WHO-EM/MAL/337/E

Report on the

Second meeting of the Steering Committee for the regional WHO/UNEP project supported by the Global Environmental Facility

Damascus, Syrian Arab Republic
11–12 November 2006

World Health Organization
Regional Office for the Eastern Mediterranean

Document WHO-EM/MAL/337/E/01.07/70

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EXECUTIVE SUMMARY

A project entitled "Demonstration of sustainable alternatives to DDT and strengthening of vector control capabilities in 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). 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 by March 2007. Access to full project support is based on the country having ratified the Stockholm Convention on Persistent Organic Pollutants (POPs).

To provide technical guidance and independent appraisal to the project formulation process, a steering committee was established that met for the second time 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. The steering committee also provided guidance on the way forward, based on the inputs received from the countries, to arrive at a regional Project Brief for submission to GEF and a further elaboration of the implementation of the regional IVM strategy. The steering committee carried out these tasks with the assistance of WHO field staff and consultants.

During the meeting, the steering committee reviewed the reports and proposals received for each individual country, and made recommendations for their further strengthening and completion to be conveyed to the country teams by the assigned facilitators. The steering committee also concluded that countries should be asked to complete their GEF proposals in light of sharpened GEF criteria so that a small drafting group could then prepare the final regional Project Brief in line with the GEF criteria and expectations. It was agreed that countries would be asked to complete their GEF proposals by 31 December 2006 – the drafting group of the Project Brief would meet in the last week of March 2007.

With respect to the national IVM strategies, the steering committee concluded that progress in this area should now be disseminated to all other countries in the Region, and countries thus far not involved should be encouraged to follow the same process. This would require mobilization of the necessary funds to support countries in the transition from conventional vector control programmes to IVM programmes.

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.

1. BACKGROUND

A project entitled "Demonstration of sustainable alternatives to DDT and strengthening of vector control capabilities in 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). This regional project (2006–2007) covers the following countries of the Eastern Mediterranean Region: Djibouti, Egypt, Islamic Republic of Iran, Jordan, Morocco, Sudan, Syrian Arab Republic and Yemen. A total of US$ 650 000 has been made available to support these countries in developing full project proposals for submission by March 2007. Access to full project support is based on the country having ratified the Stockholm Convention.

At its 52nd Session, the WHO Regional Committee for the Eastern Mediterranean adopted resolution EM/RC52/R.6 promoting integrated vector management as the vector control approach of choice. In parallel, UNEP/GEF provided PDF-B funding to support the preparatory phase towards a full regional project on the reduction of reliance on DDT in compliance with the Stockholm Convention. Through the vector control needs assessment procedure, this has resulted in two related, yet distinct documents for each of the eight countries: a national IVM strategy and a proposal for the achievement of the GEF DDT goals, which is part of the Stockholm Convention National Implementation Plan and should be considered for inclusion in the final regional Project Brief.

Over the past six months, the GEF criteria have been sharpened. In the first instance, the key evaluation criterion of the GEF secretariat is the reduction, in absolute terms, of the global DDT burden through the reductions in its use for vector control and the disposal of stockpiles. The majority of countries concerned are not using DDT at the moment, though several have interrupted the use only recently, but there are quite a number of countries with stockpiles or with DDT transit issues. In second instance, the possibility that countries in the Region will revert to DDT as the only affordable vector control option is real, in view of the continued heavy vector-borne disease burden and of the risk of possible epidemic outbreaks.

In this context, the inadequate knowledge base on suitable, effective and efficient alternatives is the main limiting factor for keeping DDT use under control. Therefore, demonstration projects in specific eco-epidemiological settings, to test the transmission risk reduction potential of such alternatives and their cost-effectiveness vis-à-vis DDT indoor residual spraying could also be considered by GEF, with appropriate capacity-building and information dissemination activities embedded into them.

2. INTRODUCTION

The second meeting of the Steering Committee of the project was held in Damascus, Syrian Arab Republic on 11 and 12 November 2006. This meeting built on the recommendations of the first steering committee meeting in Muscat in March 2006 and aimed to review the results of national VCNAs and the criteria applied in the selection of demonstration project sites for alternatives, and to provide strategic directions in addressing national capacity gaps and opportunities. The aim of the meeting was also to set a roadmap for the completion of the PDF-B phase and to give directions on the further Region-wide development of the IVM strategy and its funding. Nine members of the steering committee were present; the remaining members were unable to attend. The meeting was also attended by concerned staff of the countries implementing the project, several observers and by staff of WHO and UNEP.

Dr Fouad H. Mujallid, WHO Representative, Syrian Arab Republic, opened the meeting with remarks from Dr Hussein A. Gezairy, WHO Regional Director for the Eastern Mediterranean. In his remarks, Dr Gezairy focused on the position of the WHO Regional Office for the Eastern Mediterranean with regard to the use of DDT for vector control. Countries of the Region had never deliberately attempted to phase out the use of DDT for vector control; however, WHO advised its use be restricted to indoor residual spraying, provided this was effective and would do no harm. This position was fully compatible with the obligations of Member States under the Stockholm Convention.

