



cially when referring to paper (cotton fabric) sacks, which are practically outworn.

The older pesticides (since 1972) have been kept in special underground storages, which are made

concrete-type and located far from residential areas. There are 13 such underground sites in Uzbekistan, most of which are filled with pesticides, insecticides, containers for these, industrial wastes, etc, and covered with slabs and soil. Most of the sites are enclosed with mesh and guarded. Total area of facilities is 60 hectares, and according to the latest information they contain 17,718 tons of pesticides.

As a legacy of defoliation of cotton fields practiced in the last century, there are agricultural airdromes throughout the country. The airdromes occupy 461 hectares in total. The contamination level of such airdromes by chlorine-organic and phosphorus-organic pesticides exceeds the maximum acceptable concentrations level several times.

The State Committee for Nature Protection of the Republic of Uzbekistan implements state control and interdepartmental regulation in the area of environmental protection. The State Environmental Monitoring adopted by the Government of the Republic includes a list of priority sources of contamination, and areas around pesticides warehouses, underground sites and agricultural airdromes.

Results of the State Environmental Monitoring (soil) tests intended to define the amount of pesticides around the warehouses show presence of persistent organic pollutants (POPs). The concentration of POPs in the environment does not exclude their transmission into the foodstuffs and live organisms. Monitoring data of 2003-2004 show that the worst contamination by chlorine-organic pesticides within a radius of 200 meters

around the underground storages is in Namangan areas, where the concentration exceeds the allowable level 17 times. The same parameter in Andizhan areas is 16 times, but there are places where

the allowable level is exceeded up to 100 times. In Syrdaria areas the level is exceeded 13 times. Underground storages obviously have a negative impact on the environment. According to area Inspectors (of the State Committee for Nature Protection) it is impossible to approach some of mortuaries closer than 1-1.5 km without personal protection means. Built 40 years ago, the mortuaries collapse under the impact of climatic fluctuations. As a result, there is a danger of pesticides penetration to underground waters, discharges of toxins, and formation of inflammation sources.

Agricultural airdromes, underground storages and chemical warehouses are still the main sources of environmental pollution in Uzbekistan, and problems of disposal and decontamination of these have not been solved yet.

Scientists and researches from the Institute of Genetics of the Academy of Sciences of the Republic of Uzbekistan are engaged in developing environmentally clean bio-technologies for bio-remediation of contaminated soils. It includes development of new bio-preparations based in active strains of microorganisms – destructors of chlorine-organic pesticides.

The situation with old pesticides is a characteristic feature of many of the Central Asian countries. We believe it's feasible to undertake joint efforts in solving the problem with old pesticides, through creating regional center activities, which focus on finding the ways to dispose of obsolete or useless pesticides.



## IMPLEMENTING STOCKHOLM CONVENTION NATIONAL PLANS: WAYS FORWARD

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### ABSTRACT

This paper examines the basis and nature of Action Plans, strategies and measures required to implement the obligations of the Stockholm Convention. Some actions will be the proper business of government. Other initiatives will require technical assistance and may be suitable for fund-

ing as envisaged in the Convention's financial mechanism. Some of these will need to be taken up by non-government organisations /O in particular industry and civil society groups. The paper emphasises the need to find cost-effective solutions by linking proposed actions with other national strategies and policies, and with 'country assistance strategies' negotiated by each country and its development partners. Of importance will be seeking appropriate and innovative financing arrangements and partnerships to meet the pragmatic goals of the Convention: to address POPs risks through the adoption of practical, feasible, viable and available techniques. The paper examines issues related to the Global Environment Facility – the interim principal entity of the Convention's financial mechanism, in assisting developing countries and countries with economies in transition to meet their Convention obligations and protect their populations and the environment from the risks posed by POPs.

## INTRODUCTION

Article 7 of the Stockholm Convention requires all Parties to prepare National plans describing how the obligations of the Convention will be implemented. National planning has been taken up by developing countries and countries with economies in transition with funding from the GEF, the interim principal entity of the financial mechanism of the Convention, using initial guidelines prepared by the GEF and its implementing agencies.

