



Secretariat of the Stockholm Convention
International Environment House 1
11-13, chemin des Anémones
CH-1219 Châtelaine – Geneva
Switzerland

Telephone: +41 22 917 87 29
Facsimile: +41 22 917 80 98
E-mail: ssc@pops.int
www.pops.int

Future plans for work on DDT elimination

A Stockholm Convention Secretariat Position Paper

November 2007

A. INTRODUCTION

During the negotiations toward the determination of the Stockholm Convention, there was strong debate among States and other stakeholders on the continued use of DDT for disease vector control. This resulted in DDT being placed in a separate annex of the Convention and labelled as for “Acceptable use Purpose”.

DDT is the most intentionally produced POP and its use is presently on the increase for disease vector control. The DDT register that is kept by the Secretariat now has fourteen Party States that have notified the Secretariat on using DDT for disease vector control.

The United Nations Environment Programme – Chemicals Branch – had the lead role prior to and up till recently in dictating the implementation of the secretarial work from the Conference of the Parties (COP). Along with WHO, these two organizations carried the burden of work on DDT issues. With the institutionalisation of the Secretariat, UNEP Chemicals now plays a less prominent role on DDT issues.

For support to UNEP during the negotiations and subsequent to the Convention coming into force, the World Health Organization has been requested to act as the technical authority on DDT issues and, in particular, to set the conditions for its use in Indoor residual Spraying (IRS) against the mosquito vector that carries the malaria parasite. The three organizations are now closely linked based on the history of their collaboration (Annex I).

The use of DDT has increased in the past seven years (Annex II) and a strategy is required to develop alternatives. In 2005, the Secretariat, WHO and UNEP Chemicals drafted and reviewed a global strategy paper on the elimination of DDT. This paper is again being reviewed by the organizations (Annex III). Additionally, the COP at its third meeting in Dakar, requested the secretariat in collaboration with WHO to prepare a business plan for promoting a global partnership on developing and deploying alternative products, methods and strategies to DDT for disease vector control.

These two initiatives will form the backbone for the future plans to build capacities, monitor and to report on DDT use, stimulate development and deployment of alternatives and to eventually reduce and ultimately eliminate the use of DDT for disease vector control.

B. STEPS AND TIMELINES FOR FUTURE WORK

In compiling the steps and arranging the schedule for working with our two partners – WHO and UNEP Chemicals – consideration is always given to ensuring that directives from the COP are met with the focus remaining as the delivery of the objectives of the Stockholm Convention. This should be undertaken through collaboration and consultation where consensus is achieved and the thoughts and ideas of our partners are considered when decisions are made.

It is expected that the elimination of the use of DDT and its production will be achieved in ten years. Three phases are established for implementing the Convention objective of the elimination of DDT. These are outlined in Table 2 below.

1) Phase I

The first set of objectives involves the creation of a global partnership for developing and deploying alternatives to DDT and establishing the capacity for countries to introduce such alternatives. Many activities are already underway to achieve the goals of Phase I. These include:

- ✓ Preparation of a business plan on developing alternatives;
- ✓ GEF-funded projects being executed by WHO for examining alternatives;
- ✓ Capacity building projects to enable data collection and reporting on DDT;
- ✓ Capacity building projects to manage the use of alternatives.

Countries should be in a position to deploy alternative measures for malaria vector control without the use of DDT by the end of 2010. WHO will provide technical control of the implementation of these projects with the Secretariat providing administrative support and guidance on the policies of the Convention and to ensure that the objectives of the Convention are realised.

2) Phase II

This period will be used to deploy alternatives identified as suitable and cost-effective for particular locations and the concomitant reduction in the production of DDT should follow. The successful establishment of the global partnership will be critical for the effective deployment of suitable alternatives that are developed. There has to be understanding among the many key players from industry, non-government organizations, inter-government organizations, donors and malaria endemic countries on the process to be used for the introduction and use of alternatives to DDT.

