# PROJECT EXECUTIVE SUMMARY



**REQUEST FOR** Council Work Program Inclusion UNDER THE GEF Trust Fund

**GEFSEC PROJECT ID: 2546** 

IA/ExA PROJECT ID: Not assigned

COUNTRY: Djibouti, Egypt, Jordan, Morocco,

Islamic republic of Iran, Sudan, Syria, Yemen

**PROJECT TITLE:** Demonstration of Sustainable Alternatives to DDT and strengthening of National Vector Control Capabilities in Middle

East and North Africa

**GEF IA/ExA:** United Nations Environment Programme (UNEP; Implementing Agency-IA); World Health Organization (WHO, Executing Agency-ExA)

OTHER PROJECT EXECUTING AGENCY(IES):

Ministries of Health in the project countries

**DURATION:** 5 years

**GEF FOCAL AREA:** Persistent Org. Pollutants

GEF STRATEGIC OBJECTIVES: POP-4 (Promote

partnering in demonstration of innovative

technologies and practices for POPs reduction)

**GEF OPERATIONAL PROGRAM:** OP-14

PIPELINE ENTRY DATE: 13 July 2004

EXPECTED STARTING DATE: September 2007
EXPECTED CEO ENDORSEMENT: AUGUST 2007

**IA/ExA FEE:** 556,311 US \$

FINANCING PLAN (\$)			
	PPG	Project*	
GEF Total	650,000	4,913,114	
Co-financing	(provide details in Section b: Co-		
	finar	ncing)	
GEF IA/ExA	50,000		
Government	131,750	7.210,902	
Others	564,750	1,205,500	
Co-financing Total	746,500	8,416,402	
Total	1,396,500	13,329,516	
Financing for Associated Activities If Any:			

\*\* For multi-focal projects, indicate agreed split between focal area allocations

FOR JOINT PARTNERSHIP**				
GEF PROJECT/COMPONENT (\$)				
(Agency Name)	(Share)	(Fee)		
(Agency Name)	(Share)	(Fee)		
(Agency Name)	(Share)	(Fee)		

\*\*\* Projects that are jointly implemented by more than one IA or ExA

#### CONTRIBUTION TO KEY INDICATORS IDENTIFIED IN THE FOCAL AREA STRATEGIES:

Key indictors for project impacts related to the key indicators as identified in the Focal Area Strategy, are as follows:

• Strategic Objective (SO)-4: Cost-effective and sustainable alternative interventions to DDT will be introduced in the eight participating countries;

Strategic Objective(SO)-4: Reliance on DDT and potential to revert to DDT for the

prevention and control of vector-borne diseases will be reduced;

The project envisages the above through demonstrating the viability of new methods and

technologies for vector borne disease control within the Integrated Vector Management (IVM)

context. The alternatives to be considered will mostly be non-chemical based and will include the

following:

- biological control;

- environmental management (including water sanitation and irrigation management);

- insecticide treated nets: and

- combination of the above with supportive insecticide use.

Strategic Objective(SO)-3: Collection, repackaging and disposal of at least 100 tons of

obsolete Persistent Organic Pollutants (POPs).

The project envisages the above through the collection, repackaging and disposal of at least 100

tons of Persistent Organic Pollutants containing pesticides wastes from the participating countries.

Approved on behalf of the *United Nationas Environment Program*. This proposal has been prepared in accordance with GEF policies and procedures and meets the standards of the Global

Environment Facility (GEF) Project Review Criteria for work program inclusion.

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Date: April 26, 2007

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# ACRONYMS/ABBREVIATIONS

ASP Africa Stockpiles Program

COMBI Communication for Behavioural Impact

DDT 3-5 Dichloro Diphenyl Trichloroethane, a POPs

pesticide mentioned in Annex B of the Stockholm

Convention

EMRO Eastern Mediterranean Regional Office of the WHO

ExA Executing Agency

FAO Food and Agricultural Organization of the United

**Nations** 

GEF Global Environmental Facility

GEFSEC the Secretariat of the Global Environment Facility
GFATM Global Fund for Aids, Tuberculosis and Malaria

HIA Health Impact Assessment
IA Implementing Agency
IRS Indoor residual spraying
ITNs Insecticide Treated Nets

IVM Integrated Vector Management
LLINs Long Lasting Insecticidal Nets
MoU Memorandum of Understanding
NGO Non-Governmental Organization

NIP National Implementation Plan for the Stockholm

Convention

NSC National Steering Committee

OP Operational Program

PEEM Panel of Experts on Environmental Management

PDF Project Development Facility
POPs Persistent Organic Pollutants
PPG Project Preparation Grant

STAC (Regional) Scientific and Technical Advisory

Committee

TOR Terms of Reference

UNEP United Nations Environment Program

UNIDO United Nations Industrial Development Organization

VBDs Vector-borne Diseases

VCNA Vector Control Needs Assessment

WHO World Health Organization

#### 1. PROJECT SUMMARY

a) Project rationale, objectives, outcomes/outputs, and activities.

