**ANNEX A: INCREMENTAL COST**

**BROAD DEVELOPMENTAL GOALS**

Countries of the Eastern Mediterranean Region (EMR) and North African Region share a huge proportion of the global burden due to vector-borne diseases such as malaria, leishmaniasis lymphatic filariasis, dengue fever, rift valley fever, Crimean-Congo haemorrhagic fever etc. As they usually occur as outbreaks they are a major cause of impediment of social and economic developments in the Region. One effective method to control such vector-borne diseases aims at killing insects that transmit the diseases. This is achieved through the use of insecticides sprayed on the inside walls of houses as the insects rest on the sprayed walls before and after biting people. One of such insecticides is DDT.

However, Annex B of the Stockholm Convention on Persistent Organic Pollutants (POPs) states that "*Each Party that produces and/or uses DDT shall restrict such production and/or use of DDT for disease vector control in accordance with World Health Organization recommendations and guidelines on the use of DDT when locally safe, effective and affordable alternatives are not available to the Party in question*." The Convention also states that: "*The production and use of DDT shall be eliminated except for Parties that have notified the Secretariat of their intention to produce and/or use it. A DDT Register is hereby established and shall be available to the public. The Secretariat shall maintain the DDT Register*."

While countries of the Region are committed and strive to attain sustainable development, meeting the provisions of the convention remain a challenge. Indeed, this is mainly due to insufficient technical information on alternatives to DDT and capacities to plan, implement and evaluate alternatives in the context of the integrated vector management (IVM). The broad developmental objective of the project is to reduce reliance on the use of insecticides and of DDT in particular as well as to minimize the potential to revert to DDT for the prevention and control of vector-borne diseases in all the countries. This will be achieved through the use of sustainable, cost-effective and environmentally friendly alternative interventions within the framework of IVM approaches and practices.

**BASELINE**

The overriding concern of vector control programs of participating countries is to protect the health of local populations from the burden of vector borne diseases through the use of selective and targeted vector control based on sound knowledge of the local situation.

The implications of the provisions of the Stockholm Convention and its subsequent challenges to vector control programs of contracting parties of the Region is enormous. Under baseline condition each country in the EMR is currently making efforts to control and prevent the transmission of vector-borne diseases using chemical insecticides as alternatives to DDT. Pyrethroids make up the main alternative insecticides currently applied for indoor residual spraying (IRS) in the Region. Countries are also promoting other forms of vector control such as the use of insecticide-treated bednets (ITNs/LLINs), environmental management and biological control methods. In addition this intervention (IRS) is supplemented by prompt diagnosis and treatment of cases whenever appropriate through the health system based on the surveillance reported cases**.**

Governments of project countries fund the major share of financial and other resources required for vector control programs including the support of IRS using DDT and the application of alternative interventions. The implementation of these programs is supported by national governments and

their partners both at national and international levels. As an outcome of the VCNA process during PDF-B activities, countries have developed and will be implementing national vector control strategic plans which have been translated into yearly implementation plans that encompass vector control operations, monitoring and evaluation of activities and, strengthening of targeted elements of health systems. National and provincial/governorate vector control teams are in place (however weak they may be). The current national inter-sectoral coordination mechanisms will help in the mobilization of technical expertise to support planning, implementation, monitoring and evaluation of the vector control activities. WHO is providing additional human resources at national level in addition to the team at the WHO Regional Office for the Eastern Mediterranean based in Cairo, Egypt.

The estimated amount of financing from each of the participating countries is shown in Table 1.
Annex J to the Project Brief provides detailed country report with budget specifications.
The amounts for component 3 (Collection, repackaging and disposal of POPs) are indicative estimates.

**Table 1: Baseline budget for vector control activities by participating countries**

| | **Component 1** | **Component 2** | **Component 3** | **Component 4** | **Component 5** |
|---|---|---|---|---|---|
| Djibouti | 1,454,730 | - | 200,000 | - | - |
| Egypt | 888,250 | - | 200,000 | - | - |
| Jordan | 1,227,000 | - | 200,000 | - | - |
| Morocco | 1,269,000 | - | 200,000 | - | - |
| Islamic Republic of Ian | 696,250 | - | 200,000 | - | - |
| Syria | 1,828550 | - | 200,000 | - | - |
| Sudan | 1,131,233 | - | 200,000 | - | - |
| Yemen | 2,005,000 | - | 200,000 | - | - |
| Total | 10,500,013 | - | 1,600,000 | - | - |

**INCREMENTAL PROCESS**

The incremental activities proposed in this project essentially seeds or implant a solid basis for the introduction of more evidence-based decision-making in the selection of vector control interventions based on local epidemiology of disease and vector ecology through the strengthening of vector control capacity of participating countries. The implementation of alternatives to DDT is limited and is not systematically done under baseline conditions, however, countries do undertake indoor residual spraying as the mainstay of vector control as mentioned elsewhere. The current project, however, take an IVM approach aimed to plan, deliver, monitor and evaluate targeted, cost-effective and sustainable combinations of vector control measures, with a measurable impact

on vector-borne disease transmission risks, adhering to the principles of subsidiarity, inter-sectoral collaboration and partnership.

The Stockholm Convention states that: *"With the goal of reducing and ultimately eliminating the use of DDT, the Conference of the Parties (COP) shall encourage each Party using DDT to develop and implement an action plan as part of the implementation plan specified in Article 7. That action plan shall include:*

*(i) Development of regulatory and other mechanisms to ensure that DDT use is restricted to disease vector control;*

*(ii) Implementation of suitable alternative products, methods and strategies, including resistance management strategies to ensure the continuing effectiveness of these alternatives;*

*(iii) Measures to strengthen health care and to reduce the incidence of the disease."*

Essentially all project countries are promoting the implementation of IVM approaches that rely less on the use of pesticides and of DDT in particular to reduce DDT run off into the environment. The lack of national capacity to assess the cost-effectiveness and sustainability of alternatives and the sound management of pesticides hamper the sustainable reduction of reliance on DDT. The project will contribute to the strategic priorities of POPs III - Demonstration of Innovative and Cost-Effective Technologies and Practices. Secondarily the project will also contribute to:

a) Targeted (foundational) capacity building
b) Management and dissemination of information on integrated management of POPs including best management practices.

The present project builds on the IVM initiative currently being implemented in project countries and aims to achieve the following goals:

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 pesticides.

**DOMESTIC BENEFIT**

The benefit on the local populations derived from the project in the demonstration areas is substantial. The most significant benefit will be strengthening of vector control programs that result in the reduction of vector-borne disease burden as well as decreased human and environmental exposure to chemical hazards through improved management of pesticides. This will be achieved through training on the safe use and management of public health pesticides and therefore reduce health risks related to continued exposure to insecticides.

Additional benefit of the project will be the strengthening of the vector control program at national level for planning, implementing and evaluating alternative intervention through various capacity building activities. Participating countries will also be supported to create an enabling environment to facilitate the sound management of pesticides and also to carry out collection, repackaging and transportation of obsolete pesticides. Partnership and inter-sectoral coordination created during the

VCNA process and the planned training workshops and seminars will help to advocate and address issues of coordination and mobilization of resources for vector control.

**(GLOBAL) INCREMENTAL BENEFIT**

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 eco-epidemiological and social settings for policy makers to scale up alternative interventions at country and regional level as appropriate.

Clearly, capacity building for the prevention of vector-borne diseases while reducing the potential to revert to the use of DDT for vector control has features of incrementality in providing global benefits while at the same time giving rise to significant domestic benefits (enhanced medical and health care services for the populations). It is therefore appropriate for government co-financing to be targeted on these aspects of capacity building as proposed under this project.

Significant enabling factors are also available from international and bilateral donors at country level. For instance, some countries of the Region are receiving additional funding through the Global Fund for AIDS, Tuberculosis and Malaria (GFATM) and bilateral support from neighboring countries to accelerate disease control. The use of such resources will result in strengthened vector control systems thus expanding the project proven interventions at a wider scale, resulting in the decrease on the use of DDT.

Additionally the national partnership established during the PDF-B activities at country level will provide ideal and perhaps unique platform for coordination, advocacy and mobilization of resources to address the constraints to reduced reliance on DDT. Moreover, WHO country offices of participating countries will provide the necessary resources to better articulate and implement vector control priorities for implementation of project activities which will include technical support for project implementation, monitoring and evaluation.

The global and local benefit of the project and incremental cost is described in Table 2 matrix. Baseline expenditures were estimated at US$ 12,100,013 while the alternative has been US$24,596,529 The incremental cost of the project (US$ 12,496,516) is required to achieve the project's global environmental benefit of which the amount US$ 4,965,114 is requested from GEF. This amounts to 40 % of the total incremental cost. The remaining amount US$ 7,531,402 or 60% of the total project costs will be provided by co-financing by the participating countries and the World Health Organization.

**TABLE 2: INCREMENTAL COST ANALYSIS AND BASELINE COST**

| | **Baseline** | **Alternative** | **Increment (A-B)** |
|---|---|---|---|
| **Global Benefits** | • Evaluations of alternatives limited to a small number of the range of the social, economic and physiographic phenotypes within individual countries.<br><br>Baseline $ 12,100,013 | • Reduced reliance and minimize the potential to revert to the use of DDT for vector control<br>• Cost effectiveness and sustainability evaluation of alternatives to DDT for vector control ;<br>• Evaluation of alternatives in a wider range of phenotypes that are representative of areas beyond those of project implementation;<br>Alternative $ 24,544,529 | Increment $12,444,516 |
| **Domestic Benefits** | • Limited capacity for implementation and evaluation of alternative in a systematic way for vector control;<br>• Limited capacity to implement IVM approaches and practices;<br>• Limited cooperation among stakeholders for review of policy, legislation on IVM;<br>• Limited capacity and less functionality stakeholders participation in the judicious use and management of public health pesticides;<br>• Limited capacity for collection, transport and safeguarding as well as removal of obsolete pesticides. | • Enhanced capacity to plan, implement and evaluate alternative interventions<br>• Improved capacity on pilot demonstration applications of alternatives;<br>• Rigorous costing procedures applied to assessing the cost benefits of alternatives;<br>• Well-informed public and other stakeholders;<br>• Enhanced public health protection services in relation to insect-borne disease. | |

| Components | **Baseline** | **Alternative** | **Increment (A-B)** |
|---|---|---|---|
| *Component 1: Viability, availability, sustainability and cost-effectiveness of the alternatives to the use of DDT demonstrated* | • The lack of national capacity to support a transition to an IVM strategy<br>• Limited capacity for analysis of cost effectiveness and sustainability<br>• Poor project management and implementation skills;<br>• Poor public awareness of the benefits of reductions in DDT use and the benefits of alternatives to DDT in vector control; | • Increased capacity for IVM implementation<br>• Considerably improved capacity for project management and implementation;<br>• More comprehensive and detailed technical data management procedures in place for disease survey and surveillance. | Total: US$ 7,926,450 |
| | Total: US$ 10,500,013 | Total: US$ 18,426,463 | |
| *Component 2: Capacity to plan, implement and evaluate the application of alternatives to DDT based on the principles of IVM strengthened* | • Enabling environments, in the form of policy, legal and regulatory frameworks, for intersectoral coordination weak or non-existent;<br>• Limited evaluation and testing of the range of alternative malaria vector control measures;<br>• Applicability of evaluated alternatives limited to a small number of phenotypes;<br>• Public attitudes to the need for phasing out the use of DDT in vector control and the willingness to seek and apply alternative procedures for malaria prevention including vector control;<br>• Limited testing of alternatives in the context of public health for cost effectiveness and sustainability. | • Creates structure for implementation of IVM through consolidation of fragmented vector control units<br>• Broader range of alternatives evaluated, tested and demonstrated;<br>• Improved public knowledge on benefits of alternative methods of malaria prevention including vector control.<br>• Testing of alternatives done in the context of well-designed and effective disease surveillance procedures and controls.<br>• Effective institutional arrangements for IVM promoted | Total: US$ 1,311,000 |
| | Total: US$ - | Total: US$ 1,311,000 | |

| | | | |
|---|---|---|---|
| *Component 3: Collection, repackaging and disposal of obsolete public health POPs* | • Lack of regulatory framework, infrastructure and resources for the sound management of pesticides;<br>• Limited knowledge on collection and safeguarding of obsolete POPs;<br>• Poor storage facilities and inappropriate application of DDT used for vector control purposes;<br>• Limited capacity to manage pesticide exposure of humans and environment and thus posing potential release into the environment. | • Enhanced capacity to deal with collection, repackaging and planning for obsolete stockpiles<br>• Stringent controls on the conditions of storage and use of DDT and other pesticides for health protection applications, including specification of accessibility and handling procedures;<br>• Enhanced capacity to protect human exposure and environment from obsolete pesticides | Total:<br>US$ 615,132 |
| | Total: US$ 1,600,000 | Total: US$ 2,215,132 | |
| *Component 4: Information on good practices and demonstrated cost-effectiveness and sustainability of alternatives disseminated* | • Limited information on good practices and implementation of IVM applicable to the Region. | • Documented region-wide information available on good practices, policies and experiences on IVM | Total: US$ 255,833 |
| | Total: - | Total: US$ 255,833 | |
| *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* | • Limited staff and structures dedicated to implementation and evaluation of the project. | Effective national and regional collaboration to produce project outcomes with required standards of monitoring, evaluation and active participation of stakeholders in project activities at national and regional levels.<br>Proper overall Mid-term and Final Project Evaluations conducted. | Total: US$1,972,167 |
| | Total - | US 1,972,167 | |
| *Programme support costs (8%)* | | US 363,934 | Total: US$ 363,934 |

**Table 2 Project Financing**

| Component | Incremental Cost | GEF | Governments | WHO |
|---|---|---|---|---|
| Activity 1.1.Formulation of national protocols | 94,000 | 59,000 | 7,000 | 28,000 |
| Activity 1.2 Capacity building for project implementation based on country protocol | 157,000 | 59,000 | 70,000 | 28,000 |
| Activity1.3 Organize a regional workshop for the harmonization the country protocols | 55,880 | 48,880 | 7,000 | - |
| Activity 1.4 Demo-Project implementation | 7,071,370 | 1,311,600 | 5,681,770 | 50,000 |
| Activity 1.5 Monitor project activities and on-site visits to demonstration projects | 371,600 | 336,600 | 35,000 | 28,000 |
| Activity 1.6 Analysis of datasets, including cost-effectiveness and sustainability analysis | 120,000 | 48,000 | 35,000 | 37,000 |
| Activity 1.7 Organize a STAC meeting to review the national reports | 56,600 | 42,600 | | 14,000 |
| **Sub total** | **7,926,450** | **1,905,680** | **5,835,770** | **185,000** |
| Activity 2.1 Review of policy and legal frameworks. | 325,000 | 176,000 | 112,000 | 37,000 |
| Activity 2.2 Produce advocacy and promotional documents and conduct national seminars and on site visits | 224,000 | 160,000 | 64,000 | - |
| Activity 2.3 Restructuring of national vector control units | 200,000 | 160,000 | 40,000 | - |
| Activity 2.4 Developing guidelines and organization of training courses on vector control | 562,000 | 450,000 | 112,000 | - |
| **Sub total** | **1,311,000** | **946,000** | **328,000** | **37,000** |
| Activity 3.1 collection, repackaging and disposal of obsolete public health and agricultural POPs | 615,132 | 400,000 | 215,132 | - |
| **Sub total** | **615,132** | **400,000** | **215,132** | **-** |
| Activity 4.1.Publication of project report and formation of a web-page | 255,833 | 166,500 | 80,000 | 9,333 |
| **Sub total** | **255,833** | **166,500** | **80,000** | **9,333** |
| Activity 5.1. Recruitments of 1 Asst. Technical Project Coordinator and assignments of 8 national Coordinators, transboundary & national coordination, information sharing etc.<br><br>Monitoring and evaluation | 774,500 | 310,000 | 442,000 | 22,500 |

| | | | | |
|---|---|---|---|---|
| 50 % Project Coordinator & office support | 200,000<br><br>442,500 | 100,000<br><br>- | 80,000<br><br>- | 20,000<br><br>442,500 |
| Activity 5.2. Operating of 8 National Steering Committees | 366,667 | 240,000 | 80,000 | 46,667 |
| Activity 5.3. Operating of Regional STAC, production of various reports | 40,000<br><br>91,000 | 40,000<br><br>91,000 | -<br><br>- | -<br><br>- |
| Project Management (excl. WHO Project Coordinator & office support)<br>50 % Project Coordinator & office support | 500,000<br><br>442,500 | 350,000<br><br>- | 150,000<br><br>- | -<br><br>442,500 |
| **Sub total** | **2,857,167** | **1,131,000** | **752,000** | **974,167** |
| **Sub total for Component 1,2,3,4,5** | **12,965,582** | **4,549,180** | **7,210,902** | **1,205,500** |
| WHO Programme support costs (8%) (of 4,549,180) | 363,934 | 363,934 | - | - |
| **Grand Total** | **13,329,516** | **4,913,114** | **7,210,902** | **1,205,500** |

## ANNEX B: PROJECT LOGICAL FRAMEWORK

## Demonstration of Sustainable alternatives to DDT and Strengthening of National Vector control Capabilities in Middle East and North Africa

**OVERALL GOAL:** Demonstration of regional and ecosystem specific alternative approaches to vector borne diseases control as contribution to the formulation of (and in line with) UNEPs global DDT project related portfolio promoting a global vector borne diseases control policy without the application of DDT through the use of sustainable, cost effective and environment friendly alternatives.

| Summary | Indicators (OVIs) | Means of Verification | Hypotheses / critical assumptions and risks |
|---|---|---|---|
| **ENVIRONMENT AND DEVELOPMENT OBJECTIVES**<br><br>The environmental objective is to reduce the negative effects of DDT in public health and the global environment through the introduction of sustainable, cost effective and environment friendly alternative interventions.<br><br>The development objective is to reduce the reliance on DDT in case of outbreaks of vector borne diseases and to minimize the potential to revert to DDT use. | Improved public health situation (by end PY5) for populations in the project demonstration areas due to stopped application of DDT in case of vector borne diseases outbreaks.<br><br>Zero application of DDT (by the end of PY5) instead of an estimated potential 300 ton DDT use per year, and no stocks of DDT anymore available in the participating countries. | Technical Reports from Public Health officers in the demo areas.<br><br>Mid Term & Final Project Evaluation<br><br>Mid-term (PY3) and Final (PY5) Evaluation reports<br><br>Project Progress Reports,<br><br>Final Report of obsolete stocks elimination. | Strong commitment to scale up alternative interventions.<br><br>Timely support for the project implementation.<br><br>Risks: Large outbreaks of vector borne diseases in project areas before the end of the project might influence the public opinion and as such the political commitment to continue with the project. |
| **Outcomes** | | | |
| **1.** Viability, availability, sustainability and cost effectiveness of the alternatives to the use of DDT demonstrated. | Number of mortal vector borne diseases in the demonstration areas in the 8 participating countries has been significantly reduced while no DDT has been applied (PY5).<br><br>None of the 8 countries request exemption for DDT use with the Secretariat of the Stockholm Convention (PY5). | Project steering committee reports<br><br>Technical reports and project progress reports<br><br>Field surveys<br><br>Cost effectiveness report<br><br>Reporting from Stockholm Convention Secretariat | Participating countries and institutions continue to prioritise project goal to replace the use of DDT for vector control by alternative approaches.<br><br>Communication and exchange of information unhindered between, national central and district (project demo) levels.<br><br>Regional collaboration unhindered. |

| Summary | Indicators (OVIs) | Means of Verification | Hypotheses / critical assumptions and risks |
|---|---|---|---|
| | | | |
| **2**. Capacity in each country to plan, implement and evaluate the application of alternatives to DDT based on the principles of IVM strengthened. | 8 countries with an IVM policy framework and IVM legal arrangements in place (PY5). | Project steering committee reports<br>Reports of national seminars.<br>Policy and legal documents.<br>National political endorsements of the policy and legal documents. | National and local governments agree to shift focus from DDT spraying to provision of an enabling /supportive environment for community based interventions.<br>Timely support is available.<br>Guidance from WHO office is provided. |
| **3.** Collection, repackaging and disposal of POPs pesticides used in public health and agriculture completed. | Inventory of all POPs pesticides in the 8 participating countries completed by PY3.<br>Collection, repackaging and disposal of at least 100 tons POPs in 4 countries not covered under the Africa Stockpiles Program completed by PY5. | Project steering committee reports<br>Inventory reports of 8 participating countries.<br>Project progress reports<br>Reports of collection and disposal operation.<br>Final disposal statement (certificate) | Local institutions and partners willing to allow the disposal of POPs pesticides stocks.<br>Timely support is available.<br>Guidance from WHO, UNEP and FAO is provided. |
| **4.** Information on good practices and demonstrated cost-effective and sustainable alternatives taken up by national institutions and planning processes. | 8 countries have accepted demonstrated alternatives in their national vector control policy and planning processes (PY5)<br>Best practices for addressing integrated vector management without the use of DDT and inter sectoral approaches mainstreamed in planning and development processes to allow wider introduction in other areas of the 8 countries (PY5) | Project steering committee reports<br>National policy documents<br>National work plans on IVM | Timely availability of necessary data and support.<br>Institutional guidance and support from WHO. |
| **5.** Transboundary & national coordination, information sharing and monitoring and evaluation mechanisms | Integrated Vector Management programmes to reduce vector borne diseases without applying DDT being implemented and | Project steering committee reports<br>Reports and decisions of district and national health policy and planning | Participating countries and institutions continue to prioritise project goal to demonstrate regional and ecosystem |