3) Phase III

The final activities for the elimination of DDT include an inventory of all remaining stocks and stockpiles of DDT that exist and establishing a project for the destruction of all the DDT in storage. The GEF would act as the leading funding agency for this project with final destruction of the chemical being completed by the end of 2020.

Table 2. Phases, activities, timelines and costs for the elimination of DDT production and use

Objectives	Activities	Timeline	Cost USD(\$)	Assumptions
Phase 1				
Establishment of a global partnership on developing alternatives	1. Prepare a business plan.	07/07-12/08	140,000	Funds are available
	2. Convene a global meeting of stakeholders.	11/09	100,000	The business plan and the COP endorse this activity
Establishment of national procedures for collection and collation of DDT data	1. Create national inter-organizational collaborative linkages;	03/08-12/10	50,000	Where feasible, existing systems will be used
	2. Institute process for DDT reporting.	03/08-12/10	1,500,000	Parties carry out process
Phase 2				
Implementation of phase-in of DDT alternatives	1. Establish international database on alternative measures and schemes	12/09-06/10	30,000	
	2. Implement WHO-guided introduction of IVM without DDT	12/11-06/15	90,000,000	Alternatives are developed that are locally suitable, cost-effective and less toxic
Implementation of phase-out of DDT production plants	1. Initiate GEF project for elimination of production in India and China	06/14-06/15	150,000,000	Governments endorse cessation of production of DDT
	2. Cease production of DDT	12/16		
DDT no longer used	Curtail use of DDT	06/17		
Phase 3				
Destruction of all stockpiles of DDT	Undertake global inventory of DDT stocks and stockpiles	12/14-06/15	5,000,000	
	Initiate GEF project to destroy all stockpiles of DDT	12/15-12/16	5,000,000	
	Destroy all remaining stocks and stockpiles	12/16-12/20	35,000,000	
TOTAL COST			316,790,000	

C. ADMINISTRATIVE AND FINANCIAL ACTIONS REQUIRED

The administrative and financial actions required to implement the activities outlined above are shown in table 3 below.

Action	Timeline	Cost (USD\$)
Employ support staff		
1. Programme Officer	31/03/08	90,000
2. Programme Assistant	31/06/09	75,000
Establish MOUs with WHO and UNEP Chemicals	31/04/08	No cost
Seek donor financial support	On-going	No cost
Prepare regular press releases	On-going	No cost
Create DDT position paper	31/06/08	No cost

The total expenditure for the full operation to eliminate DDT will cost approximately \$316,000,000 (see Table 2). The ongoing and planned activities are being funded by the Global Environment Facility (Annex IV). Much of the technical work will reside outside of the Secretariat. However, in providing a leadership role in guiding the process, the Secretariat will require personnel with strong managerial background, good negotiating skills and the potential to galvanise support around a common process.

Currently, there is one staff member covering DDT issues. It is vital that the Secretariat has a presence 'on the ground' as the various activities are implemented. Therefore it is envisaged that two other persons are brought in to augment the technical capacity of the organization and to liaison with the technocrats at WHO while monitoring the activities that are being introduced especially on the African continent. Such persons should have a strong technical background in epidemiology, be fully versed in Integrated Vector Management approaches and are fluent in French, English and Swahili.

The relationship between SSC and WHO and UNEP Chemicals is closely aligned to the implementation of the programme for the elimination of DDT. The history of this relationship is contained in Annex II. It is intended that the roles of these organizations in the future are as follows:

SSC

- ⇒ Leads the programmes and activities resulting from COP decisions;
- ⇒ Provides information to all stakeholders on SC-DDT related matters;
- ⇒ Seeks financial support for DDT related activities coming from COP;
- ⇒ Proposes recommendations to COP on DDT related issues;
- ⇒ Delivers support to Parties for implementation of DDT obligations

WHO

- ⇒ Sets policy on how DDT is used for disease vector control;
- ⇒ Provides technical support to Parties on DDT use;
- ⇒ Provides technical support to the Secretariat on DDT related issues;
- ⇒ Implements GEF DDT-related projects as the executing agency;
- ⇒ Collaborates with the Secretariat based on requests from the COP.

