

Report on the

**Third meeting of the Steering Committee for
the regional WHO/UNEP project supported by
the Global Environment Facility**

Damascus, Syrian Arab Republic
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EXECUTIVE SUMMARY

The preparatory phase of a project entitled "Demonstration of sustainable alternatives to DDT and strengthening of vector control capabilities in the Middle East and North Africa" is being implemented by the World Health Organization's Regional Office for the Eastern Mediterranean (WHO/EMRO) and the United Nations Environment Programme (UNEP), with financial support from the Global Environmental Facility (GEF) through a PDF-B grant. This regional project (2006–2007) covers the following countries in the Eastern Mediterranean Region: Djibouti, Egypt, Jordan, Islamic Republic of Iran, Morocco, Sudan, Syrian Arab Republic and Yemen. A total of US\$ 650 000 has been made available to support these countries to develop full project proposals for submission as a regional Project Brief during the course of 2007.

A Steering Committee was established to guide the project formulation process with technical guidance and independent appraisal. After meetings in March and November 2006, this Committee met for a third time in Damascus, the Syrian Arab Republic from 13 to 14 March 2007. The purpose of the meeting was to review and endorse the final draft of the Project Brief and its annexes, which had been formulated by an expert drafting group in Alexandria, Egypt, in January 2007; to discuss outstanding requirements for project submission; and to agree on management arrangements for the project.

The Committee paid special attention to the issue of cost-effectiveness analysis of alternative vector control measures, which was at the core of the project, as the proposed demonstration projects made specific reference to this aspect in their titles, and as capacity-building efforts would focus on establishing integrated vector management (IVM) programmes. In IVM, cost-effectiveness is a key criterion in the selection of suitable interventions. It was agreed that existing guidelines needed updating, and that at the same time, practical tools should be developed which would enable countries to apply the procedures proposed by the guidelines in their national project activities.

The Committee also discussed at length the coordination and management arrangements of the project, and it formulated terms of reference for the Scientific and Technical Advisory Committee (STAC) to be established in its support. While each country would have its own Steering Committee and a national project coordinator, these national coordinators would be members of the regional management team, together with the regional project coordinator and assistant regional project coordinator. Periodic meetings with the STAC would ensure maximum added value of working at the regional level, both for the participating countries and also for other countries in the Eastern Mediterranean Region.

The Committee reviewed the follow-up actions to recommendations it made at its second meeting and reiterated a number of them. It noted progress made in consolidating the vector control needs assessment reports, and encouraged the

Secretariat to ensure the consolidated report was part of its reporting to the WHO/EMRO Regional Committee in 2007 on progress in the implementation of Resolution EM/RC.52/6.

Once again, the Steering Committee acknowledged the important contribution of the GEF PDF-B funds in the reduction of reliance on DDT for vector control and the overall furtherance of IVM in the Region, and expressed its appreciation for the support received. The Committee would remain functional to assist in any remaining issues during the finalization and submission process, and would be disbanded when handing over its responsibilities to the project's STAC.

The meeting concluded with the unanimous endorsement of the Project Brief and its annexes, including the amendments made during the meeting and the addition of two new annexes: an annex on cost-effectiveness and an annex containing the terms of reference for the STAC.

1. INTRODUCTION

The preparatory phase of a project entitled “Demonstration of sustainable alternatives to DDT and strengthening of vector control capabilities in the Middle East and North Africa” is being implemented by the World Health Organization’s Regional Office for the Eastern Mediterranean (WHO/EMRO) and the United Nations Environment Programme (UNEP), with financial support from the Global Environmental Facility (GEF) through a PDF-B grant. This regional project (2006–2007) covers the following countries of the Eastern Mediterranean Region: Djibouti, Egypt, Jordan, Islamic Republic of Iran, Morocco, Sudan, Syrian Arab Republic and Yemen. A total of US\$ 650 000 has been made available to support these countries to develop full project proposals for submission during the course of 2007. Access to full project support from GEF is based on a country having ratified the Stockholm Convention, and this is the case for all countries included in the project.

A Steering Committee was formed by Dr Hussein A. Gezairy, WHO Regional Director for the Eastern Mediterranean, at the start of this preparatory phase to provide guidance on the process of developing the full Project Brief. The Committee’s first meeting in Muscat, Oman, set the stage for countries to carry out vector control needs assessments and to formulate national IVM plans and GEF proposals. Its second meeting in Damascus, the Syrian Arab Republic, on 11 and 12 November 2006, reviewed the results of national vector control needs assessments and the criteria applied in the selection of demonstration project sites for alternatives and provided strategic directions in addressing national capacity gaps and opportunities. It also defined a roadmap for the completion of the PDF-B phase—the formulation of a full Project Brief and its annexes by an expert drafting group. This group met in Alexandria, Egypt, in January 2007.