The planning process comprises three principal 'technical stages':

- assessing the Country situation through inventory activities – physical inventories of the various chemicals and assessments of legal & regulatory frameworks for chemicals and POPs management;
- determining priorities for addressing POPs issues of concern in the context of national objectives;
- developing the plans necessary to deal with priorities and so move the country into compliance with the Convention.

These technical stages are preceded by the development of mechanisms for coordinating amongst the various government agencies with responsibilities for parts of the POPs 'life-cycle' and with industry and other non-governmental stakeholders. Such participatory approaches are emphasised throughout the National Implementation Plan (NIP) development process. National endorsement of the plan, prior to its transmission to the Conference of the Parties, and its subsequent implementation depend upon the continuing engagement and participation of a wide range of stakeholders and their common and joint ownership of the POPs problems that are identified in the assessment and planning process.

The completion of the NIP is, of course, not the end of the process but merely the end of the beginning. It is intended to be a dynamic document that will be enriched by the addition of new data and information; updated and reviewed as action plans are implemented and take effect or as new chemicals are added to the Convention. It may form the basis of national reviews and reports to meet Convention requirements.

Article 7 of the Convention is not the only one to require Parties to report to the Convention. Article 15 specifically requires Parties to report on the measures taken to implement the provisions of the Convention and on the effectiveness of such measures.

The first Conference of the Parties<sup>1</sup> decided that each Party shall submit its first report by 31 December 2006 and its subsequent reports every four years thereafter<sup>2</sup>.

Reporting to meet the provisions of Article 15 may incorporate other reporting provisions, for example:

- a review of the success of its strategies to reduce or eliminate releases from unintentional production<sup>3</sup>
- a report on its progress in eliminating PCBs<sup>4</sup>

Furthermore, Parties using DDT in disease vector control are required to provide, every three years, information on

consumption and conditions of use to the Conference of the Parties and the World Health Organization<sup>5</sup>. Parties seeking to renew specific exemptions for the continued production or use of chemicals in Annexes A and B will also need to provide review reports to support their applications<sup>6</sup>.

These continuing obligations mean that information gathering and reporting systems established during development of the NIP will need to be sustained. They form the basis for the support from the GEF not simply for the development of the NIP but for 'enabling activities' that build capacities of local stakeholders and strengthen responsible institutions.

Assessments of the current situation

Preliminary national inventories, which form the basis for priority setting and action planning during the NIP process, are all imperfect models. These models may be explicit – for example, the dioxin/furan toolkit, or implicit – for example the assessments of pesticide stocks or PCB equipment, and based on survey methodologies that likely provide returns from only a portion of the real populations.

The recognition of the inventories as models gives rise to a number of questions for those responsible for implementing the Convention at national level and for the Conference of the Parties:

- How well do the inventories reflect reality?
- How can the inventories be improved and refreshed?
- Can the initial inventories be used as the basis for indicators of the performance of a Party?

*How well do the inventories reflect reality?* This question leads to the consideration of whether the inventory is adequate for the purposes of setting priorities and making appropriate action plans.

In considering these questions it is perhaps best to distinguish between the size and shape of the inventory result.

The **size** refers to the number of items of, for example, PCB equipment, the tonnage of pesticides, the grams of dioxins and furans released in total or in the various components of the inventory.

The **shape** refers to the distribution of the total inventory between its different components; for example, the proportion of transformers held by the electrical utilities and other sectors of the economy; or the economic sectors contributing significantly to the dioxin inventory.

Inventory size and shape are considered in the simple matrix set out in Table 1 below.

If we have chosen an appropriate methodology and applied it diligently, then our results may reflect the national distribution of the chemical or equipment being considered and our inventory falls in the 'shape right' column of the table. Clearly, if we have also been able to gather data from all sources then we may obtain the correct size so that inventory falls into the upper 'size right' row. In this circumstance, we have an excellent result that truly reflects reality and forms a secure foundation for planning.

