milestones.

A. PROJECT FRAMEWORK

Project Objective: Improvement in the environment, public health and rural livelihoods through the elimination of POPs and other obsolete pesticides, reduced reliance on synthetic chemical pesticides and improved pesticides management.								
Project Components	Indicate whether Investment, TA, or STA ^b	Expected Outcomes	Expected Outputs	Indicative GEF Financing ^a		Indicative Co-Financing ^a		Total (\$) c = a + b
				(\$ a)	%	(\$ b)	%	
1. Disposal of POPS/obsolete pesticides and contaminated materials	TA	All POPs/obsolete pesticides destroyed and plans prepared for the remediation of contaminated materials	1. 20 staff trained in management and handling of hazardous chemicals 2. 400 tonnes of POPs/obsolete pesticides repackaged, centralized, shipped and destroyed. 3. Strategy developed and demonstrated for remediation of 1,400 m2 contaminated soil, 12,000 contaminated empty containers, 5,411 contaminated sprayers and other contaminated materials	1,650,000	47	1,830,000	53	3,480,000
2. Capacity Building in pest and pesticide management to prevent use and accumulation of POPS and obsolete pesticides	TA	Reduced reliance on pesticides and strengthened capacity on life-cycle management of pesticides	1. IPM strategy for Citrus cultivation developed and implemented. 2. Draft pesticide legislation translated and approved. 3. 20 Extension and Plant Protection staff trained in IPM techniques; 10 staff trained in stock management, needs assessment and	284,000	25	840,000	75	1,124,000

¹ Project ID number will be assigned by GEFSEC.

² Select only those focal areas from which GEF financing is requested.

			procurement of pesticides; 3 laboratory staff trained in pesticide quality control procedures. 4. Plan developed for upgrade of Pesticide quality control laboratory 5. FAO's Pesticide Stock Management System set up in Eritrea, and 10 staff trained to be Trainers of Trainers in its use 6. Plan developed for rationalization and upgrade of Eritrea's pesticide stores 7. Plan for pilot scheme in Zoba Maekel for management of empty pesticide containers developed. 8. Communications strategy to raise awareness and change behaviors in POPs and obsolete pesticide practice implemented.					
3. Monitoring and Evaluation	TA		1. Best practices identified and disseminated 2. M&E plan carried out	40,000	40	60,000	60	100000
4. Project management				176,000	41	250,000	59	426,000
Total project costs				A2,150,000	42	B2,980,000	58	5,130,000

^a List the \$ by project components. The percentage is the share of GEF and Co-financing respectively of the total amount for the component.

^b TA = Technical Assistance; STA = Scientific & Technical Analysis.

B. INDICATIVE CO-FINANCING FOR THE PROJECT BY SOURCE and by NAME (in parenthesis) if available, (\$)

Sources of Co-financing	Type of Co-financing	Project
Project Government Contribution	In-kind	250,000
GEF Agency – (FAO)	Grant	900,000
GEF Agency – (FAO)	In-kind	150,000
Bilateral Aid Agency (Japan)	Grant	1,500,000
Multilateral Agency(ies)	(select)	0
Private Sector (Croplife)	Grant	180,000
NGO	(select)	0
Others	(select)	0
Total Co-financing		B2,980,000

C. INDICATIVE FINANCING PLAN SUMMARY FOR THE PROJECT (\$)

	Previous Project Preparation Amount (a) ³	Project (b)	Total c = a + b	Agency Fee
GEF financing		A2,150,000	2,150,000	215,000
Co-financing	821,000	B2,980,000	3,801,000	
Total	821,000	5,130,000	5,951,000	215,000

³ Include project preparation funds that were previously approved but exclude PPGs that are awaiting for approval.

D. GEF RESOURCES REQUESTED BY AGENCY (IES), FOCAL AREA(S) AND COUNTRY(IES)¹

GEF Agency	Focal Area	Country Name/ Global	(in \$)		
			Project (a)	Agency Fee (b) ²	Total c=a+b
FAO	Persistent Organ	Eritrea	2,150,000	215,000	2,365,000
Total GEF Resources			2,150,000	215,000	2,365,000

¹ No need to provide information for this table if it is a single focal area, single country and single GEF Agency project.

² Relates to the project and any previous project preparation funding that have been provided and for which no Agency fee has been requested from Trustee.