UNEP Chemicals

- ⇒ Undertakes relevant GEF projects as the implementing agency;
- ⇒ Provides technical support as requested by the Secretariat;
- ⇒ Delivers advisory services on DDT issues;
- ⇒ Maintains the DDI-IS information system.

It is in the best interest of the Secretariat to maintain a healthy and cordial relationship with these organizations. The support from WHO and UNEP Chemicals is important for the success of the work to be undertaken toward the elimination of DDT. It would be useful to re-define the relationship with these two organizations by the establishment of new Memorandum of Understandings that reflect the roles above.

D. CONCLUSION

The goal of reducing and ultimately eliminating the production and use of DDT will require close collaboration with all stakeholders and, in particular, with WHO. Developing and deploying alternative products, methods and strategies for DDT in disease vector control is the critical hurdle that must be overcome initially and is the first phase in achieving this goal. However, countries must have the capacity to accept the deployment of such alternatives. The replacement of DDT and eventually, the destruction of old stocks and stockpiles will represent the final two phases respectively of a three phase plan to rid the world of this chemical.

The Secretariat holds a unique position and has the opportunity to play a leading role in stimulating and galvanizing support for the development and deployment of alternatives to DDT. This first, pivotal phase toward the elimination of DDT requires carefully and strategic planning and implementation. MOUs should be established with partners to ensure formal understanding of roles and functions on DDT issues.

There will be need for financial support to be garnered to undertake the many activities to be implemented. It is vital that DDT issues are highlighted for donor governments to ensure a fair cut of the financial pie is achieved. Having a global partnership among all stakeholders with full financial support from GEF and donor governments are vital components to the successful implementation of the plan.

ANNEX I WHO, SSC, UNEP CHEMICALS COLLABORATION

In 2003, UNEP and WHO signed a Memorandum of Understanding that provided WHO the key role in all technical issues pertaining to DDT use. This MOU is open in its direction as to which organization shall lead the activities presented in the MOU. Therefore, there is no dictate for WHO to control the preparation and implementation of activities.

In most instances, WHO prepared technical documents, implemented regional and global studies and played a major role during meetings of the expert group on the Assessment of DDT. Given the renewed advocacy for DDT use within IRS recently established by WHO, it may be prudent for the Secretariat to review the roles being played to ensure the goals of the Convention are given priority and focus even as WHO continues to have the lead role technically on issues pertaining to DDT use for disease vector control.

The United Nations Environment Programme – Chemicals Branch – had the lead role prior to and up till recently in dictating the implementation of the secretarial work from the Conference of the Parties (COP). With the institutionalisation of the Secretariat, UNEP Chemicals now plays a less prominent role on DDT issues. However, UNEP Chemicals continues to have good expertise and close consultation will continue for all matters on DDT.

Currently, WHO has been given the lead role in much of the work undertaken over the past 3-4 years. The Secretariat has on occasion found it difficult to arrive at consensus on certain issues for two reasons:

1. Given the many factions in WHO, there are differing views coming from representatives within that conglomerate. At times, these conflicting views make it difficult to arrive at consensus both within and between our organizations on particular issues.
2. There have been many changes in personnel and policy that has compounded the decision-making process and compromised the goals of the Stockholm Convention regarding the elimination of DDT.

It is deemed crucial that the Secretariat reserves the right and takes the lead to establish policy regarding the issues surrounding the elimination of DDT as this is the core goal of the Stockholm Convention. Such a position should definitely be taken in close consultation with both WHO and UNEP Chemicals. However, it is time for the Secretariat to take a stand that reflects the text of the Convention and the direction established through the decisions of the COP.