The third meeting of the Steering Committee was held in Damascus, the Syrian Arab Republic, from 13 to 14 March 2007, with Dr Zuhair Hallaj as the Chairperson. The purpose of the meeting was to:

- review and endorse the final draft of the Project Brief and its annexes,
- discuss outstanding requirements for project submission;
- agree on management arrangements for the project.

The meeting was also attended by representatives of UNEP/GEF and the Food and Agriculture Organization of the United Nations (FAO), and by nine Secretariat members.

The meeting was opened by the WHO Representative for the Syrian Arab Republic, Dr Ibrahim Betelmal, who delivered the opening remarks of Dr Hussein A. Gezairy. Dr Gezairy extended congratulations to the Islamic Republic of Iran for ratifying the Stockholm Convention, which completed ratification by all eight countries. The relevance of the project for all countries in the Region was emphasized

as its unique feature. Participating countries would face new challenges during the implementation phase of the project which would be of a more scientific and technical nature. Therefore, the Steering Committee was invited to recommend to the Regional Director the best arrangements for coordinating and managing the project, and to give consideration to the establishment of a STAC with clear terms of reference.

In his opening statement, Dr Jan Betlem, UNDP Resident Coordinator, recalled the extensive coverage, in terms of funding and expertise, of environment-related activities through the GEF in the Syrian Arab Republic. This meeting was yet another important step in strengthening the bond between the Syrian Arab Republic and UNEP/GEF.

Dr Zuhair Hallaj, Chairman of the Steering Committee, welcomed all participants and reminded the group that the Steering Committee had been formed with the specific objectives of providing leadership and guidance to the regional project and of strengthening the national vector control capabilities in the Region. The Committee had achieved good results—guidelines and tools for the VCNA had been developed, countries had been assisted in the VCNA process and eight countries in the Region had received assistance to develop their IVM national plans as well as to draft GEF proposals. The expert drafting group had completed the final draft of the regional Project Brief which built on the national proposals, and this was now on the table for discussion.

The work of the Steering Committee was nearly finished. The Regional Director had requested the receipt of proposals for the terms of reference and composition of a regional STAC to guide the further steps in project implementation and to assist countries in the challenges they would face.

The present meeting built on the work of the first two Steering Committee meetings in Muscat and Damascus and on the recommendations that arose out of them. It aimed to review, discuss and endorse the final draft Project Brief that had been formulated by an expert drafting group in Alexandria, Egypt in January 2007. This Project Brief included a detailed budget listing national contributions and a calculation of the incremental costs, as well as a logical framework.

The opening remarks were followed by a round of introductions of the participants. Dr Robert Bos was elected as meeting Rapporteur. The agenda, programme, list of participants and proposed terms of reference are included as Annexes 1, 2, 3 and 4.

2. BRIEFING ON THE STATUS OF THE EMRO/GEF PROJECT

2.1 Progress report

Dr A. Mnzava

The objectives of the EMRO/GEF project are to: achieve a reduction in the reliance on DDT without increasing the vector-borne disease burden; demonstrate the viability of cost-effective alternatives in selected sites; develop national capacity in planning and implementation of vector control through integrated vector management (IVM), as endorsed by the WHO Regional Committee; and coordinate the dissemination and sharing of country experiences in the Region and globally.

Since the first Steering Committee meeting, VCNA tools have been finalized and translated into French; meeting reports have been completed and distributed; progress reports have been submitted to the GEF; countries have been supported in carrying out VCNA; countries have established intersectoral committees, adapted tools and guidelines and recruited consultants to assist them, funds have been provided to countries and the national VCNA's have been carried out and analysed.

The analysis of the VCNA's had been the starting point of the second meeting, and had served to identify needs, gaps, and opportunities for IVM with respect to the following points: enabling policy and legal environment; infrastructure, human resources and financial resources; intersectoral coordination and collaboration; vector control planning and implementation; and community participation and involvement.

A number of recommendations had emerged from the second meeting of the Steering Committee which included:

- Final VCNA reports, IVM plans and GEF proposals should be submitted to WHO Regional Office no later than 31 December 2006.
- An updated version of the VCNA guidelines should be consolidated for use by other countries in the Region and in other Regions.
- The outcomes of the VCNA in the eight countries should be condensed into an article to be published in the *Eastern Mediterranean Health Journal*.
- The full VCNA reports should be summarized, compiled into one report and submitted to the Regional Committee when convenes in 2007.
- The development and formulation of IVM strategies should be expanded to all countries of the Region.
- Transparent information should be provided on procedures to produce and endorse the VCNA reports and IVM plans to ensure ownership.
- The request for GEF support should be carefully considered in the light of new GEF criteria and generic issues should be incorporated into the proposed activities of the demonstration projects.