Dr Hoda Atta, WHO/EMRO, and Dr Zuhair Hallaj, WHO/EMRO, were elected Chair for the first and second day, respectively. Mr Robert Bos, WHO/HQ, was elected Rapporteur. The proposed agenda and programme of work were approved, with several amendments. The Steering Committee added an agenda item, "lessons learned from the use of the vector control needs assessment guidelines", in light of the importance of using these experiences in the further development of the guidelines and their use in other WHO Regions. It was also agreed to address issues relevant to other countries in the Region that were not eligible for GEF funding whenever appropriate. The original agenda is attached as Annex 1. The programme and list of participants are attached as Annexes 2 and 3, respectively.

The WHO Secretariat provided relevant information on progress in the ratification process of the Stockholm Convention. Sudan had ratified the Convention since the first Steering Committee meeting, leaving the Islamic Republic of Iran as the only country among those participating in the project where the process was not yet completed.

3. GENERAL PROGRESS IN PROJECT IMPLEMENTATION

3.1 Review of events and their outcomes

Dr A. Mnzava, WHO/EMRO

When the steering committee met for the first time in Muscat in March 2006, the project objectives were to:

- reduce reliance on DDT without increasing the vector-borne disease burden;
- demonstrate the viability of cost-effective alternatives in selected sites;
- develop national capacity for planning and implementation of vector control through integrated vector management (IVM), as endorsed by the WHO Regional Committee;
- coordinate the dissemination and sharing of country experiences (in the Eastern Mediterranean Region and globally).

The main focus of the terms of reference of the steering committee was on providing guidance for the PDF-B preparatory phase and for the subsequent formulation of the Project Brief. Three meetings of the steering committee were foreseen: the initial review and agreement on national work plans (Muscat, March 2006); the current mid-point review of the PDF-B implementation (VCNA results, selection of demonstration project sites); and the completion of the Project Brief and confirmation of intention and commitment (the Project Brief will be drafted by a group of not more than four experts in February 2007).

Since the first steering committee meeting, the following actions have been undertaken and completed:

- VCNA tools have been finalized and translated into French for French-speaking countries.
- Meeting reports have been finished and distributed to participants and to UNEP/GEF.
- Progress reports have been submitted to UNEP/GEF and subsequent instalments released for project activities.
- Countries have been supported in carrying out VCNAs.
- Countries have established intersectoral committees, adapted tools and guidelines and recruited consultants to assist them.
- Funds have been provided to the countries and the national VCNAs have been carried out and analysed.
- All the reports that emerged from these activities were provided to the participants of the present meeting on a CD ROM as background documents.

The analysis of the VCNAs was intended to serve the identification of needs, gaps, and opportunities for IVM with respect to the following points:

- policy and legal environment;
- infrastructure, human resources and financial resources;
- intersectoral coordination and collaboration;
- vector control planning and implementation;
- community participation and involvement.

Based on these analyses, countries had drafted national IVM plans and WHO/GEF proposals to feed into the regional proposal. It was important to clarify to all participating countries that any support from GEF would not be for their individual national proposals, but would go to a consolidated regional project.

The IVM strategic plans stemmed from WHO Eastern Mediterranean Regional Committee resolution EM/RC52/R.6, which acknowledged IVM as the approach of choice in vector control. The plans are needed to ensure that national capacity to implement this approach is strengthened and cost-effectiveness analyses of different vector control options are promoted. Countries were asked to develop a vision of where their vector control activities would be in five years, to develop indicators for this vision, to strengthen their capacity for monitoring and evaluation and to provide an estimated budget.

Testing sustainable alternatives to DDT through demonstration projects at different eco-epidemiological sites should be the focus of countries' inputs to the regional GEF proposal. These inputs should identify demonstration sites based on clear criteria for selection. They should estimate co-financing in cash and kind, and indicate the incremental costs for implementing alternatives.

Proposals submitted by countries should receive a national endorsement by all stakeholders involved. Questions to be asked by the steering committee include: Was a national consensus workshop held? If not: why not? What was the stakeholder composition – were all relevant stakeholders represented at the workshop? What were the major conclusions and recommendations? Were the various outputs endorsed by the stakeholders? If not: why not? What would be the next steps?

From the Regional Office perspective, a number of valuable lessons have been learned over the previous seven months:

- The countries that complied have collected, for the first time, comprehensive and useful information on their vector control situation.
- Through the exercise, the strength of working with other sectors has been recognized.
- The work done highlights the role of vector control in the prevention and control of vector-borne diseases other than malaria.
- The need to transform conventional vector control into IVM programmes has been recognized.

- Countries have developed a vision where they want their IVM programme to be in five years from now.
- Awareness of the importance of advocacy for resource mobilization and for political commitment has increased considerably.

Countries' efforts have, however, also demonstrated weakness in country-level intersectoral coordination, even though resolution EM/RC52/R.6 clearly stated that ministries of health were to take the lead in intersectoral coordination and action for IVM. There is an apparent lack of leadership to guide the process, and a lack of confidence to take up this leadership role.

A summary of the expenditures of the GEF PDF-B funds and what they have covered shows that 62% of the funds received have been spent in specific country activities, and 38% for intercountry activities (mainly to cover the two steering committee and two regional meetings), while the implementation rate has been 82.7%. Given that the project started rather late due to administrative formalities between the executing (UNEP) and implementing (WHO) agencies, such a high implementation rate is a success.