PART II: PROJECT JUSTIFICATION

A. STATE THE ISSUE, HOW THE PROJECT SEEKS TO ADDRESS IT, AND THE EXPECTED GLOBAL ENVIRONMENTAL BENEFITS TO BE DELIVERED:

Eritrea has a legacy of environmental degradation and public health impacts from POPs and obsolete pesticides dating from 1960. In February 2008, FAO, with funding totaling \$721,000 from the Governments of Japan and the Netherlands plus \$100,000 in-kind contributions from FAO and the Government of Eritrea, completed the preparation project "Prevention and Disposal of Obsolete Pesticides in Eritrea (Inventory and CESA) Phase I". This preparation project identified 400 tonnes of POPs and obsolete pesticides plus 1,400 m² contaminated soil, 12,000 contaminated empty containers and 5,400 contaminated sprayers. The environmental assessment identified 10 critical sites with leaking pesticides in dilapidated stores located close to human habitation and/or water supplies. The project recommended that the critical sites be safeguarded as an emergency followed by the less critical stores and the disposal of all the pesticides. The institutional capacity for handling and managing hazardous chemicals is weak. There are no suitable facilities within the country for the environmentally sound disposal of POPs and obsolete pesticides. For the contaminated materials it recommended more detailed assessment and evaluation of the most appropriate environmental option based on the risks posed to the environment and public health, followed by early implementation.

The preparation project also reviewed through a consultative process, pest and pesticide management practice in Eritrea and identified weaknesses and gaps that should be filled in order to avoid the future accumulation of obsolete pesticides. Agricultural practice relies heavily on pesticides although both institutional and farmer capacities are weak. Inappropriate use of pesticides is damaging crops, the environment and threatens the health of farmers and consumers. The consultative process recommended the institutionalization of alternative pest management strategies such as Integrated Pest Management (IPM) to reduce reliance on synthetic chemical pesticides. It also recommended capacity building throughout the lifecycle of pesticides in particular with training staff involved in the procurement of pesticides, stock management and the provision of advice to users. Draft pesticide legislation was prepared, together with a communications strategy to change attitudes and behaviors of the farming communities and general public regarding pesticide use.

The preparation project has been included as co-finance. It has provided a firm basis upon which to plan the project for the prevention and disposal of obsolete pesticides in Eritrea. The quantities, types, locations and environmental conditions of obsolete pesticides that require safeguarding and disposal are well defined and will allow the project plan to focus on the rapid reduction of risks to public health and the environment. The project components for capacity building in pest management and pesticide management are focused on filling the key gaps that were identified during the preparation project.

DDT is still being used in small quantities by the Ministry of Health as part of its malaria control programme. It is only authorized for use for spraying inside houses by ministry staff. POPs pesticides are banned from use but, as smuggled and obsolete pesticides are entering the market illegally, there is a risk of their continued use until the obsolete pesticides are disposed of and pesticide management practice is improved.

Component 1 - Disposal of POPs and Obsolete Pesticides and Contaminated Materials

The objective of this component is to destroy all POPS and obsolete pesticides in Eritrea and to develop and

demonstrate strategies for the remediation of the other contaminated materials. The component will initiate with the training of national staff in the safe handling, clean-up and repackaging, transportation and storage of pesticides. Eight Collection centres have been identified which will be refurbished to receive the repackaged pesticides. To reinforce the training and ensure the safety of the operations, the national staff will first safeguard the critical sites under the direct supervision of a specialist safeguarding contractor. The remaining sites will be safeguarded by the trained national staff alone. As there are no local environmentally sound destruction facilities for POPs and other pesticides, an international tender will be used to select the most appropriate disposal contractor. The pesticides will be shipped in accordance with the Basel Convention (Eritrea acceded in 2005) and International Maritime Dangerous Goods code. The project design is based on experience of other ASP and FAO obsolete pesticides projects. The project will use standard training modules and operating procedures that have been proven successful previously.

Detailed assessments of the contaminated sites, soils, sprayers and empty containers will be undertaken to identify the most appropriate environmental remediation, recycling or disposal option. The assessment will take account of the options' impacts on environment and public health in relation to the benefits they offer in treating the waste. It is expected that environmentally sound disposal options will be found locally for the majority of the contaminated materials. The selected options, where appropriate should be sustainable and contribute to building Eritrea's capacity to manage its other chemical wastes safely. To the extent possible within the funding constraints, these remediation strategies will be piloted to demonstrate their effectiveness. Full implementation of the recommended options is outside the scope of this project and will require additional funds.

Component 2 - Capacity Building in pest and pesticide management to prevent use and accumulation of POPs and obsolete pesticides

This component comprises a number of activities that all contribute to reducing reliance on pesticides and improving pesticide management. A participatory programme with farmers and extension staff will introduce integrated pest management practices in citrus cultivation. Many citrus stands are currently infested with woolly whitefly and other pests due to the excessive use of broad spectrum pesticides including obsolete stocks. Citrus production has been identified as a priority by the Government of Eritrea. Effective biological control of citrus pests has been demonstrated in other regions similar to Eritrea. Successful implementation of IPM will be publicized to stimulate interest in other crops. The expected benefits are improvements to farmer and consumer health, reduced environmental contamination and improved farmer livelihoods.