- Collaboration with the FAO should be pursued in the area of stockpile management and elimination.
- In the proposal, the economic element should be highlighted with a focus on cost-effectiveness analysis of interventions.
- WHO should carry out donor profiling for project co-financing.

With respect to the implementation of these recommendations, all country reports have been finalized and submitted to the Regional Office by the agreed deadline. Some country reports were translated from the original French into English. An expert drafting group comprising seven members met in Alexandria, Egypt, from 21–26 January 2007. The group produced a first full draft of the Project Brief, including annexes, which was further refined in consultation with the national counterparts in the eight participating countries and with UNEP/GEF. Draft tools for economic analysis have been produced and were submitted for comment to the present meeting. All countries have submitted letters of endorsement, but on the instigation of UNEP/GEF some revision to the text of these letters was requested. To date, five revised letters of endorsement have been received. The draft Project Brief is currently under internal review with UNEP/GEF, and an external review is planned.

Contact has been established with a UK-based consultant for the consolidation of the VCNA reports, in order that a full report can be submitted to the Regional Committee in 2007, and the recommended scientific article produced.

2.2 Presentation of the draft regional full project proposal

Dr R. Bos

The expert drafting group of the Project Brief were asked to:

- review progress in the development and submission of country inputs into the Project Brief;
- formulate the final Project Brief and logical framework;
- review specific aspects, such as cost-effectiveness analysis, in detail;
- explore options to strengthen links with FAO in the management of obsolete stockpiles (to achieve this objective contact has been established through UNEP/GEF with a representative of FAO of the United Nations (Rome, Plant Protection Division), who attended the meeting of the expert drafting group for that purpose).

The drafting group formulated the following set of objectives for the Project Brief. The development objective was to reduce reliance on DDT and minimize the potential of reverting to the use of DDT for the prevention and control of vector-borne diseases in all countries through the use of sustainable, cost-effective and environmentally-friendly alternative interventions. The project objective was to establish an IVM framework, criteria and procedures for the prevention and control of vector-borne diseases through optimized use of tools and resources and strengthened

inter- and intrasectoral coordination, partnerships and community empowerment as the basis for a reduced reliance on DDT.

The specific objectives of the project are to:

- demonstrate the viability, availability, sustainability and cost-effectiveness of the alternatives to DDT;
- strengthen national capacities in the planning, implementation and evaluation of the vector control alternatives to DDT, based on the principles of IVM;
- strengthen national capacities for the sound management of DDT and other public health pesticides and the safeguarding of POPs-containing pesticide wastes;
- disseminate good practices and demonstrate alternatives and lessons learned in the participating countries.

The Project Brief consists of five components:

- viability, availability, sustainability and cost-effectiveness of alternatives to the use of DDT;
- capacity building in each country to plan, implement and evaluate the application of alternatives based on the principles of IVM;
- collection, repackaging and disposal of obsolete POPs stocks;
- information documented and disseminated on good practices and cost-effectiveness and sustainability of alternatives disseminated;
- project coordination and management structure established.

In the deliberations of the expert drafting group a number of considerations and issues for debate were raised, including: the vector-borne disease burden and the potential to revert to the use of DDT for vector control; existing stockpiles; regional experience in the application of alternative vector control measures; and the growing importance of IVM in the Region.

The Project Brief foresees linkages with other GEF and non-GEF projects, including: the GEF-supported projects on DDT alternatives in Central America and in Africa, as well as those which may be developed in Asia and Central Europe; the Africa stockpiles programme of FAO; the FAO/WHO collaboration on the sound management of pesticides; and FAO/WHO collaboration on the prevention and control of water-associated diseases.

The Project Brief gives a number of clear rationales for the proposed activities. The first one is that demonstration of the viability of alternatives will lead to the introduction of more evidence-based decision-making in the selection of vector control measures. Secondly, promotion of regulatory frameworks and best practice in pesticide management is commensurate with the substantial levels of pesticide use in the Region. And thirdly, the need for demonstration, in specific settings, of the cost-

effectiveness of a structured and well-designed package of vector control interventions which is relevant to local needs.

As an example of the logical framework structure, component 1 “Viability, availability, sustainability and cost-effectiveness of alternatives to the use of DDT” resulted in the following six outcomes:

- eight completed country protocols available;
- capacity building for the implementation of the protocol achieved;
- eight regionally harmonized country protocols available;
- implementation of eight demonstration projects supported;
- monitoring reports for each project available;
- country reports and regional consolidation report available.