Discussion

In the new four-year phase of GEF (GEF-4, 2007–2011) there will be an increased focus on regional projects at the expense of national ones. But the new GEF policy framework also tightens the criteria for support (see section 2.2 below), so the final regional Project Brief will be evaluated for the impact it will have on the reduction of DDT use. Broader objectives, such as the overall reduction of reliance on pesticides or the general issue of capacity strengthening towards sound management of pesticides are not relevant in that context. Innovation to reduce the global DDT burden is the final goal, and project proposals will be judged on their cost-effectiveness in this connection: maximum reduction of the DDT burden at minimal cost.

It is therefore important to make a distinction between the regional IVM strategic plan and the GEF component therein. Such GEF components will have to conform with the exact wording in the Stockholm Convention. Countries were asked to develop their IVM plan with a five-year vision; GEF support will be over a five year period. Nonetheless GEF support will not be enough to cover the entire IVM plan. This therefore underscores the need to mobilize other sources of financial support. Any additional co-financing raised will also have an impact on the level of GEF support.

The amounts proposed for the GEF projects cannot be included in the WHO country budgets – the GEF Project Brief is to be submitted as a regional initiative. Since the focus of the GEF project is on alternatives to DDT, there should be an

emphasis on environmental management as a proven, sustainable and cost-effective non-chemical approach to vector control.

One benefit of this GEF-supported preparatory phase is that national data were collected over a period of six months that would otherwise have taken years to accumulate. The only bottleneck has been the timely disbursement of funds to sustain the activity's momentum.

3.2 Opportunities for accessing UNEP/GEF funds and the draft format for full project proposals

Dr J. Betlem, UNEP

The elimination of POPs is one of the focus areas of GEF: it provides funding to cover the incremental costs of actions by developing countries and countries with economies in transition that support the global GEF goals. GEF implementing agencies are the United Nations Development Programme (UNDP), UNEP, and the World Bank (the latter only for large investments). Executing agencies with expanded opportunities receive GEF funds to contribute to the management and execution of GEF projects and include the Asian Development Bank (ADB), the African Development Bank (AfDB), the Inter-American Development Bank (IADB), the European Bank for Reconstruction and Development (EBDR), the Food and Agriculture Organization of the United Nations (FAO), the United Nations Industrial Development Organization (UNIDO) and the International Fund for Agricultural Development (IFAD). This designation allows them limited direct access to GEF funds, based on specific negotiated allocations.

Key roles for UNEP in GEF include catalysing the development of scientific and technical analysis and advancing environmental management in GEF activities, and guidance in relating GEF activities to environmental assessments, policy frameworks and plans, and environmental agreements.

During the next phase (GEF-4, 2007–2011), activities will shift from preparation to implementation. This phase has the following strategic objectives with respect to POPs:

- National implementation plan (NIP) programme development and dissemination of best practice – NIPs prioritize needs in countries and this is a key criterion for GEF support. This includes enabling activities and some knowledge management projects focused on disseminating practices.
- Strengthening capacity for NIP implementation.
- Partnering in investment for NIP implementation.
- Partnering in the demonstration of feasible, innovative technologies and practices for POPs reduction.

The fourth objective – demonstration projects (including limited coverage of capacity building and knowledge generation and management) – is critical for the current Eastern Mediterranean regional project.

There will be a strong emphasis on the sustainability of GEF interventions. In the POPs context this means a focus on those countries whose policies and actions demonstrate their firm intention to follow through in their commitments to the Stockholm Convention.

An overview of the allocation of GEF-4 funds to different focal areas shows that the focal area of POPs is still in its start-up phase, while the largest proportions of funds have gone to the focal areas of international waters and biodiversity.

In the NIP project cycle, situation analysis leads to priority actions, which are captured in an action plan. This is implemented as a project and the impact then influences the country situation. It is important from the standpoint of GEF that the global environmental benefit be measurable. Criteria for eligibility for GEF support are twofold: countries have to be party to the Stockholm Convention and they should have a NIP that can serve as the basis for the proposed action plan.

GEF finances only incremental costs, and was never intended to be the only source of funding. All actions must be cost-effective, so that maximum global environmental benefit may be achieved at the lowest possible cost.

Issues to be aware of for GEF funding include:

- The project cycle is lengthy.
- The incremental cost should be calculated correctly (GEF funds will cover the global element of new and additional costs).
- GEF support concentrates on new and innovative activities rather than investments.
- There are increasing difficulties in co-financing as well as donor fatigue.
- A Resource Allocation Framework (RAF) has now been applied, but is not yet valid for POPs (RAF is the overall GEF funding that could be maximally allocated to a country).

Discussion

The key issue that came out of the discussion was that GEF policies and procedures have evolved over the last six months. This evolution and the new funding situation of GEF under GEF-4 require an adjustment of the outlook on GEF support for the project in the Eastern Mediterranean Region: US$ 8–13 million is no longer realistic, whereas a floor of US$ 2 million, with the possibility that the amount might be higher depending on effectively justified plans, is.

To reiterate: GEF support will go to those components that will lead to a real reduction in the global POP burden. So while WHO might be interested in the reduction of reliance on pesticides that pose a risk to public health in general, GEF interest is only in the reduction and elimination of the eight POPs pesticides which, in the case of vector control, effectively means DDT.

This means that interruption of current use of DDT and the elimination of stockpiles of DDT are first order actions, while demonstration projects on the effectiveness and affordability of alternatives are second order. General capacity strengthening in vector control cannot be supported by GEF, but capacity building specifically required for the successful implementation of alternatives to DDT can be embedded in the demonstration projects. In countries where currently no DDT is used in vector control, there should be a clear rationale and justification of the likelihood that governments might decide to revert to indoor residual spraying with DDT for public health and economic reasons.