The burden of vector borne diseases and subsequent social and economic development in the population of Middle East and North African countries participating in the project is substantial. Chemical insecticides including DDT are the mainstay of vector control interventions in order to reduce the transmission of vector borne diseases by insect vectors. Although countries have implemented alternative interventions these experiences are not complemented and integrated with other evidence based evaluation of sustainable interventions as well as measures including policy framework, legislations and partnership. The lack of national capacity to support a transition to an Integrated Vector Management (IVM) strategy, to analyze alternatives for their viability, to consider the use of well-tested alternatives within national public health policy, and to ensure the sound management of pesticides all hamper the sustainable reduction of reliance on DDT.

Vector-borne diseases (VBDs) are a significant source of morbidity and mortality in the countries of the Middle East and North Africa, which make up part of the WHO Eastern Mediterranean Region (EMR). Countries in this Region suffer a disproportionate share of the global burden of vector-borne diseases. While less than 8% of the world's population lives in this Region, it accounts for almost 11% of the global burden of Vector Borne Diseases. Approximately 17% of the burden of all infectious diseases can be attributed to Vector Borne Diseases. The Vector Born Diseases that occur in the Eastern Mediterranean Region include malaria, leishmaniasis, lymphatic filariasis, African trypanosomiasis, onchocerciasis and several insect-borne viruses, notably Rift Valley fever, Crimean-Congo haemorrhagic fever, dengue, yellow fever, Chikungunya and West Nile fever. Insects (houseflies) also play a role in the epidemiology of other diseases with a high regional burden, such as diarrhea and trachoma. The dynamics of vector populations, the level of transmission risks and the disease incidence fluctuate geographically and seasonally and is likely to be influenced by predicted climate changes in the near future.

Although the exact use of DDT in the participating countries is not known, several countries<sup>1</sup> have reported 'illegal DDT use' and 'undocumented DDT use'.

<sup>&</sup>lt;sup>1</sup> Djibouti and Egypt

Only Morocco mentions the use of about 500 kg of DDT on a yearly basis for malaria vector control (National Implementation Plan-NIP Morocco, May 2006). Other countries (like Jordan) mention as priority the development of a national program based on Integrated Vector Management for the control of vectors.

*Potential* use of DDT in future is based on DDT-use data from a limited number of countries from past periods. In case all participating countries decide to revert to the use of DDT, and based on the very limited figures from several countries concerning DDT use in the past as regular vector control measure, it is estimated that this will result in an annual DDT use of at least 300 ton/year in malaria vector control only.

There is ample experience in the Eastern Mediterranean Region with the use of alternative interventions including biological control (using larvivorous fish) and environmental management. Yet, often these have been applied in an unstructured, poorly designed and isolated way and not as part of a balanced combination measures. The project aims to reduce reliance on DDT and minimize the potential to revert to DDT for the prevention and control of vector-borne diseases through the use of sustainable, cost-effective and environmentally friendly alternative interventions through establishing an IVM framework, criteria and procedures and building national capacities for IVM and for the sound management of pesticides. Inter-sectoral collaboration, partnerships and community involvement will be crucial mechanisms considered in the planning and implementation of vector control activities. The activities contained in the present Global Environment Facility project brief will add value to the (although limited) ongoing and projected baseline activities of the national governments, by generating knowledge, skills and experiences on actual application of alternatives to DDT in a range of representative ecological, epidemiological and socioeconomic settings. The alternatives to be considered will mostly be non-chemical based and will include the following:

- biological control;
- -environmental management (including water sanitation and irrigation management);
- insecticide treated nets; and
- combination of the above with supportive insecticide use.

As stockpiles of POPs reportedly are used for illegal supply of POPs, the project will deal with the collection, repackaging, and disposal- of at least 100 tons of

obsolete POPs stocks (including DDT) in countries without Africa Stockpiles Program (ASP) coverage.

## The project aims to:

- i. demonstrate viability, availability, sustainability and cost-effectiveness of the vector control alternatives to DDT, based on principles of IVM;
- ii. strengthen national capacities for the planning, implementation and evaluation of the application of alternatives to DDT based on the principles of integrated vector management;
- iii. collect, repackage and dispose obsolete public health and agricultural POPs;
- iv. disseminate good practices, demonstrated alternatives and lessons learned in the participating countries; and
- v. secure transboundary & national coordination, information sharing, monitoring and evaluation of the proposed actions related to IVM measures without using DDT.

Essential to the promotion of alternatives to DDT and the firm anchoring of national programmes for IVM are the affordability of the alternatives and the efficiency of their application compared to indoor residual spraying of DDT.

The definition of IVM, a process of evidence-based decision-making procedures aimed to plan, deliver, monitor and evaluate targeted, cost-effective and sustainable combinations of regulatory and operational vector control measures, highlights efficiency as one of the key criteria for the proper implementation of this approach.

The project will look in detail into the issue of 'cost effectiveness'. This will require the accelerated updating of existing cost-effectiveness guidelines and the development of tools that can be used in the demonstration projects. During the implementation phase, effective links will need to be established with academic institutes that can provide expertise in the area of economic evaluation. In two selected countries, cost-effectiveness studies will be performed in great detail and with a high level of accuracy. This type of studies has never been done before in any DDT related Global Environment Facility co-funded project and should be seen as a unique feature of this project.