| Summary | Indicators (OVIs) | Means of Verification | Hypotheses / critical assumptions and risks |
|---|---|---|---|
| operational and effective in promoting Integrated Vector Management without the use of DDT | monitored by the 8 countries in the selected demo areas, reviewed by national (Steering Committees) and regional (STAC) structures and project activities widely shared and available.<br><br>Regular budgetary allocations from governments to IVM practices in all 8 countries involved (PY5) | mechanisms.<br><br>National Steering Committee and STAC reports.<br><br>Technical reports and Project Progress reports.<br><br>National and district financial accounts. | specific alternative approaches to vector borne diseases control as contribution to the formulation of a global vector borne diseases control policy without the application of DDT through the use of sustainable, cost effective and environment friendly alternatives.<br><br>National and district institutions and partners agree to mainstream sustainable, cost effective and environment friendly approaches for vector borne disease control into their programmes and activities by adopting integrated and inter-sectoral policies and approaches.<br><br>Communication and exchange of information unhindered between demo areas and countries. |
| **Outputs** | | | |
| **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. | 8 protocols completed (PY2) and mechanisms in place for their implementation in demo areas (by PY5). | Completed country protocols | Good cooperation among national and local governments and among sectors (agriculture, environment, health, community development).<br><br>Timely support available.<br><br>Guidance from WHO office provided. |
| **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. | Number of cases from 8 countries whose request for specific capacity building has been adequately dealt with. | Project progress reports<br><br>Reports on demonstration project-specific capacity building activities<br><br>Workshop notes | Countries willing to collaborate in integrated vector management systems and sharing data on regional basis<br><br>Good communication, information exchange among countries and partner |

| Summary | Indicators (OVIs) | Means of Verification | Hypotheses / critical assumptions and risks |
|---|---|---|---|
| | | | institutions<br>Local offices commit staff and other necessary resources to execute pilot demonstration activities |
| **1.3** Regional workshop conducted for the harmonization of the country protocols with effective follow-up for the completion of the protocols, and final review by the STAC | 16 demo projects successfully implemented by PY5.<br>1 Regional harmonisation workshop conducted (PY2) | Project progress reports<br>Workshop report | Communication and exchange of information unhindered<br>Timely support available.<br>Guidance from WHO office provided. |
| **1.4** Assistance provided to the National Project Coordinators for essential elements of demonstration projects implementation in line with the agreed protocols | Number of monitoring procedures carried out correctly as planned. Number of final reports produced (PY1- 5).<br>16 demonstration projects with significantly reduced vector borne disease outbreaks (while no DDT was applied) successfully completed by PY5 without significant loss of ecosystem functioning and loss of biodiversity values.<br>Attitude change by involved communities | Harmonized protocols<br>Project progress reports<br>Socio-economic data evaluation at various points during project life time | Communication and exchange of information unhindered<br>National and local governments and institutions and partners agree to mainstream IVM into their programmes and activities.<br>Adoption of integrated and inter-sectoral policies and approaches in the field of Vector Management by all levels.<br>Timely support available.<br>Guidance from WHO office provided.<br>STAC members are committed and supportive<br>Local government and community co-operation effective |
| **1.5** Project activities monitored 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 | Number of regional analysis carried out correctly as planned. Number of final reports produced (PY1- 5). | Technical, management and financial progress reports.<br>Reports on technical and managerial support activities.<br>Final Technical, management and | Communication and exchange of information unhindered<br>Timely support available.<br>Guidance from WHO office provided. |

| Summary | Indicators (OVIs) | Means of Verification | Hypotheses / critical assumptions and risks |
|---|---|---|---|
| recommendations | | financial reports.<br>Bi-annual project reports; annual reports of the National Project coordinator; review reports by the STAC; reports on site visits by STAC members. | STAC members are committed and supportive<br>Local government co-operation effective |
| **1.6.1** Technical support (through consultancies) provided for the analysis of datasets, including cost-effectiveness and sustainability analysis, and the production of the final report | Consultancy reports and Final Report made available to STAC (PY3-5) | Project Progress Report<br>Consultancy Reports | Communication and exchange of information unhindered<br>Timely support available.<br>Guidance from WHO office provided. |
| **1.6.2 STAC** meeting held to review the national reports and draft the consolidated regional report, including lessons learnt, for submission to relevant parties. | Consolidated regional report produced in accordance with STAC terms of reference (PY5) | Project progress reports<br>Report of STAC meeting | National reports timely available<br>Timely support and guidance available from WHO office.<br>Regional Report with lessons learnt will get sufficient attention from policy makers. |
| **2.1** National seminars organized for the review of policy and legal frameworks | 8 sets of inter-sectoral policy and legal frameworks seminars organised (PY2-5);<br>Number of countries with an IVM policy framework and IVM legal arrangements in place. | Reports of seminars including suggestions for changes for Policy and Legal documents<br>National political endorsements of the new/adapted policy and legal documents<br>Project progress reports | National Governments recognize the importance of policy and legal reforms in the field of vector management in public health sector |
| **2.2.1** Promotional documents produced, country visits conducted and national seminars organised, provision of | Number of community-based IVM activities initiated in each country at PY5 | Advocacy materials for intersectoral collaboration and community involvement, educational & training | Local governments agree to participatory extension approaches |

| Summary | Indicators (OVIs) | Means of Verification | Hypotheses / critical assumptions and risks |
|---|---|---|---|
| examples and case studies of successful institutional arrangements between the sectors completed | | material produced (technical and advocacy leaflets, maps, etc.)<br>Training reports<br>Project progress and technical reports<br>Agreements (MoU, performance contracts) between different ministries | Timely support available.<br>Guidance from WHO office provided. |
| **2.2.2** 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 | 8 countries have a restructured vector control unit operating on the basis of IVM including participation of all relevant partners (PY5) | Project progress reports<br>Materials for use by community health services, agricultural extension services and/or farmer field schools | Service providers interested and available to support the programme |
| **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 | 8 Vector Control Units in the participating countries are restructured (PY4) and full technical cooperation is provided as needed (PY5) | Action plans for restructuring the vector control units.<br>Progress reports on the restructuring processes in each participating country.<br>Organograms of the new vector control units.<br>Project progress reports | National health systems and vector control units are interested to support the program and to accept to make necessary changes in the institutional structure. |
| **2.4.** Guidelines and training materials for vector control professionals are developed, updated and reviewed | Number of updated, reviewed and developed guidelines and training materials available for vector control professionals in the region | Available guidelines and training materials | National health systems, vector control units, and partner organisations are interested to support the program and to develop, review and update training materials for vector control specialists in the region.<br>Timely support available. |

| Summary | Indicators (OVIs) | Means of Verification | Hypotheses / critical assumptions and risks |
|---|---|---|---|
| | | | Guidance from WHO office provided. |
| **3. 1.** Obsolete POPs pesticides used in public health and agriculture are collected, repacked and disposed | Inventory of all POPs pesticides in the 8 participating countries completed by PY3.<br>Collection, repackaging and disposal of at least 100 tons POPs pesticides from 4 countries not covered under the Africa Stockpiles Program completed by PY5. | Training reports concerning inventory training<br>Inventory reports of 8 participating countries.<br>Project progress reports<br>Reports of collection and disposal operation.<br>Final disposal statement (certificate) | FAO led regional project takes of on time.<br>Collaboration with regional initiative works out well.<br>Partners willing to collaborate.<br>Stockowners are willing to release stocks.<br>Timely support is available.<br>Guidance from WHO, UNEP and FAO is provided. |
| **4.1.** Report and/or article for peer reviewed literature is published, tri-lingual web page is designed and publicly available to give wide dissemination to the outcomes of the national studies | Web pages in English, French and Arab created (by PY3) and at least two scientific publications (at least one in each language English, French or Arab) produced and published in relevant science periodical (PY5) | Web pages<br>Relevant scientific periodical<br>Project progress reports | Data timely available<br>Institutional guidance and support from WHO available on time<br>Scientist available willing and able to take responsibility to write scientific paper |
| **5.1.** (Part-time) Project Coordinator assigned by WHO,<br>Assistant Technical Project Coordinator recruited and eight National Project Coordinators assigned; transboundary & national coordination, information sharing, monitoring and evaluation assured | Confirmation of WHO provision of a suitable Project Coordinator (PY1).<br>Timely recruitment and proper working of Assistant Project Coordinator (PY1) and eight National Project coordinators (PY1) | National and Project Reports.<br>Contracts project staff. | Willingness from WHO to appoint a suitable Project Coordinator timely<br>It is assumed that the hiring of an Assistant Project Coordinator and other key staff can proceed expeditiously. |
| **5.2.** Establishment / functioning of a National Steering Committee in each participating country | National Steering Committees in each participating country guide national processes and meet once/twice yearly (PY1-5) | Steering Committee meeting reports<br>National and Project Reports | National and multi sectoral commitment to participate in the National Steering committee meetings to address Integrated Vector Control issues |
| **5.3.** Establishment / functioning of a Regional Scientific and Technical | STAC members appointed by the Regional Director of WHO according to the related | Written confirmation from the | WHO commitment to select timely suitable |

| Summary | Indicators (OVIs) | Means of Verification | Hypotheses / critical assumptions and risks |
|---|---|---|---|
| Advisory Committee | Terms of Reference (Annex N) and STAC meeting once/twice a year (PY1-5). Minutes of STAC meetings. | Regional WHO Director<br>STAC Meeting reports, Project Progress Reports | candidates for the STAC<br>Suitable candidates available and willing to become a member of the STAC |

## ANNEX C: RESPONSE TO PROJECT REVIEWS

a) Convention Secretariat comments and IA/ExA response

non received.

b) STAP expert review and IA/ExA response

*Demonstration of Sustainable Alternatives to DDT and Strengthening of National Vector Control Capabilities in Middle East and North Africa*

**STAP – INDEPENDENT TECHNICAL REVIEW**

*Demonstration of Sustainable Alternatives to DDT and Strengthening of National Vector Control Capabilities in Middle East and North Africa*

UNEP/GEF: Persistent Organic Pollutants, OP#14

**STAP Roster Expert Review**
undertaken by

**Prof Henk Bouwman**[1]

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This is a well prepared, comprehensive and cohesive document. Because this project covers eight countries, detailed planning would not form part of the PB. It reads rather generic in places, and some detail is left for later development. This is understandable. Details are however the basis for many problems, and I will attempt to also identify issues that needs addressing at a national and regional level, even though the project team and drafters might have assumed these already. Some instances of easily rectifiable and unintentional inconsistencies have been identified, and does not detract from the value. I have however, also included a number of additional issues that needs consideration, either in the PB, or as specific issues to be taken on board later.

On the whole, this is a timely and urgent project that builds on the experiences of two similar regional projects.

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An earlier mention of the SC than currently in #&, would I suggest better reflect the motivation and concern of this project. Where appropriate, closer association with SC text would also strengthen the text. Mention of specific articles of the SC can be incorporated, such as Article 12 on technical assistance.

Any changes in the PB, should also be checked against the relevant sections of the summary, and the accompanying annexes.

**Key issues**

Scientific and technical soundness of the project

1. Assess scientific basis of the project

The MENA area seems relatively new to IVM. The required epidemiological, entomological, environmental and social knowledge relating to malaria control would mostly be residing in existing and traditional malaria control programmes. Although there is inherent knowledge of the ecosystems residing within the programmes, regarding IVM it might be less comprehensive. Since IVM relies heavily on ecological and biological insight, this issue will need attention at the local project level. An ecological characterisation of each site (with reference to eco-epidemiological settings as in #20) could be done, whereupon potential IVM interventions can be based. This will also establish a base to evaluate possible impacts of IVM interventions, both positive and negative. The country projects supplied is rather generic, and it is expected that at the NSC level, much work needs to be done in this regard. The early assessment of the sites by IVM experts or consultants would most likely be required, and is anticipated. This aspect needs to be covered in one of the Activities (possibly #52). These are issues that need to be covered by the initial workshop.

An assumption inherent in much of the PB and summary is that IVM will work, although it is correctly identified under risks that it might not. In #83 for instance, failure is only ascribed to incorrect implementation of IVM strategy. It is, however, an assumption that IVM will be effective under any given situation. The possibility exists that current tools may not be enough to cover every possible ecological and social situation. Therefore, an increase in disease may not necessarily be the result of incorrect implementation of IVM, but inappropriate IVM. This has implications further on, regarding risks to communities, ethics, and strategies for reversal in specific cases.

2. Appropriateness of approach to collect relevant information on sections of society and economy and on the different aspects of the environment.

As part of the ecological assessment above, a socio-economic assessment could also be done, together with the intended KAP/COMBI at the demonstration sites. This will also provide a baseline against which the alternative interventions can

be evaluated and better quantified, since alternative measures might affect local livelihoods and other economic aspects. Knowledge and perceptions is one of the aspects identified and addressed in this project, and any improvement can then be measured and reported on at the end of the project. Additionally, similar attitudes could be obtained from the line managers in malaria control for each country at inception of the project. These are the key people that will advise the governments regarding the restructuring of vector control units and adopting IVM principles. Changes in the attitudes will be crucial, especially when working from a conservative but dedicated mindset.

One instance, where attitudes and economy would play a crucial role, is the use of bed nets. Keeping people under bed nets restrict them socially and economically, and may not be acceptable under a variety of conditions. These are also issues to be addressed under cost-effectiveness.

3. Does the project fully determine which sectoral changes are needed to achieve the aims?

This has been adequately identified in a number of instances in the PB. The interaction between health, agriculture and environment, but also with others, are crucial for the success of the project, and has also been identified as a risk.

In a number of instances, the PB and summary refers to “political will” (e.g. PB #88 and #85). I would suggest rewording this reflecting “convincing the authorities”, and make the intention of the statements less controversial. Implementation and scaling-up might be resisted because the demonstration project results might not be convincing enough, or carries additional or other perceived risks, which has nothing to do with “will”.

4. Has the issue of inter-comparability been addressed?

The STAC (referred to as Regional Steering Committee and RSC, p13 of the summary) has taken on board this huge task, of collecting, collating and dissemination of data and experiences. From experience with multi-country projects, the top-down communication through such a route might not be that effective. Demonstration projects are run by managers who become very protective (and rightly so) of their projects, and resist interference from the top. The PB does address this issue by envisaging visits between projects. This is probably the best way to do it, but is costly in time and money, and it should include the demonstration project personnel at mid-term, rather than only the NSC members. Reciprocal visits in my experience strengthen bonds and trust between the practitioners, rather than a flow of paper, websites and brochures.

Demonstration projects are site specific, and it would therefore be quite difficult to devise an all-encompassing set of criteria with which to compare. Allowance should be made for local adaptive management in the projects. A mixture of

quantitative and qualitative criteria for inter-comparability could therefore be developed and applied, but this should also be adapted as the project progresses.

5. Analysis of the interlinkages between VBD and IVM as alternative to DDT.

IVM has a steep hill to climb in convincing authorities to change from a proven and effective method (DDT and IRS) to IVM as a viable and sustainable alternative. Given the number of anticipated demonstration projects (some countries have up to four), it is likely that the necessary ecological, social and other factors that affect VBD for some are not well understood at all. Alternative measures will have to be carefully though through for each site to ensure the safety of the people. It needs to be understood that effectiveness of alternatives will be measured in the first instance in changes in disease burden. This has been recognised in #81. Since it is possible that a demonstration might not achieve its aims or even fail, ethical considerations will come into play. The communities will have to be properly involved and accept from inception, that they are part of a demonstration. They will therefore also have to be involved in determining when it would be appropriate to revert back to previous or other control measures. Such a measure will need to be build in to protect the project as whole, whereby failure at one demonstration site does not threaten others. Given the variability in disease transmission (based on various factors), this will be a daunting task, but necessary for eventual adoption of alternatives.

In #83, mention is made that increased transmission would be due to “the IVM strategy is not implemented correctly”. It seems premature to blame this on incorrect implementation alone, as other factors, such as lack of knowledge or local considerations might also come into play. The project is structured as iterative, so that knowledge gained at one site can be applied at others, and thereby improve the demonstrative value of the demonstrations.

6. Does the project determine what type of measures is needed to ensure that human health is not affected?

Although it is understood that the eventual aim is to reduce the use of DDT, and to reduce the likelihood of reintroduction, alternative insecticides also have health consequences. Within VBD control, these risks are less well understood for alternatives than for DDT which it intends to replace. Adequate measures should be taken to monitor any health effects. Care should be taken in understanding possible human-pesticide contact patterns that might differ between regions. It is possible, and it has been documented elsewhere, that multiple exposures to the same compound, through malaria control and agricultural use, is possible. This needs careful assessment for each demonstration site.

In addition, the relevant WHO, WHOPES and other risk assessment documents available should also be consulted, and verified that use of alternatives would be safe under local exposure conditions and profiles.

Strong consideration should be given to develop backup / emergency plans, and have available at the sites, the required stock and equipment to revert to a proven method (and enough medicines to threat the cases), once a certain threshold of disease burden, to be determined *ab initio*, has been exceeded. Communities will probably be more willing to participate in such a case, and will ensure and demonstrate due diligence from the project. This also implies an intensive active surveillance at each site.

Since the WHO is the executing agency, and given the explorative / demonstrative / experimental nature of the project, consideration could be given to subject the project to ethical review at WHO level, and probably also at country level. There is enough time scope in the project time line for this. The existing WHOPES and other supporting documentation will be of considerable help in this regard.

7. Does the project determine what type of measures is needed to ensure that environmental health is not affected?

Although the alternative insecticides are considered more benign, they do have environmental impacts. As for human health, provision should be made to recognise, monitor, document and rectify any impacts. In addition, some IVM interventions, especially when concerned with water management, could also have consequences. Requirements for ecosystem functioning and protection of biodiversity may supersede some interventions, as both ecosystem functioning and biodiversity might also form an important part of the livelihoods of local communities.

8. Assessment of adequacy of the scope of the project.

This is an ambitious project, and very necessary. Many of the detail issues have been dealt with above, and some will be later on. There is one issue though, that needs more attention. Up-scaling is fraught with problems, many of them unforeseen. Factors may come into play on a larger scale, which are not apparent on a pilot or demonstrations scale. Both the NSCs and STAC need to give adequate and dedicated attention to this aspect, as problems with up-scaling might negate the good work and results achieved on a smaller scale. Problems or failures will also diminish the willingness of governments to change their control towards IVM, on a much wider level than this region. Since IVM based vector control units is one of the aims of the project, this needs serious attention from the beginning. In South Africa, where pyrethroids replaced DDT for malaria control successfully on a small scale, widespread implementation failed, due to resistant vectors from across an international border.

Under Stakeholder involvement/ intended beneficiaries (#99-104), the text regarding the communities as beneficiary needs to be strengthened. Although the intention of OP14 and the SC is on POPs, the intended reduction of reliance on DDT should not impact on communities. This is well understood in the PB, but might be stated more explicitly where appropriate.

9. To what extent will innovations be used to support the project?

IVM in itself is a relatively recent innovation and adapted from IPM. Adaptive management (depending on effective communication between projects) should also be encouraged, rather than persisting with strict multi-year plans, so as to incorporate local experience, indigenous knowledge, and advise from other demonstration projects. This might be the intention of the project in any case.

10. Assess institutional arrangements: the role of existing scientific institutions in the development and sustainability of regional mechanism is of paramount importance.

The institutional arrangements are in order and well described. It operates on three levels (STAC, NSC, projects). It is a daunting task to manage all the stakeholders, not least of which will be the involvement of the local communities, the prime beneficiary target.

Although academia and research institutions have been consulted, their capacity to monitor progress, effectiveness and other aspects should not be relegated during the process. Significant involvement from the inception would strengthen their capacity in fine tuning IVM options, and serve as resource base to deal with potential problems. These institutions are also equipped to deal with scientific counterparts in other projects in the world.

11. Is the choice of demonstration sites representative and appropriate?

I am not able to judge from the materials at hand, but criteria for selection, or at least reasons for selection, should be carefully documented, and presented in appropriate reports. The indicators for each should therefore be appropriate for each site. See also comments under 1, 2, 6 and 7 above.

It is mentioned in Output 1.4 that there will be 16 demonstrations sites, but the country submissions add up to 26.

12. Have any problems been overlooked?

See comments on up-scaling in 8 above.

The STAC is mentioned in #54 (and also in the summary) as doing a final review of the protocols. If this implies approval for each project, a potentially serious area of conflict might arise. Clear areas of responsibilities need to be established at each level.

Under monitoring and evaluation in the summary, the last paragraph indicates that the NSCs reports to the executing agency (WHO in this case) – should this rather be to STAC?

Specific issue are listed below.