The implications of this information were considered by the steering committee and various suggestions made to deal with the new situation. Applying for support from other focal areas of POPs is not an option, as they have their own priorities; neither is partnering with the World Bank's GEF Coordination Division, because the Bank only deals with large infrastructural investments. One possible solution to deal with the limited funds is to review the project for a staggered implementation.

Economic evaluation plays a critical role in the further development of the Project Brief for GEF. The IVM approach calls for the cost-effectiveness of the package of vector control measures in specific settings, and the GEF POPs approach also mentions the need for cost-effective solutions to reduce the global DDT burden. It is therefore important to involve an economist in the final conceptualization of the plans.

It was noted that at this meeting the identification, management and elimination of stockpiles of DDT has re-appeared on the agenda. At the first steering committee meeting the GEF representative had separated this component from the development and testing of DDT alternatives in specific settings. The new GEF policies have now brought it back to the table.

Clearly, this is an area that will need close collaboration with FAO, which has been active in the area of agricultural pesticide stocks for some time now. WHO/FAO partnership in the elimination of stockpiles (as also foreseen in the 1999 WHO DDT Action Plan), supported by GEF, could include the identification and preparation of inventories of DDT stockpiles, targeted training in elimination procedures, arranging for export and destruction. The administrative and contracting parts could be left to FAO.

Other areas for which contacts with FAO already exist and can be strengthened further include sound management and judicious use of pesticides, the coordination of integrated pest management (IPM) and IVM in agro-ecosystems and the promotion of IVM messages through agricultural extension programmes and farmer field schools. In line with the recommendations of the steering committee, the GEF representative agreed to contact his FAO counterpart and convey the interest in a WHO/FAO/UNEP partnership on this. Sources of co-financing, such as Strategic Approach to International Chemicals Management (SAICM), should also be explored.

It was suggested that intersectoral linkages at the national level are being confused because of the strict assignment of roles and responsibilities to sectors. The issues of sectoralism and single ownership (for example, ministries of environment felt a strong ownership of NIPs) are counter-productive to intersectoral action. It is important to ensure proper briefing and updating of the ministers of environment and health about the issues at stake and their progress.

With the limited GEF-4 POPs funding available, proposals will have to compete in cost-effectiveness. With a clearer focus than before on the elimination of the global POPs burden, the GEF secretariat is concerned with the per unit costs of elimination of POPs: those proposals containing the most efficient ways of elimination will score high in the evaluation. Sustainability is a secondary consideration.

4. REVIEW OF COUNTRY REPORTS

4.1 Overview

The steering committee spent the largest part of its meeting reviewing the country documents that had been submitted. It started by exploring the cross-cutting issue of intersectoral collaboration, essential to the success of the project.

Achieving effective intersectoral coordination and action continues to be a challenge in all countries. The complexity of this approach has again come to light in the context of the avian flu crisis.

One of the real problems with respect to sustained intersectoral action is the turnover in staff, which entails regular updating of new staff in their roles and responsibilities in the intersectoral context. This was, for example, a major obstacle to the VCNA work in Egypt and Yemen. Personality issues also played a role, and bringing together the various sectors over certain issues intensified frictions over territorial disputes, such as the responsibilities with respect to pesticide management.

In Morocco, the success of the intersectoral support for the VCNA process was due to establishing very clear and detailed agreements on the distribution of responsibilities and to having strong leadership in each of the areas identified.

In the Islamic Republic of Iran the lack of intrasectoral collaboration has been identified as an issue, as there is strong compartmentalization in the Ministry of Health itself; this is true, to a greater or lesser extent, in most countries of the Region.

Several countries lack strong focal points for POPs activity. Such focal points should play a role in the formation of intersectoral committees and should ensure that when they are established they are given clear terms of reference. Where the Ministry of Health takes the lead, it should be ensured that other ministries assign the right people in terms of both area of expertise and administrative level. The steering committee recognizes that many countries lack adequate capacity in project formulation.

The Ministry of Health should not always take the lead. Sometimes, intersectoral committees may be established under the Prime Minister's Office, as long as this does not lead to partners passing responsibilities to one another.

Vector-borne diseases are gaining importance in the Region. There has been an explosive outbreak of dengue in Pakistan, and outbreaks are ongoing in Saudi Arabia, Yemen, Sudan, Djibouti and Somalia. Crimean–Congo haemorrhagic fever (CCHF) is a key emerging disease, while leishmaniasis is endemic. Malaria is still prevalent everywhere and many areas continue to be receptive. Yellow fever has returned to Sudan after 40 years of absence. Pesticides are being used everywhere and by every sector – even at household level their use is on the rise – but most countries lack proper regulatory frameworks. The demarcation between the rural and the urban setting had disappeared, as has been observed in the case of avian influenza. Meanwhile, the sectoral fragmentation of government makes it impossible to achieve a coherent national programme.

It is therefore critical that IVM strategies and inputs into the GEF proposal really reflect the views of all stakeholders and that they represent intersectoral ownership. While tactics to achieve this might differ from one country to another, the overall strategy should remain the same.