All outcomes have a rationale, a set of activities and an indicator. For each outcome the baseline expenditure, the alternative costs and the total increment as a result of the additional action are listed.

For project coordination and management, the Project Brief foresees the confirmation of the regional project coordinator, the appointment of a professional assistant project coordinator, the provision of secretarial support and the joint designation of eight national project coordinators. In each country a national steering committee will be established which will meet twice a year, and a regional STAC with distinct terms of reference will be established and will meet once/twice a year.

2.3 Update on recent developments regarding funding by GEF

Dr J. Betlem

The process that has led to the formulation of the Project Brief has been open and transparent. The final draft of the Project Brief has been submitted for internal review in the UNEP/GEF Secretariat in order to expedite the submission process. The final step before submission will be an external review by selected members of the GEF STAC, and it is hoped that the outstanding revised letters of endorsement will be received shortly.

GEF approval is expected by July/August 2007 in order that the project can start in October 2007, and the first STAC meeting can be organized before the end of the year.

In terms of collaboration with FAO a representative from FAO headquarters had been asked to explore the possibility of providing assistance in supporting a component for the collection, packaging and disposal of POPs pesticides. While it had not been possible to mobilize resources at short notice that would have allowed this to be a component of this project from the start, the current outlook was that

US\$ 1.7 million would be available in approximately one and a half years from now, so that activities could still be coordinated with this project at that stage.

3. REVIEW OF THE DRAFT REGIONAL PROJECT PROPOSAL

It is clear that the GEF project will not solve all of the problems related to vector-borne diseases or to their prevention and control in the entire Region. The remit and boundaries for the project are clear although the GEF project could be seen as an important entry point to initiate other related activities that would go beyond the strict reduction of future emissions of POP pesticides, including the strengthening of national capacities in the sound management of pesticides and of intersectoral mechanisms that would support environmental management for vector control. The capacity-building activities under the Project Brief could always be extended to other countries in the Region providing that additional funding was secured. The GEF is encouraging this, as it is a further multiplier effect of the resources it has put into the project. In this context, there could be a role for WHO Collaborating Centres in the Region with the additional benefit that this would help to strengthen such centres in their capacity to implement relevant activities.

In terms of coordination and management arrangements, at the national level intersectoral steering committees have already been established as part of the PDF-B phase and these will now evolve into new national steering committees, presumably with updated terms of reference for the implementation phase. National coordinators will be designated, and it is predicted that this process will be a joint effort between the governments of Member States and the WHO Regional Office as the executing agency. This means that governments will be invited to make several nominations and that a selection will be made by the national authorities and the WHO Regional Office. The national coordinators will be members of the project management team.

The Regional Director has requested the Steering Committee to consider the establishment of a regional STAC and to develop terms of reference for this Committee. The STAC would meet periodically with the national coordinators and with the regional project coordinator and the regional assistant project coordinator. The STAC's role would be strictly an advisory one and the Regional Office will have the executing role.

The costs of these arrangements are significant and ways of reducing costs are being explored. It has been agreed that in future communication with UNEP/GEF, the Regional Office will indicate, without any firm commitment, that it will explore possibilities for WHO to mobilize additional funds to take charge of the position of assistant project coordinator after the first 2 year period of the project.

The terms of reference for the STAC were the subject of an extended debate and the Steering Committee agreed on a formulation of these terms of reference that set out the responsibilities in a generic way and defined the requirements for STAC

members with respect to background, experience and skills, setting out the *modus operandi* of the Committee. Clearly, the STAC's advisory role would not be limited to scientific and technical issues but it could also advise on managerial issues, including re-allocation of funds to accommodate any unexpected challenges or windfalls. The terms of reference agreed by the Committee for submission to the Regional Director are presented in Annex 4.

Questions were raised with respect to the level of detail in the Project Brief, in particular in the section describing the demonstration project, with some members arguing that there needed to be a greater level of detail describing activities and an expansion of the indicators. The majority of the Committee felt, however, that the level of detail in the Project Brief was adequate, as it left room for the national teams to tackle issues in the local context, without an overly prescriptive protocol coming from the regional level. The current details are sufficient to allow for a sound budgeting process.

It was agreed that a reference to the WHO Centre for Environmental Health Activities (CEHA) would be included in the description of the various agencies involved. The following text was agreed upon for insertion in paragraph 31 of the Project Brief: "The Region also has a specialized WHO Regional Centre for Environmental Health Activities (CEHA) in Amman, Jordan. This Centre can provide technical assistance and support capacity-building activities for the eight participating countries, especially in the area of environmental management. The role of CEHA in this project will be to build on existing capacities in the Region and to focus on environmental management both in the demonstration projects and in national IVM capacity-building activities."