If, as we have suggested is more usual, the true size of the inventory is not captured by the preliminary inventory then our inventory must be considered in the lower row of the

<sup>1</sup> Held in Punta del Este, Uruguay, 2-6 May 2005.

<sup>2</sup> UNEP/POPs/COP.1/CRP.14/Rev.1.

<sup>3</sup> Stockholm Convention Article 5 paragraph (a), (v).

<sup>4</sup> Stockholm Convention, Annex A, Part II, paragraph (g).

<sup>5</sup> Stockholm Convention, Annex B, Part II, paragraph 4.

<sup>6</sup> Stockholm Convention, Article 4, Paragraph 6 and UNEP/POPs/COP.1/CRP.11/Rev.1.

Table 1. Size and shape considerations in preliminary national inventories

	Shape right	Shape wrong
Size right	<p>Excellent (but unlikely first time), A good methodology, applied conscientiously with a high level of returns and responses Inventory reflects reality Planning will be on a secure footing 😊</p>	<p>An unlikely result Inventory has total right but not where they are Planning cannot identify sectoral priorities (though total costs of action may be close to reality)</p>
Size wrong	<p>Not bad, A typical inventory result where a good methodology has been used but returns and responses are not complete Planning will identify correct priorities but be inadequate to deal with them. 😐</p>	<p>The worst result. The methodology was not appropriate or incorrectly applied and returns and responses were not complete. The inventory is almost useless. Planning cannot identify priorities or the scale of work required 😞</p>

matrix. If we have chosen an appropriate methodology and applied it diligently, then our results may still fall into the ‘shape right’ column and we have what is probably a typical result, allowing us to identify areas of priority but underestimating the full scale of the problem.

The worst case is where our inventory has captured neither the size nor the distribution of the problem. Such a result, falls into the bottom right ‘size wrong’ – ‘shape wrong’ cell of Table 1. We must seek to avoid this in the NIP development projects, as the result is practically useless for planning purposes; identifying neither the areas of concern nor the scale of the problem.

None of the inventory methodologies includes means of estimating errors so that imperfections in the inventory will need to be identified in our reporting of the results. Here, local knowledge and our understanding of the technical and socio-economic circumstances surrounding POPs use will be important; they form a ‘commentary’ to the inventory – identifying likely areas requiring further work; estimating possible totals from partial results and so on.

*How can the inventories be improved and refreshed?* Clearly, there is limited time and money within the enabling activities so that full and detailed inventories are impossible in most countries. It follows that activities to improve the inventories need to be incorporated into plans to implement the Convention. Of course, these subsequent phases of inventory work will not be national in character but will focus on priority areas or sectors. Here again, if our preliminary inventory is in the ‘shape right’ column, then these more detailed inventories will be correctly targeted.

That more detailed and focused inventories are necessary should not be a surprise to planners or financiers of Convention implementation. It would be unrealistic, for example, to expect to develop from the preliminary national inventory the detailed technical specifications necessary for a contract to dispose of PCB equipment. In this example, disposal of PCB equipment in a key sector would begin with focused inventory work using a methodology like that provided under the Basel Convention ([www.basel.int](http://www.basel.int)). Of course, results from such inventories should be captured by the national authorities responsible for Convention implementation to enrich and improve the information held at national level.

*Can the initial inventories be used as the basis for indicators of the performance of a Party?* With clear indications that the inventory results do not capture the true size of the problem, and with no clear measure of error in the inventory models, it is difficult to see how the results can be used to define a baseline against which later national reporting can be compared.

Parties to the Convention have committed themselves to eliminating and reducing POPs emissions and releases and so might expect national reporting to show a progressive fall in national inventory levels. In Diagram 1 (below) I have attempted to show the possible evolution of a national inventory by considering the ‘forces’ acting upon it.