13. Have issues of conflict been addressed?

From experience with multi-country projects, the inherent complexity will create stress in the systems, especially with financial issues. Late or inadequate transfer of funds will create conflict between the various levels. Country ownership is very important, but the tendency of complex projects is to become prescriptive top-down – the STAC management could become authoritative rather than play a guiding role. Care needs to be taken to ensure support to (and from) the projects.

Again, the level of approval of projects rests either with STAC or NSCs. For country ownership, it should rest with NSCs. STAC – NSC – project coordination takes time, and this could delay implementation. Seasonal considerations could also play a role in initiating projects.

Another crucial issue is the timely transfer of funds. Since this project involves a potential risk to human lives, GEF and WHO should have means and procedures available to support demonstration projects, in spite of administrative red tape and reporting problems. Failure to deliver reports in time, issues with money transfer, variations in exchange rates, changes in GEF/WHO/UNEP procedures, or any other delays, on an ethical basis, cannot be a reason or excuse for halting or reducing adequate support or funding. Most other projects might be able to deal with zero cost extensions (at great pain), but not projects that deals with human health and communities with no or little recourse.

<u>Identification of the global environmental benefits</u>

1. Does the project address issues that will result in global environmental benefits?

Yes, and adequately described.

2. Are any negative environmental effects anticipated?

See comments above.

How does the project fit within the context of the goals of GEF

1. Does the project fit within the overall strategic thrust of the GEF- funded OP 14 activities?

Yes on all accounts

Regional context

With few exceptions GEF projects are multi-country regional projects. Assess the regional scope of the project.

The number of countries and scope of work is probably the maximum that such a project can manage. It regional scope is excellent.

Replicability of the project

Is there scope for replication?

Yes, and adequately addressed. However the risks with up-scaling should be taken note of.

Sustainability of the project

The project addresses sustainability well. But it will depend on successful demonstration projects. The cost-effectiveness process in this project will need to take on board (if not already envisaged) the changes in disease burden, as well as social and environmental impacts (positive or negative).

**Secondary issues**

Linkages to other focal areas

No specific linkages to other GEF focal areas, but International Waters and Biodiversity could be mentioned under beneficiaries.

Linkages to other programmes and action plans at regional or subregional levels

1. Have all relevant conventions been considered and taken into account in the project?

Linkages with other conventions, such as Basel would be useful.

2. Is the proposed activity consistent with existing national plans?

As far as possible, the relevant NIPs have been consulted and incorporated in # 24.

Other beneficial or damaging environmental effects

See above

Degree of involvement of Stakeholders in the project

Because of the area-wide interventions, community involvement and stakeholder participation are especially important. Are the national and regional institutions likely to be able to contribute to the achievement of the objectives identified?

Yes, and clearly so on all levels.

However, community involvement would likely have to incorporate ethical considerations, and the following is suggested. A process akin to informed consent would most likely be the most responsible manner in which to involve the communities. Since participatory involvement would be required, it is conceivable that a set of criteria can be negotiated with the communities, which if achieved or exceeded, would signify either failure or success.

Capacity building aspects

Capacity building is addressed on all levels. Horizontal exchange should be encouraged. Therefore, earlier reciprocal visits of project managers between projects would probably be better, so that new ideas can be implemented earlier in the project cycle.

Innovativeness of the project

IVM in itself is innovative and rather new.

**Comments specific to the PB**

- Summary and elsewhere: The viability of IVM should include as a criterion, the reduction in disease burden.
- Summary: Be consistent with the term POPs. It also includes dioxins. The ASP covers the POPs pesticides, but also others.
- #12: Better define the source of the need for accelerating the use of ITNs/LLINs.
- #14: Motivate or better describe the statement “The arid conditions in the EMR favour water management measures for the reduction of vector densities.” It might be ecologically counter productive.

- The situation analysis, ecological analysis and KAP survey can be built into the project components and outcome section.
- Output 1.1: Who will identify and appoint the “international expert”?
- #50: How will eco-epidemiological regions be considered in the formulation of the specific protocols?
- Indicator 8: The might be need for more than one protocol per country, if different eco-epidemiological regions are covered.
- #52: Specify who will do this.
- #53: Include ethics in the protocols.
- #54: Specify who will do this.
- #54: There seems to be some preparatory work needed for the 4-day workshop. Who will do this, including the elements from #94.
- #56: Specify who will do this.
- Indicator 16: A sudden pre-condition is introduced here. DDT can form part of IVM, but it is explicitly excluded here. I suggest removing this issue, as it is counter to WHO policy. It may be discouraged.
- #60: Specify who will coordinate this.
- #63: Specify who will do this.
- #65: Specify who will do this.
- #65: Does this include the websites of 4.1?
- #67: Consideration should be given that WHO also develops guidelines regarding the composition, skills, retraining, equipment, schedules etc, of the restructured vector control units.
- #67: A consultation process is envisaged to start before the results of the demonstration projects have been received or evaluated. This consultation might be initiated at a later stage, then indicated in Annex L.
- #69: Specify who will do this.
- #69: The updating of the guidelines covers the first 2 years, but the project runs for 5. I suggest that this be done also at the end of the project, to accommodate the experiences of the demo sites.
- #69: Who will develop and produce the training materials, and who will present them?
- #69: Suggest that ecological, agricultural and socio-economic aspects also be covered
- #69: suggest rephrasing of topic “Epidemiological surveillance/laboratory support as basis for sustainable alternative implementation, maintenance, emergency response, and in-house capacity building resource”
- #72: Specify who will do this.
- #72: refer to SC and Basel conventions regarding transport and disposal.
- Component 4: Align the outcome with the indicator.
- #73: Why not Arabic? It will improve the replicability.
- #76: The plan for Outcome 5 seems static. Once implemented, it will not change. There needs to be an element of operational research and adaptive management built in, to continually strive to improve the operations at each demo site, to take account of local conditions, and take

full advantage of local and indigenous knowledge. This will result in a range of options, as well as experience and willingness of local operators to select and adapt from a range in an IVM toolkit. It will also achieve one of the aims – to distribute decision making to lower levels, and build capacity through experience. See also link with #94.

- #76: From experience, and considering the workload (especially dealing with GEF and its reporting requirements under annex K, as well as #107-111) the 20% might be a substantial underestimation of the time required.
- #82: The TOR for the NSC and NC could also be developed, in line with the TOR for the STAC.
- Risks and sustainability: Other risks need to be recognised: Livelihoods affected, multiple exposures, and change in ecosystem functioning.
- #86 reads as an outcome rather than a threat. It could be incorporated in outcome 5. The current section can be rephrased as a risk, with adaptive management and emergency / terminating procedures as remedies.
- #92: Include COMBI in the appropriate outcome.
- #92: reflect also in outcomes
- Replicating strategies: The various mentions (national and regional) could do with an alignment in terminology.
- #105: Suggest that a generic audit system for public health pesticides be developed and made available

*South Africa, 21 March 2007*
*Prof. Henk Bouwman*

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**RESPONSE TO STAP REVIEW FROM PROJECT TEAM**

We would like to thank the Reviewer for his conclusions that the project document of the project "*Demonstrations of Sustainable Alternatives to DDT and Strengthening of National Vector Control Capabilities in Middle East and North Africa*" is a well prepared, comprehensive and cohesive document, prepared as regional project which requests additional details on some aspects to be developed later.
The Reviewer has judged that the project is timely and urgent and the Project Team can not more agree.
We further fully agree with the fact that the Stockholm Convention should have been mentioned earlier on in the document and have replaced this paragraph now to #1 at the very beginning of the Project Brief.
We have in full taken note of all suggestions from Reviewer and have included these in the relevant sections of the project documents. Numbers refer to sections in the Project Brief.
The Project Team is confident that after the long period of participatory project preparation, the comments from the Reviewer have contributed to an even higher quality of the project proposal compared to the earlier output from the Project Team.

**Key issues**

**1. Scientific and technical soundness of the project**

The Project Team agrees with the observation of the Reviewer that an early assessment of the sites by IVM experts or consultants is required and anticipated and that this needs to be covered in one of the activities. #52 now includes this issue.
Eco-epidemiological and social characterization of selected sites will be done during the first year of the project.
As mentioned, IVM tools might not work: Not only because they are not well implemented but simply because tools may not be enough to cover every possible ecological and social situation. As such, the Project Team agrees with Reviewer that an increase of disease burden may not necessarily be the result of incorrect implementation of IVM, but it can be due to inappropriate IVM. During implementation, the project will carefully monitor the impacts of its interventions and determine which interventions are achieving the required results. In case of non or even adverse effects the intervention has to be re-defined or adjusted. During the first year of project implementation, the baseline of indicators and the monitoring framework for assessing the state of indicators will be developed and approved by the Regional Scientific and Technical Advisory Committee (STAC), as mentioned in Annex K.

**2. Appropriateness of approach to collect relevant information on sections of society and economy and on the different aspects of the environment**

As mentioned by the Reviewer, as part of the ecological assessment of each site, a socio-economic assessment should be done. Although this was included in the original outline of the project, following Reviewers' suggestion, this has now been mentioned in #52. Attitudes –and the change in attitude !- play an important role in the project. These can be obtained at the beginning of the project and assessed at the end of the project as well, showing the impact of the project on people's attitudes towards the new and alternative interventions. See the Logframe Matrix (Annex B) where the attitude change by involved communities is included as an indicator to be monitored.
We fully agree with the Reviewer that these issues need to be taken into account as well during the planned cost-effectiveness study.

**3. Does the project fully determine which sectoral changes are needed to achieve the aims?**

Project Team is happy to see Reviewers' opinion that the envisaged interaction between various sectors have been adequately addressed as they are crucial for the project. However, this issue in itself includes potential risks to the project as well.
The comment from Reviewer concerning the wording "political will" has been taken into account and the wording has now been changed (see #85 and #88).
Of equal importance is the fact of how the 'impact' of the alternatives will be reviewed and evaluated, and later on communicated to the politicians (and other stakeholders) as 'an achievement' of the project. This is crucial in order to promote review of the policy and legal frameworks as basis to sustainability of the anticipated institutional changes.
The project will pay attention to this issue through, amongst others, the development of a Regional Report including lessons learnt which will be brought to the attention of policy makers and decision takers.

**4. Has the issue of inter-comparability been addressed?**

Seen the comment of the Reviewer, in the whole Project Brief document, consistency of wording has been improved with regards to the STAC.
The Project Team fully agrees with the remarks from Reviewer that top-down communication is not that effective. As such, various visits between project teams were envisaged. In order to strengthen this idea, we have now highlighted reciprocal visits even at mid-term of the project (see #95).

**5. Analysis of the interlinkages between VBD and IVM as alternative to DDT**

#83 now addresses the mentioned issues related to the fact that communities are –of course! - part in the demonstrations and evaluations.
Community involvement in this project will go further then 'briefing them'. It will include participatory identification of problems related to malaria and other vector borne diseases and the application of DDT, their perception of the issues involved and their solutions suggested. This will include making use of relevant traditional and indigenous practices and socio/cultural behaviour patterns. IVM might change the normal behaviour and routine and the consequences of all envisaged alternative interventions will be

monitored, mostly by the communities themselves, and registered by the project. The exact way of intervention and communication with the various communities varies per country and probably per community group but will be defined during the first year of the project after the process of demo site selection.

**6. Does the project determine what type of measures is needed to ensure that human health is not affected?**

Reviewer mentions correctly that alternative -pesticides, which might be used as part of IVM- also have health consequences and that appropriate action should be taken to reduce the potential negative effects.
The very interesting issue of exposure to the same compound (due to use in agriculture and in public health) has been included in the project documents. #86 is adapted as such.
Of course, as correctly mentioned by Reviewer, all available risk assessment documents will be consulted before any alternative intervention will take place. To emphasize this issue, #87 has been modified.
Backup and emergency plans for alternative interventions should be in place and is now more specific addressed in # 20.
The Project Team agrees that attention should be given to ethical review at WHO level and suggests this to be done during the Mid Term and Final Review for which Terms of Reference will be formulated at a later stage.

**7. Does the project determine what type of measures is needed to ensure that environmental health is not affected?**

The Project Team agrees with the comment from Reviewer that ecosystem functioning and biodiversity issues might supersede some proposed alternative interventions. Any negative impacts should be avoided or rectified. #20 has now addressed this issue adequately. One of the indicators as mentioned in the Logical Framework reads: “16 demonstration projects with significantly reduced vector borne disease outbreaks (while no DDT was applied) successfully completed by PY5 *without significant loss of ecosystem functioning and loss of biodiversity values.*

**8. Assessment of adequacy of the scope of the project**

Project Team shares the opinion of the Reviewer that this project is ambitious and very necessary. The issue of up-scaling demo activities will meet many, sometimes unforeseen, problems. As failures will de-motivate stakeholders, these should be avoided as much as possible through proper and adaptive management of the National Steering Committees and the STAC. #95 has now emphasized this more specific.
Also the text in # 104 has been strengthened in order to emphasize the importance of communities as beneficiary. While the intention of the project is to reduce the use of DDT, this should not impact on the communities. Although Reviewer stated correctly that this is already addressed in the Project Brief, the Project Team decided to more pay attention to this issue through strengthening of the text in #13, 64, 83 and 105.

**9. To what extend will innovations be used to support the project?**

Reviewer states that IVM is a relatively new recent innovation and adapted from IPM. Agreeing with this, the Project Team emphasizes that IVM in the proposed region is in fact a completely new approach. It should indeed include local experiences, indigenous knowledge, traditions and of course experiences from other projects –as mentioned in the Project Brief-. #21 covers this topic.

**10. Asses Institutional Arrangements: the role of existing scientific institutions in the development and sustainability of regional mechanism is of paramount importance.**

The Project Team agrees with the view of Reviewer that the role of scientific institutions for example in fine tuning IVM options, is of importance. Although Reviewer states that the institutional arrangements are in order and well described, the Project Team preferred to outline more the potential role of scientific institutions and as such # 103 has been strengthened, also seen the potential role of scientific institutions in dissemination of obtained results with other scientific counterparts in other parts of the world. Scientific institutions can play a role through making available specialists and experts for consultancies and can be involved during the Mid term and Final evaluations. It is expected that STAC members will have their own scientific networks including scientific institutions as well.

**11. Is the choice of demo sites representative and appropriate?**

The various countries have been selected demonstration sites which will at the beginning of the project be verified and discussed with STAC and other stakeholders to verify whether these demo sites are representative and feasible to start with. The criteria for the selection of demo sites will be developed at the early beginning of the project but will include amongst other issues the vector disease burden and the current and potential use of DDT. Criteria will be developed in collaboration with the stakeholders with strong input from STAC, however the final selection of demo sites on the basis of agreed criteria will be the responsibility of the National Steering Committees.
Countries have selected more demo sites compared to the number anticipated in the project and as such a serious scrutiny can take place reducing the number of demo sites to an average of 2 per country. See further $ 48.

**12. Have any problems been overlooked?**

The few issues mentioned by Reviewer are already taken care of in the previous points. It should be mentioned that STAC provides Scientific and Technical inputs. The all-over responsibility and 'right-for-endorsement' of projects and activities lies with the individual countries (and in this project by the individual National Steering Committees). Through this structure the issue of country ownership is also guaranteed.
Concerning reporting issues, the National Steering Committee will report to the
Executing Agency WHO concerning progress and financial / administrative issues, while

it will report to the STAC concerning Scientific and Technical issues. #101 and #109 addresses this issue now clearly.

**13. Have issues of conflict been addressed?**

Reviewer mentions potential issues of conflict and a main potential issue raised is concerning administrative and financial arrangements between the Implementing and Executing Agencies. It is –as Reviewer correctly stated- a crucial issue.
However, we have to keep in mind that both Implementing and Executing Agencies are UN Agencies with their specific bureaucratic administrative and financial systems. Also the specific GEF requirements are to be considered.
But as everywhere in institutions, the 'chemistry' between the various persons in these institutions plays an important role. And as the 'chemistry' during the preparation phase was very good between the members of the Project Team, we expect that, although we have to take into account the bureaucratic systems with 'red tapes', we will be able to move ahead in an adaptive and flexible way to secure an optimal project implementation.

**Identification of the global environmental benefit**

No comments from Reviewer to be addressed, apart from the issues tackled already above.

**How does the project fit into the context of the goals of GEF**

Reviewer confirms that the proposed project fits in all its aspects in the overall thrust of the GEF co-funded Operational Program 14.
The Project Team however, as stated in the Project Brief #2, sees links with Climate Change issues as well. Links with International Waters and Biodiversity can be made as well however the project documents do not further elaborate on this.

**Regional Context**

Project Team agrees with Reviewer that a number of 8 countries spread over a region as proposed in this project is probably the maximum that such a project can manage.
Reviewer: "Its regional scope is excellent".

**Replicability and Sustainability**

Replicability is adequately addressed (according to Reviewer) and issues related to scaling-up will be paid attention to (#95).
Sustainability is well addressed as well but –as mentioned correctly- will depend on successful demonstration projects. The various mentioned points are already addressed above.

**Secondary issues**

Linkages to other focal areas are addressed above and in #2.
Linkages with other Conventions are mentioned in # 33.
Reviewer correctly remarks that relevant NIPs are consulted and are incorporated in #24.
Reviewer correctly noticed that the involvement of Stakeholders in the project is clearly done. However, the Project Team adapted annex K (Monitoring and Evaluation) to further emphasize the participatory involvement of the communities also during the evaluation of the project activities.
The issue of reciprocal visits has been added in #95 as this will strongly contribute to the flow of information at execution level in the field (see #95).
Although "IVM in itself is innovative and rather new" (Reviewers words), the Project Team would like to stress that the introduction of IVM in the proposed countries in this part of the world and at proposed scale, in combination with the lessons learnt from other experiences, and including a specific cost-effectiveness analysis is a **unique** endeavour.

**Comments specific to the Project Brief**

All suggestions from Reviewer have been taken into account and the relevant text in the Project Brief has been rectified, changed of worded in a different way in order to accommodate Reviewers questions and remarks.
Several issues need further explanation and are clarified below:

- An eco-epidemiological characterisation will be carried out at the beginning of the detailed protocol formulation in each country. At the harmonization workshop the eco-epidemiological characterisations will be compared to ensure that most if not all ecosystems typical for the region are properly represented in the regional methodology.
- WHO will provide a Project Coordinator who will most of his time and on demand be available for project purposes.

The Project Team does not share the view of the Reviewer with regards to the fact that the development of a generic audit system for public health pesticides should be included in the project: Although a good and valuable suggestion as such, the Project Team is convinced that such an activity will divert too much from the original project direction as described in this project proposal.

**********

c) GEF Secretariat and other Agencies' comments and IA/ExA response

see attached file "GEF Secretariat Project Review"

**RESPONSE TO GEF SEC REVIEW FROM PROJECT TEAM**

(the numbers follow the same numbering as in the GEF SEC Review)

2. Programme and Policy Conformity

2.1 Under the Project Design, the reviewers wanted to know why there is still ambiguity on the amounts of DDT used in project countries and yet an amount of USD 650, 000 was made available during PDF-B

*Indeed part of the USD 650,000 was used to assist project countries to carry out a very comprehensive vector control needs assessment which also looked at the amounts of DDT and other insecticides used for vector control. However, in countries where there is illegal use of DDT outside of the public sector, it has been difficult to get such amounts used. In other words there is no transparency in reporting and so no data is available. Through appropriate advocacy as well as the strengthening and enforcement of legal tools, this problem should be resolved and will be an important outcome of this project. Only one country (Morocco) has officially confirmed the use of DDT; as mentioned in the Project Brief, some other countries have mentioned illegal or unspecified use.*

2.2 Why undertake a new POPs inventory when this is either already available through the NIPs?

*We fully agree with this comment and the suggestion that the objective should be to* ***update*** *the preliminary inventory as executed during the NIP and devising a comprehensive disposal plan. This suggestion has been incorporated in the text of the Project Brief (and the Executive Summary in the various relevant sections (#72 of Project Brief and page 11 of the Executive Summary).*

2.3 List the types of activities that are related to capacity building under output 1.2 of the Project Brief

*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. However, the above mentioned indicative activities have been included in the project brief as examples.*

2.4 Elaborate more on the activities under output 3.1 (collection, repackaging and disposal) and indicate other cost-effective and environmentally friendly methods in addition to incineration

*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 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 specialised 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.*

2.5 Activity 1.1 what is the development of the 'protocol' for?

*The protocol will be developed by each of the National Steering Committees 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.*

2.6 Limit the use of acronyms in the project executive summary

*This has been addressed in the project executive summary. A list of acronyms has been included as well.*

2.7 Scaling-up and sustainability of project will depend on a number of factors including strong anchorage of vector control units in the Ministries of Health.