There was also a question of whether sufficient funds (US\$ 600 000) were available in the budget to deal with stockpiles of obsolete pesticides. This was acknowledged by members of the drafting group and it was pointed out that this was exactly the reason why the contacts with FAO had been pursued. Even discounting the countries that are part of the African stockpiles programme, the amount needed to be complemented by the funds that would eventually be mobilized by FAO.

4. COST-EFFECTIVENESS ANALYSIS

The subject of cost-effectiveness analysis was addressed at a special session of the meeting.

4.1 Cost-effectiveness analysis of vector control intervention: Guidelines for development and implementation

Mrs Tuula Pehkonen-Elmi

All economic evaluation techniques (cost-effectiveness analysis, cost-benefit analysis and cost-utility analysis) are decision-making tools for planners and

managers. In cost–benefit analysis, the benefits are expressed in monetary terms, making it a method that is less useful in the health sector. Decision-making principles include to only do those things where the benefits exceed the costs and not to do those things in which the costs exceed the benefits. In cost–utility analysis, the output is expressed in a multidimensional measure of health—the quality-adjusted life year. This assumes that health maximization is the only objective of health care and it ignores other benefits, such as the information generated or the equity achieved. In cost–effectiveness analysis, the output is expressed in a physical unit such as healthy life years gained or number of cases detected. It starts with a problem and a set of solutions (interventions) which are compared. The final decision-making is about identifying the alternative with the lowest cost per unit of health effect achieved.

In order to develop and use cost-collection tools, it is important to have clear definitions. Recurrent costs include personnel and other labour costs; supplies/materials used in intervention activities; recurrent costs of vehicles; recurrent costs related to buildings and their management; administrative costs; and other recurrent expenditures. Capital costs include vehicles in use, buildings in use, equipment in use and land in use.

For all these costs spreadsheets have been developed that can be considered for use in the demonstration projects in countries. The following recommendations have also been made:

- Plan the cost–effectiveness study properly.
- Seek the advice of an epidemiologist in designing effectiveness studies.
- Include in the project a capacity-building activity on how to carry out the cost–effectiveness analysis at the country level.
- Take note that the intervention will be the ultimate basic cost allocation unit.
- Collect baseline data using developed tools.
- Collect costs on DDT interventions using the developed tools or estimate the costs and/or establish control areas in project countries.
- Establish a central place/point in the district project coordinator’s office at the demonstration site or national coordinator’s office in the Ministry of Health.
- Organize accounting and payroll procedures in order that they provide all the data specified in the cost-collection forms.
- Keep all original vouchers or copies in files at the established central place/point. Ensure that this systematic process catches all contributions from the government, WHO and other UN organizations, donors and communities whether it is cash or in-kind at all administrative levels (region, province, district, community).
- Ensure that all paid staff keep a diary of their weekly/daily working time spent on different interventions. Plan and set up additional procedures for recording data on other labour, volunteers, community participation and costs related to this.

- Make sure that each vehicle has a log book in which distances travelled for each intervention are registered.
- Avoid the duplication of the recording of any cost.
- Using developed tools, collect the costs of alternative interventions on demonstration sites during the start-up and implementation phases.

4.2 Cost-effectiveness of vector control interventions

Dr Robert Bos

Economics is the science of opportunities foregone. Economic evaluation aims to compare different options to achieve a given objective in terms of the ratio of the inputs they require and the outputs they yield.

In essence, 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? Cost-effectiveness is a decision-making tool to generate sound economic justification for the selection of an action or a set of actions that contribute to achieving a stated objective in the most efficient way.

The sequential steps in cost-effectiveness analysis include: planning; estimating costs; measuring effectiveness; analysing costs and effectiveness of alternatives; and testing the sensitivity of assumptions and reporting.

The planning phase is particularly critical for cost-effectiveness analysis. It should be addressed rigorously in the proposed demonstration projects. It includes problem specification, identification of alternatives, deciding if an analysis is worthwhile, boundary definition and selecting a sampling strategy and preparing a plan of action.

In problem specification, a problem is defined, a desirable end-point in solving the problem is established and a set of possible and viable solutions is developed.

Then, all feasible alternatives to achieve the stated objectives are described in detail, ensuring they are of a similar scale and impact. Those alternatives with absolute constraints (financial, legal, temporal or ethical) are eliminated. For example, draining wetlands for vector control may be against existing nature conservation legislation. Those alternatives that have good economic returns are highlighted, this is often the case for vector control measures in agro-ecosystems, for example, improved water management may reduce vector populations, and at the same time, help increase agricultural yields. Options that have powerful political support must be included, however implausible they may be.