In providing recommendations to the COP, the DDT expert group that meets to assess DDT use proposed programmes that would improve the capacity of Parties to report on DDT use. The COP accepted these recommendations and requested the Secretariat to work with WHO to implement these activities. Two sets of activities have been undertaken through MOUs with WHO to assess and support the capacity of Parties to report on DDT. In 2005, WHO was commissioned to undertake a 4-country study on possible mechanisms for active information collection to provide an adequate information base for the evaluation of the continued need for DDT; a set of induction workshops on reporting and data requirements for countries that use or potentially will use DDT for disease vector control. These activities were funded by the COP at a cost of \$243,000. No financial report on the implementation of these activities was received from WHO.

Future plans for work on DDT elimination - SSC position paper November 2007 - cont'd.

In 2007, an MOU was established with WHO for undertaking activities for supporting countries to report on DDT. These activities included:

- ◆ Develop standardized procedures for systematic collection of relevant data and adequate reporting;
- ◆ 3 inter-country workshops on data collection procedures
- ◆ Coordinate the implementation of national meetings within selected Party countries
- ◆ Prepare a final report outlining the results of the assessment of data collection systems and the meetings held with relevant agencies in each country

The cost of these activities is set at \$160,000 and paid for by the COP.

In addition, there is a project proposal before the GEF valued at >\$1M for an in-depth implementation of systems on a national basis for collection and storage of data on DDT use. This project was created by the Secretariat based on a request by the COP but WHO would be the executing agency for this project.

ANNEX II DDT USE

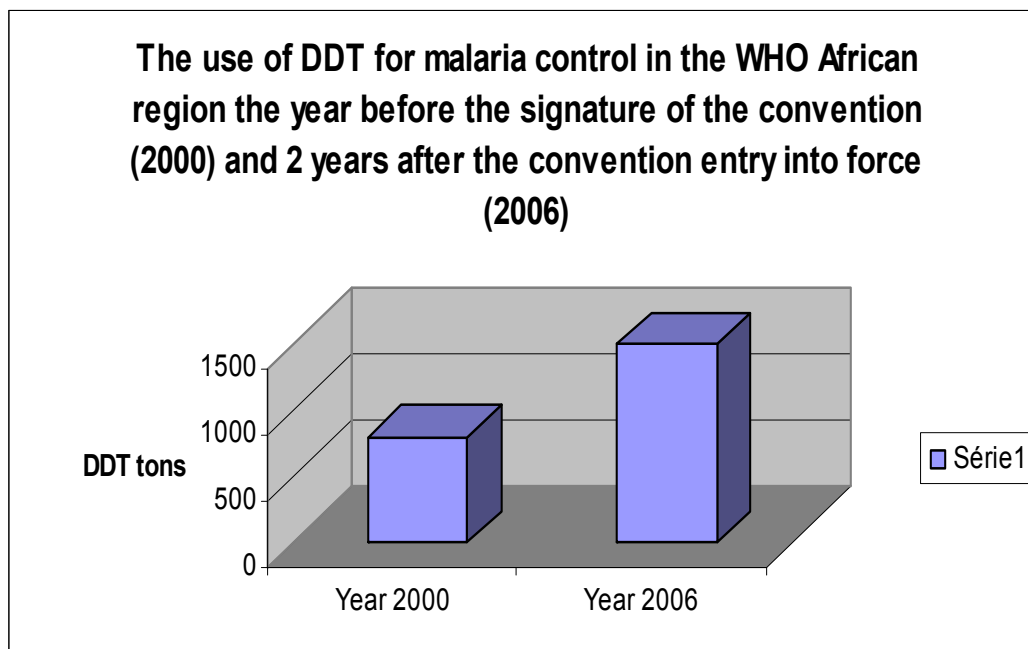
For the twenty-five years between the years 1975 and 2000, over 40 countries have banned or severely restricted the use of DDT. All countries stopped the use of DDT for agricultural pest control but some others did continue to allow the use of DDT for malaria vector control. Globally, the production and use of DDT declined and many stockpiles of DDT were generated in countries that had abruptly banned its use.