*The Project team fully agrees with the reviewers. In fact the lack of a vector control unit in Ministries of Health of project countries (except in Morocco) was highlighted in the vector control needs assessment reports as one of gaps to effectively implement vector control and therefore impacting on the sustainability of this project. Although it was mentioned already in the Project Brief (amongst others in # 67) this point has been more highlighted now (for example as well in # 88).*

2.8 Risks of up-scaling as part of the project replicability must be taken note of

*The project team fully agrees with the reviewers that the risks with scaling-up should be taken note of. Please note that it was already highlighted in # 85 that a critical assumption of the project would be that governments will maintain their political will towards scaling up the implementation of interventions that are proven to be effective. In # 95 (Replicability) this crucial aspect has now been mentioned as well.*

2.9 Stakeholder involvement – need to include NGOs, private sector and CBOs in the national steering committees

*With the exception of Sudan, none of the other countries have included these groups of partners in their respective national steering committees. This is not intentional but rather a true reflection of what is currently available in the countries. Most of these countries come from a background in which vector control has been vertical and mainly implemented by the public sector. However, the point is very valid and will be appropriately accommodated as the situation gradually changes at country level.*

*Moreover at the start of the project the composition of the National Steering Committee will be reconfirmed. Also, under detailed protocol development for the demonstration projects, it should be added that the stakeholder involvement will be reviewed and updated to ensure the demonstration project will be all-inclusive. Finally, this is an issue to be addressed at the harmonization meeting for the country protocols and should be mentioned among the objectives of that meeting. # 101 and # 103 have been amended accordingly to emphasize these issues.*

2.10 Monitoring and evaluation – plan needs to be presented in a more synthetic form – indicating who is responsible. Include performance indicators as well as reference to final 'independent' evaluation

*The Monitoring & Evaluation plan (Annex K to the Project Brief) has been adapted and indicates now who is responsible for what. A clear link has been made between the Logical Framework and the M&E Plan.*

*However, as mentioned as well in the M&E plan, a M&E matrix will be developed at the start of the project, including more specific performance questions and targets based on the Logical Framework.*

2.11 Clarify the baseline and how it was estimated

*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).*

3. Financing

3.1 Cost for activity 2.4 …developing guidelines and organization of training courses for vector control is high (512,000 USD) and not co-financed. Guidelines are already available in the Mexico/Central America DDT project, why re-inventing?

*It seems to be a too simplistic statement to assume that proper and ready applicable guidelines do already exist. It should be recognized that there are ecological differences between malaria in Central America (three vector species in one zoogeographical zone, and one species of malaria parasite) and in the EMRO Region (three zoogeographical zones meet and more than ten Anopheles species show a wide range of ecological requirements transmitting all four species of parasite). Moreover, the guidelines foreseen do not just address the vector control techniques, but also the various managerial issues: cost-effectiveness analysis, IVM decision making criteria, how to develop inter-sectoral arrangements. Reference should be made as well to the planned WHO HQ activity aiming at compiling the experiences in the various regional projects into an environmental management toolkit, that will cover different species, settings and needs at a global level.*
*Activity 2.4 is co-funded through Government contribution (see table 2, Project financing).*
*Paragraph 68 of the Project Brief has now been enforced including the above mentioned statement.*

3.2 Explain why the disposal cost is so high – USD 613,000 for 100 tons of POPs stocks

*Recent international tenders have shown on average collection, international transport and high temperature incineration prices of about 4000 US $ per ton hazardous waste. These prices are related to 'turn-key' contracts with international and well experienced contractors.*
*However, for chlorinated wastes (like for example DDT), the incineration prices are higher.*
*Apart from the pure collection, repackaging and disposal, countries have to be prepared for these operations. It is expected that FAO will conduct some limited and targeted capacity building through specific trainings in order to prepare the relevant institutions for the up-coming collection, repackaging and disposal activities as well as to avoid future accumulation of new stockpiles.*
*As mentioned in Annex B (Logical Framework) and in # 70 of the Project Brief, capacity building will be supported in execution of the POPs inventory (the current inventory data should be completed and detailed to such a level that it forms the basis for an international tender) and guidelines to avoid new stockpiling in future.*
*These activities will be conducted in only 4 countries, not being covered under the Africa Stockpiles Program, ASP.*
*Furthermore, # 72 of the Project Brief states that* ***at least*** *100 tons of POPs pesticides will be disposed of, depending on the outcome of the country inventories and depending on the disposal market prices obtained during the transparent and international tender to be handled by FAO (see above). Please refer to Annex B (Logical Framework) as well which mentions that* ***at least*** *100 tons of POPs pesticides will be disposed of. Of course an optimal quantity of POPs pesticides –but at least 100 tons- will be disposed of with the current proposed budget.*

3.3 Financing section of the Executive Summary lacks coherence and needs reworking

*This has been addressed in the financial part of the Project Brief as appropriate; the Project Management costs as specified in the template of the Executive Summary are now reflected in table 2 of the Project Brief.*

3.4 Project Management costs should be shared more equitably

*The Project Team agrees with the observation that there appears to be an non balanced distribution of project management costs.*
*However it should be noted that the costs for the (full time) WHO Project Coordinator and secretarial services will be borne for 100 % by WHO. This was apparently not included in the budget but has now been rectified.*
*The relevant tables and parts in the project budget have been adapted accordingly showing an increased in-kind co-funding from WHO (see Project Brief table 2, Executive Summary Chapter 4, financing). The Commitment Letter from WHO has been adapted accordingly as well and shows now an* ***additional*** *WHO contribution of US $ 885,000 to the project. The total WHO contribution is now US $ 1,205,500.*
*This additional WHO contribution for full time Project Coordinator and secretarial support has been equally divided over the budget lines for component 5 (Transboundary coordination, information sharing, monitoring etc.) and Project Management.*

*The mentioned 8 % Executing Agency fee is a standard fee for the Executing Agency as agreed upon during previous negotiations between WHO and UNEP for the current type of project as part of the global DDT related WHO/UNEP/GEF portfolio.*
*In other cases WHO maintains a higher Executing agency fee or overhead which can mount up to 13 % or more.*

3.5 Budget table on page 39 of the Project Brief shows an amount of 660,000 USD for Project Management costs and yet there is only 22,000 USD as co-financing from WHO

*The budget for this component has completely been revised taking into account the 100 % coverage by WHO of the full costs concerning the Project Coordinator and secretarial support.*
*These changes have now been reflected in the appropriate sections of the documents.*

3.6 Tables a and b of the financing section of the Project Executive Summary indicate consultants weeks instead of months – clarify

*The respective tables have been completed according to the latest template as provided by GEF through the GEF website. These tables require provision of data in weeks, not in months.*

3.7 Miscellaneous is not an eligible expense under Project Management

*The respective table has been completed according to the latest template as provided by GEF through the GEF website. The relevant table as provided by GEF shows an eligible budget line called 'Miscellaneous'.*

3.8 Activity 1.3 Regional Workshop should be co-financed

*Project team agrees with this suggestion however relevant co-funding from WHO will be in the form of participation by the WHO Project Coordinator as part of the transboundary coordination and information sharing. These cost are already taken into account under budget item 5.1.*

3.9 Activity 1.5 Monitoring Project activities not co-financed

*Agree to this suggestion and has been addressed in the appropriate sections of the project documents (see Project Brief table 2, and Executive Summary Chapter 4, financing).*

3.10 Activity 2.2 'Produce advocacy documents seminars'

*Agree that the title is not convincing. It should read as* 'Produce advocacy and promotional documents and conduct national seminars and on site visits'. *This has been addressed in the appropriate section of the project documents.*

3.11 Activity 5.1 Project Coordination and PSC at 8% seem high

*Both issues have been addressed as explained above.*

3.12 Activity 5.2 – Cost for the eight national steering committees should be covered by participating countries

*Members of the national steering committees are drawn from different ministries and sectors which currently do not have budgets for holding the steering committee meetings. These coordinating meetings have been very instrumental in strengthening national coordination mechanisms for vector control in project countries. GEF contribution is therefore an important investment now with the view of being covered by participating countries at the end of the project. Besides that, Steering Committee meetings are an incremental activity and as such eligible for GEF co-funding. Both the involved governments and WHO support the Steering Committees through co-funding.*
*The countries will cover the salary costs of the members of the NSC when they are working for the Committees, but an incentive is needed and the costs of meetings needs to be covered as well (travel, meeting facilities).*

4. Institutional coordination and support

4.1 Page 35 paragraph 107 states that WHO's in kind contribution includes a Full Time Project Coordinator. If so must be included in the budget as co-financing

*This is already done as indicated above. Relevant budget lines and the Commitment Letter from WHO has been adapted accordingly and shows now contribution for the full time Project Coordinator and secretarial support.*

4.2 The work under this project must demonstrate coordination and not duplication with the work of the national implementation plans

*Agree with the reviewers. As indicated above, the project will not duplicate the activities of the NIPs. This is exemplified in the proposed coordination with FAO and the African Stockpiles Programme – where the latter is applicable. With respect to inventory activities see comments above under2.2.*

General Comments raised by the reviewers

1. What is the impact on WHO commitment of its recent policy shift on the use of DDT?

*Indeed there was a recent statement by the Global Malaria Programme of WHO on the use of DDT. However, it will be appreciated that there has never been any shift of WHO's commitment with UNEP in supporting Member States in their efforts to phase out the use of chemicals in general and with DDT in particular for the control of disease vectors within the framework of the Stockholm Convention. Furthermore DDT is included in the formal global WHO strategy for IRS (Indoor Residual Spraying) and can as such and under well defined conditions be applied in disease vector control, please refer also to section VI. WHO Policies and Guidelines and Activities regarding DDT in Disease Vector Control in document UNEP/POPS/COP.3/24. In the WHO Regional Office of the Eastern Mediterranean, to use or not to use DDT for vector control has always been guided by a number of factors such as the susceptibility of the local vector species, availability of sustainable and cost-effective alternatives, community acceptance, cost etc. This is in contrast to the blanket proposal on the use of DDT. Through this project, WHO shows its continuous commitment to work with Member States in strengthening their capacity to implement alternatives to DDT for disease vector control without leading to increased disease burden.*

2. Only 2 of the 8 participating countries have officially registered their use of DDT with the Stockholm Convention

*It is true that both Morocco and Sudan had officially registered the use of DDT with the Stockholm Convention. The reasons for this were twofold. Firstly the two countries were actively using DDT for vector control during that time and secondly it was a requirement by the Stockholm Convention for countries using DDT to register officially its use. After the Convention came into force, parties are no longer required to do so. However this is still under discussion. Countries that become party now or later, after the convention already entered into force in 2004, have also to register their DDT use.They are obliged*

*to report regularly the amounts and sources of DDT used. WHO and the Secretariat of the Stockholm Convention have developed monitoring and evaluation tools to capture this data. Details of the process will be discussed at POPs COP3.*

# GEF SECRETARIAT PROJECT REVIEW

| | |
|---|---|
| **Country/Region :** | Regional (Sudan, Morocco, Yemen, Djibouti, Egypt, Syria, Jordan, Iran) |
| **Project Title :** | Demonstration of Sustainable Alternatives to DDT and Strengthening of National Vector Control Capabilities in Middle East and North Africa |
| **GEFSEC Project ID :** | 2546 |
| **Operational Program :** | 14 |
| **Implementing Agenc(ies) :** | UNEP |
| **Anticipated project financing ($ million) :** | PPG $ 0.65 GEF Project Allocation $ 4.91 Total Project Cost : 13.09 |
| **PIF Approval Date :** | |
| **Target Work Program Date :** | June 2007 |
| **Program Manager :** | Ibrahima Sow |
| **IA Contact Person :** | Jan Betlem |


**Summary**

The long-term objective of the project is to reduce the reliance on DDT without increasing the occurrence of vector-borne diseases (VBD), and to promote appropriate vector control management practices by strengthening capacities of countries to sustainably implement environmentally sound alternatives. The project objectives are to: (i) demonstrate the viability, availability, efficiency and cost-effectiveness of the alternatives to use of DDT; (ii) promote the replication of the good practices and demonstrated alternatives in the countries selected and elsewhere; and (iii) build capacity in each country to plan and design application of alternatives based on the principles of integrated vector management (IVM).

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.

This will lead to significant and sustainable reductions in the vector-borne disease burdens of the countries of the region and at the same time ensure the protection of the environment and human health by reducing the use of DDT and other insecticides.

**Expected Outputs**

The expected project outcomes are as follows:

1. Demonstrated applicability and cost-effectiveness of alternatives to DDT use for vector control in the selected demonstration sites;
2. Developed national capacity for planning and implementation of vector control; and
3. Stocks of pesticides POPs used in public health and agriculture, collected, repackaged and disposed of,
4. Regionally coordinated dissemination and sharing of country experiences.

## 1. COUNTRY OWNERSHIP

**Country Eligibility:** All the participating countries (Djibouti, Egypt, Islamic Republic of Iran, Jordan, Morocco, Sudan, Syria and Yemen) have ratified the Stockholm Convention.

**Country Drivnness:**

| *At PPG, if any* | *Expected at Work Program inclusion:* | *Expected at CEO endorsement:* |
|---|---|---|
| The objectives of the project were agreed to during a joint WHO-UNEP workshop with the participating countries in December 2003.<br><br>High level commitment of countries is demonstrated by letters of support claimed to be received by WHO and UNEP from some of the Ministries of Health, Environment and Agriculture of the participating countries.<br>[Note: letters should be included to revised submission]<br>8 July 2004 revised version : done<br><br>It is recommended that the participating countries be in the driving seat during project preparation, and in particular in preparing the Vector Control Needs Assessment (VCNA). | Participating countries conducted the VCNA process which involved major relevant stakeholders at the national level.<br>See comment under Stakeholder involvement regarding the composition of stakeholders.<br><br>All the eight countries have indicated the amount of their contributions in cash and in kind. | |

**Endorsement :**

| | *Expected at Work Program inclusion:* | *Expected at CEO endorsement:* |
|---|---|---|
| Not received as of June 23 2004. In principle not required for pipeline entry. | Letters of endorsement dated February - March 07 are attached to the project proposal. | |

Endorsements are included with the request for PDF-B received October 7 2004.

## 2. PROGRAM AND POLICY CONFORMITY

### Program Designation and Conformity

| *At PPG, if any* | *Expected at Work Program inclusion:* | *Expected at CEO endorsement:* |
|---|---|---|
| Conforms to OP14 and Strategic Priority No 3: demonstration of alternative technologies and practices. | idem | |

### Project Design

| *At PPG, if any* | *Expected at Work Program inclusion:* | *Expected at CEO endorsement:* |
|---|---|---|
| Criteria for and final "selection" of countries need to be clarified up-front.<br>8 July 2004 revised version : done | $650K have been expended for project preparation. Why is there still such ambiguity as to the amounts of DDT used - or not? | |
| Sound project design which relies on demonstrations in selected areas (2 per countries), capacity building, and promotion of replication. | Considering the fact that participating countries have prepared their NIPs or are in the process of doing so, it is assumed that they have already conducted an inventory during this process. Therefore, we don't see a need to undertake a new POPs inventory. However one can expect an updating of the POPs inventory in order to have more precise data on DDT and other POPs stocks and to establish a comprehensive disposal plan. | |
| The stated project objective "to replicate the good practices and demonstrated alternatives in the countries selected" would seem in fact to be a post-project, rather than a direct project, impact.<br>8 July 2004 revised version : clarified. | | |
| Indicative total financing per component is required.<br>8 July 2004 revised version : done | Under output 1.2, please list the types of activities that are related to capacity | |

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|---|---|---|
| | building (Project specific CB that may be required for successful project implementation).<br>Activities under output 3.1 (Collection, repackaging and disposal) should be more detailed.<br><br>Activity 1.1 is the development of a "protocol". For what?<br><br>With regard to the disposal option, it's strange that only incineration is envisaged when we know that it exists other methods that could be quite cost-effective and environmentally friendly. Need to explore other possibilities and to perform this activity through a transparent tendering process.<br><br>Please limit the use of acronyms in the project executive summary. (STAC?) | |

**Sustainability (including financial sustainability)**

| *At PPG, if any* | *Expected at Work Program inclusion:* | *Expected at CEO endorsement:* |
|---|---|---|
| Scaling-up and sustainability is predicated on political will and availability of resources from RBM and Global Fund. | Will depend on the cost-effectiveness of the alternatives but also on the strong anchorage of vector control units in the ministries of Health. These units should be established and mandated to ensure coordination between all stakeholders performing or influencing vector control activities. | |

**Replicability:**

| *At PPG, if any* | *Expected at Work Program inclusion:* | *Expected at CEO endorsement:* |
|---|---|---|
| Replicability is central to all "demonstration" projects, and indeed a specific project component is dedicated to dissemination of experience and promotion of replication. | Replicability is adequately addressed. However the risks with up-scaling should be taken note of. | |

**Stakeholder Involvement:**

| *At PPG, if any* | *Expected at Work Program inclusion:* | *Expected at CEO endorsement:* |
|---|---|---|
| The relevant section adequately outlines the major stakeholders and plans to involve them, including at the community level. | During the PDFB phase, it is noted that some countries did not include NGOs, Private Sector and Community Based Organizations in their Steering committees.<br>For the project, there is a need to harmonize the composition of national stakeholders and make sure that all relevant stakeholders are on board of the process, building upon Sudan's case, but also taking into account countries' specificities. | |

**Monitoring and Evaluation:**

| *At PPG, if any* | *Expected at Work Program inclusion:* | *Expected at CEO endorsement:* |
|---|---|---|
| The PDF-B will collect baseline data as basis for measuring progress in project implementation and impact. | On Annex L (workplan): Activities under component 3.1 have to be detailed.<br>The M&E plan needs to be presented in a more synthetic form, with clear indication of who is responsible to produce what. Need to include an annex (table) indicating key performance indicators, etc.<br>Also, please refer to final | |

| | | |
|---|---|---|
| | "independant" evaluation .<br><br>Finally, please clarify the baseline - and how it is estimated. | |

## 3. FINANCING

**Financing Plan**

| *At PPG, if any* | *Expected at Work Program inclusion:* | *Expected at CEO endorsement:* |
|---|---|---|
| GEF grant financing complemented by co-financing expected from participating governments, Roll-Back Malaria and Global Fund.<br><br>Financing of activities in non-GEF eligible countries cannot be counted as co-financing, but will have to be accounted for separately.<br>8 July 2004 revised version : clarified | The budget for Activity 2.4 (developing guidelines and organization of training courses on vector control) is rather high ($ US 512,000) and almost not co-financed. It should be noted that guidelines for malaria vector control without DDT have been prepared during the Mexico and Central America DDT project. The related manual can be updated/adapted but does not need to be reinvented. Split this budget component in terms of :<br>- Cost of training courses:<br>- Cost of updating/adapting the guidelines.<br><br>Explain why the disposal cost is so high :$ US 613,000 for 100 tons of POPs stocks, which means $ 6130 per ton. This seems to be overestimated.<br><br>The financing section of the Executive Summary seems to lack coherence at times and needs to be reworked | Confirmation of co-financing. |

extensively.

Project costs table (a) shows project management costs of$350k for the GEF and $150K from co-financing. This should be shared more equitably.

The following table (b) which is supposed to be a breakdown of the project management cost now shows $500K from the GEF. (And nothing from other sources !!).

The 8% OH for WHO have to appear in these 2 tables.

The budget table (P39) shows $660K for what seems to be project management costs. Moreover, only $22K from WHO, when the section on financing states that WHO is financing the costs of the Project Coordinator.

Going back to the project management and consultants tables, the staff-week figures must be rather months. Please clarify.
Consultants table should also estimate costs from co-financing.

"Miscellaneous" is not an eligible expense under Project management.

Activity 1.3 regional workshop: should be co-financed.

| | | |
|---|---|---|
| | Activity 1.5: "monitoring project activities": Why is this (quasi) not cofinanced?<br><br>Activity 2.2: "produce advocacy documents seminars". The title is not very convincing. Activity seems unfocused.<br><br>Activity 5.1., $660K that seem to be management costs + 8% WHO costs: this quite excessive.<br><br>Activity 5.2: 8 national steering committees @$250K: there seems to be no reason why this should not be fully covered by the participating countries. | |

**Implementing Agency Fees**

| *At PPG, if any* | *Expected at Work Program inclusion:* | *Expected at CEO endorsement:* |
|---|---|---|
| NA | | |

## 4. INSTITUTIONAL COORDINATION AND SUPPORT

**Core Commitments and Linkages**

| *At PPG, if any* | *Expected at Work Program inclusion:* | *Expected at CEO endorsement:* |
|---|---|---|
| Commitment of WHO is demonstrated by co-financing of PDF-B. | Please clarify the statement P35 (para 107) that WHO's in-kind contribution includes a full time project coordinator. This would be an acceptable contribution, but I do not see it reflected in the project budget. | |

**Consultation, Coordination, Collaboration between IAs, and IAs and EAs, if appropriate**

| *At PPG, if any* | *Expected at Work Program inclusion:* | *Expected at CEO endorsement:* |
|---|---|---|
| Adequate reference is made to need to coordinate with UNDP and UNIDO on integration with work under the National Implementation Plans, and with WB and FAO re. the African Stockpiles Program. | Demonstrated coordination and not duplication with work under National Implementation Plans and the African Stockpiles Program. | |

## 5. RESPONSE TO REVIEWS

**Council**

| *At PPG, if any* | *Expected at Work Program inclusion:* | *Expected at CEO endorsement:* |
|---|---|---|
| NA | NA | |

**Convention Secretariat**

| *At PPG, if any* | *Expected at Work Program inclusion:* | *Expected at CEO endorsement:* |
|---|---|---|
| None received. | None received | |

**GEF Secretariat**

| *At PPG, if any* | *Expected at Work Program inclusion:* | *Expected at CEO endorsement:* |
|---|---|---|
| Discussions on the subject have been on-going over the years between GEFSEC, UNEP and WHO. | | |

**Other IAs and RDBs**

| *At PPG, if any* | *Expected at Work Program inclusion:* | *Expected at CEO endorsement:* |
|---|---|---|
| None received. | None received | |

**STAP**

| *At PPG, if any* | *Expected at Work Program inclusion:* | *Expected at CEO endorsement:* |
|---|---|---|
| None received. | | |

**Review by expert from STAP Roster**

| *At PPG, if any* | *Expected at Work Program inclusion:* | *Expected at CEO endorsement:* |
|---|---|---|
| NA | Received and addressed. | |

## GENERAL COMMENTS

*(for records purpose only, not pre-conditions)*

| *At PPG, if any* | *Expected at Work Program inclusion:* | *Expected at CEO endorsement:* |
|---|---|---|
| A meeting on DDT was held June 11 2004 between WHO, UNEP and GEFSEC. The meeting outlined a strategy based on demonstration projects with GEF "seed" co-financing sustained through replication and scaling-up supported by the Roll Back Malaria and Global Fund. The proposed concept fits into this strategy which will be further developed over the coming months. | Clear articulation of baseline and incremental activities forming the basis of a developed incremental costs analysis in support of GEF financing request. | |

## SUMMARY RECOMMENDATIONS BY PROGRAM MANAGER

| *At PPG, if any* | *Expected at Work Program inclusion:* | *Expected at CEO endorsement:* |
|---|---|---|
| Resubmission of a revised proposal taking into account the above comments.<br><br>9 July 2004<br>The revised submission received July 9 2004 addresses and clarifies the points raised in this review.<br><br>The program manager would recommend concept pipeline entry. | The proposal fits with GEF-4 programming priorities. Nevertheless, a number of points are raised throughout this review and need addressing, in particular:<br><br>- very high administrative/ management costs.<br><br>- ambiguous commitment of WHO. | |

- No need to embark on a new POPs inventory. Updating the existing ones would suffice (refer to Countries'NIPs).