Cost-effectiveness analyses also require resources and it is therefore important to rapidly assess whether a specific analysis is really worthwhile. This involves

determining whether the cost or effectiveness implications of selecting the wrong alternative will be substantial, whether cost-effectiveness information can be obtained without excessive effort, whether there are usable results of previous analyses and whether the chances that the outcome of the analysis will effectively influence decision-making.

Boundaries for analyses include spatial, temporal and hierarchical limits, as well as a definition of stakeholder groups. The activities for each option are described in detail within the agreed boundaries.

Finally, a sampling strategy for cost estimation and effectiveness measurement is selected, a plan of action applying the strategy is drawn up and information collected at the central level, data sets at lower administrative levels are collected and the collection of data is returned to the central level to cross-check, verify and fill in remaining information gaps.

It is important to distinguish between financial and economic costs, and some of the main differences are presented in Table 1.

The estimation of costs requires an analysis of the outputs, outcomes and impacts of different interventions, in order to identify a common denominator that will make the comparison of the effectiveness indicators possible. The further advanced in the sequence of events the common denominator is, the less reliable it is, as a result of the increasing influence of confounding factors.

The needs for the EMRO/GEF project include the development and testing of cost-effectiveness tools for the selection of optimal combinations of interventions, and capacity building to carry out cost-effectiveness analysis. It was therefore proposed that the existing guidelines for cost-effectiveness analysis of vector control be reviewed. A meeting of vector control managers and health economists was organized and updated guidelines and tools that could support the process of cost-effectiveness analysis in the EMRO/GEF project and other GEF-supported projects were prepared, in addition to training material on cost-effectiveness analysis.

Table 1. Differences between financial and economic costs

Financial costs	Economic costs
Inputs purchased	All resources are employed Excludes money transfers (taxes and subsidies).
Market price of purchased goods	Opportunity costs of resource use Shadow prices if market prices do not reflect the true opportunity cost
Show funds required to cover cost and reflect whether the intervention is affordable	In combination with measures of effectiveness show whether the intervention is efficient

4.3 Discussion

In the ensuing discussion, the Committee re-affirmed the great importance of cost-effectiveness analysis as a key component in IVM and in the proposed Project Brief. Accuracy and user-friendliness were cited as the two attributes that guidelines and tools should possess. However, it was felt that the management of vector control programmes should not necessarily have the capacity to carry out these analyses in detail, but rather, that they should be aware of the technique and familiarized with its main concepts and also that they should be connected to academic institutions where the capacity for economic evaluation exists.

As cost-effectiveness is a recurring theme in the Project Brief, it was agreed that an annex should be added which provided a clear description of the concept and which outlined where it fitted in the Project Brief.

Interestingly, the Governments of Kenya, Tanzania and Uganda had formulated a proposal for GEF to develop a decision-making tool for alternatives in vector control with the universities of Pretoria and Duke in North Carolina which included this economic evaluation element. Efforts to develop guidelines and tools for these various interested parties should be combined.

The outcome of the discussion was that, while all participating countries should ensure that cost-effectiveness analysis is a substantial element in the national workplan in the context of this project, two countries should be selected where this analysis is performed in-depth and from where experiences and results can be disseminated to the other participating countries and to other countries in the Region.

5. CONCLUSIONS

The Project Brief and its annexes prepared by the expert drafting group and the amendments and additional annexes agreed by the Steering Committee at its third meeting, were unanimously endorsed and the remaining procedural steps required for its submission for GEF support could now be undertaken. All participating countries meet the requirement for ratification of the Stockholm Convention, and the Project Brief has a strong evidence base resulting from national vector control needs assessments and is in line with the WHO Regional Office policy for the promotion of integrated vector management (IVM).

With this endorsement, the Steering Committee had achieved its main objective, but could also continue to play a role in the further steps leading to the submission and expected approval of the Project Brief.

The GEF project can be considered as an entry point for other activities in the Region, in particular, the strengthening of country capacity in the area of sound management of pesticides, an area in which most countries continue to be deficient. It

can also be an entry point for the extension of IVM capacity building to those countries in the Region that are not part of the project.

Cost-effectiveness is clearly a critical aspect of the project as it is at the core of integrated vector management and its methods and procedures can be usefully field-tested in the context of the national demonstration projects. As such, it deserves special attention and effort with in-depth analyses conducted in two selected countries.

The PDF-B preparatory phase has resulted in a considerable volume of rich information, collected in a time frame that would not have been possible without GEF support. Some information (research and development, human resource base) was easier to generate than other information (policy framework, community involvement).