On a more practical note, the investment made in the VCNA exercise has paid off handsomely; more information has been collected in less time than ever before, in parallel, in eight countries. The reports, after completion, should be compiled and publicized; emulation of the exercise in other regions is desirable. A consolidated report should be submitted to the 2007 Regional Committee meeting, under a specific agenda item. In addition, summaries of the VCNA reports should be published in a special edition of the *Eastern Mediterranean health journal*. The VCNA has proved its value in providing countries with entry-points to position themselves more strategically in the promotion of vector control.

4.2 Djibouti

The report of Djibouti was presented by the WHO Medical Officer based there. The VCNA was carried out by an intersectoral team, consisting of representatives of the ministries of health, agriculture and environment. It was supported by a WHO consultant. The report was completed with inputs from the Ministry of Environment – the current Minister of Health used to be Minister of Environment, and his personal efforts have clearly played a role in bringing the different sectors together.

Djibouti lacks even the most rudimentary capacity for vector control. Vector control is carried out by the central Vector Control Unit of the Ministry of Health (one technician entomologist, eight health agents and one social mobilization technician). Its main activities comprise larviciding, outdoor spraying and distribution of long-lasting insecticide-treated bednets. No indoor residual spraying has been done since 1996, for lack of funding, and efforts to apply biological control (larvivorous fish) have been abandoned. There is only a small degree of community involvement in vector control.

Djibouti has no policy framework for vector-borne disease control and currently environmental policies do not address vector control and pesticide management; there is no policy harmonization between different departments in the Ministry of Environment. The Ministry of Agriculture has no policies at all with respect to pesticide management. Research capacity is weak and there is no updated mapping of vector species. Training capacity at country level is non-existent; the only health care training facility in Djibouti is for nurses and laboratory technicians. The entomology laboratory has been abandoned, and has been non-functional for the last six years.

While there is no surveillance and monitoring, malaria, leishmaniasis, dengue, West Nile virus, chikungunya and yellow fever are known to be present. The Ministry of Environment applies pesticide management practices, but there is no link between pesticides and public health.

The FAO representative commented that there are no IPM activities in Djibouti, yet WHO confirmed that Djibouti will shortly receive support from the Global Fund to Fight AIDS, Tuberculosis and Malaria. Also the United States Naval Medical Research Unit 3 (NAMRU-3) has carried out research on vectors in Djibouti.

Djibouti is important in the transit of DDT to neighbouring countries, and there is no regulatory framework to check on the illegal trans-boundary flow of DDT back into the country.

4.3 Egypt

The WHO consultant supporting the work in Egypt has also made two missions each to Jordan and the Syrian Arab Republic, a total of three weeks for each country. His account combines experiences from the three countries.

The process of working with these countries included liaison with national focal points, draft plans of action, in-country missions, review and adaptation of VCNA tools, data collection, field visits, literature review (national and international), assessment of data and information, report writing and the organization of national consensus workshops to amend and complete the reports.

Generally, it is clear that this has been a totally new experience for all countries. Initially, there was a defensive attitude towards the assessment process. Levels of communication, language barriers and involvement of senior staff all varied between countries. In Egypt and the Syrian Arab Republic the national focal points changed during the process.

The assessments were carried out using the VCNA tools, and provided a detailed analysis of needs, gaps and opportunities for the implementation of vector control. Based on the VCNA guidelines a flowchart approach was included looking at inputs, primary impacts, secondary impacts and outcomes, while a problem tree was developed to assist with prioritization.

Major constraints included a lack of awareness, ministerial rules about the use of funds and tardiness in funds disbursement. With respect to the latter it was suggested to create a special fund that would make disbursement easier.

The three countries represent those where malaria control is in the maintenance phase and where no DDT is used. Clearly, in evaluating the proposals from different countries it is important to look at the reality and ensure that funding is targeted where the needs are greatest.

Leishmaniasis continues to be a public health problem in all these countries, and there is a real risk of malaria epidemics. For both diseases health authorities might revert back to DDT as the most affordable public health pesticide. Moreover, stockpiles of DDT remain in the three countries.

The situation in these three countries makes it clear that Region-wide funding of IVM strategies will need to mobilize funds from other sources apart from GEF. (At its first meeting the steering committee excluded schistosomiasis because it has no link to DDT).

The steering committee specifically discussed the report produced by Egypt, which had improved very much over the first draft. Yet it was still occasionally

necessary to return to the VCNA guidelines to understand the flow of information in the report. With respect to the burden of vector-borne diseases in Egypt questions were raised on the authenticity of the figures. For example, ten reported cases of malaria in 2005 were known to WHO, yet in the report there is a mention of 200 cases. Some figures given were of secondary importance, such as the numbers of cars and amount of spraying equipment, yet other, more essential parts of the guidelines were not addressed. Numbers were given for training, but it was not specified what people had been trained in. Clearly, the problem analysis needed a lot more work and most importantly, the work needed to be completed by a team, not by a single person.

4.4 Jordan

Reference is made to the previous section for the observations made by the consultant on Egypt, Jordan and the Syrian Arab Republic. In line with the recommendations made in Oman, the Jordan report was prepared in three parts, all of which were discussed and endorsed by the intersectoral committee. The three parts were well prepared and well documented.

The VCNA report contained an elaborate situation analysis. The section on intra- and intersectoral collaboration showed good coverage of the collaboration within the Ministry of Health, but the intersectoral part was weak and needed strengthening.

The GEF and IVM reports showed that most vector-borne disease cases were imported cases. This places Jordan in the group of countries where vector control is mainly for maintenance and to respond to epidemics should they occur. It was therefore important to strengthen the rationale for GEF funding. Intersectoral collaboration was done through a national committee which was stated to have a number of problems; the nature of these problems remained, however, unclear.