Also, countries turned to pyrethroids and organophosphates in their IRS vector control programmes but generally, these chemicals were not as effective as DDT and more costly. As a result, the incidence of malaria cases increased and much pressure was put on governments as human mortality figures also steadily increased over the period.

DDT was again introduced after 2000 to combat the mosquitoes carrying the plasmodium parasite that caused malaria. South Africa led the way with widespread use of IRS using DDT as the chemical of choice. Malaria cases were dramatically reduced in the ensuing years. Other countries in Southern Africa soon followed suit and the use of DDT increased (see figure 1).

In 2006, the use of DDT far exceeded the combined use of other insecticides in IRS. Some 1500 tons of DDT was used as compared to over 200 tons for all other insecticides combined. In the meantime, a concerted effort was made in the press and by certain entities including the WHO to promote the use of DDT. At all meetings of the COP, the continued use of DDT for disease vector control was endorsed.

Figure 1.



While providing a tool for reducing the malaria burden is a priority, there must be parallel effort to seek alternatives to DDT. The Secretariat sees this effort as its priority and has been given the mandate by the COP at its third meeting to promote partnerships to achieve this end.

ANNEX III PARTNERSHIPS WITHIN A GLOBAL STRATEGY

The GEF is the principal financial mechanism for the Stockholm Convention and much emphasis will be placed on its support to implement activities for reducing DDT use. Working with the WHO as the executing agency, many projects have been implemented or are in the pipeline for approval by the GEF (See the Annex).

One such project involves the determination of locally appropriate alternatives to DDT. This global project has already been implemented in Central America and is being expanded to cover Sub-Saharan Africa, North Africa and the Mediterranean, Western Asia and South Eastern Europe and East Asia and the Pacific. This exercise will set the stage for the introduction of an Integrated Vector Management approach that will reduce the use of insecticides for control of disease vectors.

Additionally, GEF is considering a request for financial support to 18 countries mainly in Africa to improve their capacity to collect and collate data on DDT. Again to be executed by WHO, this project is expected to result in complete information on DDT and related areas being made available by countries using DDT to allow the COP to make informed decisions on the continued use of the chemical for disease vector control.

There are other major projects currently underway. The Government of the United States of America has introduced a President's Malaria Initiative to support countries in their fight against malaria. IRS is the main intervention and pyrethroids have been the leading chemical group used. Over 200 million dollars is earmarked in this project and should provide countries an opportunity to increase their capacity to accept alternative measures in the future.

The World Bank, in cooperation with the GEF, is planning a 200 million Public Private Partnership initiative on environmental issues. From this project, 10 million dollars is being held as an award for any entity that develops an alternative insecticide to DDT. This is a bold undertaking and, as expected, requires thought in prescribing the criteria for a successful awardee. However, it should stimulate industry and researchers to look in this direction when considering where to put research efforts. It is imperative that the Secretariat continues to have a voice and a presence in the implementation of these projects.

In 2004, UNEP Chemicals and WHO embarked on an initiative to create a global strategy paper on the way forward to eliminate the use of DDT. After many reviews and hierarchical discussions, the draft document was sidelined even though only a single issue was still in debate.

In 2006, the draft was revisited and WHO revised the document based on comments from its technical staff. The revision placed a slightly different emphasis on the strategy and put into question the focus and intention of the paper. The priority of WHO is malaria control. This priority at times superseded the goal of the elimination of DDT and altered the focus of the strategy. It is essential that the Secretariat takes ownership of this strategy while gaining endorsement from WHO and UNEP Chemicals to ensure that the focus on elimination of DDT is maintained.