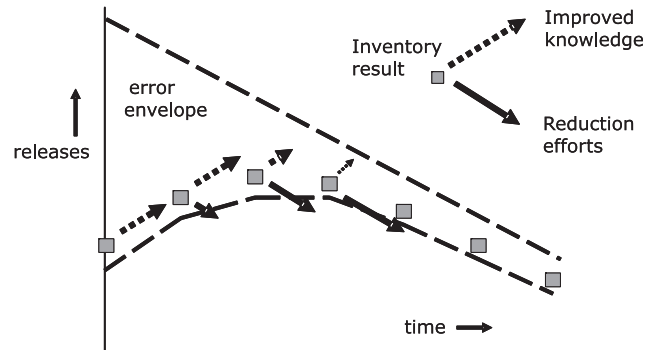


Diagram 1. Possible evolution of national inventories

The preliminary national inventory, prepared during NIP development, is represented by the shaded box straddling the vertical axis (time = 0). In the period immediately after its preparation, few, if any, reduction efforts have begun but national POPs teams may well continue to acquire new information and to improve their knowledge and understanding of POPs. In this way, at the time of first national reporting, represented by the next shaded square, the inventory total may have increased. This situation may persist for several reporting periods but it is likely that, as time goes on, the volume of new information decreases (marked by progressively smaller dashed arrows) while the reduction efforts begin to take effect (marked by progressively larger solid arrows) so, eventually, bringing the inventory total down.

In some cases, preliminary national inventories may be characterised by a large proportion of unknowns. For example, ‘suspect’ items of PCB equipment that were produced during the phase of PCB production and use but that, on inspection, lack information on the dielectric fluid used. Sampling and analysis of these items may show a significant proportion to be non-PCBs containing and to eliminate them from the inventory.

Improved knowledge and more complete information progressively reduce the error on the total inventory (shown by the narrowing of the area between the upper and lower dashed error limit lines) but this cannot be easily quantified.

## ACTION PLANS, MEASURES AND STRATEGIES

Having established the country situation, Parties can begin to plan the actions necessary to move towards compliance with the Convention.

Formal Action Planning is required of Parties at only two places in the Convention: in relation to reducing the unintentional production of POPs (Article 5) and in relation to the disease vector control to reduce and eliminate DDT use (Annex B). This latter obligation is limited to those Parties that request an entry in the DDT register to permit the continued use of DDT in disease vector control.

In addition to these two obligations, however, the English text of the Convention contains more than 200 other uses of the word ‘shall’ implying action by somebody. Some of these are duplications and not all require actions by Parties but, even removing these, there are many references in the convention to actions, measures and strategies that need to be planned in the context of NIP development and subsequently implemented.

The Convention is helpful in providing definitions of the likely contents of an action plan (text box) and further assistance is available from the initial guidance prepared by UNEP and the World Bank<sup>7</sup> and by UNITAR<sup>8</sup>.

Excerpt from Article 5, paragraph (a) of the Stockholm Convention

The action plan shall include the following elements:

- (i) An evaluation of current and projected releases, including the development and maintenance of source inventories and release estimates, taking into consideration the source categories identified in Annex C;
- (ii) An evaluation of the efficacy of the laws and policies of the Party relating to the management of such releases;
- (iii) Strategies to meet the obligations of this paragraph, taking into account the evaluations in (i) and (ii);
- (iv) Steps to promote education and training with regard to, and awareness of, those strategies;
- (v) A review every five years of those strategies and of their success in meeting the obligations of this paragraph; such reviews shall be included in reports submitted pursuant to Article 15;
- (vi) A schedule for implementation of the action plan, including for the strategies and measures identified therein;

resources and timescale needed to execute the activities; and to rank the actions in terms of both Convention obligations and national policies and strategies towards broader development targets.

Several distinct types of action can be identified in the Convention: there are actions relating to the responsibilities and roles of Parties within the Convention, and its management at national level; to the reduction and elimination of POPs production, use and trade through technical actions; and to social requirements in terms of raising awareness and providing information to vulnerable groups. It seems likely, therefore, that these actions will require the involvement of different groups of actors, different levels and sources of funding, and different modes of operation.