- List the types of activities that are related to capacity building (Project specific CB that may be required for successful project implementation).

- Give details on specific activities under component 3.1 and

- Explore other possibilities of POPs destruction in addition to incineration

- Harmonize stakeholder's composition

- M&E plan with baseline data and indicators

- Need to justify (or re-adjust) the high cost of updating the guidelines and traning activities for vector control and for the disposal of 100 tons of POPs stocks.

- Number of other budget related questions noted under "financing".

## FURTHER PROCESSING

| *At PPG, if any* | *Expected at Work Program inclusion:* | *Expected at CEO endorsement:* |
|---|---|---|
| A request for PDF-B was submitted October 7 2004, together with endorsements from the participating countries. The program manager would | Submission of a satisfactorily revised proposal. | |

recommend CEO approval of the PDF-B.

Nov 2006 repipeline exercise.

Comments:
The project is part of a cluster of regional projects implemented by UNEP and executed by WHO that seek to demonstrate the effectiveness of alternatives to DDT for malaria vector control.

- What is the impact on WHO's commitment of its recent policy shift re the use of DDT?

- Only 2 of the 8 participating countries have officially registered their use of DDT with the Stockholm Convention.

Recommendation:
Further discussion w/ UNEP on the above points is required during further project development. Taking into account the overall GEF envelop for POPs for GEF-4, the GEF allocation should not exceed $5m.

*Arab Republic of Egypt*
*Cabinet of Ministers*
*Ministry of State for Environmental Affairs*
*Egyptian Environmental Affairs Agency*

جمهورية مصر العربية
رئاسة مجلس الوزراء
وزارة الدولة لشئون البيئة
جهاز شئون البيئة

To: Mr. Olivier Deleuze
Officer in Charge
Division of GEF Coordination
P.O.Box 30552
00100 Nairobi, Kenya

Date: 22 February 2007

Subject: Endorsement of the project "*Demonstration of Sustainable Alternatives to DDT and Strengthening of National Vector Control Capabilities in Middle East and North Africa*" and commitment of contribution.

Dear Mr. Deleuze,

With reference to the above named project which has been developed and formulated in close collaboration with relevant staff of my Government during the Project Preparatory phase, please receive herewith our full and continuous support to the project.

The project compliments our national efforts and is consistent with and contributing directly towards the implementation of the Stockholm Convention on Persistent Organic Pollutants (POPs), which was ratified by the Government of EGYPT .on 12 May 2003.

In line with the respective budget part of the Project Brief, the Government of EGYPT. is pleased to endorse the Project Brief and commits itself to a contribution of at least 3 million US $ (in-kind contribution) and 14 million US $ (cash contribution).

I would highly appreciate if you could take the necessary action and communicate this commitment letter to the Global Environment Facility in order to obtain GEF-funding for the above named project.

Please accept my high esteem and consideration,

**Dr. Mohamed Sayed Khalil**
Chief Executive Officer
Egyptian Environmental Affairs Agency
M.S. Khalil
**(National GEF Focal Point)**

Dr. Tarek Eid

٣٠ طريق مصر حلوان الزراعى – خلف فندق سوفيتل المعادى – القاهرة الرقم البريدى ١١٧٢٨ ت : ٥٢٥٦٤٥٢ فاكس : ٥٢٥٦٤٩٠
*30,Misr Helwan El-Zyrae Rd., Maadi - Cairo Egypt. P.O. 11728 Tel.: 5256452 - Fax : 5256490*

بسم الله الرحمن الرحيم

Ministry Of Environment&
Physical Development
Higher Council For Environment &
Natural Resources
General Secretariat

وزارة البيئة والتنمية العمرانية
المجلس الأعلى للبيئة والموارد الطبيعية
الأمـــانـــة العـامـــة

**To:** Mr. Olivier Deleuze
Officer in Charge
Division of GEF Coordination
P.O.Box 30552
00100 Nairobi, Kenya

**Date:** 03 march 2007.

**Subject: Endorsement of the project "*Demonstration of Sustainable Alternatives to DDT and Strengthening of National Vector Control Capabilities in Middle East and North Africa*" and commitment of contribution.**

Dear Mr. Deleuze,

With reference to the above named project which has been developed and formulated in close collaboration with relevant staff of my Government during the Project Preparatory phase, please receive herewith our full and continuous support to the project.

The project compliments our national efforts and is consistent with and contributing directly towards the implementation of the Stockholm Convention on Persistent Organic Pollutants (POPs), which was signed/ratified by the Government of Sudan on 2006.

In line with the respective budget part of the Project Brief, the Government of Sudan is pleased to endorse the Project Brief and commits itself to a contribution of at least 703,143 US $ (in-kind contribution) and NONE US $ (cash contribution).

I would highly appreciate if you could take the necessary action and communicate this commitment letter to the Global Environment Facility in order to obtain GEF-funding for the above named project.

Please accept my high esteem and consideration,

**IZZELDIN, Saadeldin**
Higher Council for Environment and Natural Resources (HCENR)
P.O. Box 10488
Khartoum
Sudan
TEL:(249) 11 784279
FAX:(249) 11 787617
E-mail:hcenr@sudanmail.net
*(Operational Focal Point)*

(National GEF Focal Point)

**ROYAUME DU MAROC**

MINISTERE DE L'AMENAGEMENT DU TERRITOIRE DE L'EAU ET DE L'ENVIRONNEMENT

SECRETARIAT GENERAL

DIRECTION DU PARTENARIAT, DE LA COMMUNICATION ET DE LA COOPERATION

...../ 6100

المملكة المغربية

وزارة إعداد التراب الوطني

و الماء و البيئة

الكتابة العامة

مديرية الشراكة و التواصل و التعاون

***Mr Olivier DELEUZE***
***Officer in Charge***
***Division of GEF Coordination***
***P.O.Box 30552***
***00100 Nairobi, Kenya***
***Fax: + 254 20 762 404 1/624042***
***E-mail : Olivier.deleuze@unep.org***

0368

07 MARS 2007

## ENDORSEMENT LETTER

***Subject :*** ***Endorsement of the project « Demonstration of Sustainable Alternatives to DDT and Strengthening of National Vector Control Capabilities in Middle East and North Africa » and commitment of contribution.***

Dear Sir,

With reference to the above named project which has been developed and formulated in close collaboration with relevant staff of my Government during the Project Preparatory phase, please receive herewith our full and continuous support to the project.

The project compliments our national efforts and is consistent with and contributing directly towards the implementation of the Stockholm Convention on Persistent Organic Pollutants (POPs), which was signed by the Government of Morocco on May 23, 2001 and ratified on April 21, 2004.

In line with the respective budget part of the Project Brief, the Government of Morocco is pleased to endorse the Project Brief and commit itself to a contribution of the Ministry of health of at least 270.642 US$ in kind and cash contribution of 600.000 US$.

I would highly appreciate if you could take the necessary action and communicate this commitment letter to the Global Environment Facility in order to obtain GEF-funding for the above named project.

Please accept my high esteem and consideration.

*Mr. Taha BALAFREJ*
GEF Operational Focal Point

Le Directeur du Partenariat, de la Communication et de la Coopération

Signé : Taha BALAFREJ

بسم الله الرحمن الرحيم


**THE HASHEMITE KINGDOM OF JORDAN**
**Ministry of planning and International Cooperation**
**AMMAN**

**المملكة الأردنية الهاشمية**
**وزارة التخطيط والتعاون الدولي**
**عمان**


Ref. No. .....
الرقم .....

Date 23/03/2007
التاريخ .....

الموافق .....

To: Mr. Olivier Deleuze
Officer in Charge
Division of GEF Coordination
P.O.Box 30552
00100 Nairobi, Kenya

Subject: Endorsement of the project "*Demonstration of Sustainable Alternatives to DDT and Strengthening of National Vector Control Capabilities in Middle East and North Africa*" and commitment of contribution.

**Dear Mr. Deleuze,**

With reference to the above named project, which has been developed and formulated in close collaboration with relevant staff of my Government during the Project Preparatory phase, please receive herewith our full and continuous support to the project.

The project compliments our national efforts and is consistent with and contributing directly towards the implementation of the Stockholm Convention on Persistent Organic Pollutants (POPs), which was signed/ratified by the Government of Jordan on 18/1/2002.

In line with the respective budget part of the Project Brief, the Government of Jordan is pleased to endorse the Project Brief and commits itself to a contribution of at least 131892 US $ (in-kind contribution) and 500000 US $ (cash contribution).

I would highly appreciate if you could take the necessary action and communicate this commitment letter to the Global Environment Facility in order to obtain GEF-funding for the above named project.

Please accept my high esteem and consideration.

**Sincerely**

**Saleh Al-Kharabsheh**
**Director, Projects Department**
**GEF OFP**
**Ministry of Planning And International Cooperation**


هاتف ٤٦٤٤٤٦٦/٧٠-٤٦٤٣٨١/٨٥(٦-٩٦٢+) فاكس ٤٦٤٩٣٤١ - ٤٦٤٢٢٤٧ برقيا NPC جو - ص.ب ٥٥٥ عمان ١١١١٨ الأردن
Tel.:(+962 6)4644466 / 70 - 4643381/85 Telefax: 4649341 - 4642247 - Cable: NPC Jo -P.O.Box 555 Amman 11118 Jordan
E-mail : mop@mop.gov.jo

WORLD HEALTH ORGANIZATION
Regional Office for the Eastern Mediterranean
ORGANISATION MONDIALE DE LA SANTE
Bureau régional de la Méditerranée orientale

منظمة الصحة العالمية
المكتب الإقليمي لشرق المتوسط

Jan.betlem@unep.org

RBM (VC).3/1
V2/61/1

1 March 2007

Subject: Endorsement of the project "Demonstration of Sustainable Alternatives to DDT and Strengthening of National Vector Control Capabilities in the Middle East and North Africa" and commitment of contribution.

Dear Mr Kakakhel,

The above-mentioned project has been developed and formulated in close collaboration with project countries through the Regional Project Steering Committee with the WHO Eastern Mediterranean Region (WHO/EMRO) as the implementing agency.

The project compliments the national efforts of strengthening capacity in vector control in project countries and is consistent with, and contributing directly towards the implementation of the Stockholm Convention on Persistent Organic Pollutants (POPs).

In line with the respective budget part of the Project Brief which is attached herewith, the WHO/EMRO is pleased to endorse the Project Brief in the amount of at least US$320,500 as in-kind contribution. This estimation is based on staff time who will be involved to implement this project.

We would highly appreciate it if you could take the necessary action and communicate this letter to the Global Environmental Facility in order to obtain GEF-funding for the above-named project.

Best regards.

Yours sincerely,

for Jaouad Mahjour, Acting/Director,
Communicable Disease Control

Mr Shafqat Kakakhel
Deputy Executive Director and
OIC
Division of GEF Coordination
P.O. Box 30552
Nairobi
KENYA

... Encls.: As stated above.

MINISTRY OF FOREIGN AFFAIRS
OF THE ISLAMIC REPUBLIC OF IRAN

To: **Mr. Olivier Deleuze**
Officer in Charge
Division of GEF Coordination
P.O. Box 30552
00100 Nairobi, Kenya

Date: Tehran, February 26th, 2007
Our Ref.: 622/344-7/2732

Subject: Endorsement of the project "Demonstration of Sustainable Alternatives to DDT Strengthening of National Vector Control Capabilities in Middle East and North Africa" and commitment of contribution.

Dear **Mr. Deleuze**

With reference to the above named project which has been developed and formulated in close collaboration with relevant staff of my Government during the project Preparatory phase, please receive herewith our full and continuous support to the project.

The project compliments our national efforts and is consistent with and contributing directly towards the implementation of the Stockholm Convention on Persistent Organic Pollutant (POPs), which was signed/ratified by the Government of the Islamic Republic of Iran.

In line with the respective budget part of the Project Brief, the Government of the Islamic Republic of Iran is pleased to endorse the Project Brief and commits itself to an in-kind contribution of US $ 675,891.

I would highly appreciate if you could take the necessary action and communicate this commitment letter to the Global Environment Facility in order to obtain GEF-funding for the above named project.

Please accept my high esteem and consideration.

**Ishagh Alhabib**
**Director General for**
**International Economic Affairs**
**And specialized Agencies,**
**As GEF Operational Focal Point**

RÉPUBLIQUE DE DJIBOUTI
Unité - Egalité - Paix

MINISTERE
DE L'HABITAT, DE L'URBANISME,
DE L'ENVIRONNEMENT
ET DE
L'AMENAGEMENT DU TERRITOIRE

LE SECRETAIRE GENERAL

Djibouti le 03 FEV 2007

N° 046 /07/ SG

**To**
**Mr. Olivier Deleuze**
**Officer in Charge**
**Division of GEF Coordination**
**Nairobi, Kenya**
**C/o Djibouti WHO Office**

**Subject**: Endorsement of the project « Demonstration of Sustainable Alternatives to DDT and Strengthening of National Vector Control Capabilities in Middle East and North Africa » and Commitment of contribution

**Dear Mr. Deleuze**,

With reference to the above named project which has been developed and formulated in close collaboration with relevant staff of the Government of Djibouti during the Project Preparatory phase, please receive herewith our full and continuous support to the project.

The project complements our national efforts and is consistent with and contributing directly towards the implementation of the Stockholm Convention on Persistent Organic Pollutants (POPS), which was ratified by the Government of Djibouti on March 11th, 2004.

In line with the respective budget part of the Project Brief, the Government of Djibouti is pleased to endorse the Project Brief and commits itself to a contribution of at least 1,498,082 US $ (in-kind contribution) and 1,880,840 US $ (in-cash contribution).

I would highly appreciate if you could take the necessary action and communicate this commitment letter to the Global Environment Facility in order to obtain GEF-funding for the above named project.

Please accept my high esteem and consideration.

MINISTERE DE L'HABITAT DE L'URBANISME DE L'ENVIRONNEMENT ET DE L'AMENAGEMENT DU TERRITOIRE
LE SECRETAIRE GENERAL
REPUBLIQUE DE DJIBOUTI

**NATIONAL GEF FOCAL POINT**

**ABOUBAKER DOUALE WAISS**

CC: - Ministère de la Santé
- Djibouti WHO Office

SECRETARIAT GENERAL DU MINISTERE DE L'HABITAT, DE L'URBANISME, DE L'ENVIRONNEMENT
ET DE L'AMENAGEMENT DU TERRITOIRE
☎ (253) 35 85 22 BP 11 fax : (253) 35 16 18 - (253) 35 24 36

بسم الله الرحمن الرحيم

**REPUBLIC OF YEMEN**
Ministry of Water and Environment
Environment Protection Authority

No/Ref:.....
Date:.....
No.of Pages:.....

الجمهورية اليمنية
وزارة المياه والبيئة
الهيئة العامة لحماية البيئة

الرقم / المرجع:.....
التاريخ:.....
عدد المرفقات:.....

**To: Mr. Olivier Deleuze**
**Officer in Charge**
**UNEP Division of GEF Coordination**
**P.O.Box 30552**
**00100 Nairobi, Kenya**
**Fax: + 254 20762 4041/ 762 4042**

**Subject: Endorsement of the Project "*Demonstration of Sustainable Alternatives to DDT and Strengthening of National Vector Control Capabilities in Middle East and North Africa*" and commitment of contribution of the Republic of Yemen**

**Top Urgent**

Dear Mr. Deleuze,

With reference to the above mentioned project which has been developed and formulated in close collaboration with the relevant staff of the Ministry of Health of the Government of Yemen during the Project Preparatory Phase. Please receive herewith our full and continuous support to the project.

The project compliments our national efforts and is consistent with and contributing directly towards the implementation of the Stockholm Convention on Persistent Organic Pollutants (POPs), which was ratified by the Republic of Yemen in Feb. 2002, and which EPA is a Focal Point.

In line with the respective budget part of the Project Brief, the Government of Yemen commits itself to a contribution of at least 520,141 US $ (in-kind contribution) and 1.650.000 US $ (cash contribution).

I would highly appreciate if you could take the necessary action and communicate this endorsment letter to the Global Environment Facility in order to obtain GEF-funding for the above project.

Please accept our high esteem and consideration,

Mahmoud M. Shidiweh
Chairman,
Environment Protection Authority (EPA)
GEF Operational Focal Point
Sana'a – Republic of Yemen

صنعاء-ص.ب:(١٩٧١٩)- هاتف: ٢٠٧٨١٦/ ٧ - فاكس: ٢٠٧٣٢٧ بريد إلكتروني: environment@yemen.net.ye
Sana'a-P.O.Box: (19719)-Tel: (207816/7) - Fax: (207327)-E-mail:epa-yemen@yemen.net.ye
www.yemenenvironment.org

***Syrian Arab Republic***
***Ministry of Local Administration and Environment***

***Ref. 319 /dm3***

***To*** ***Mr. Olivier Deleuze***
***Officer in Charge***
***Division of GEF Coordination***
***P.O .Box 30552***
***00100 Nairobi, Kenya***

***From*** ***Eng. Imad Hassoun***
***Deputy Minister of Local Administration and Environment / National GEF OFP***
***Tel/fax: +963 11 3316104***

***Date*** ***12.3.2007***

***Sub.*** ***Endorsement of the project "Demonstration of Sustainable Alternatives to DDT and Strengthening of National Vector Control Capabilities in Middle East and North Africa" and Commitment of Contribution***

***Dear Mr. Olivier Deleuze:***

*With reference to the above named project which has been developed and formulated in close collaboration with relevant staff of my Government during the Project Preparatory phase, please receive herewith our full and continuous support to the project.*

*The project compliments our national efforts and is consistent with and contributing directly towards the implementation of the Stockholm Convention on Persistent Organic Pollutants (POPs), which was ratified by the Government of the Syrian Arab Republic by legislative decree No. 54 in 2005*

*In line with the respective budget part of the Project Brief, the Government of the Syrian Arab Republic is pleased to endorse the Project Brief and commits itself to a contribution of 285.141 US $ in-kind contribution and 400.000 cash contribution.*

*I would highly appreciate if you could take the necessary action and communicate this commitment letter to the Global Environment Facility in order to obtain GEF-funding for the above mentioned project.*

*Please accept my high esteem and consideration,*

*Yours truly,*

***Eng. Imad Hassoun***
***Deputy Minister of Local Administration and Environment***
***National GEF Operational Focal Point***

*cc- GEF Secretariat, Mrs. Funke* Oyewole

## *ANNEX F*

### *VECTOR CONTROL NEEDS ASSESSMENT*

### *PROCESS FOR MIDDLE EAST AND NORTH AFRICAN COUNTRIES*

## Vector Control Needs Assessment (VCNA)

The vector control needs assessment (VCNA) aims to identify barriers and gaps for strengthening vector control for an orderly transition to the use of cost-effective and safe alternative methods of vector-borne disease control. It is necessary that countries participating in the project identify barriers and gaps to strengthen the human resource, institutional arrangements and policy framework that are lacking for the implementation of integrated vector management (IVM). The VCNA exercise required a long consultative process in which stakeholders both at national and international level were participated. The specific objectives of VCNA exercise at country level were the following:

1. Assess the situation of vector-borne diseases in the country
2. Identify the relevant policy framework for vector control
3. Determine the place and structure of the vector control program
4. Describe the planning and implementation of vector control
5. Identify the inter-sectoral coordination mechanisms for vector control at country level
6. Identify community mobilization strategies for vector control

The process of data collection at country level in target countries involved the following stakeholders:

- Ministry of Agriculture;
- Ministry of Trade or Finance;
- Ministry of Environment and Tourism;
- Construction of energy plants and urban and rural infrastructure;
- Research institutions;
- Municipalities in urban areas

## 1ST MEETING OF THE DDT/GEF STEERING COMMITTEE

The PDF-B phase of the DDT/ GEF project was initiated with the establishment of the Steering committee with the task of advising on technical soundness of guidelines and methodologies applicable to the project. The first meeting of the Steering Committee for the GEF-supported project was held in Muscat, Oman from 4 to 5 March 2006. Fourteen Steering Committee members representing different countries and institutions were in attendance.