The project is consistent with the goals of the Stockholm Convention, in line with the outcome of the meeting between World Health Organization, United Nations Environment Program and the Secretariat of the global environment Facility (GEFSEC) of 11 June 2004 (agreeing on a global strategy based on demonstration projects with GEF "seed" co-financing sustained through replication and scaling-up supported through WHOs Roll Back Malaria program and Global Fund) and will contribute to the GEF POPs target of reducing the stress caused by global POPs emissions and the development of sustainable alternatives to DDT. The project will assist countries to reduce their reliance on DDT and potential to revert to the use of DDT by strengthening their capacity to scale up integrated vector management interventions.

In the long run the activities contained in the present GEF project brief will benefit the global community by generating knowledge, skills and experiences on actual application of alternatives to DDT in a range of representative ecological, epidemiological and socio-economic settings. The current project will be implemented in a Region with three of the major global zoogeographical zones – representing Asia, Europe and Africa. Results from this project will provide sufficient evidence for suitability, replicability and applicability of alternative interventions for a wider audience. In combination with other DDT projects in Africa and Central America, the project will therefore give documented evidence to regional and global community on cost-effectiveness and sustainability of environmentally friendly interventions. Although reduction in the amount of DDT release and the resulting global benefit may not be significant in the short term, the project provides substantial amount of evidence in different ecoepidemiological and social settings for policy makers to scale up alternative interventions at country and regional level as appropriate.

# **Project outcomes and outputs**

The following outcomes and outputs per component are envisaged during the project execution:

<u>Outcome Component 1: Viability, availability, sustainability and cost</u> <u>effectiveness of alternatives to the use of DDT demonstrated</u>

Output 1.1: A protocol formulated by the National Steering committee, following guidance from the WHO Regional Office with on-site review by an international expert completed for each participating country

Output 1.2: Specific capacity building carried out that may be required for successful implementation of the protocol, based on the needs identified in the demonstration project proposal

Output 1.3: Regional workshop for the harmonization of the country protocols with effective follow-up for the completion of the protocols, and final review by the STAC

Output 1.4: Assistance provided to the National Project coordinator for essential elements of demonstration projects implementation in line with agreed protocols

Output 1.5: Project activities monitored through screening of annual reports by the National Steering Committee and Scientific and Technical Advisory Committee (STAC) and by on-site visits to demonstration projects by STAC members, and dissemination of observations and recommendations

Output 1.6: Technical support (through consultancies) provided for the analysis of datasets, including cost effectiveness and sustainability analysis, and the production of the final report; STAC meeting organized to review the national reports and draft the consolidated regional report, including lessons learnt, for submission to relevant parties

Outcome Component 2: Capacity built in each country to plan, implement and evaluate the application of alternatives based on the principles of IVM

Output 2.1: National seminars organized for the review of policy and legal frameworks

Output 2.2: Promotional documents produced, country visits conducted and national seminars organized, provision of examples and case studies of successful institutional arrangements between the sectors completed; Existing local health services, agricultural extension services and farmer field schools are used to channel messages on IVM and the sound management of pesticides to rural communities.

Output 2.3: National vector control units are restructured to ensure that all essential IVM functions are performed well at all levels. Technical cooperation in the area of program management provided as needed.

Output 2.4: Guidelines and training materials for vector control professionals are developed, updated and reviewed

<u>Outcome Component 3: Collection, repackaging and disposal of POPs pesticides</u> used in public health and agriculture completed

Output 3.1: Obsolete POPs pesticides used in public health and agriculture are collected, repacked and disposed

Outcome Component 4: Information on good practices and demonstrated costeffective and sustainable alternatives are taken up by national institutions and in planning processes

Output 4.1: Web pages in English, French and Arab created and at least two scientific publications produced and published in relevant science periodical

Outcome Component 5: Transboundary & national coordination, information sharing and monitoring and evaluation mechanisms operational and effective in promoting Integrated Vector Management without the use of DDT

Output 5.1: (full-time) Project Coordinator assigned by WHO, Assistant Technical Project Coordinator recruited; 8 National coordinators assigned Output 5.2: Establishment and operating of a National Steering committee in each participating country

Output 5.3: Establishment of a Regional Scientific and Technical Advisory Committee (STAC)

**ACTIVITIES** 

#### **Component 1**

# **Activities related to Output 1.1:**

Each National Steering Committee will formulate a protocol based on the

proposal they developed and following guidance from the WHO Regional Office, with on-site review by an international expert.

The protocol includes a detailed and country specific methodology concerning the implementation of demonstration activities.

The various protocols differ due to the various geographic, epidemiological, ecological and socio cultural settings in each country. As such, the methodology for each country differs as well and affects the type and design of each required intervention.

The protocols will be established to specify the methods and activities in the greatest level of detail, based on what has been proposed in the general descriptions of the country proposals received. Once approved, they will provide the binding terms of reference for the implementation of the demonstration projects. By obliging countries to write up protocols for their demonstration projects, the process of harmonization between countries is also facilitated. The protocols (as mentioned in # 49 of the Project Brief) are the basis for monitoring and evaluation of the demonstration projects.

# **Activities related to Output 1.2:**

Carry out any project-specific capacity building that may be required for successful project implementation, based on the needs identified in relation to the demonstration project protocol. The types of capacity building activities under output 1.2 are not easy to define yet as they depend on the contents of the specific country protocols to be developed under 1.1.