Some actions – for example, the development, maintenance and sharing of POPs data and information and national reporting to the Conference of Parties and its subsidiary bodies, will be the *proper and normal business of gov-*

*ernment* and will need to be planned into the work of appropriate line ministries.

Other actions, particular those of a technical nature, may be beyond the current capacity or capability of developing and transition economy states and be suitable for support under the Convention’s *technical assistance* provisions and for funding as envisaged under the Convention’s financial mechanism (Articles 12 and 13 of the Convention). Guidance to the financial mechanism on those areas of Convention likely to require technical assistance is set out in decision SC1-22 of the First Conference of the Parties.

Some of these plans may require actions by non-government organisations - in particular industry and civil society groups, or be best executed by such groups. Civil society groups with strong community links can be instrumental in raising awareness of particular risks and in assisting the vulnerable to play an active role in designing and implementing solutions. Similarly, the precautionary approach adopted by the Convention places a duty of care on industry to adopt, or work towards the application of available, feasible and practical measures that locally may represent Best Available Techniques (BAT) and Best Environmental Practices (BEP). Many of the possible approaches listed in the guidance on BAT/BEP in the Convention (Annex C Part V) are, if introduced intelligently, likely to provide economic as well as environmental improvements and thus represent positive drivers for the engagement of industry.

It is recognised, however, that government will need to play an active role in moving into compliance with the Convention. It is important to remember here that while the Ministry of Environment or an equivalent agency is responsible for leading NIP development, it is likely that many of the actions identified as necessary for compliance will fall outside its mandate and require coordination and interaction with a wide range of other governmental and non-governmental institutions. Identifying appropriate stakeholders, defining their roles and responsibilities, and working with them to identify appropriate and workable actions are thus key elements of the planning aspects of the NIP work.

Here again the Precautionary Approach is fundamental. Costs likely to be incurred in the remediation of POPs contaminated sites, if possible at all, are likely to be orders of magnitude greater than the costs of environmentally sound management. For this reason, we need to be sensitive to the risk that our actions to ensure good management of POPs if not properly targeted or designed may result in chemicals, equipment and articles being dumped or moving from the legal sector - where environmentally sound management can be developed, to the informal or illegal sectors where our influence is likely to be much less.

## DETERMINING THE COST OF COMPLIANCE

Governments becoming Parties to the Convention will be concerned about the costs associated with moving into compliance, and about who will bear the responsibility for providing the financial resources to meet these costs. Governments will expect those developing NIPs to examine a wide variety of alternative actions in order to determine the most

<sup>7</sup> Available on [www.pops.int](http://www.pops.int)

<sup>8</sup> [www.unitar.org/cwm](http://www.unitar.org/cwm)

cost-effective approach, and to develop or initiate a resource mobilisation strategy.

Priority setting and action planning during NIP development thus play a key role in examining alternatives and establishing the most acceptable and cost-effective combination of actions to deliver the desired outcomes. Planning is likely to be dependent not only on technical and scientific priorities but also on prevailing socio-economic factors at national level, the results will be a compromise between them.

It follows that action planning is not straightforward but a complex and iterative process. It is likely to involve problem analysis, so that correct interventions can be identified, stakeholder analysis, so that appropriate actors can be identified, and comparative 'cost-benefit' analyses of both the *status quo* and possible alternative strategies.

That POPs possess toxic properties, resist degradation, bioaccumulate and are transported across international boundaries; makes such cost-benefit analysis particularly difficult at the national level. Restrictions in use or the elimination of releases in one country may appear to generate only costs at the national level while benefits accrue elsewhere.

This could jeopardise action were it not for the Convention's emphasis on identifying cost-effective solutions targeting sources of POPs release, and its intention to offset incremental costs with financial support.