Pesticide management will be improved through the improvement of pesticide legislation and regulation where current stakeholders have agreed that current systems are inadequate. In addition training will be provided to stakeholders who come into contact with pesticides at various stages of their lifecycle. This may include customs officers, extension staff, retailers and farmers. A communications programme will be launched to raise awareness on pesticide hazards, alternatives and risk reduction measures. The Pesticide Stock Management System (PSMS) will be introduced to improve the decision-making over the procurement of pesticides and effective stock management.

Component 3 – Monitoring and Evaluation

A monitoring and evaluation plan will be developed to measure the effectiveness of the project in delivering its expected benefits. The lessons learnt and best practices identified from the project will be disseminated in order to benefit future projects in Eritrea and other countries with similar issues.

Component 4 – Project Management

The project will be overseen by a national steering committee made-up of key stakeholders including Ministry of Land Water and Environment, Ministry of Agriculture, Ministry of Health, donors, FAO, and NGOs. The steering committee will appoint a National Project Coordinator and a Project Management Unit to manage the

day to day activities. An International Technical Advisor will be appointed to support the implementation of the project.

Global Environmental Benefit

The expected global environmental benefit of the project will be the elimination of risks from POPs and obsolete pesticides in Eritrea through the use of environmentally sound management methods that prevent the creation of by-product POPs or other environmental contaminants. The project will address both the pesticide chemicals and the other materials that they have contaminated. In addition the project aims to put in place measures to prevent recurrence of obsolete pesticide accumulation, importation or use of POPs or other controlled pesticides and the creation of by-product POPs or other contaminants through hazardous waste destruction, or uncontrolled import of poor quality pesticides or other chemicals that may be contaminated by POPs.

B. DESCRIBE THE CONSISTENCY OF THE PROJECT WITH NATIONAL/REGIONAL PRIORITIES/PLANS:

Eritrea ratified the Stockholm convention on 1st March 2005, the Rotterdam Convention on 10th March 2005 and the Basel Convention on 10th March 2005. Ratification of the three key chemicals conventions demonstrates Eritrea's high level of commitment to protection of health and environment from hazardous chemicals. The project will contribute to the country's attainment of its Millennium Development Goal targets for MDG1 in poverty reduction and MDG7 for access to sustainable safe water supplies. The project is also in conformance with Eritrea's National Environmental Management Plan and Environment Proclamation. The UNDAF for 2007-2011 details the national priorities and the expected focal areas for UN strategic assistance. The project will contribute to achieving UNDAF outcomes 2 and 3 relating to capacity development and food security respectively. In particular:

- 2.3 operational, regulatory and legislative capacity of the civil service organizations strengthened by 2011;
- 3.2 support development and protection of the environment and natural resources by 2011;
- 3.3 improved access and availability of food; and
- 3.4 capacity support provided to enhance food production at national and household level.

C. DESCRIBE THE CONSISTENCY OF THE PROJECT WITH GEF STRATEGIES AND STRATEGIC PROGRAMS:

The FSP will contribute to the GEF-4 strategic objective of reducing and elimination production, use and releases of POPs. It will address the three strategic programmes, particularly SP-3 with partnering in the demonstration of feasible, innovative technologies and best practices for POPs reduction and SP-1 with the strengthening of capacity for NIP development and implementation.

D. JUSTIFY THE TYPE OF FINANCING SUPPORT PROVIDED WITH THE GEF RESOURCES:

The GEF financial support will be used as a grant. The activities planned under this project are of a nature that do not lend themselves well to loan arrangements since they will not result in income being generated. The GEF grant will also be matched by funds from other donors that will be granting their contributions without expectation of reimbursement.

E. OUTLINE THE COORDINATION WITH OTHER RELATED INITIATIVES:

The project falls under the GEF umbrella programme, the *Africa Stockpile Programme* (ASP) led by FAO and the World Bank. The experience of other ASP POPs and obsolete pesticides projects, plus the supporting guidelines and tools developed by ASP will be used by the project to facilitate effective implementation. Lessons learnt in Eritrea will be disseminated and will contribute to the success of the whole programme. The project will also draw on FAO's expertise in pest and pesticide management.