However, a list of indicative activities could include the following:

- Training related to country and ecosystem specific requirements as mentioned the country protocol. As the characteristics of ecosystems, socio-cultural and epidemiological settings are different in each country, also the training needs will be different.
- Strengthening of institutional infrastructure. Infrastructural strengthening (including the capacity to plan and implement) depends on the already existing structure related to the required needs in each individual country.
- Ecosystem assessment and modelling, with a focus on the place of insect vectors in ecosystem food webs.
- Insect population sampling methods and techniques, including vector insects, their predators and their parasites.
- Environmental management and engineering methods for vector control
- Biological control methods.
- Sophisticated identifications techniques (PCR) and blood meal analysis.
- Insecticide resistance monitoring.
- Social assessment methods (including KAPB –knowledge, attitude, practice and beliefs- methodologies)
- Basic IPM techniques and their relevance to IVM.

Development of IVM curricula for Farmer Field Schools.

Seen the above, no specific activities have been and can be incorporated in the Project Brief.

# **Activities related to Output 1.3:**

Organize a four-day regional workshop for the harmonization of country protocols with effective follow-up for the completion of the protocols, and final review by the Scientific and Technical Advisory Committee (STAC, see component 5 below). The workshop will also produce a harmonized template for reporting mechanisms and formats.

## **Activities related to Output 1.4:**

Provide assistance to the National Project Coordinator for essential elements of demonstration project implementation in line with the agreed protocols. This may include the establishment of institutional arrangements, technical and managerial support and ensuring the resource base for the implementation of the protocols.

### **Activities related to Output 1.5:**

Monitoring of project activities, through screening of annual reports by the National Steering Committee and STAC and by on-site visits to demonstration projects by STAC members, and dissemination of observations and recommendations.

### **Activities related to Output 1.6:**

Provide technical support, through consultancies, for the analysis of datasets, including cost-effectiveness and sustainability analysis, and the preparation of the final report. Organize a STAC meeting to review the national reports and draft the consolidated regional report, including lessons learned, for submission to relevant parties.

### Component 2

#### **Activities related to Output 2.1:**

Organize national seminars for the review of policy, legal and regulatory framework, including sound management of public health pesticides. Such seminars will produce action plans for detailed policy formulation and adjustment, legal improvements and the creation of an IVM policy framework. To implement these action plans following the first seminar, to support the process through consultation services, and to conclude the process with a second seminar. This will require political backing and endorsement at the end of the process.

### **Activities related to Output 2.2:**

With an emphasis on advocacy, the activities include: the production of promotional documents, country visits, the organization of national seminars and the provision of examples and case studies of successful institutional arrangements between the sectors. In connection with community involvement, existing local health services, agricultural extension services and farmer field schools will be used to channels messages on IVM and sound management of pesticides to rural communities.

## **Activities related to Output 2.3:**

The WHO Regional Office informs national health authorities of the outcome and recommendations of the vector control needs assessments, in relation to IVM. Next, the National Steering committee starts a process of consultation leading to the restructuring of national vector control units, including vision and mission statements, clear terms of reference and a description of responsibilities, and the rationalization of posts to ensure all essential IVM functions are performed at all levels. Technical cooperation in the area of programme management is provided as required.

# **Activities related to Output 2.4:**

Developing, updating and/or reviewing of guidelines and training materials (e.g. the Panel of Experts on Environmental Management-PEEM- cost-effectiveness guidelines) for technical content and learning methodology; generation of relevant case study material (e.g. economic evaluations). Organizing regional workshops and training courses for vector control professionals.

Regional training activities on the following topics will be supported are, amongst others:

- Biological control and engineering approaches to vector control
- Principles and practice of integrated vector management
- Insecticide resistance monitoring and management
- Sound management and judicious use of public health pesticides
- Economic evaluation of vector control interventions
- Monitoring and evaluation of vector control operations (quality control)
- Epidemiological surveillance/laboratory support to prevent crisis application of DDT
- Diagnosis and treatment of vector-borne diseases at the primary health care level

#### Component 3

# **Activities related to Output 3.1:**

Carry out a stakeholder analysis to determine which organizations should be informed and involved in the process of addressing POPs containing obsolete pesticides in the country; Training of personnel in safe and effective execution of updating the existing inventory data of obsolete pesticides; Update the field inventory data of public health pesticides and other POPs pesticides stocks; Compile & analyze data collected during the field inventory; Procure equipment and services required to safeguard obsolete pesticides; Carry out repackaging and centralization of obsolete stocks prioritized for action under expert supervision; Securely store repackaged obsolete pesticides until further action for their elimination can be taken. Export and final incineration in a dedicated hazardous waste incineration facility abroad.

As indicated in the Project Brief and acknowledging the comparative advantage of Food and Agriculture Organization (FAO) of the UN, collaboration for the implementation of this component has been sought with FAO.

As indicated in the Project Brief (# 71), more or less at the same time of the start of the current project, FAO will start a bilateral donor funded initiative in the region aiming at the collection, repackaging and disposal of obsolete pesticides, including POPs pesticides.

Based on discussions and agreements with FAO, the countries prefer to leave the selection of detailed methods and activities to the specialists of the FAO.