National strategy itself was still a draft and had not yet been adopted by the intersectoral committee. The strategy required an estimated US$ 10 million, but there was no breakdown of what part would come from the government and in what way, begging the question of what other potential sources could be.

The reports should have had more emphasis on vector surveillance, stratification and risk estimation, and also mapping needed strengthening. The staff needs tables appeared to include different professional categories, and there were discrepancies between the staffing needs cited in various parts. The costs of the demonstration site work should have been compared for their cost-effectiveness to general health sector activities in the country; some of the national figures on the health sector budget also needed checking.

Finally, the Jordan report indicated that the control of houseflies was done by spraying. Houseflies are one of the key vectors that show early pesticide resistance

and therefore this is a strategy that should be questioned. Environmental management should be the basis. Resistance prevention and management should be a joint concern of the health and agriculture sectors.

4.5 Islamic Republic of Iran

The VCNA report prepared by the authorities of the Islamic Republic of Iran contained a great deal of information and the proposal set goals that may, realistically, be achieved. The report did not provide detailed information on the procedures followed and tools used in the needs assessment. It was also not clear from the report if the required national consultative meeting with different stakeholders had been held. These two pieces of critical information were missing.

While needs, gaps and opportunities were identified in the report, an analysis of these elements was missing and this reduced the concrete and practical value of the needs assessment.

The VCNA covered the five areas of assessment requested. Under policy frameworks certain policies were identified, but reference to key legislation relevant to vector control was left out. This legislation and its translation into national strategies and programmes were lacking. The VCNA guidelines should have asked more explicitly for information on legislation.

In the section on structure, resources and functions the place of vector control was well identified, with details about the communication between the various administrative levels. Malaria, leishmaniasis and CCHF constituted the main disease burdens. There was no central unit to coordinate vector control activities, but two different departments: the Centre for Disease Control and Management dealt with malaria and leishmaniasis, and the Environment and Occupational Health Department dealt with CCHF. The report furthermore identified that each of these programmes had their own technical national committee advising the Ministry of Health and Medical Education – there was no mention of any interaction on vector control issues.

These units at the central level were not replicated at peripheral levels. All vector control at the provincial level came under the mandate of a single entity, thus coordination was missing at the central level.

The report could have benefited from a more critical analysis of the research carried out and how this had been translated into policy change and actions.

With respect to vector control planning and implementation, estimates of cases and detailed information on vectors and their distribution, behaviour, and insecticide resistance were presented. However, there was little or no information on coverage rates of vector control activities and how they were planned, implemented and monitored – a major omission.

The pesticide management section of the report contained a good analysis, which was carried out with the support of a WHO/EMRO consultant, and provided a strong evidence base in favour of the further development of this area. There is a need for revision of national legislation on registration of pesticides, and criteria and procedures need to be better defined. Currently, there is an opportunity to include public health pesticides in the country's ongoing legal review related to pesticides.

There is no established body in the Islamic Republic of Iran responsible for intersectoral coordination, which is critical for IVM, and not much was presented on the issue of community knowledge, attitude and practice; this part needs improvement. Through another stakeholder meeting the Iranian needs assessment could be further improved.

The IVM action plan, however, was not acceptable at all, being just a table with a list of activities. An action plan that responds to the steering committee requirements is needed.

The steering committee noted the various shortcomings in the reports. While needs were mentioned at various levels, there was insufficient information on capacities. The status of the intersectoral committee was unclear: had it been established or not and had it been operational throughout? Coverage of policy items could have been better extended in the area of legal perspectives, even though that was perhaps not made fully clear in the guidelines. A plan for demonstration sites still needs to be developed. This situation analysis was mainly qualitative; there seems to be a lack of quantitative datasets. Research outputs were listed, but the question remains: were the research reports peer-reviewed or at least published in articles – if not there is no possibility of accessing and checking them.

4.6 Morocco

Based on the outcome of the VCNA, the Moroccan plan to develop a national IVM programme over the next five years included strengthening capacities for IVM, training and operational research.

As with several other reports, it was not clear whether an intersectoral committee had been established, but the Moroccan steering committee member confirmed that this was the case and that it had met six times. This should be better highlighted in the final report.

The criteria used for the selection of demonstration sites were excellent, but the information, education, and communication (IEC) work should perhaps shift from advocacy to behavioural change. Behavioural change was pivotal and might need more funds allocating to it. The budget anticipated plenty of funds from the government, but a lot was intended for IVM capacity building and for staff. There

seemed to be little tangible outcome for GEF, therefore, other than the sustainability factor.

On a more general note, the steering committee again recognized that the VCNAs had resulted in two distinct outputs, one consisting of the items for IVM development and their funding, the other referring to the GEF project. Once all the IVM capacity-building needs had been identified, the drafting committee of the Project Brief should select those parts that meet GEF requirements.

Some countries had included success stories in their reports as a reflection of the country's interest and commitment. The question was raised whether such examples of success stories could be included in the regional project brief. In completing the country reports, the logical framework approach of Morocco and the problem tree analysis of Jordan should be adopted by the other countries, to further reshape the reports under a common strategy.

The financial section of the VCNA report again underlined the disproportionate expenditure on pesticides. This was another reason why it was valuable to publish these reports, because they showed opportunities to address existing needs and problems.