Furthermore, the Convention is helpful in providing a variety of mechanisms that work to reduce costs and provide resources:

- It is founded on precautionary approaches that seek to remove the threats posed by POPs chemicals at source; before they enter the environment or affect human health;
- It provides a variety of timescales during which the chemicals, equipment or articles must be reduced or eliminated. This allows, for example, well managed PCB equipment to be replaced over 20 years, largely according to the normal business capital investment cycle, thus reducing the incremental cost by discouraging the replacement of equipment with residual value;
- It requires Parties to establish and set national targets for the 'continuous and meaningful reductions' in the unintentional production of POPs through the introduction and promotion of practical, viable, and available techniques;
- It recommends cleaner production approaches that may provide economic benefits, again reducing or eliminating medium- and long-term incremental costs;
- It stresses the importance of using techniques that are already commercially proven in order to avoid the costs associated with the development and proving of new technology;
- It encourages the linking of POPs obligations to wider development strategies so that costs can be shared and benefits enhanced;
- It defines the obligation of developed country Parties to assist in providing new and additional resources;
- It limits the obligations of developing country Parties and Parties with economies in transition to implement measures to the extent that financial resources, technical assistance and technology transfer are made available; and finally,
- It provides a mechanism for the provision of financial resources and establishes the Global Environment Facility,

on an interim basis, as the principal entity entrusted to operate the financial mechanism.

Of course, determining the costs associated with action plans is not easy. The inventory process, as we have seen, provides only a model or outline of the country situation and this will not be sufficient for commercial service providers to calculate or offer firm prices for management and disposal work, or to determine an appropriate timescale for its execution. It follows that action plans of this type will need to be focused on priority issues and incorporate a component of detailed survey and inventory work so that the technical specifications of required work can be determined as a basis for costing<sup>9</sup>.

Furthermore, while prices may be available for key stages of a process – for example, the 'ex works' cost of destruction; prices for other stages may be highly dependent on a wide variety of factors. This is likely to make cost estimation in any detail extremely difficult unless similar local experience is available.

For example, costing a plan to remove obsolete pesticides will require a detailed assessment of: the materials to be disposed; the degree to which they require handling and repackaging; the degree to which hazards are increased by the decay of packaging and the mixing of stored materials; the access to and security of existing locations and storage facilities; the availability of properly-equipped local service providers; the distances over which materials must be transported and hazards on the way; and so on. Despite this, results from the increasing number of bilaterally-funded removal projects may provide evidence for preliminary costs to be estimated.

In preparing NIPs, country teams may choose to provide more detail and better cost estimates for short-term, priority actions – perhaps based on the results from previous similar exercises, while the costs associated with medium- and long-term actions are left less well defined.

## FINANCING ACTION PLANS

Developing country Parties and Parties with economies in transition are provided with a financial mechanism to help them meet the agreed full incremental costs of implementing measures to fulfil their obligations under the Convention. Incremental costs are those additional capital and recurrent costs incurred by the requirement to amend existing practices and act in accordance with the Convention.

Furthermore, the Convention indicates that the source of much of this financial support should be, but is not necessarily limited to, developed country Parties and that it is to be provided either through the financial entity, the GEF, or through bilateral, regional and multilateral sources and channels.

It follows that the development partner community – bilateral donors, regional development mechanisms, the GEF Agen-

<sup>9</sup> Different inventory processes may be relevant at this stage. For PCBs, for example, following the guidance provided by the Basel Convention ([www.basel.int](http://www.basel.int)) is likely to be appropriate and will permit detailed assessment of focused problems towards the determination of technical specifications of work required as a basis for contracting.

<sup>10</sup> Access to the GEF is provided through 3 'implementing agencies'; UNDP, UNEP and the World Bank, and, for POPs, a series of 'executing agencies with expanded opportunities'; FAO, IFAD, UNIDO and the Regional Development Banks.

cies<sup>10</sup> and so on, is a stakeholder in the NIP development process and needs to be engaged in the process as it progresses.