However, it is anticipated that the FAO, in close collaboration with the project, will select and contract through an international and transparent bidding process an international hazardous waste management company specialized in the collection, repackaging and disposal of hazardous wastes. Incineration will take place in a dedicated high temperature incineration facility in Europe. The current state of knowledge recognizes repackaging according to UN guidelines and with UN approved packaging materials and final disposal through high temperature incineration as the most cost effective and best environmental practice to dispose of obsolete stocks of hazardous pesticides of the kind to be dealt with in the project. Seen the above, no other disposal options have been and will be considered during the course of the project.

#### **Component 4**

### **Activities related to Output 4.1:**

Prepare and publish a report and/or article for peer-reviewed literature to give wide dissemination to the outcome of the national studies, the regional analysis, and lessons learnt through consultants' services. Reports will be translated into English, French and Arab. Provide support for the creation of dedicated webpages (in English, French and Arab) to make information available through the internet.

### Component 5

### **Activities related to Output 5.1:**

Appointment of a (full-time) professional Project Coordinator.

Appointment and recruitment of an Assistant Project Coordinator;

provision of secretarial support through the appointment of an office secretary, assignment of 8 National Project Coordinators.

Mid-Term and Final Evaluation through UNEP

# **Activities related to Output 5.2:**

Establishment and operation of eight National Steering Committees (meeting once/twice a year)

### **Activities related to Output 5.3:**

Establishment and operation of a regional Scientific Technical Advisory Committee (STAC, with Terms of Reference including Monitoring and Evaluation as in Annex O; meeting once/twice a year)

### b) KEY INDICATORS, ASSUMPTIONS, AND RISKS (FROM LOGFRAME)

Key indicators are defined as follows:

- o Cost-effective and sustainable alternative interventions to DDT are introduced in 8 countries
- Reliance on DDT and potential to revert to DDT for the prevention and control of vector-borne diseases is reduced
- Collection, repackaging and disposal of at least 100 tons of obsolete POPs pesticides

A critical assumption of the project is that governments will maintain their political will towards scaling up the implementation of interventions that are

proven to be effective. Industry and the Ministries of Agriculture, Environment, Municipalities, Finance and Trade as stakeholders in the project, will promote dialogue and facilitate appropriate changes in relevant policies. Additional resources channeled to the countries by the Global Fund for HIV/AIDS Tuberculosis and Malaria (GFATM), bilateral and by other donors aimed at lowering the costs of health interventions will also contribute to resource mobilization and to the reduce costs of alternative methodologies.

Another assumption is that the project will receive the necessary support from various partners including WHO as well as participating countries. Additionally, it is assumed that alternatives will be as effective as DDT and that planning, implementing and evaluation of alternative interventions will be accepted by local communities and will understand the public health benefit of the project.

#### 2. COUNTRY OWNERSHIP

#### a) COUNTRY ELIGIBILITY

All participating countries of the project (Djibouti, Egypt, Islamic Republic of Iran, Jordan, Morocco, Sudan, Syria and Yemen) have ratified the Stockholm Convention on Persistent Organic Pollutants (POPs) and, they are contracting parties to the StockholmConvention.

Egypt, Jordan and Morocco have submitted their National Implementation Plans to the POPs Secretariat; Djibouti has a draft National Implementation Plan available. The other countries have completed their priority setting and are still preparing the formulation of the National Implementation Plans (NIPs).

NIPs for Morocco and Jordan are available now for the public. Djibouti has a draft NIP available. Based on the NIPs already available as well as from previous contact with the countries and their focal points, the issue mentioned in this project should be seen as a logical follow-up on the priorities as identified during the NIP formulating processes.

The NIP for Morocco (May 2006) specifically mentions the use of DDT for malaria vector control and mentions that "the Ministry of Health regularly proceeds to the application of pesticides and DDT for the protection of citizens against disease vectors. However, this Department does not organize sensitizing programmes for the population on pesticides risks".

Furthermore, the NIP for Morocco mentions as policy objectives regarding POPs amongst others: "Appropriate elimination of [POP] obsolete stockpiles and sound management of wastes" and "Reduction to the strict minimum of DDT stockpiles, still necessary against disease vectors, in the framework of an integrated strategy".

The NIP for Jordan (June 2006) mentions as general recommendation, amongst others: "Develop a national program for control of vectors of human diseases that are borne by biological vectors, using the Integrated Vector Management (IVM) technique, including provision of support to such programs" and "provide support to programs, such as the Malaria control Program, in order to eliminate the need to resort to DDT or other insecticides from the POPs list".

As priority actions, the NIP of Jordan mentions, amongst others: "Define stockpiles of existing banned POPs pesticides, label and repack POPs pesticides properly, and store and dispose of [POPs] pesticides stockpiles."

The current proposal answers to needs and priorities as specified above and as mentioned in the currently available National Implementation Plans.

Based on the NIPs already available as well as from previous contact with the countries and their focal points, the issue mentioned in this project should be seen as a logical follow-up on the priorities as identified and needs requested for during the NIP formulating processes.

#### b) Country Drivenness

The participating countries have indicated strong political support to reduce the reliance on the use of DDT and other insecticides and are committed to introduce cost-effective and sustainable alternatives for the control and prevention of vector-borne diseases. This commitment is in line with the project objectives of testing appropriate alternatives in demonstration areas. For example, as of 1998 only two countries (Sudan and Morocco) in the region routinely used DDT, Morocco is still using DDT at present. Several other countries (Tunisia, Libya and Yemen) however, reported DDT stocks for emergency purposes (i.e. responding to outbreaks). Insecticide Treated Nets (ITNs)/Long Lasting Insecticidal Nets (LLINs) and the use of larvivorous fish for the control of mosquito-borne diseases are currently under implementation in a number of the proposed project countries.