6. RECOMMENDATIONS

1. The WHO Secretariat and the UNEP/GEF Secretariat should undertake the necessary steps leading to the timely submission of the endorsed Project Brief to the Global Environment Facility.
2. The Steering Committee should remain functional and provide support to the process of submission and appraisal until a final decision on GEF support has been confirmed; in the case of approval of the Project Brief, the Steering Committee should hand over its responsibilities to the project's Scientific and Technical Advisory Committee at the initial meeting for the project.
3. Members of the WHO and UNEP/GEF Secretariat should maintain close contact with the Plant Protection Division of FAO concerning joint activities for the management of public health pesticides, including safeguarding of POPs-containing pesticide wastes and life-cycle management of pesticides in use.
4. The Chair of the Steering Committee should submit the terms of reference for the Scientific and Technical Advisory Committee to WHO Regional Director for his consideration, and members of the Steering Committee should propose possible candidates for membership to the Chair for consideration by the Regional Director.
5. The project should be used as an entry point to strengthen the capacity of Member States in the Region in the area of sound management of pesticides and the application of environmental management, in line with the findings of the vector control needs assessments and should provide leverage in the process of mobilizing additional financial resources for activities to address the capacity needs in these areas.

6. WHO should make arrangements for the accelerated development of cost-effectiveness guidelines and tools through organizing an expert consultation to review existing guidelines and tools, leading to the preparation of a cost-effectiveness analysis tool kit. This material should be available at the start of the project.

In reviewing the recommendations made at its second meeting and their progress in terms of implementation, the Steering Committee reiterated the following recommendations:

7. 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.
8. 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 2007 regional committee meeting, possibly under a specific IVM agenda item.
9. 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/RC.52/R6 (2005), starting with the application of the updated VCNA guidelines.
10. 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.
11. 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.
12. For the regional GEF Project Brief, collaboration with FAO should be pursued, particularly in the area of stockpile management and elimination.
13. 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.
14. 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.

15. 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.
16. Donor profiling should be carried out by the Regional Office in consultation with the Steering Committee in order to target specific donors with specific versions or components of the regional IVM strategy.
17. WHO should explore with the GEF Secretariat options to become an executing agency with expanded opportunities, with special reference to the Stockholm Convention.

Annex 1

AGENDA

1. Registration
2. Opening remarks
3. Objectives of the meeting, method of work and nomination of a Rapporteur
4. Review the general progress of the implementation of the regional project
5. Present and review the draft regional Project Brief (full project proposal)
6. Finalize and endorse the full regional project proposal for submission to UNEP/GEF
7. Arrangements for continued support to the proposed regional project
8. Conclusions and recommendations
9. Closing session

Annex 2

PROGRAMME

Tuesday 13 March 2007

8:30–09:00	Registration	
9:00–10:00	Opening session	
	<ul style="list-style-type: none"> • Welcome remarks • Opening remarks by Dr Zuhair Hallaj, Chairman of the GEF Steering Committee • Introduction of participants • Adoption of the proposed agenda and programme • Election of Rapporteur 	<i>Dr I. Betelmal, WR/Syrian Arab Republic</i>
	Briefing on the EMRO/GEF project	
10:00–10:30	Progress towards the development of a regional full project proposal	<i>Dr A. Mnzava</i>
10:30–11:00	Presentation of the draft regional full project proposal	<i>Dr R. Bos</i>
11:10–12:00	Update on recent developments regarding funding by GEF	<i>Dr J. Betlem</i>
12:00–14:00	Discussion	
	Reviewing draft regional project proposal	
14:00–16:30	Discussion and comments on the draft regional project proposal	<i>Dr Z. Hallaj</i>
16:30–17:00	Cost-effectiveness analysis of vector control interventions	<i>Dr R. Bos</i>
		<i>Mrs T. Pehkonen-Elmi</i>
17:00–17:30	Discussion	

Wednesday 14 March 2007

09:00–14:00	Incorporation of comments on the project document	<i>Plenary</i>
14:00–16:15	Next steps: Arrangements for continued support to the project	<i>Plenary</i>
16:15–17:15	Conclusions and recommendations	
17:15–17:30	Closing session	

Annex 3

LIST OF PARTICIPANTS

Members of the Steering Committee

WHO/EMRO

Dr Zuhair Hallaj

Chairman of the WHO/UNEP Project Steering Committee

WHO/EMRO

Cairo

Dr Hoda Atta,

Regional Adviser Roll Back Malaria

WHO/EMRO

Cairo

Dr Abraham Mnzava

Scientist

Roll Back Malaria (Vector Control)

WHO/EMRO

Cairo

EGYPT

Dr Muhammad Z. A. Khan

Director

WHO Centre for Environmental Health

Activities (CEHA)