4.7 Sudan

In the discussion on the Sudan VCNA report and proposals it was noted that no policies existed in support of IVM. In fact, there was no allocation of resources to vector control (except malaria) because of the lack of policies and structure. The reports provided plenty of detailed background information. For example, the vector-borne disease burden is the highest in the Region – if this was the only criterion for GEF funding, then Sudan would be a priority.

The intersectoral committee is chaired by the Undersecretary, Ministry of Health and has met six times. Its composition is very broad and is probably the best example in the eight project countries. Like Morocco, Sudan is one of the countries where the VCNA, draft national IVM strategy and draft GEF proposal have been undertaken by the intersectoral committee and where a national consensus workshop endorsed these documents. A committee established after the national consensus workshop should decide on a new vector control unit: where it would be and its terms of reference. There is a strong sense of national need to use this platform provided by the GEF initiative and give it recognition and legal status.

The Sudanese VCNA, however, lacked a sensitivity analysis, which was necessary to check whether the proposed solutions were realistic or not. There was no mention of legislative issues in the VCNA. The IVM strategic plan was very brief but addressed the needs identified in the VCNA. The goals set were very ambitious. Capacity building in sound pesticide management at all levels needed to be included

to ensure consistency. Until a more detailed plan was developed, it remained hard to judge whether the budget was realistic or not.

Action at lower administrative levels also had to be addressed as the Khartoum municipality played an important role in malaria control. The municipality should be represented in the intersectoral committee. Targets were well-prepared but several lacked dates. Mapping and GIS work should be elaborated in the final version.

4.8 Syrian Arab Republic

The Syrian Arab Republic produced a well-written report that reflected a strong government commitment, in particular because of the President's desire to eliminate leishmaniasis. More clarity could be given to the policies related to agricultural extension and farm field schools.

Mention was made of intrasectoral and intersectoral collaboration but roles and responsibilities did not seem to be well-defined. There was no clear budget outline at the end of the IVM strategic plan. Funding requirements were clear but the specific costs of the different activities were lacking. Some research had been done, but there was no apparent mechanism for its findings to flow to policy makers and programme managers. There was mention of a mechanism for pesticide quality control, but the information did not appear to be routinely transferred to the Ministry of Health and the Ministry of Agriculture.

Further questions were raised about details, including the organizational diagram, which did not show the link between the entomology research unit and the other units, and whether epidemics mentioned in livestock were Rift Valley fever or not. Information on sandfly distribution would have been useful. Tables referring to areas covered for house spraying were found to be confusing. There was also confusion over the amounts of pesticides used – unless the information on the insecticides used indicated formulation and active ingredient, it would not be possible to estimate amounts used.

The issue of differences in exemption of taxes between insecticides for agriculture and for public health were noted. There was no need for regional or global IVM issues to be addressed in this or other country reports; the reports should go straight into the Syrian context. It was suggested that the IVM strategy document should be shortened, with the VCNA report as an annex.

4.9 Republic of Yemen

The WHO staff member stationed in Yemen described the procedures followed and obstacles that had been met in the VCNA process. Clearly, this country belonged

in the category where malaria and a number of other vector-borne diseases were important public health problems, and where health sector resources were very limited. The proposal needed further completion: the environmental and agricultural inputs needed integrating and activities needed prioritizing.

The Yemen report needed to highlight the role of the intersectoral committee and also the methodology of assessment as it was applied in that country. The malaria situation was described in detail but there was little information about other vector-borne diseases. The environmental and agriculture reports had been included as mere annexes. The report needed restructuring, separating the VCNA part from the IVM strategy.

These remarks were accepted as valid and fair and will be of help in finalizing the report. The environmental and agricultural annexes had not been received on time for incorporation, and the intersectoral committee had suffered from staff turnover. Targets for monitoring and evaluation were listed in an annex.

5. CONCLUSIONS

In the Eastern Mediterranean Region, the status and trends of vector-borne diseases continue to be causes of concern, especially in view of their resurgence. Vector control continues to be a major component in the prevention and control of these diseases.

Roughly, two categories of countries can be distinguished in the Region: those where vector-borne diseases continue to be a serious public health problem with an important disease burden and where vector control contributes significantly to disease prevention and control; and those where public health efforts have reduced the burden of vector-borne diseases to a level that justifies a maintenance phase of risk monitoring and management, but where vulnerable communities and receptive environments continue to exist.

While DDT is no longer used in most vector control programmes in the Region, the deteriorating vector-borne disease situation, particularly with respect to malaria, may force some or all countries to revert to the use of DDT indoor residual spraying as the only affordable alternative, particularly when faced with epidemic situations. Several countries continue to have DDT stockpiles. The inadequate knowledgebase on alternatives to DDT and their cost-effectiveness in different eco-epidemiological settings is an important limiting factor to the deployment of such measures. The lack of effective institutional arrangements for intersectoral coordination and action is another serious constraint.

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 the GEF support. Parts of this information (research and development, human resource

base) were easier to generate than others (policy framework, community involvement).

The main obstacle in the national VCNAs and in the formulation of the IVM proposals has been the challenge of getting together all stakeholders for their inputs into the assessment and proposal development, and their endorsement of the final products.

The VCNA tool has proved to be extremely useful in guiding an orderly process of information collection to build a comprehensive picture of needs, gaps and opportunities, and should be evaluated on the basis of this first experience for further development and application in other countries of the Region and in other WHO regions.