Consistent with the commitment reflected in the World Health Assembly Resolution 50.13, which urges the WHO Member States to initiate sustainable actions to reduce the use of pesticides and implement alternative interventions, countries have developed a 5 year action plan and strategic priorities have been developed with the support of the WHO Regional Office of the Eastern Mediterranean (EMRO).

The project formulation and activities were based on country proposals submitted by all participating countries to the WHO Regional Office. The Stockholm Convention Focal Points were engaged during the PDF-B phase at national level and endorsed the project.

#### 3. PROGRAM AND POLICY CONFORMITY

a) FIT TO GEF FOCAL AREA STRATEGIC OBJECTIVES AND OPERATIONAL PROGRAM

The GEF Operational Programme 14 for Reducing and Eliminating Releases of Persistent Organic Pollutants into the Environment (Draft OP-14) provides four major objectives for full and medium size projects. Of most relevance is: Promote partnering in demonstration of innovative technologies and practices for POPs reduction. The project will also contribute to: develop and/or strengthen the capacity of developing countries and countries with economies in transition to address the threats posed by POPs, according to the priorities and needs identified by the countries; and facilitate the environmentally sound management of POPs stocks, because the project seeks, among others, to:

- a. Facilitate sustainable reduction of the reliance on DDT for disease vector control, through the assessment and testing of locally appropriate, safe and cost-effective alternatives;
- b. Strengthen the policy and regulatory framework, as well as the institutional and human resource capacities for environmentally sound management of DDT and other public health pesticides;
- c. Strengthen national capacities for the safe management of stocks of DDT and other public health and agricultural POPs pesticides.

The project will contribute to the strategic priorities of POPs-4: Promote partnering in demonstration of innovative technologies and practices for POPs reduction. Secondarily it will also contribute to the targeted (foundational) capacity building, to partnering in investments for NIP Implementation and to management and dissemination of information on integrated management of POPs including best management practices.

### b) Sustainability (including financial sustainability)

The sustainability of the proposed project relies to a greater part on the safety, efficacy, affordability and acceptability of the various alternatives to DDT and other insecticides, which will be assessed and implemented. Such alternatives should also contribute to minimize and/or prevent the development of vector resistance to insecticides, which is a problem in the region. Availability and utilization of alternatives will need to be guaranteed under the current fluctuating economic conditions common to many endemic countries in the region. When this is feasible, countries of the region will no longer have to depend on chemical

methods that pose health risks to humans and to the environment. At the local level, the sustainability of the transition from DDT use or potential to revert to DDT - to other alternatives will depend on fostering ownership at the community level.

With capacity building activities, the countries can effectively evaluate and adopt appropriate and sustainable alternatives to DDT under national policy framework. This will be underpinned by the adoption of policy, legislation and inter-sectoral coordination. WHO and partners are accelerating technical support for sustainable implementation of integrated vector management by countries. This is being done through the creation of enabling institutional and policy environment, as well as the development of requisite technical and human resources for inter-sectoral action and the use of suitable multiple interventions.

Furthermore, any proposed efforts based on the results of the project, will be incorporated into the National Implementation Plan development and implementation process. In this way, reduction of reliance on DDT for vector control purposes can be appropriately incorporated into NIP implementation in a systematic and sustainable manner. By incorporating the DDT alternatives into the NIPs, the cost for continuously reducing reliance on DDT will be incorporated into the national and international financing mechanism for the implementation of NIPs. Guidelines on the selection of appropriate interventions in various ecoepidemiological settings are under development by WHO to assist the adoption and appropriate implementation of the various intervention options.

Additionally, the significant increases in financial and technical support to vector-borne disease endemic countries, within the broader programs of WHO and partners will assure continued resources to sustain project benefits and scale up the use of the alternatives. WHO is involved in a continued dialogue with countries for the enactment of appropriate legislation and policy, such as the elimination of import taxes on certain goods associated with vector control (e.g. Insecticide Treated Nets (ITNs)/Long Lasting Insecticidal Nets (LLINs) and associated net re-treatments), which should assist in the reduction of the cost of alternatives.

#### c) REPLICABILITY

The project will analyze the results of the demonstration activities in terms of

technical efficiency, cost-effectiveness and local acceptability. Through the Project Steering Committee, the experience obtained through the demonstration interventions will be shared with the participating countries. At the national level, the National Steering Committee will provide a platform to review experience obtained so that both within-country replication and the scaling up of successful demonstrations of alternatives to vector control is undertaken. This will provide sufficient evidence for suitability, replicability and applicability of alternative interventions for a wider audience.

In combination with other DDT projects in Africa and Mexico and Central America, it will provide documented evidences to regional and global community on cost-effectiveness and sustainability of environmentally friendly interventions. The project will produce experience in models, technologies and alternatives as well as processes gained from the project that will be useful to other countries in the region and to the other regions, such as Africa and South Asia and Western Pacific noting that the project countries represent three of the major global zoogeographical zones of Africa, Asia and Europe. UNEP and WHO will ensure the smooth transfer of knowledge and experiences obtained from one regional GEF project to another.