The specific objectives of the meeting were to:

- review the work plan of the project development facility B (PDF-B) phase of the EMRO/GEF project, including a number of specific elements for its implementation;
- review the outline and format of the national work plans for the implementation of the EMRO/GEF project;
- review the vector control needs assessment (VCNA) guidelines and its associated tools for their technical quality and feasibility as part of PDF-B activities;
- agree on the Steering Committee's position on issues on the agenda of the first regional meeting of GEF-supported countries in the Eastern Mediterranean Region (Muscat, 6–8 March 2006);
- prepare recommendations that would enhance the overall implementation of PDF-B activities.

The following were the main recommendations:

- The scope of the project documents should be expanded to include all vector-borne diseases rather than malaria exclusively.

- Priority should be given to strengthening capacity in countries of the Region under the PDF-B and the subsequent project in order to ensure effective networking, information exchange and a stronger negotiation position for the countries.

- Under the PDF-B phase, WHO should develop a clear model for intersectoral collaboration that countries can adapt to their local needs.

- The final project proposal should be based on sound statistical evidence, for which programme models with proven success, e.g. tuberculosis, can be utilized. The expertise of a health economist should be included in undertaking the financial and economic analysis required for the project proposal.

- The VCNA should be a comprehensive, not a rapid, assessment in order to ensure that the real needs of countries in the Region in terms of vector control are identified. It should be conducted periodically as part of a process of ongoing assessment and adjustment against evolving programme targets.

- With respect to the final update and completion of the VCNA guidelines:

    - WHO guidelines for pesticide management should be reflected as an integral part;
    - A community participation section should be developed and included;

- A stronger orientation towards regional coordination of efforts should be reflected;
- A user-friendly format should be ensured, following the example of the health impact assessment training materials;
- The opinion of country delegates should be sought at the first regional meeting concerning the desirability of the scoring method as part of the guidelines.
- Consultants should be given orientation on the methodology proposed for the implementation of the VCNA guidelines at country level so that an effective and regionally harmonized approach is ensured. These consultants should have a broad public health perspective, and could be backed up by specialists in specific areas of relevance.
- The budget for the PDF-B should be adjusted in order to reflect the current realities of country contributions and to cover the costs of the additional technical inputs required.

## 2ND MEETING OF THE STEERING COMMITTEE

The 2nd meeting of the steering committee was held in Damascus, Syrian Arab Republic, on 11 and 12 November 2006. Nine members of the Steering Committee were in attendance. The purpose of the meeting was to review the vector control needs assessment (VCNA) reports carried out in the eight countries, the national integrated vector management (IVM) strategies developed and the draft national GEF plans proposed.

**Recommendations**

1. Countries should complete their VCNA reports, IVM plans and GEF proposals, taking into account the guidance of the steering committee, and submit them to the WHO Regional Office no later than 31 December 2006.
2. A first evaluation of the VCNA guidelines should be consolidated into a new version of the guidelines that can be used by the other countries in the Region.
3. The outcome of the national VCNAs should be condensed into an article to be published in the *Eastern Mediterranean health journal* and the full reports of the VCNAs carried out should be submitted to the Regional Committee in 2007, possibly under a specific IVM agenda item.
4. The development and formulation of the IVM strategy should be expanded to all 22 countries of the Region, in line with Regional Committee resolution EM/RC52/R.6 (2005), starting with the application of the updated VCNA guidelines.
5. Explicit and transparent information should be provided about the procedures followed to produce and endorse the VCNA reports, the IVM programmes and the GEF proposals, so that the country ownership and the ownership of the individual stakeholders are clearly apparent; this information could be presented in the report's preface.

6. The proposed actions for GEF support should be carefully considered in the light of the GEF criteria; generic items such as capacity building should be embedded into the demonstration projects on vector control alternatives to DDT.
7. For the regional GEF Project Brief, collaboration with FAO should be pursued, particularly in the area of stockpile management and elimination.
8. The facilitators for the further development and completion of the country reports and proposals should continue to play their role in accordance with the terms of reference prepared.
9. The economic component in the development of the IVM plans and GEF proposals should be highlighted in order to address both the health sector's need for cost-effectiveness of interventions, and GEF's focus on efficient approaches to reduce the POPs burden.
10. Further development of the regional IVM strategy should have one of two entry points: either the formulation of national IVM strategies or the development of national plans for sound pesticide management and judicious use within the IVM context.
11. Donor profiling should be carried out by the Regional Office in consultation with the steering committee in order to match specific donors with specific versions or components of the regional IVM strategy.
12. WHO should explore with the GEF Secretariat options to become an executing agency with expanded opportunities, with special reference to the Stockholm Convention.

## SUMMARY OF NEEDS, GAPS AND OPPORTUNITIES IDENTIFIED

### 1. Policy for vector control

Despite all the project countries having a national health policy and in some of them the policy has been translated into a disease specific strategy, none of them have included vector control of vector-borne diseases as a key strategic approach. It was for this reason that project countries developed national IVM plans for the control and prevention of all vector-borne diseases. The strategies came up with clear goals, objectives, vision, targets and indicators for monitoring and evaluation with clear roles and responsibilities of different partners involved in vector control. The plans also contained estimated budgets. The VCNA also identified the need to adapt environmental policies to the needs of project countries in the areas of impact assessment (environmental and health), agricultural policies in relation to implementation of integrated pest management (IPM) and financial policies for the exemption of taxes and tariffs of vector control supplies and equipment.

### 2. Institutional framework

All project countries lacked a vector control unit in the ministries of health that addressed all vector-borne diseases resulting in the lack of coordination of control efforts of such diseases. It also meant that resource allocations resulted in under-funding of vector

control activities overall. Establishment of such a unit was considered essential with a clear organogram and terms of reference for entomology and vector control staff to man these units. Parallel with the establishment of the unit, ministries of health were requested to make an effort to strengthen national capacity development – including training in entomology and vector control both in the short and long-term. Infrastructures such as insectaries, laboratories and capacity for operational research were also needed.

### 3. Scaling up of appropriate interventions

To be able to effectively coordinate and target the most appropriate vector control interventions in project countries, it was found necessary to update the distribution of the different vector-borne diseases and their vector species. There was also a need to develop and strengthen the information system in which entomological and vector control operation data was collected and managed by the ministries of health and made available to all national beneficiaries. Where the distribution of the different vectors, their ecology, biting and resting behaviour would overlap, the possibility of using one or several interventions in synergy should be explored in project countries. Furthermore, management of public health pesticides was another area in which national capacity was lacking. Coordination with agriculture and adaptation of relevant policies and their enforcement is needed in most if not in all project countries.

### 4. Inter-sectoral coordination for IVM

The implementation of IVM is based on the strength of inter-sectoral coordination and collaboration. Because of the inter-dependency of different sectors in relation to health and to avoid duplication of meager resources, the VCNA identified the need to coordinate such activities. As this is currently not the case in all the project countries, national IVM coordinating bodies were proposed with members drawn from the different sectors with very clear terms of reference. The need to give such a national coordinating body legal recognition and provision of incentives to sustain it was identified.

### 5. Community mobilization for IVM implementation

To maximize the impact of vector control interventions, relevant community perceptions must be identified and awareness messages developed and promoted for behavioural impact. This was reflected in the VCNA reports from the project countries. The assessment also showed the need to identify appropriate sources and local networks of information to deliver such messages. Strengthening of the capacity to coordinate and plan such activities in the ministries of health of project countries was recommended.

## Annex G: PROJECT ACTIVITIES AND COSTS TO THE GEF

| **Components/ activities** | **Description of activities** | **GEF contribution** |
|---|---|---|
| *Component 1* | *Viability, availability, sustainability and cost-effectiveness of the alternatives to the use of DDT demonstrated* | |
| Activity 1.1. | Formulation of the draft protocol by the National Steering Committee | 59,000 |
| Activity 1.2. | Carry out any project-specific capacity building | 59,000 |
| Activity1.3. | Organize a regional workshop for the harmonization the country protocols | 48,880 |
| Activity 1.4. | Assist National Project Coordinators in project implementation | 1,311,600 |
| Activity 1.5. | Monitor project activities | 336,600 |
| Activity 1.6. | Technical support for the analysis of datasets and report writing | 48,000 |
| Activity 1.7. | Organize STAC meeting and the consolidated regional report | 42,600 |
| | **Sub-total** | **1,905,680** |
| *Component 2: Capacity in each country to plan, implement and evaluate the application of alternatives to DDT based on the principles of IVM strengthened* | | |
| Activity 2.1. | Review of policy and legal frameworks | 176,000 |
| Activity 2.2. | Produce promotional documents of successful institutional arrangements between the sectors | 160,000 |
| Activity 2.3. | Consultation on restructuring of national vector control units | 160,000 |
| Activity 2.4. | Develop and or updating guidelines and training materials | 450,000 |
| | **Sub-total** | **946,000** |
| *Component 3: Collection, repackaging and disposal of obsolete POPs pesticides used in public health and agriculture* | | |
| Activity 3.1. | Collection, repackaging and disposal of obsolete POPs pesticides | 400,000 |
| | **Sub-total** | **400,000** |
| *Component 4: Information on good practices and demonstrated cost-effectiveness and sustainability of alternatives disseminated* | | |
| Activity 4.1. | Dissemination of information | 166,500 |
| | **Sub total** | **166,500** |

| | | |
|---|---|---|
| *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* | | |
| Activity 5.1. | Recruitments of 1 Ass. Technical Project Coordinator and assignments of 8 National Coordinators; conducting of Mid-Term and Final evaluations | 410,000 |
| Activity 5.2. | Establishing and operation of 8 National Steering Committees | 240,000 |
| Activity 5.3. | Establishing and operation of a Regional Scientific and Technical Advisory committee (STAC) | 131,000 |
| Project Management | | 350,000 |
| **Sub-total** | | **1,131,000** |
| **Total components 1-5** | | **4,549,180** |
| **Programme support costs (8%)** | | **363,934** |
| **Grand Total** | | **4,913,114** |

**Annex J: Summarized countries proposal for the DDT/ GEF project**

## DJIBOUTI

**Composition of national stakeholder meetings for development of project proposal included:**

Ministries of Health, Agriculture, Water and Irrigation, Environment and Djibouti Municipality

**Goal of the project:**
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, and sound management of pesticides

**Specific objectives:**

- Promote and implement IVM in the context of the recommendations of the Stockholm Convention;
- Develop, implement, monitor and evaluate demonstration activities of cost-effective and sustainable alternative vector control interventions;
- Disseminate information for wider application on the best alternative methods for vector control.

**Demonstration sites proposed:**

- **Djibouti town** (60 % of the country population are resident here, poor drainage system and waste management, conducive for environmental management)
- **Arta district** (epidemic-prone area for vector-borne diseases and for transit of pesticides to other countries)
- **Tadjourah district** (endemic for malaria, breeding sites ideal for environmental management)

**Situation analysis and scope of the project:**
Malaria, dengue and rift valley fever are the main vector-borne diseases in Djibouti. Other diseases for which suspected cases have been reported include West Nile virus fever, Leishmaniasis and Chikungunya. The population is unevenly distributed in Djibouti where 68% of the total population lives in Djibouti district alone. Capacity for vector control is very weak and interventions rely mainly on the use of ITNs in rural areas and space spraying in urban areas. The coverage of ITN use is very low. There is illegal importation/trafficking of pesticides including DDT. Whereas Djibouti no

longer uses any POPs for vector control, the country is facing huge problems of pesticide management issues including stocks of obsolete pesticides. In a recent inventory by the Directorate of Prevention and Public Hygiene it has been shown that Djibouti uses approximately 11 tones of insecticides and 8,300 liters of aerosol insecticides. Moreover, there are 400 tons of obsolete pesticides including 3000 tons of transit obsolete – among them DDT destined for Ethiopia. Illegal use of DDT is a possibility and the proposed project will provide opportunity to document the magnitude of this problem. The proposal is in line with National IVM Strategic Plan, covers the gaps and the priorities identified in Vector Control Needs Assessment during the PDF-B process. The current project proposal aims to strengthen the national capacity for IVM and sound management of public health pesticides with the goal of reducing reliance on DDT and minimizing 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.

**Table 1: baseline expenditure for vector control and in kind contribution for the project for 5 years**

| | **Baseline expenditures US $** | **Co financing US $** |
|---|---|---|
| **Component 1** | 1,454,730 | 867,250 |
| **Component 2** | - | 40,500 |
| **Component 3** | 200,000 | 2450 |
| **Component 4** | - | 10,000 |
| **Component 5** | - | 94,000 |
| **Subtotal** | 1,654,730 | 1,014,200 |

## EGYPT

**Composition of national stakeholder meetings for development of project proposal included:**

Ministries of Health and Population, Agriculture, Irrigation, Environment, Municipalities, academic and research institutions

**Goal of the project:**
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, and sound management of pesticides

**Specific objectives:**

- Introduce and promote the IVM principles at national, governorate and locality level
- Provide the appropriate political and institutional frameworks for IVM
- Strengthen the capacity for IVM planning and implementation at all levels
- Promote the use of non-chemical vector control interventions and appropriate management of pesticides
- Strengthen intrasectoral and intersectoral collaboration and partnership, including community participation

**Demonstration sites proposed:**

- **Fayuom governorate –** has residual foci of transmission due to unique hydrology and ideal site to demonstrate environmental management interventions as an appropriate method for vector control
- **Aswan governorate** – an area that borders with Sudan and had recent cases of malaria, RVF and West Nile virus, a new development project is planned in Toshka area
- **Cairo governorate** – recently invaded by the malaria vector *An. sergenti* and malaria cases reported is an ideal site for vector control in an urban environment

**Situation analysis and scope of the project:**
Egypt is faced with sporadic cases of malaria as well as epidemics of Rift Valley fever and West Nile Virus, whereas lymphatic filariasis and Leishmaniasis are endemic. Vector control interventions rely on the use of chemicals. Capacity for vector control is relatively good but both intra and inter-sectoral coordination is weak. The use of POPs pesticides for vector control was stopped in the late 1980's especially with the advent of pyrethroids. High irrigated agriculture activities as well as new

developmental projects provide potential for expansion of vector-borne disease transmission. It also increases the potential for undocumented usage of pesticides and including DDT. Pesticide management problems (transportation, storage, legislative, obsolete stocks etc) are not well documented and the project provides the opportunity to address them. The proposal is in line with National IVM Strategic Plan, covers the gaps and the priorities identified in Vector Control Needs Assessment during the PDF-B process. The current project proposal aims to strengthen the national capacity for IVM and sound management of public health pesticides with the goal of reducing reliance on DDT and minimizing 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.

**Table 1: baseline expenditure for vector control and in kind contribution for the project for 5 years**

| | **Baseline expenditures US $** | **Co financing US $** |
|---|---|---|
| **Component 1** | 888,250 | 267, 250 |
| **Component 2** | - | 37, 000 |
| **Component 3** | 200,000 | 2450 |
| **Component 4** | - | 10,000 |
| **Component 5** | - | 94,000 |
| **Subtotal** | 1,088,250 | 410,450 |

## ISLAMIC REPUBLIC OF IRAN

**Composition of national stakeholder meetings for development of project proposal included:**
Ministries of Health and Medical Education, Agriculture, Water and Irrigation, Environmental Agency and academic and research institutions

**Goal of the project:**
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, and sound management of pesticides

**Specific objectives:**

- Strengthen the capacity for IVM planning, implementation and evaluation, as well as insecticide management at all levels;
- Promote the judicious use of insecticides and the use of non-chemical vector control interventions;
- Strengthen inter- and intra-sectoral collaboration/coordination and partnership, including community participation Strengthen IVM and pesticide management capacities, including provisions of training and operational research (e.g. alternative methods).
- Strengthen the community participation on vector borne disease control through establishment of a functional mechanism between the Rural Islamic Councils and the rural PHC staff.

**Demonstration sites proposed:**

- Minab district, Hormozgan Province
- Kahnooj district, Kerman Province
- Chabahar district, Sistan and Baluchestan Province

**Situation analysis and scope of the project:**
The Islamic Republic of Iran is a lower-middle income country with a total population of about 70 million covering 1,648,000 sq km. The health services including vector control is carried through the network of primary health care (PHC). Health houses are the first point of contact in rural areas (16278 in total). This network of health houses is supported by Rural Health Centres (2361 in total). In urban areas, the Urban Health Centres (2261 in total) provide ambulatory care. For outreach, health posts (1176 in total) provide vaccination and MCH services. Malaria, leishmaniasis and Crimean–Congo hemorrhagic fever are the most important vector-borne diseases in the country with annual reported cases of 35000–46000. Indoor residual spraying (IRS) is currently the main vector control intervention for malaria, whereas

IRS, space spraying, insecticide treated nets are being used for leishmaniasis prevention and control in different epidemiological settings. Intersectoral collaboration for vector control, and resources and infrastructure for sound management of public health pesticides are inadequate. DDT was discontinued in 1990 due to vector resistance and stocks of obsolete exist in the country. The proposal is in line with National IVM Strategic Plan, covers the gaps and the priorities identified in Vector Control Needs Assessment during the PDF-B process. The current project proposal aims to strengthen the national capacity for IVM and sound management of public health pesticides and includes the innovative approach to strengthen the collaboration of the community in vector control activities through establishment of a functional mechanism between the Rural Islamic Councils and the rural PHC staff.

**Table 1: Countries baseline expenditure for vector control and in kind contribution for the project for 5 years**

| | **Baseline expenditures US $** | **Total incremental cost US $** |
|---|---|---|
| **Component 1** | 1,269,000 | 504,500 |
| **Component 2** | - | 40,500 |
| **Component 3** | 200,000 | 2450 |
| **Component 4** | - | 10,000 |
| **Component 5** | - | 94,000 |
| **Subtotal** | 1,469,000 | 651,450 |

# JORDAN

**Composition of national stakeholder meetings for development of project proposal included:**
Ministries of Health, Agriculture, Environment, Water and Irrigation, the Jordan Valley, the Greater Amman municipalities and Ministry of Defence.

**Goal of the project:**
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, and sound management of pesticides

**Specific objectives:**

- Introduce and promote the IVM principles at national, governorate and locality level
- Provide the appropriate political and institutional frameworks for IVM
- Strengthen the capacity for IVM planning and implementation at all levels
- Promote the use of non-chemical vector control interventions and appropriate management of pesticides
- Strengthen intrasectoral and intersectoral collaboration and partnership, including community participation.

**Demonstration sites proposed:**

- **Ghor Safi**, Karak Governorate (topography conducive for vector-borne diseases, potential for environmental management, development projects etc.)
- **South Shunah** (irrigated agriculture, endemic for zoonotic cutaneous leishmaniasis, potential for NGO and community involvement)

**Situation analysis and scope of the project:**
Jordan is under the risk of vector-borne diseases which include malaria, leishmaniases and schistosomiasis. A number of agricultural development projects increases this risk. Although in general the use of insecticides for public health is very low, their use in agricultures is high. For example a recent survey carried out during the NIP process has indicated that Jordan used 646,271 kg of DDT between 1959 and 1991.The survey also revealed that stockpiles of DDT (9130 kg of DDT 75% and 13015 kg of DDT 100%) are stored at the Ministry of Health, Malaria Division. The total quantities of POPs found in Jordan, however amount to 22,380 kg belonging to the Ministry of Health and Ministry of Agriculture. Moreover, assessment carried out between 2002 and 2005, have shown that agricultural soils and sediments in Jordan are contaminated with POPs. For these reasons, international efforts

as well as regional alliances are needed to address this problem. The proposal is in line with National IVM Strategic Plan, covers the gaps and the priorities identified in Vector Control Needs Assessment during the PDF-B process. The current project proposal aims to strengthen the national capacity for IVM and sound management of public health pesticides with the goal of reducing reliance on DDT and minimizing 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.

**Table 1: Countries baseline expenditure for vector control and in kind contribution for the project for 5 years**

| | **Baseline expenditures US $** | **Total incremental cost US $** |
|---|---|---|
| **Component 1** | 1,227,000 | 460,500 |
| **Component 2** | - | 40,500 |
| **Component 3** | 200,000 | 2450 |
| **Component 4** | - | 10,000 |
| **Component 5** | - | 76,000 |
| **Subtotal** | **1,427,000** | **589,450** |

## MOROCCO

**Composition of national stakeholder meetings for development of project proposal included:**
Ministries of Health, Agriculture, Interior and Environment, including research and academic institutions

**Goal of the project:**
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, and sound management of pesticides

**Specific objectives**

- Promote and implement IVM in the context of the recommendations of the Stockholm Convention;
- Develop, implement, monitor and evaluate demonstration activities of cost-effective and sustainable alternative vector control interventions;
- Disseminate information for wider application on the best alternative methods for vector control.