Eritrea is about to start preparing its NIP under GEF Project ID 3139 *Enabling Activities to Facilitate Early Action on the Implementation of the Stockholm Convention on POPs*. The inventory of POPs and obsolete pesticides and the Country Environmental & Social Assessment, prepared under the Phase I project, are available to contribute to the preparation of the NIP. The proposed project will contribute to the removal of POPs from Eritrea. It will also contribute to the objectives of the GEF Project ID 1331 *Demonstrating Cost-effectiveness and Sustainability of Environmentally-sound and Locally Appropriate Alternatives to DDT for Malaria Control in Africa*. The project has also been designed to complement the *FAO programme for the Control of Desert Locust* for capacity building in the management of empty pesticide containers.

F. DISCUSS THE VALUE-ADDED OF GEF INVOLVEMENT IN THE PROJECT DEMONSTRATED THROUGH INCREMENTAL REASONING :

The safeguarding and disposal costs of the POPs and Obsolete pesticides from Eritrea are estimated to exceed \$6,000 per tonne, giving a total cost for disposal of at least \$2.4 million. Were GEF not to participate in the project, Eritrea would be unlikely to find single or multiple donors that would contribute the full cost of disposal. The objective of the co-financing partners (Japan and Croplife) is the disposal of the stocks. The Government of Japan are unlikely to be willing to fund just the safeguarding of all stocks, or the safeguarding and disposal of only a proportion of the stocks, as the stocks that would remain in Eritrea would pose a continued, albeit reduced, risk to the environment and public health. The worst case would be that no co-finance is forthcoming as many donors see GEF's participation as a critical endorsement of the validity of the project. Eritrea has neither the technical nor financial capacity to deal with this problem by itself. "Business as usual" leaves the POPs and obsolete pesticides condition deteriorating and threatening the entire region from contamination since a) Eritrea feeds several river catchments and borders the Red Sea and b) political instability risks chemicals being unintentionally damaged or used in their own right as weapons.

The Global Environmental Benefit is the elimination of all the POPs and obsolete pesticides and the removal of the risks that they pose to the global environment and public health. GEF's role in the project is shown in the table below:

COMPONENT	GEF CONTRIBUTION	CO-FINANCE
Component 1	<ul style="list-style-type: none"> • the safeguarding and disposal of 280 tonnes of the remaining sites; • the remediation/disposal strategy development of the other contaminated materials. 	<ul style="list-style-type: none"> • Safeguarding capacity building; • safeguarding and disposal of critical sites (90 tonnes) and 30 tonnes of the remaining sites.
Component 2	<ul style="list-style-type: none"> • Pesticide legislation; • Training national staff in stock management, • Training pesticide quality control laboratory staff • Plan for upgrade of quality control laboratory • Establishment of Pesticide Stock Management System • Plan rationalization and upgrade of storage infrastructure • Plan for pilot empty pesticide container management scheme 	<ul style="list-style-type: none"> • IPM for Citrus cultivation; • Training national staff in IPM techniques. • Implement communications strategy for awareness-raising and behavior change in POPs and pesticide practice.

COMPONENT	GEF CONTRIBUTION	CO-FINANCE
Component 3	<ul style="list-style-type: none"> • Identification and dissemination of best practice 	<ul style="list-style-type: none"> • M & E plan

G. INDICATE RISKS, INCLUDING CLIMATE CHANGE RISKS, THAT MIGHT PREVENT THE PROJECT OBJECTIVE(S) FROM BEING ACHIEVED, AND IF POSSIBLE INCLUDING RISK MITIGATION MEASURES THAT WILL BE TAKEN:

RISK	MITIGATION
Risk of environmental contamination from obsolete pesticides during repackaging, transportation and destruction operations	All obsolete pesticides in Eritrea will be packed in new UN approved containers. The safeguarding operations will be undertaken using proven operating procedures that minimize risks of environmental contamination. Transportation on land and sea will be in full compliance with UN regulations. Destruction will be carried out only in facilities and by companies that comply with international, regional and national regulations, and apply best practice.
Political instability in the region prevents project from being implemented	While beyond the control of the project, previous political events in the region did not affect project implementation.
Insufficient funds are secured to complete POPs/obsolete pesticide destruction	At present, there is a very high level of confidence that sufficient funds will be secured. If a donor drops out, efforts will be made to secure alternative funds as quickly as possible. The limited funds would be used to safeguard all the stocks and centralize them in a secure store until funds for disposal become available.

H. DESCRIBE, IF POSSIBLE, THE EXPECTED COST-EFFECTIVENESS OF THE PROJECT:

The most significant costs in the project are a) the safeguarding and b) the destruction of the POPs and obsolete pesticides.