#### d) Stakeholder Involvement

During the PDF-B, a National project steering committee was formed in each of the participating countries. The National Steering Committee (NSC) is the nucleus of the broader stakeholders that participated in the national consensus workshop that have direct and indirect impact on disease transmission. The National Steering Committees are key players in malaria and take initiative as well as necessary preparation for implementation of IVM. However the process involved the participation of a wide range of national and international organizations.

National stakeholder workshops were organized in participating countries as part of the Vector Control Needs Assessment (VCNA) process during the PDF-B phase of implementation. The workshops included Ministries of Health, Ministries of Agriculture, Land, Water and Environment, local governments/administration, research institutions, civil associations (e.g. youth, women and church groups etc.) involved in public health promotion, local and

international Non Government Organizations (NGOs), as well as the private sector. This provided opportunity to establish a strong basis for their continued involvement in the project.

The primary beneficiaries of the proposed project will be:

- a) Populations living in project districts: with strengthened capacity to control vector borne diseases, and they will be empowered for health choice decision-making through training and public awareness-raising on alternative interventions;
- b) Human and environment exposure risks will be reduced as well as sound management of pesticide will be reduced which happens during mixing and handling of public health insecticides through training national staff of Ministry of Health and Agriculture;
- c) Training of vector control personnel on alternative strategies such as Integrated Vector Management.

#### e) MONITORING AND EVALUATION

The baseline costs are the costs for related activities but without GEF support. These amounts were difficult to estimate for each individual project country despite the fact that countries should have these budgetary details available based on their national budget. However, in practice these figures are not easy or even impossible to obtain due to the fact that there are currently no specific vector control units in each country. As such, related budgets are spread over various sectors and institutions within each of the governments.

The provided baseline figures are a result of careful estimating the baseline costs on the basis of how much resources are currently used for vector control in relation to the relevant specific project activity. The difficulty in obtaining this baseline was made worse especially where vector control activities for different vector-borne diseases were undertaken by different disease control units and sometimes by different ministries, as mentioned above.

The participating countries provided estimates for current vector control related activities, as was mentioned in the individual country proposals (see annex J).

Project activities and its impact on vector-borne disease burden, the amounts of

DDT used and budget information will be collected and reported by the project coordinators of the demonstration areas. The collated data will be submitted to the country project coordinator. For this purpose, during the first year of the project implementation, detailed baseline will be established, including a detailed baseline of vector borne diseases (and other relevant indicators) needed for monitoring and evaluation of the project progress and impact. A project administrative, technical and financial reporting framework will be established in a manner conforming to UNEP and GEF reporting protocols. The Regional Steering Committee will monitor the overall progress of the project through annual project evaluations against the approved work-plans, which will be revised annually. The work-plan and evaluation will be based on topics and indicators as mentioned in the log-frame matrix. The work-plans will have component activities subdivided into time-bound milestones or indicators and progress made against these milestones will be assessed annually.

Each National Steering Committee will review implementation progress twice a year and will prepare a comprehensive annual report on the progress made to the executing agency for preparation of annual reports. After the first two years of project implementation, a mid-term evaluation will be carried out to assess the level of attainment of the project objectives. The conclusions and recommendations of this evaluation will be used, as necessary, to adjust project implementation and management plans. The project will also be subject to a final evaluation.

# **4. FINANCING** (for all tables, expand or narrow table lines as necessary)

#### a) PROJECT COSTS

<b>Project Components/Outcomes</b>	Co-financing (\$)	GEF (\$)	Total (\$)
1. Viability, availability, sustainability and	6,020,770	1,905,680	7,926,450
cost-effectiveness of the alternatives to the			
use of DDT demonstrated			
2. Capacity to plan, implement and	365,000	946,000	1,311,000
evaluate the application of alternatives to			
DDT based on the principles of Integrated			
Vector Management strengthened			
3. Collection, repackaging and disposal of	215,132	400,000	615,132
at least 100 tons of POPs			
4. Information on good practices and	89,333	166,500	255,833

demonstrated cost effectiveness and sustainability of alternatives disseminated			
5. Transboundary & national	691,167	631,000	1,472,167
coordination, information sharing and			
monitoring and evaluation mechanisms			
operational and effective in promoting			
Integrated Vector Management without the			
use of DDT.	442,500	-	442,500
50 % Project Coordinator & secretarial			
support			
Project management budget/cost*	150,000	350,000	500,000
50 % Project Coordinator & secretarial	442,500	-	442,500
costs			
Total project costs	8,416,402	4,549,180	12,965,582
WHO Programme support costs (8%) (of	-	363,934	363,934
4,549,180)			
Grand Total	8,416,402	4,913,114	13,329,516

<sup>\*</sup> This item is an aggregate cost of project management; breakdown of this aggregate amount should

be presented in the table b) below.

# b) PROJECT MANAGEMENT BUDGET/COST<sup>2</sup>

Component	Estimated staffweeks	GEF(\$)	Other sources (\$)	Project total (\$)
Locally recruited personnel*	96	100,000		100,000
Internationally recruited	50	350,000		350,000
consultants*				
Office facilities, equipment,				
vehicles and communications				
Travel				
Miscellaneous		50,000		50,000

<sup>&</sup>lt;sup>2</sup> For all consultants hired to manage project or provide technical assistance, please attach a description in terms of their staff weeks, roles and functions in the project, and their position titles in the organization, such as project officer, supervisor, assistants or secretaries.