**Demonstration sites proposed:**

- Bab Berred
- Rhafsai
- Attaounia
- Moulay Yacoub

**Situation analysis and scope of the project:**
In Morocco the disease burden attributable to communicable diseases is relatively high, and a significant proportion is due to vector-borne diseases. Although there are prospects for the elimination of malaria and schistosomiasis, many areas in which these diseases were endemic are still receptive because of the existence of the vector or the intermediate host and their frequent contact with the human population. On the contrary, the incidence of leishmaniases remains relatively high. For example, the incidence of visceral leishmaniasis is 5.4 per 100,000 for children under the age of 15 years old and the mortality rate is estimated at between 2.6% and 4%. The incidence rate of cutaneous leishmaniasis on the other hand is about 15.5 per 100,000 of population. The main vector control interventions include IRS and the use of ITNs/LLINs. With IRS for example, between 1963 and 1972, 25 provinces were covered with at least three spraying cycles of DDT. This required a total of 1,090 tons of DDT. Between 1973 and 1998 a total of 1,887

tons of DDT was used. Since 1998, DDT has not been used, except in very small quantities to counteract the respond to outbreaks of vector-borne diseases[1]. Currently there are 37 tons of usable 75% DDT. For malaria, the main vector species *Anopheles labranchiae* is resistant to DDT. In terms of obsolete pesticides, there are about 700 tons which include 39.2 tons of persistent organic pollutants (POPs). The proposal is in line with National IVM Strategic Plan, covers the gaps and the priorities identified in Vector Control Needs Assessment during the PDF-B process. The current project proposal aims to strengthen the national capacity for IVM and sound management of public health pesticides with the goal of reducing reliance on DDT and minimizing 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.

**Table 1: baseline expenditure for vector control and in kind contribution for the project for 5 years**

| | **Baseline expenditures US $** | **Total incremental cost US $** |
|---|---|---|
| **Component 1** | 696,250 | 699,250 |
| **Component 2** | - | 40,500 |
| **Component 3** | 200,000 | 2,450 |
| **Component 4** | - | 10,000 |
| **Component 5** | - | 94,000 |
| **Subtotal** | **896,250** | **846,200** |

[1] NIP Morocco: "The annual quantity [of DDT] used by the MOH average 500 kg".

## SUDAN

**Composition of national stakeholder meetings for development of project proposal included:**
Federal Ministry of Health (National Malaria Control Program, Occupational Health Department and State Ministries of Health); Ministries of Agriculture, Environment and Tourism, Irrigation and Water Management; Non-Governmental Organizations (NGOs), Community-based organizations (Sudanese Women Union (SWU) and the Private Sector e.g. ITNs; Academic and research institutions.

**Goal of the project:**
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, and sound management of pesticides

**Specific objectives**

- Carry out system reforms to enable the implementation of vector control interventions in the context of IVM at national and state level;
- Design, implement, monitor and evaluate demonstration activities that will assess the cost-effectiveness and sustainability of alternative interventions;
- Strengthen community participation and mobilization to support the sustainable implementation of alternative interventions;
- Strengthen pesticide management practices that will prevent the accumulation of DDT and other toxic pesticides in stockpiles and reduce the development of vector resistance;
- Assess the potential risks to human health of alternative, non POP, insecticides; and
- Disseminate information on the best alternative disease vector prevention methods for wider application.

**Demonstration sites proposed:**

- **Managil locality in Gezira State** (irrigated area, use of pesticides in agriculture, reported resistance to vectors, high disease burden)
- **Galabat locality in Gedarif State** (several VBDs, ITN/LLIN implementation)
- **Rashad locality in South Kordofan State** (several VBDs, lack of capacity for vector control, accessibility poor)
- **Marawi locality in Northern state (**a dam for irrigation and power is under construction in this area, area of flooding, opportunity for EHIA)

**Situation analysis and scope of the project:**

Sudan carries a disproportionate share of the regional and global burden of vector-borne diseases. Eleven per cent of the global burden due to vector-borne diseases is found in countries of the Eastern Mediterranean where only 8% of the global population lives. Fifty percent of the regional burden is found in Sudan. In other words, 6% of the global burden due to vector-borne diseases is contributed by Sudan alone. The main vector-borne diseases include malaria (about 8 million cases annually resulting in 35,000 deaths), leishmaniasis, lymphatic filariasis, Onchocerciasis, African trypanasomiasis and mosquito-borne arboviruses such as yellow fever and dengue fever. The main vector control interventions include IRS, ITNs/LLINs, environmental management and space spraying. Use of pesticides in agriculture is extensive especially in irrigated areas. Focal problem of vector resistance to insecticides exists – including that of DDT and pyrethroids. This complicates the choice of available alternatives. The use of DDT for vector control was last reported in 1998. The recent inventory (2005) however, showed that there are 234 tons of obsolete POPs pesticides with over 8850 tons contaminated soils and around 528 contaminated containers, and 400 tons of contaminated dressed seeds. These stocks are in 341 separate, store/storage sites distributed all over the country. Rough estimates of the current overall obsolete stocks may approach 2000 tons. International efforts as well as regional alliances are needed to address this chronic problem. The proposal is in line with National IVM Strategic Plan, covers the gaps and the priorities identified in Vector Control Needs Assessment during the PDF-B process. The current project proposal aims to strengthen the national capacity for IVM and sound management of public health pesticides with the goal of reducing reliance on DDT and minimizing 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.

**Table 1: baseline expenditure for vector control and in kind contribution for the project for 5 years**

| | **Baseline expenditures US $** | **Total incremental cost US $** |
|---|---|---|
| **Component 1** | 1,828,550 | 517,250 |
| **Component 2** | - | 37,000 |
| **Component 3** | 200,000 | 2450 |
| **Component 4** | - | 10,000 |
| **Component 5** | - | 112,000 |
| **Subtotal** | **2,028,550** | **678,700** |

## SYRIA

**Composition of national stakeholder meetings for development of project proposal included:**
Ministries of Health, Agriculture, Environment, Water and Irrigation, Municipalities, academic institutions

**Goal of the project:**
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, and sound management of pesticides

**Specific objectives**

- Introduce and promote the IVM principles at all levels
- Provide the appropriate political and institutional frameworks for IVM
- Strengthen the capacity for IVM planning and implementation at all levels
- Promote the use of non-chemical vector control interventions and appropriate management of pesticides
- Strengthen intrasectoral and intersectoral collaboration and partnership, including community participation
- Ensure the appropriate management of pesticides in coordination with the relevant sectors;

**Demonstration sites proposed:**

- **Tarous, Karto and Al Safsafa villages** (IRS, high burden of Leishmaniasis)
- **Idleb, maaret Al Noaaman area** (IRS, high burden of visceral and cutaneous leishmaniasis)
- **Hama, Taibet Al Emam and Soran areas** (agricultural area, IRS main intervention, endemic for leishmaniasis)

**Situation analysis and scope of the project:**
In Syria cutaneous leishmaniasis is the main public health problem of the vector-borne diseases. The disease has shown a rapid spread from originally two foci in Aleppo and the Euphrates plain before 1960 to eight provinces to-date. There are about 30,000 reported cases annually. Capacity in vector control is generally weak and control interventions heavily rely on the use of chemicals through IRS, space spraying and recently the use of ITNs for Leishmaniasis control and prevention. Environmental management is also implemented. Vector control activities are planned at the peripheral level where the control centres prepare yearly plans which are then discussed and evaluated at the central level with the centres' in put. Whereas capacity for

general pesticide management is still weak, there have been attempts by MOA and FAO to address the problem of obsolete pesticides. In this joint initiative, about 600 tons of obsolete pesticides have been identified which include about 1,575 kg of DDT. Of the 600 tons only 450 tons have been repackaged and collected. The remaining amount of obsolete is waiting for financial resources. The proposal is indeed in line with the national IVM strategic plan and covers the gaps and the priorities identified in Vector Control Needs Assessment during the PDF-B process. The current project proposal aims to strengthen the national capacity for IVM and sound management of public health pesticides with the goal of reducing reliance on DDT and minimizing 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.

**Table 1: baseline expenditure for vector control and in kind contribution for the project for 5 years**

| | **Baseline expenditures US $** | **Total incremental cost US $** |
|---|---|---|
| **Component 1** | 1,131,233 | 517,250 |
| **Component 2** | - | 37,000 |
| **Component 3** | 200,000 | 2,450 |
| **Component 4** | - | 10,000 |
| **Component 5** | - | 94,000 |
| **Subtotal** | **1,331,233** | **660,700** |

## YEMEN

**Composition of national stakeholder meetings for development of project proposal included:**
Ministry of Health and Population, Environment, Agriculture, Municipalities, Academic institutions

**Goal of the project:**
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, and sound management of pesticides

**Specific objectives**

- Introduce and promote the IVM principles at national, governorate, district and sub-district levels;
- Strengthen the capacity for IVM planning and implementation at all levels;
- Promote the use of non-chemical vector control interventions;
- Ensure the appropriate management of pesticides in coordination with the relevant sectors;
- Strengthen inter and intra-sectoral collaboration and partnership, including community participation

**Demonstration sites proposed:**

- Tihama (high disease burden for malaria and dengue, IRS, DDT resistance)
- Taiz (malaria, ITNs and very little vector control capacity)
- Shabwa (malaria and dengue, very little vector control capacity)
- Sayoun – Hadramawat (Malaria and leishmaniasis, coverage for ITNs low)

**Situation analysis and scope of the project:**
The main vector-borne diseases include malaria, leishmaniasis, lymphatic filariasis, onchocerciasis, schistosomiasis and mosquito-borne arboviruses, e.g epidemics of dengue fever and Rift Valley fever. The principal vector control measure in Yemen is chemical control.
The chemical measures applied are as follows in their order of priority: indoor residual spraying (IRS); ITNs/LLINs; and larviciding. Vector control capacity in Yemen is very weak. It is only in recent years that serious vector control has been implemented. Whereas there is no information on the amounts and status of obsolete pesticides, pesticide management issues are critical and the proposed proposal will document and address them. The proposal is indeed in line with the national IVM strategic plan and covers the gaps and the

priorities identified in Vector Control Needs Assessment during the PDF-B process. The current project proposal aims to strengthen the national capacity for IVM and sound management of public health pesticides with the goal of reducing reliance on DDT and minimizing 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.

**Table 1: baseline expenditure for vector control and in kind contribution for the project for 5 years**

| | **Baseline expenditures US $** | **Total incremental cost US $** |
|---|---|---|
| **Component 1** | 2,005,000 | 2,002,250 |
| **Component 2** | - | 37,000 |
| **Component 3** | 200,000 | 2,450 |
| **Component 4** | - | 10,000 |
| **Component 5** | - | 94,000 |
| **Subtotal** | **2,205,000** | **2,145,700** |

**Annex K: Monitoring and Evaluation**

## 1. Elements of Monitoring and Evaluation plan

Monitoring and evaluation are important integral components which must be undertaken to assess the implementation of project activities, outputs and outcomes. Monitoring is needed to verify whether activities have been implemented as planned, ensure accountability and detect any problems or constraints early, in order to make necessary adjustments for better planning in the future. While monitoring is a continuous process, formal evaluation is required to determine and document the extent to which any expectant results are attributable to a particular activity through outcome and impact indicators.

The goal, purpose and outcomes of the project and the list of its planned output, provide the basis for this M&E plan. The project will be evaluated in order to re-design its methodology and approaches if needed so that it achieves impact, outputs and outcomes on the basis of relevance, effectiveness, efficiency, impact and sustainability.
A M&E matrix will be developed at the start of the project, including more specific performance questions and targets based on the Logical Framework.

The M & E system for the current project recognizes tracking of the following elements for achieving the desired target goals and purposes of the project as mentioned in the Log Frame matrix (Annex B to the Project Brief):

- Project impact/ outcome monitoring
- Operational / activities monitoring
- Financial monitoring
- External evaluation

### 1.1 Project impact/ outcome monitoring

Project impact can be tracked after some intended outputs and activities are accomplished and therefore results can be ascertained after a certain period has elapsed. The periodic self evaluation of achievement of desired outputs of activities (see below under 2.2) will follow the UNEP led mid term review **(**MTR) which has as main goal the fine-tuning of work-plans for the second half of the project, improving project approaches and optimizing implementation arrangements, based on a review of progress on execution as well as the achievement of project outcomes as specified in the Project Document at project mid term.

Responsible institution/person: UNEP Task Manager

### 1.2 Operational monitoring/activities

Monitoring of project performance is the *routine tracking* of the key activities and achievements through record keeping, time bound reporting mechanism. Monitoring usually focuses on regular information gathering and the frequent checking of short term progress with analysis about implications of the project. Monitoring therefore assists in identifying areas that contribute to improved performance.

Project outputs and the list of activities which include information needs and target indicators for M & E, are listed in the Logical Framework (Annex B to the Project Brief).

Responsible institutions/persons (mostly): National Steering Committees, National Coordinators, Regional Project Coordinator, Scientific Technical and Advisory Panel-STAC

### 1.3 Financial monitoring, including co-financing expenditure,

Financial disbursement expenses will be reported as set out in the standard UNEP format, together with supporting documents as necessary. The regional assistant coordinator will be responsible for collecting information on disbursed and obligated funds as per activities of the project described in the logframe matrix and the M & E matrix. This will be collated and submitted on annual and quarterly bases using UNEP format.

Responsible institutions/persons: WHO Project Coordinator

### 1.4 External evaluation

Independent mid-term and end-of-project evaluations will be conducted by consultants hired by UNEP to assess the overall level of achievement as specified in the project brief proposal and Logical Framework matrix.

Mid Term and Terminal Evaluations (**c**onducted through) UNEP, have the following as minimum requirements:

- The IA will arrange for the mid term and terminal evaluation
- The terminal evaluation should be conducted by a team of independent consultants or the terminal evaluation should be reviewed by evaluators of the independent department of the IA
- The evaluation should be completed within 6 months of closing of all project activities
- Major project stakeholders at the national and local levels should be involved
- The project baselines (initial conditions), should be used so that achievements, results and impacts can be properly established.

Responsible institution/person: UNEP Task Manager

## 2. DATA ANALYSIS AND REPORTING

Data collected will be managed and analysed into descriptive statistical figures for reporting purposes by the Assistant Coordinator. Analysis for project operational and impact performance will be based according to the work-plan and targets set in the M & E matrix.

### 2.1 Annual country progress report:

The National Project Coordinator of participating countries will prepare an appraisal report on project performance that will include a section on M & E that clearly describes the key performance questions, indicators used, data collection mechanisms and analysis of results. A structure for this report in order to achieve harmonized reporting concerning the achievements of the project following the Indicators as mentioned in the Logical Framework (Annex B to the Project Brief) will be provided through the Project Coordinator.

## 2.2 Annual regional progress report

The Regional Project Coordinator will prepare a report annually on project achievements. The Annual Report consists of a section on achievements of project outcomes, project outputs and activities, performance overview related to the indicators and financial status. The report will be distributed to STAC members in advance for the meeting.

The section on financial issues describes disbursements and expenses in categories and format as set out in standard UNEP format, together with supporting documents as necessary. The Annual Report will also include committed cash and in kind contribution ('co-funding') by partner organizations and governments.

## 2.3 Quarterly Progress Report

The regional Project Coordinator will provide a quarterly progress report including fund disbursement from UNEP as per the format provided. Accumulated expenditures per activity will be listed as per the M & E matrix and Logical Framework.

## 2.4 Audit Report and Financial Report

As the project is executed by an UN institution and is as such subject to an annual external audit by the UN Board of Auditors.
The Project Coordinator will present quarterly expenditure reports showing expenditures by UNEP budget line incurred during the period, cumulative expenditures and comparisons with the approved project budget.

## 2.5 Mid-Term Reviews report

MTR report is the responsibility of the project implementing and executing agencies[1] and should be based on an extensive and transparent consultation process with all key stakeholder groups. MTR findings and recommendations will be reviewed and endorsed by the International SC and be adopted by country EAs and staff followed by a summary of key decisions indicating target dates, and key responsible agencies/officers for meeting these recommendations.

Responsible institutions/persons: UNEP Task Manager and WHO Regional Project Coordinator

## 3. OPERATIONAL MANAGEMENT

Information for managing project operation is just as important for overall performance as information about achieving project objectives. The responsibilities and roles of key project staff are as follows:

### *Assistant Regional Coordinator*

[1] Starting June 2006; all FSP submitted for GEF CEO endorsement are required to have full M&E plans including MTR and Terminal Evaluations, as well as include a adequate budget for the costs of MTR and TE.

- Manages and analyses annual and quarterly reports and data collected from national coordinators for reporting
- Prepares quarterly financial report, quarterly and annual progress reports for the Project coordinator to be forwarded to UNEP as per the format provided and within the time table agreed and established
- Ensures and coordinates timely implementation of project activities in project countries as set out in the work-plan and endorsed by the STAC
- Organizes regional training and meetings of STAC

***National Coordinators***

- Prepares quarterly progress and annual summary progress reports for the Assistant Regional Coordinator and forwards substantive and quarterly financial reports with supporting documents
- Coordinates implementation of project activities in selected project areas in the country
- Organizes country specific project activities and National Steering committee meetings

***Regional Coordinator (full time)***

- Will oversee implementation of project activities through performance management system and work-plan
- Coordinates timely recruitment of Assistant Coordinator
- Submits quarterly and annual reports including financial reports with contract agreement and work-plan as necessary
- Provides staff management report including contract agreement and staff annual reports and evaluation

## Annex L: Work Plan for project activities

| Component - Activity | Year 1 | | | | Year 2 | | | | Year 3 | | | | Year 4 | | | | Year 5 | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 |
| **Component 1 : Demonstration projects on DDT alternatives** | | | | | | | | | | | | | | | | | | | | |
| Activity 1.1. Formulation of the draft protocol by the National Steering Committee | | | | | | | | | | | | | | | | | | | | |
| Activity 1.2. Carry out any project-specific capacity building | | | | | | | | | | | | | | | | | | | | |
| Activity1.3. Organize a regional workshop for the harmonization the country protocols | | | | | | | | | | | | | | | | | | | | |
| Activity 1.4. Assist National Project Coordinators in project implementation | | | | | | | | | | | | | | | | | | | | |
| Activity 1.5. Monitor project activities | | | | | | | | | | | | | | | | | | | | |
| Activity 1.6. Technical support for the analysis of datasets and report writing | | | | | | | | | | | | | | | | | | | | |
| Activity 1.7. Organize STAC meeting and the consolidated regional report | | | | | | | | | | | | | | | | | | | | |
| **Component 2 : National capacity strengthening on IVM** | | | | | | | | | | | | | | | | | | | | |
| Activity 2.1. Review of policy and legal frameworks | | | | | | | | | | | | | | | | | | | | |
| Activity 2.2. Produce promotional documents of successful institutional arrangements between the sectors | | | | | | | | | | | | | | | | | | | | |
| Activity 2.3. Consultation on restructuring of national vector control units | | | | | | | | | | | | | | | | | | | | |
| Activity 2.4. Develop and or updating guidelines and training materials | | | | | | | | | | | | | | | | | | | | |

| Component - Activity | Year 1 | | | | Year 2 | | | | Year 3 | | | | Year 4 | | | | Year 5 | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 |
| **Component 3 : Collection, repackaging and disposal of obsolete POPs pesticides** | | | | | | | | | | | | | | | | | | | | |
| Activity 3.1. Collection, repackaging and disposal of obsolete POPs pesticides | | | | | | | | | | | | | | | | | | | | |
| **Component 4 : Dissemination of information** | | | | | | | | | | | | | | | | | | | | |
| Activity 4.1. Dissemination of information | | | | | | | | | | | | | | | | | | | | |
| **Component 5 : Transboundary and national coordination, information sharing and monitoring and evaluation mechanisms operational and effective in promoting Integrated Vector Management without the use of DDT** | | | | | | | | | | | | | | | | | | | | |
| Activity 5.1. Recruitment of key staff and M&E | | | | | | | | | | | | | | | | | | | | |
| Activity 5.2. Operation of National Steering Committees | | | | | | | | | | | | | | | | | | | | |
| Activity 5.3. Operation of Regional STAC + reports | | | | | | | | | | | | | | | | | | | | |

## Annex M: The general Regional burden of vector-borne diseases

### Regional burden of vector-borne diseases[1]

| Vector-borne disease | Eastern Mediterranean Region burden: DALYs | Member States | | |
|---|---|---|---|---|
| | | Endemic | Epidemic prone | Non-endemic |
| Diarrhoeal diseases [a] | 10 784 000 | All | all | 0 |
| Malaria | 2 050 000 | Afghanistan, Djibouti, Islamic Republic of Iran, Iraq, Morocco, Pakistan, Saudi Arabia, Somalia, Sudan, Syrian Arab Republic, Yemen | all | Bahrain, Egypt, Kuwait, Jordan, Lebanon, Libyan Arab Jamahiriya, Oman, Palestine, Qatar, Tunisia, United Arab Emirates |
| Trachoma | 602 000 | Afghanistan, Djibouti, Egypt, Islamic Republic of Iran, Iraq, Libyan Arab Jamahiriya, Morocco, Oman, Pakistan, Somalia, Sudan, United Arab Emirates, Yemen | – | Bahrain, Jordan, Kuwait, Lebanon, Palestine, Qatar, Saudi Arabia, Syrian Arab Republic, Tunisia |
| Lymphatic Filariasis | 489 000 | Egypt, Sudan, Yemen | – | 19 Countries |
| Leishmaniasis | 278 000 | All | – | 0 |
| Schistosomiasis | 202 000 | Egypt, Iraq, Lebanon, Libya, Oman, Palestine, Saudi Arabia, Somalia, Sudan, Yemen | – | Afghanistan, Bahrain, Djibouti, Islamic Republic of Iran, Jordan, Kuwait, Morocco, Pakistan, Qatar, Syrian Arab Republic, Tunisia, United Arab Emirates |
| Dengue | 85 000 | Not known | all | Not known |
| Japanese Encephalitis | 81 000 | Not known | Afghanistan, Pakistan | Not known |
| Onchocerciasis | 46 000 | Sudan, Yemen | – | 20 Countries |
| Trypanosomiasis | 40 000 | Somalia, Sudan | – | 20 Countries |

[1] This section is based on the WHO Eastern Mediterranean countries and different from the regional definition of the project.