At COP3 in Dakar, a decision was taken for the Secretariat, in collaboration with WHO to prepare a business plan to promote a global partnership to develop and deploy alternative products, methods and strategies to DDT for disease vector control. The Secretariat

considered it prudent to consult with the main stakeholders to gain some understanding on how these entities see such an exercise and how best a global partnership could take shape.

In October 2007, the Secretariat convened a meeting of representatives from the various relevant sectors and key recommendations were presented by this group. In effect, the group rejected the idea of a 'business plan' and preferred to see a compendium on DDT information prepared along with options for establishing a global partnership. A proposal has being made to prepare the business plan and over USD\$60,000 has already been received from Germany and Norway to fund these activities. It is envisaged that another wider meeting of stakeholders will be held in the latter part of 2008 to discuss the drafted business plan with the intention of having consensus on the way forward for establishing a global partnership. Funding is still being sought for this meeting.

The request from the COP to prepare a business plan appears to be in conflict with the current effort to establish a global strategy to eliminate DDT. Consideration should be given to allow the request from the COP to drive the process and use the business plan as the background tool for the creation of a global strategy.

ANNEX IV CURRENT AND PROPOSED DDT GEF-FUNDED PROJECTS*

Scope	Title	Aim	Status	GEF \$	Total \$	Partners
Global	Establishment of efficient and effective data collection and reporting procedures for evaluating the continued need for DDT in disease vector control	Provide support to Parties of the Stockholm Convention in order to improve reporting about any activity related to DDT	New	837,540	1,492,540	SSC, WHO
East Africa	Malaria Decision Analysis Support Tool (MDAST): Evaluating Health, Social and Environmental Impacts and Policy Tradeoffs	Develop decision analysis tool for Governments to analyze the (cultural, ecological, economical) consequences of selecting a certain approach (like application of DDT) in malaria vector control.	MSP drafted	1,098,900	2,012,888	WHO, Duke Univ.
Central America and Mexico	Regional Program of Action and Demonstration of Sustainable Alternatives to DDT for Malaria Vector Control in Mexico and Central America	Introduction of alternatives to DDT use in vector control and disposal of POPs	Current	7,495,000	13,905,000	WHO
Africa	Demonstrating Cost-effectiveness and Sustainability of Environmentally Sound and Locally Appropriate Alternatives to DDT for Malaria Vector Control in Africa	Introduction of alternatives to DDT use in vector control	To be CEO signed	4,934,332	7,583,232	WHO

Future plans for work on DDT elimination - SSC position paper November 2007 - cont'd.

MENA	Demonstration of Sustainable Alternatives to DDT and strengthening of National Vector control Capabilities in Middle East and North Africa	Introduction of alternatives to DDT use in vector control and disposal of POPs	To be CEO signed	6,119,425	15,282,327	WHO FAO
Asia and Pacific	Demonstrating and Scaling Up Sustainable Alternatives to DDT, and Strengthening National Vector Control Capabilities in Southeast Asia and the Pacific	Promote and assist the introduction of alternative approaches of vector control in the Pacific and SE Asia area without the use of chemicals.	PDF-B in	7,500,000	about 17 million	WHO
CEE	Demonstrating and Scaling Up Sustainable Alternatives to DDT for the control of vector borne diseases in Southern Caucasus and Central Asia	Demonstrating and Scaling Up Sustainable Alternatives to DDT for the control of vector borne diseases in Central Asia (Ukraine, Georgia, Kyrgyzstan, Tajikistan, Azerbaijan)	New	2,700,000	5,870,000	WHO & Milieukontakt
India	Reduction in the use of DDT by Enhancing Capabilities for the implementation of Integrated Vector Management	Alternatives to DDT use, awareness raising and enhance reporting of DDT use and production.	New	2,997,730	6,333,730	WHO
			Total:	33,682,927	52,479,717	

* Information kindly provided by Jan Betlem – UNEP DGEF, Nairobi.