Amman

JORDAN

WHO/HQ

Dr Robert Bos

Scientist

Water Sanitation and Health

Department Public Health and Environment

Geneva

Dr Morteza Zaim

Scientist

WHO Pesticide Evaluation Scheme

Vector Ecology and Management

WHO/HQ

Geneva

Dr Jacob Williams (unable to attend)
Scientist
WHO Secretariat on Public Health
Innovation, Essential Health Research and
Intellectual Property
Geneva

Dr Elil Renganathan (unable to attend)
Executive Secretary
WHO Secretariat on Public Health
Innovation, Essential Health Research and
Intellectual Property
Geneva

SWITZERLAND

Other countries

Dr Farah Ali Ainan (unable to attend)
Secretary General
Ministry of Water and Irrigation
Djibouti
DJIBOUTI

Dr Salim Al-Wahaiby (unable to attend)
Director
Environmental and Occupational Health
Directorate of Environmental and Occupational Health
Ministry of Health
Muscat
OMAN

Dr Btissam Ameur
Head of Vector Control Service
Directorate of Epidemiology and Disease Control
Ministry of Health
Rabat
MOROCCO

Dr El Fatih Mohamed Malik
Director
National Malaria and other Vector-borne
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Federal Ministry of Health
Khartoum
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Representatives of other organizations

Dr Jan Betlem
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UNEP Division of GEF Coordination
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Dr Taher El-Azzabi
Regional Plant Protection Officer
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Food and Agriculture Organization of the
United Nations (FAO)
Cairo
EGYPT

Invitees to the opening session

Dr Mahmoud Karim
Director, Environmental and Chronic Diseases
Ministry of Health
Damascus

Dr Atef Al Tawil
Head, Environmental Health Department
Ministry of Health
Damascus

Dr Nasir Ajlani
Manager, Malaria and Parasitic Diseases Department
Ministry of Health
Damascus

Dr Intisar Fouad Mardini
Ministry of Housing and Construction
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SYRIAN ARAB REPUBLIC

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Dr Ibrahim Betelmal, WHO Representative, Damascus, Syrian Arab Republic
Dr Mohamed Aideed Elmi, Regional Adviser, Food and Chemical Safety, WHO/EMRO, Cairo, Egypt
Dr Ghasem Zamani, Medical Officer, Roll Back Malaria, WHO/EMRO, Cairo, Egypt
Dr Ali Nasser Hassan, Professor, Institute of Environmental Studies and Research, Ain Shams University, Cairo, Egypt
Mrs Tuula Pehkonen-Elmi, WHO Temporary Adviser, WHO/EMRO, Cairo, Egypt
Dr Messay Fettene Gebremariam (unable to attend), WHO Temporary Adviser, Addis Ababa, Ethiopia
Mr Mohamoud Wais, RBM Coordinator, WHO/Sudan, Khartoum, Sudan
Dr Jeylani Abdullahi Mohamoud, RBM Technical Officer, WHO South Sudan, Nairobi, Kenya
Dr Mohamed Ali Khalifa, Medical Officer, WHO/Yemen, Sana'a, Yemen
Ms Nahla Ibrahim, Secretary, Division of Communicable Disease Control, WHO/EMRO, Cairo

Annex 4

PROPOSED TERMS OF REFERENCE**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 Yemen.

The objectives of the project are to:

- demonstrate the viability, availability, sustainability and cost-effectiveness of the alternatives to DDT;
- strengthen national capacities for the planning, implementation and evaluation of vector control alternatives to DDT, based on the principles of integrated vector management (IVM);
- strengthen national capacities for the sound management of DDT and other public health pesticides and safeguarding of POPs-containing pesticide wastes;
- disseminate good practices and demonstrate 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 for this STAC, it defines the criteria for the selection of STAC members and gives general guidance on the *modus operandi* of the STAC.

Terms of reference

Following are the terms of reference for the members of the STAC for 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 workplans 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 advice 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 projects.
- To give advice on all challenges, constraints and problems encountered in the implementation of the national workplans 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 interagency coordination and coordination between different sectors at the national level in support of the implementation of the project.
- To advise the WHO Regional Office, based on 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

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.

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 postgraduate degree in the area of expertise. It is also an asset to have served on WHO or other UN expert panels.

Members of the STAC must be fluent in English, as the official language of STAC meetings will be English.

The STAC will comprise five core members, designated for the entire period of the project by the Regional Director of WHO Regional Office for the Eastern Mediterranean. The Chair will be appointed by the Regional Director. The STAC has the possibility of co-opting 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 costs incurred by STAC activities will be covered from the project budget.