23

Total	500	0,000	500,000

\* Local and international consultants in this table are those who are hired for functions related to the management of project. For those consultants who are hired to do a special task, they would be referred to as consultants providing technical assistance. For these consultants, please provide details of their services in c) below:

C) CONSULTANTS WORKING FOR TECHNICAL ASSISTANCE COMPONENTS:

Commonant	Estimated		Other sources	Project total
Component	staffweeks	GEF(\$)	(\$)	(\$)
Personnel	0	0		0
Local consultants	43	153,000		153,000
International consultants	127	1,134,000		1,134,000
Total		1,287,000		1,287,000

d) Co-FINANCING SOURCES<sup>3</sup> (expand the table line items as necessary)

Co-financing Sources					
Name of co- financier (source)	Classification	Туре	Amount (\$)	Status*	
WHO	ExA	In-kind	1,205,500	confirmed	
Participating countries	Governments	In-kind and cash	7,210,902	confirmed	
	(select)	(select)			
	(select)	(select)			
	(select)	(select)			
	(select)	(select)			
	(select)	(select)			
Sub-total co-financia	ng		8,416,402		

<sup>\*</sup> Reflect the status of discussion with co-financiers. If there are any letters with expressions of interest or

commitment, please attach them.

### 5. INSTITUTIONAL COORDINATION AND SUPPORT

24

Refer to the paper on Cofinancing, GEF/C.206/Rev. 1

#### a) Core Commitments and Linkages

The United Nations Environment Program (UNEP) is the Implementing Agency for a GEF/DDT project in Africa, Mexico and Central America and has prepared a proposal for a similar project in the South East Asia and Western Pacific region, for the Africa region (including three countries in Africa). Other DDT related projects are currently being prepared and will be submitted to GEF Secretariat soon. UNEP will therefore be in a position to facilitate and coordinate exchange of information and experience among the various regions and countries undertaking efforts to reduce the reliance on DDT for vector control. UNEP will look for ways of bringing the respective DDT project managers and other key staff together to review progress, exchange experience and to find solutions to address common challenges related to project implementation.

As the Executing Agency, the World Health Organization (WHO) will take full advantage of the opportunities available at global, regional and country levels to identify and allocate appropriate technical support for project implementation, monitoring and evaluation. WHO's own structures, coupled with the opportunities provided by its partners at the international and country level, that support functions of advocacy, coordination, resource mobilization and technical support for planning, implementation, and the monitoring and evaluation of vector control efforts, provide an ideal and perhaps unique context in which to address the constraints to DDT reduction and elimination.

b) Consultation, Coordination and Collaboration between IAs, and IAs and ExAs, if appropriate.

The "Africa Stockpiles Programme" (ASP) will address the issue of disposal of obsolete stockpiles in all African countries over a period of 10 years or so. The present project activities dealing with stocks will be fully coordinated with the work of the ASP, which is implemented by the World Bank in cooperation with FAO and in which UNEP is a partner. Coordination with the ASP will be important, particularly for Morocco, Sudan, Egypt and Djibouti as requesting countries. The current project also aims to address the safeguarding of DDT stockpiles and other obsolete public health pesticides in the other participating Eastern Mediterranean Regional Office Member States, not currently covered by

ASP, and in close collaboration with FAO.

The project will contribute to the preparation of National Implementation Plans under the Stockholm Convention, specifically in relation to DDT, for countries that have not yet completed their NIP. Three of the participating countries are carrying out GEF POPs enabling activities, and UNEP functions as Implementing Agency for two countries and UNIDO does for the other. Close coordination will be sought with the United Nations Industrial Development Organization (UNIDO) to carry out the following coordination actions within the project:

- The NIP project coordinator of each participating country will participate in the National Steering Committee of the project. Correspondingly, the national vector control Programme Manager in the Ministry of Health will be requested to participate in the development of NIPs.
- Participating countries are requested to prepare inventories of DDT stockpiles in the country with reports to be subsequently discussed in the Regional Steering Committee for action within the African Stockpile Programme.
- Outputs and products from the demonstration project will be used in introducing alternative interventions in non-project districts within the framework of integrated vector management.

#### C) PROJECT IMPLEMENTATION ARRANGEMENT

At regional level, an assistant regional coordinator will be jointly identified by UNEP and WHO. The assistant coordinator will be hired by WHO to coordinate project activities. At national level, a national coordinator will be hired to work in the Ministry of Health. At the demonstration sites, district project coordinators will be responsible for the implementation of activities.

A Regional Scientific and Technical Advisory Committee (STAC) will be established based largely on a similar committee established during the PDF-B phase. The STAC will act as the highest supervisory organ of the project. It will comprise representatives from the participating countries, WHO Headquarter, UNEP, and regional research institutions. A representative of the African Stockpiles Program will also be invited to participate in the Regional Steering

Committee. The Committee will meet once a year to review progress and provide guidance on project implementation.

The National Steering Committees (NSCs) established during the PDF-B phase will continue to provide guidance on the implementation of the project at national levels. The National Project Coordinator and the relevant district project officer will participate in meetings of the NSCs.