The criteria applied by GEF to the proposals it receives have evolved and entered a new phase with GEF-4 (2007–2011) – these now imply that proposed actions will be more clearly judged on their implementation value, and, in the context of POPs, on their potential to reduce the global POPs burden (in this case DDT); at the same time, there has been a shift in focus from country to regional projects.

The steering committee reviewed the reports and proposals received for each individual country, and made recommendations for their further strengthening and completion that will be conveyed to the country teams by the assigned facilitators.

It was clear from the review that a distinction should be made between the formulation of a Region-wide IVM strategy, elaborated into a full set of national strategies and action plans, and the development of a regional GEF proposal. It is important to bear in mind that the final Project Brief for submission to GEF will be a regional document that builds on the individual country proposals received.

With respect to the national IVM strategies, progress in this area should now be disseminated to all other countries in the Region, and countries thus far not involved should be encouraged to follow the same process. Ideally, this will include, first of all, an update of the VCNA guidelines based on the experience to date. The question here is how to mobilize the necessary funds to support countries in the transition from conventional vector control programmes to IVM programmes. Even if the activities eventually supported by GEF will contribute to some components of this strategy, and some countries have indicated important government contributions to this process, there remains an important financial gap if the regional strategy is to be implemented integrally for all countries in the Region.

The strategy of mobilizing funds for Region-wide IVM implementation will require broad thinking, not excluding any opportunity. While an increased number of countries develop their IVM strategy, detailed donor profiling should be carried out to

determine which donors would in theory be interested to support which components under which conditions.

Different entry points should be sought. For example, the formulation and implementation of national plans for the sound management of pesticides is a major component in the process of achieving genuine IVM, and this component might receive support under SIACM. A joint WHO/FAO approach towards developing this component would further enhance its overall credibility. Similarly, introduction of environmental management components could be supported through UNEP co-financed activities if they clearly imply a reduction of reliance on pesticides. The message to the countries should be that the three main United Nations organizations supporting the shift to IVM will make a major effort to coordinate and actively pursue the mobilization of funds, seizing all opportunities without losing the overall balance.

Demonstration projects with a strong operational research emphasis and regulatory reform for pesticide management are, in a sense, the most readily accomplishable goal; more effort will be required to also put in place the necessary intersectoral coordination frameworks, the policy environments and some of the less obvious skills and needs, such as cost-effectiveness analysis, environmental engineering and community involvement and mobilization.

The steering committee acknowledged the important contribution of the GEF PDF-B funds to the overall furtherance of the cause of IVM in the Region, and expressed its appreciation for the support received. The funds have allowed an accelerated step ahead and provided a firm basis for the further development of this important public health area. The goal now is not to lose the momentum gained.

6. 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.

Annex 1

AGENDA

1. Registration
2. Opening session
3. Objectives of the meeting, method of work and nomination of officers
4. Review the implementation of the GEF-supported project in each country
5. Present the conclusions and recommendations of country vector control needs assessments
6. Provide recommendations for the selection of demonstration sites and activities
7. Review the national capacity needs and identify strategies to address them
8. Review draft project proposals for GEF support
9. Conclusions and recommendations
10. Closing session

Annex 2

PROGRAMME

Monday, 13 November 2006

08:30–09:00	Registration
09:00–09:45	Opening session Message from Dr Hussein A. Gezairy, Regional Director, WHO/EMRO Address by H.E. Dr Mohamed Maher Al Hossamy, Minister of Health, Syrian Arab Republic Introduction of participants
09:45–10:30	Objectives of the meeting, method of work and nomination of officers / *Dr Z. Hallaj*
10:30–11:00	Facilitation of vector control needs assessment in project countries / *Dr A. Mnzava*
11:00–11:30	Opportunities for accessing UNEP/GEF funds and draft format for Full Project Proposals / *Dr J. Betlem*
11:30–12:00	Discussions
12:00–17:30	Country reports on vector control needs assessment, draft integrated vector management (IVM) plan and proposal to UNEP/GEF – Islamic Republic of Iran, Jordan, Republic of Yemen, Djibouti

Tuesday, 14 November 2006

09:00–12:30	Country reports on vector control needs assessment, draft IVM plan and proposals to UNEP/GEF – Egypt, Sudan, Syrian Arab Republic
12:30–14:00	Introduction to group work / *Dr A. Mnzava*
14:00–17:30	Group work to review vector control needs assessment reports, country IVM plans and GEF proposals Djibouti / *Dr S. Karch and Dr K. Djibaoui* Egypt / *Dr G. Zamani and Dr A. Hassan* Islamic Republic of Iran / *Dr M. Zaim and Dr S. Al-Wahaiby* Jordan / *Dr H. Atta, Dr M.A. Khan and Dr M. Elmi* Morocco / *Dr R. Bos and Dr B. Ameur* Sudan / *Dr A. Mnzava and Dr E. Malik* Syrian Arab Republic / *Dr A. Hassan, Dr E. Renganathan and Dr J. Betlem* Republic of Yemen / *Dr R. Bos and Dr M. Khalifa*

Wednesday, 15 November 2006

08:30–10:15	Individual country group work (cont'd)
10:15–15:00	Plenary session Working group presentations and discussions on vector control needs assessment reports, country draft IVM plans and GEF proposals
15:00–16:00	Conclusions and recommendations
16:00–16:30	Closing session

Annex 3

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