Safeguarding

There are three alternatives for safeguarding shown in the table below:

Alternative	Pro	Con	Cost per manday
A. Use a specialist contractor to safeguard all stocks	Safeguarding team very experienced – fast and safe	Unnecessarily expensive for the simple safeguarding operations/smaller sites. Lacks sustainability as no capacity is built in the national staff for future safeguarding	\$900
B. Use a specialist contractor to safeguard highly hazardous sites and train local teams to safeguard the remainder under the supervision of a safeguarding consultant	Hazardous sites safely safeguarded. Sustainability ensured as national teams trained and mentored. Minimal risk of accident or environmental impairment. Medium cost		Contractor - \$900 National staff - \$17 Consultant - \$400
C. Train local teams to safeguard all sites without external supervision	Sustainability ensured Lowest cost	Higher risk of accident and environmental impairment at both high hazard sites and other sites. Slow working	National staff - \$17

Option A is ruled out because, although safe and slightly quicker than option B, it is too expensive and does not deliver sustainability. Option C is the cheapest but is ruled out because of the very high risks to project staff,

the environment and the public. Option B has been incorporated in the project design. Option B has been proven to be cost effective in other FAO and ASP POPs and obsolete pesticide projects.

Destruction

The cost effectiveness of destruction is ensured through an international tender. FAO, with support from ASP partners, GEF and Basel Secretariat has developed technical guidelines for the environmental sound destruction for POPs and obsolete pesticides. These guidelines will be used to provide the technical specification for an international tender to select the destruction facility. The lowest cost bid that satisfies the technical specification will be selected.

I. JUSTIFY THE COMPARATIVE ADVANTAGE OF GEF AGENCY:

FAO's comparative advantage for the GEF in this project is its technical capacity and experience agriculture and natural resources management. FAO has strong experience in integrated pest and pesticides management.

FAO has operated a programme for the prevention and elimination of obsolete pesticides in the Plant Protection Service (AGPP) since 1994. This programme has been funded by the Government of the Netherlands consistently for ten years. The initial focus of the programme was Africa and the Near East and it is as a direct result of the work carried out by AGPP with Netherlands funding that the ASP has come to be. The programme also operated in other geographical regions and has gained extensive experience in a wide range of situations. Collaboration with other donors in implementing projects includes Belgium, EC, Finland, Japan, Sweden, Switzerland, USA, World Bank and FAO-TCP whose funds have allowed several projects to be implemented.

The experience gained by AGPP in the area of obsolete pesticide prevention and disposal is unique among the Intergovernmental Agencies. FAO is therefore ideally and uniquely positioned to support its member states in the development and implementation of comprehensive, safe and effective projects for the management of pesticides and disposal of obsolete pesticides.

The mandate of FAO includes the prevention and management of agricultural pests, the safe distribution and use of pesticides including their disposal as governed by the *International Code of Conduct on the Distribution and Use of Pesticides*, and the control of international trade in particularly hazardous pesticide formulations as governed by the *Rotterdam Convention on Prior Informed Consent*. In addition AGPP provides guidance on Integrated Pest Management (IPM) which is able to reduce reliance on chemical pesticides, and on migratory pest control which is a major source of obsolete pesticide stockpiles.

AGPP is taking leadership in advocating Integrated Pest Management through the FAO Regular Programme and extra-budgetary funding from various financial support sources. IPM increases the sustainability of farming systems. It improves ecological sustainability, as it relies primarily on environmentally benign processes including the use of pest resistant varieties, the actions of natural enemies and cultural control. It improves social stability because it is institutionalized at the level of the farming community and local government. Finally, IPM programmes are economically sustainable as they reduce farmers' dependence on procured inputs. IPM addresses far more than purely pest management. It offers an entry point to improve the farming system as a whole.

The FAO representation in Eritrea is an important benefit offering immediate authoritative connections. This has been proven to be invaluable in project development and will undoubtedly be equally useful during project implementation.

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 country endorsement letter(s) or regional endorsement letter(s) with this template).

NAME	POSITION	MINISTRY	DATE (Month, day, year)
Mr Mogos WOLDEYOHANNES	Director General, Department of the Environment	Ministry of Land Water and Environment	April 7, 2009

B. GEF AGENCY(IES) CERTIFICATION

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

Agency Coordinator, Agency name	Signature	Date (Month, day, year)	Project Contact Person	Telephone	Email Address
Charles Riemenschneider, Director, Investment Centre Division Technical Cooperation Department, FAO		April 22, 2009	Mark Davis Chief Technical Advisor – Obsolete Pesticides Programme FAO	+390657055192	Mark.Davis@fao.org
Barbara Cooney GEF Coordinator Technical Cooperation Department FAO Tel.: +3906 5705 5478 Email: Barbara.Cooney@fao.org					