This Table is presented to express the general VBDs burden in the region based on a methodology that is difficult to do for each country separately as country-specific data for requesting countries is not available.

| | |
|---|---|
| Top 10 vector-borne diseases total | 14 657 000 = 11% of DALYs attributed to vector-borne diseases globally = 17% of DALYs attributed to communicable diseases regionally |

[a] enteric infections causing diarrhoeal diseases are only partly transmitted by vectors, being more often acquired directly from faecal/oral route or via contaminated water and foodstuffs.

**Unique eco-epidemiology of VBDs in the North Africa & Middle East project countries – the case of malaria**

The project area (North Africa and Middle East) presents a unique set of malaria eco-epidemiology compared to countries in Africa and Latin America where GEF supported projects on DDT are currently being implemented or prepared. The differences are in terms of both malaria vectors (Fig 1 & 2) - hence different vector ecology, and local epidemiology of malaria resulting from climatic and population/cultural driving forces of the disease. The project countries present different index of malaria stability (Fig. 3). The index of malaria stability provides a bases for comparing regional infectious throughputs in malaria vectors, and is thus, relevant to the design of malaria interventions (Kiszewski, A. *et. al.* 2004). A good understanding of the factors impacting the effectiveness of alternative malaria vector control interventions to DDT is therefore a prerequisite to the tailoring of these alternatives to local context, in accordance with the Stockholm Convention's vision of developing locally effective and affordable alternatives. For example, while the south- western part of Yemen has Afro-tropical malaria vectors, the Eastern part of the country is predominated by oriental species. Such species complexities present unique malaria vector control difficulties to this developing country, which is faced with 2.3 million cases and about 15,000 - 20,000 malaria deaths each year. The lessons from the project will therefore contribute to the global body of scientific knowledge on appropriate alternative interventions in different local settings.

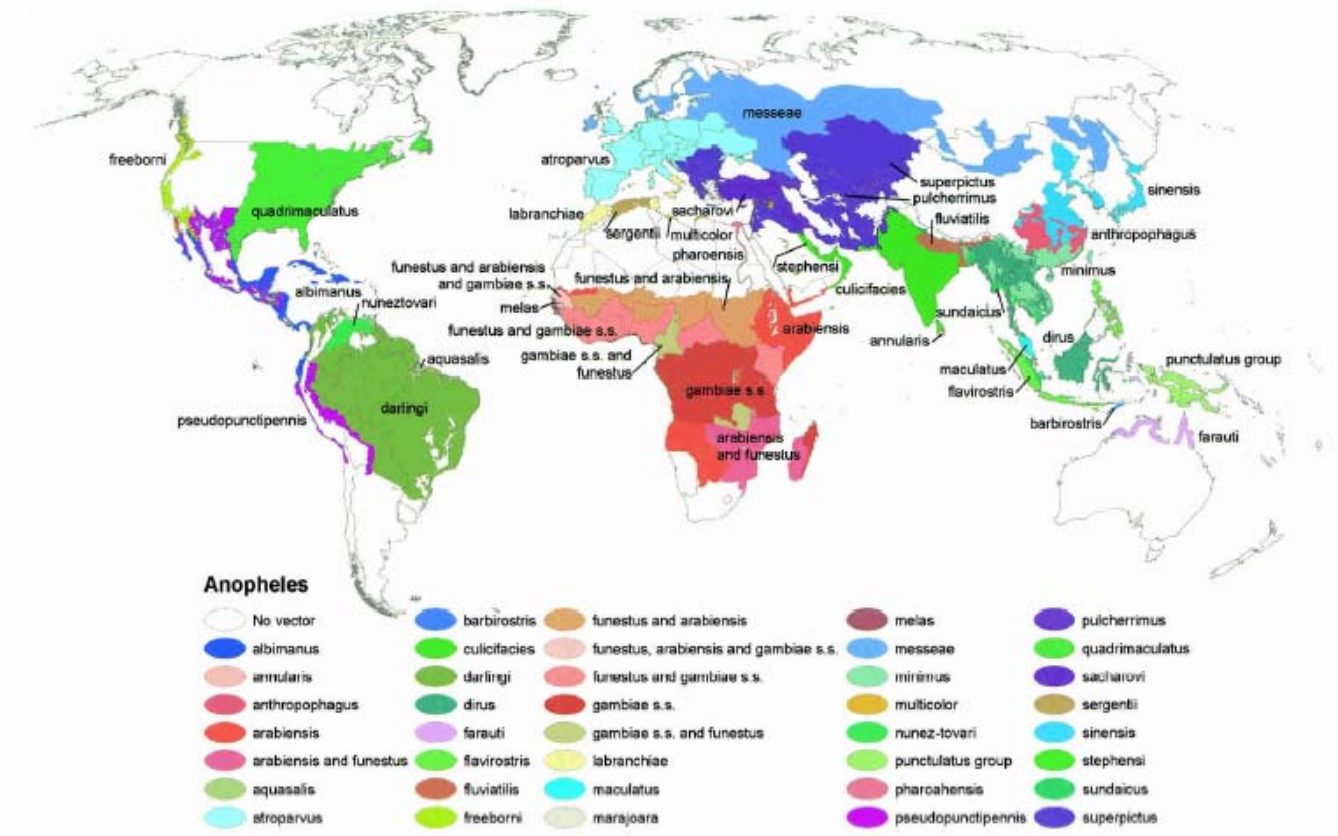



FIGURE 1. Global distribution (Robinson projection) of dominant or potentially important malaria vectors.

Source: Kiszewski, A. *et. al.* (2004). A global index representing the stability of malaria transmission. *Am. J. Trop. Med. Hyg.*, 70(5), 2004, pp. 486–498

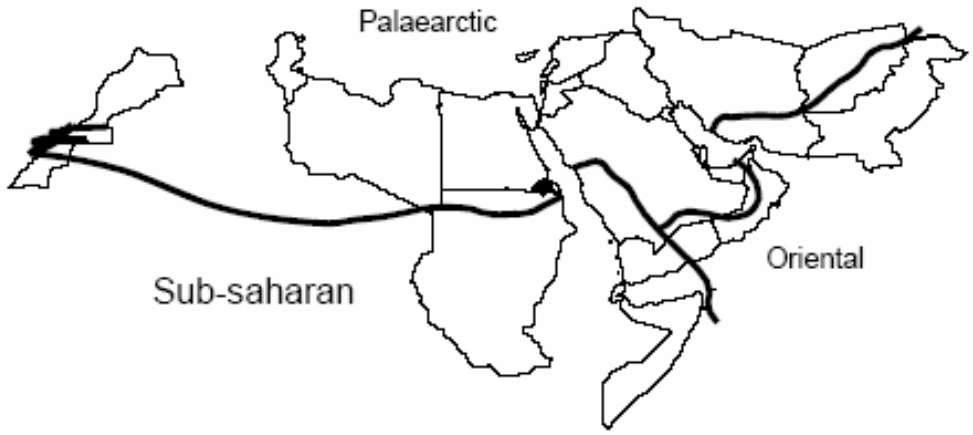



**Figure 1a:** The project region presents different ecological settings and vector species to the Afro-tropical conditions found in the participating countries of the Africa DDT project.

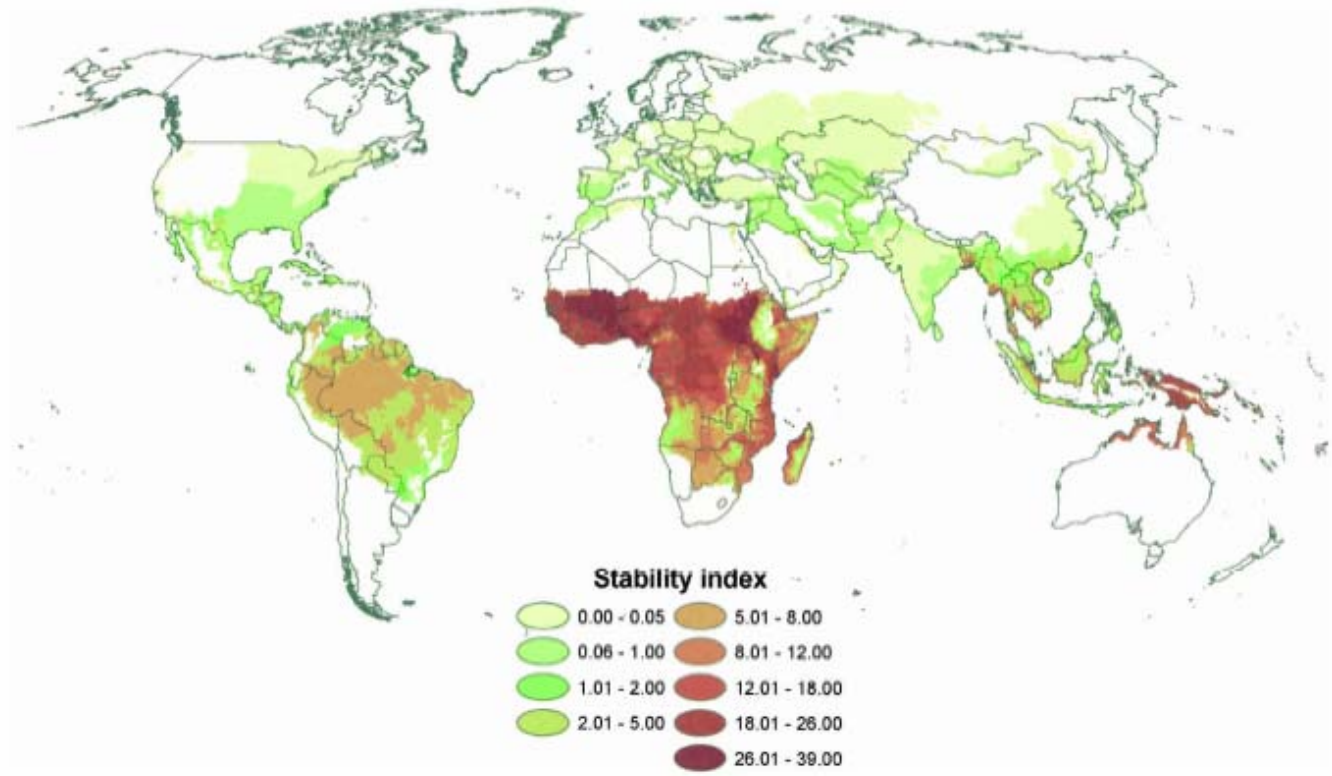
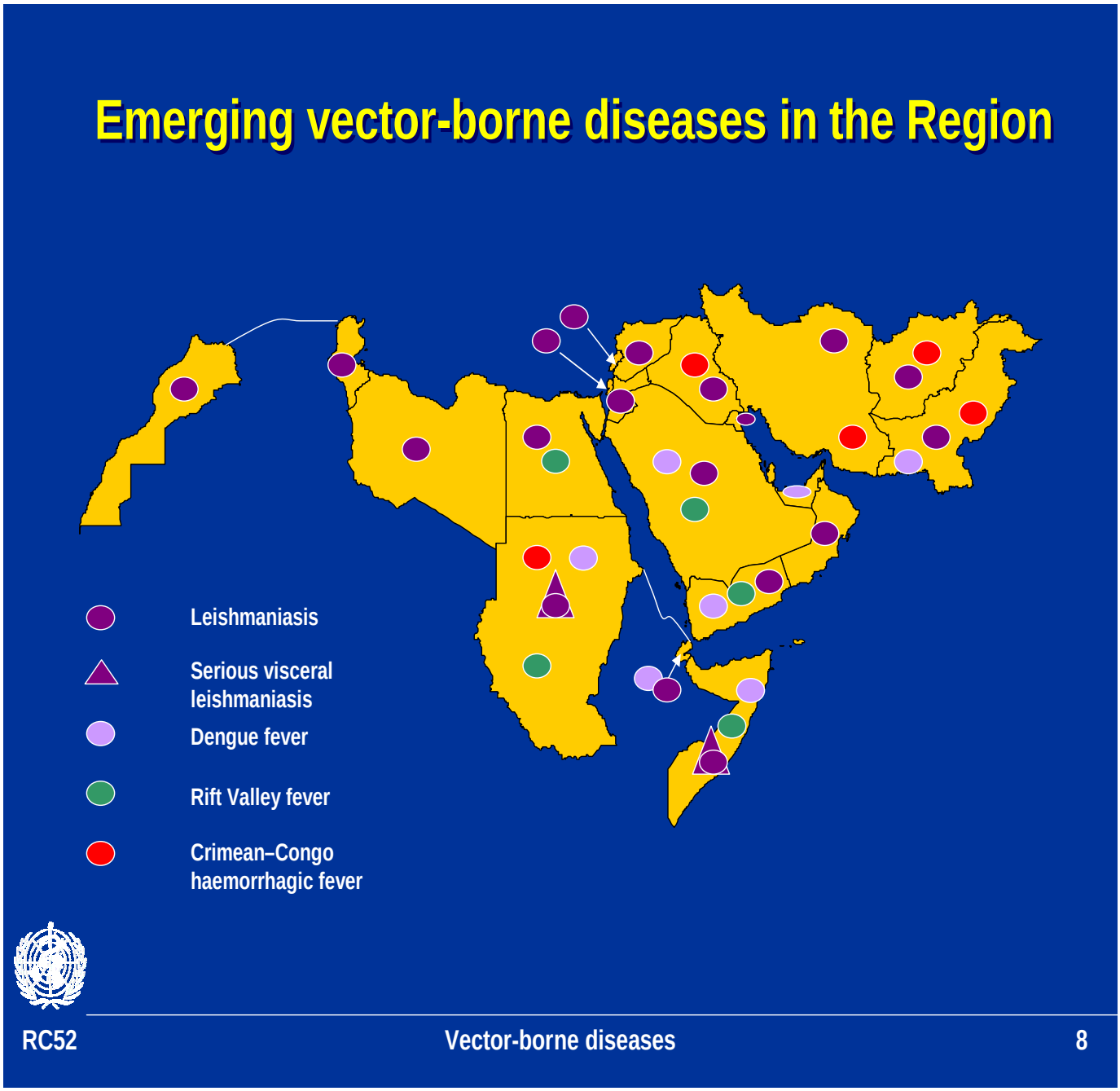



FIGURE 2. Distribution (Robinson projection) of the actual and potential stability of malaria transmission based on regionally dominant vector mosquitoes and a 0.5° gridded temperature and precipitation data set.

Source: Kiszewski, A. *et. al.* (2004). A global index representing the stability of malaria transmission. *Am. J. Trop. Med. Hyg.*, 70(5), 2004, pp. 486–498

Annex M (continued): The distribution of emerging VBDs in the Region



## ANNEX N: COST-EFFECTIVENESS ANALYSIS IN THE PROJECT'S CONTEXT.

Essential to the promotion of alternatives to DDT and the firm anchoring of national programmes for integrated vector management (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.

Cost-effectiveness analysis provides an answer to one of two questions:

- How can a set objective be achieved at the least possible cost?

- How can the achievement of a set objective be maximized within the limits of available resources?

It is the economic evaluation of choice to establish the efficiency of health interventions because their outcome is measured in effectiveness units rather than in monetary units.

In the context of the project "*Demonstration of sustainable alternatives to DDT and strengthening of national vector control capabilities in the Middle East and North Africa*" the issue of cost-effectiveness analysis is prominent in two of the four components:

1. Component 1: Viability, availability, sustainability and **cost-effectiveness** of alternatives to the use of DDT demonstrated.

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 should be performed in great detail and with a high level of accuracy.

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

This will require the development of training materials and the organization of training courses aimed at creating awareness and developing a basic understanding of cost-effectiveness analysis, its potential and its limitations among managers of vector control programmes.

## Annex O: Terms of Reference of the Scientific and Technical Advisory Committee

*Introduction*

With support from the Global Environment Facility (through a PDF-B grant) the World Health Organization's Regional Office for the Eastern Mediterranean, in consultation with eight selected Member States, has developed a project entitled: *Demonstration of Sustainable Alternatives to DDT and Strengthening of National Vector Control Capabilities in the Middle East and North Africa*. The eight countries included in the project are: Djibouti, Egypt, Islamic Republic of Iran, Jordan, Morocco, Sudan, Syrian Arab Republic, and the Republic of Yemen.

The objectives of the project are as follows:

(i) To demonstrate the viability, availability, sustainability and cost-effectiveness of the alternatives to DDT;

(ii) To strengthen national capacities for the planning, implementation and evaluation of the vector control alternatives to DDT, based on the principles of the integrated vector management (IVM);

(iii) To strengthen national capacities for the sound management of DDT and other public health pesticides and safeguarding of POPs-containing pesticide wastes;

(iv) To disseminate good practices, demonstrated alternatives and lessons learned in the participating countries.

The coordination and management structure of the project foresees, in each country, the designation of a national project coordinator and the establishment of a national steering committee. At the regional level, a regional project coordinator will be confirmed and an assistant regional project coordinator will be appointed; a regional Scientific and Technical Advisory Committee (STAC) will be established for the duration of the project.

The present document sets out the terms of reference of the STAC, it defines the criteria for the selection of STAC members and gives general guidance on its *modus operandi*

*Terms of Reference*

Following are the Terms of Reference for the members of the Scientific and Technical Advisory Committee of the project *Demonstration of Sustainable Alternatives to DDT and Strengthening of National Vector Control Capabilities in the Middle East and North Africa*:

- To review and comment on the national work plans and the harmonized protocols for the national demonstration projects for their relevance to the project objectives, their feasibility and technical soundness, and their completeness in addressing all elements required by the project.

- To give advise on all aspects of capacity building in the context of the project.

- To carry out an annual review of the progress reports of the demonstration projects, submitted by the National Coordinators, and to advise on scientific, technical and managerial aspects for the strengthening of the projects.

- To give advice on all challenges, constraints and problems encountered in the implementation of the national work plans including the implementation of the national demonstration project.

- To review the final reports of the demonstration projects and support the preparation of a consolidated regional report.

- To advise on ways and means to ensure that specific cross-cutting issues (cost-effectiveness analysis, sustainability) receive adequate attention in all relevant project activities.

- To advise on the mechanisms for inter-agency coordination and coordination between different sectors at the national level (including communities) in support of the implementation of the project.

- To advise the WHO Regional Office, based on the national and regional experiences, about the steps needed to sustain the project's gains in the eight participating countries and to expand these gains to other countries in the Region.

*Criteria for the selection of STAC members*

Areas of expertise and technical background:
The following areas of expertise must be represented in the STAC: vector control, epidemiology, environmental health and health economics. As integrated vector management is at the core of the project, vector control will be represented by two experts on the STAC. All members of the STAC should have a broad public health background.

In addition to the above areas of expertise, the following disciplines are specifically listed as they are expected to be acquired through co-opting STAC members for one or more meetings: social science, agricultural science and ecology. This does not exclude experts from other disciplines to be co-opted as the need arises.

Experience:
Members of the STAC must have at least 15 years of experience in their area of expertise. They must have field experience in the region. They must have a sound academic background, with a post graduate degree in the area of expertise. It is an asset to have served on WHO or other UN Expert Panels.

Skills:
Fluency in English

*Modus operandi*

The STAC will be composed of five core members, designated for the entire period of the project by the Regional Director of WHO EMRO. The Chair will be appointed by the Regional Director. The STAC has the possibility to co-opt members to address specific issues for which it feels attracting additional expertise is warranted.

Representing the Implementing Agency, a UNEP/GEF staff member will be a member of the STAC in order to monitor achievement of the incremental benefits of the project. Representatives of other UN sister organizations will be invited to the STAC meetings.

The official language for STAC meeting will be English.

The costs incurred by STAC activities will be covered from the project budget.

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