Of prime importance here is for national action planning to be closely linked to and integrated with wider policies and initiatives related to national development – for example, strategies towards the Millennium Development Goals. This demonstrates Government's understanding of the purpose and benefits of the Convention and commitment to its role as a Party. In turn, this facilitates the incorporation of POPs targets and priorities in assistance strategies negotiated periodically between Government and its assistance partners. Without suitable references of this type, it is likely to be more difficult to secure bilateral financial support.

Similarly, contributions from the regular government budget to support those necessary and continuing actions required of Parties – the maintenance of a national focal point, national reporting and information provision and exchange, public awareness and education and so on, further demonstrate government commitment and encourage external support.

Nevertheless, country teams will need to minimise the burden placed on hard-pressed local budgets. This can be achieved by:

- exploiting the management synergies between the various chemicals and waste-related multilateral environmental agreements will be important, particularly in small environment departments where *de facto* only a small number of people are available to handle these international commitments and their national repercussions;
- linking proposed actions with programmes and activities in other ministries and department to derive co-benefits and cost-sharing.

It follows from this that no single financing model is adequate to describe the arrangements that are likely to be necessary to fund implementation actions and NIP development teams will need to be aware of funding opportunities, to develop partnerships and consortia to take initiatives forward, and to seek innovative arrangements of securing national and international, public and private resources.

### THE GLOBAL ENVIRONMENT FACILITY (GEF)

Established, on an interim basis, as the principal entity of the financial mechanism of the Convention, the GEF is likely to be a significant and critical source of funding for POPs actions in developing country Parties and Parties with economies in transition. The GEF has responded quickly to the Convention, establishing a new focal areas for POPs and providing support to more than 120 countries engaged in enabling activities leading to NIP development and to a range of other demonstration and strategic research initiatives. The provisional guidelines, criteria and priorities set for its operation programme on POPs (OP14) have now been supplemented by guidance provided by the first Conference of the Parties<sup>11</sup>.

The GEF has a number of key advantages that enable it to play this key role:

- It made available a significant amount of money (US\$ 250 million) for POPs over the years of the 3<sup>rd</sup> phase of the GEF to 2006 and is planning similar or enhanced budgets for the 4<sup>th</sup> phase to 2010;
- It has the potential and resources to support major & costly environmental projects beyond other scope of most other individual grant donors;
- It routinely makes available grants for project development (PDF-A, PDF-B);
- It is intended to be a transparent and country-driven process; its global agenda is driven by guidance from the Convention and has set objectives and priorities that are publicly available in its programme documents.

There are, however, a number of issues that country teams need to be aware of in considering the GEF as a funding partner for their priority actions:

- It has a lengthy project cycle with full-size projects, where the GEF contribution is expected to be in excess of US\$ 1 Million, taking perhaps 2–4 year from the first expression of a concept to its implementation<sup>12</sup>;
- Incremental cost calculations for POPs are as yet unclear and potentially complex and the GEF funds, in principle, only that element of the incremental cost relating to global benefits and requires other funding partners to meet the incremental costs associated with local benefits;
- Only enabling activities are fully funded; all other project types require cofinancing at least equivalent to the GEF contribution so that country teams must explore funding possibilities from other donors, many of whom are themselves contributors to the GEF;
- It places emphasis on projects exploiting new and innovative approaches rather than on projects that represent 'routine' or repeated implementation actions at national level;
- It faces competing programmatic pressures that may make it difficult to coordinate GEF and Convention priorities both within and across its focal areas;
- It is introducing allocation arrangements, based on country performance and potential to generate global benefits, that may adversely impact on least developed country Parties and Parties that are small island states that have particular requirements and special needs in terms of capacity and capability development and technical approaches, and are a focus of attention for the Convention.

While these may appear significant obstacles to implementing the Convention, the GEF Agencies have considerable experience of assisting national teams to develop and submit proposals to the GEF. A number of implementation projects have been successfully promoted to the GEF and its partners and this process is likely to accelerate as country teams complete their NIPs and transmit them to the Conference of the Parties.

It follows that country teams developing NIPs should seek the advice and support that is available from the GEF agencies during action planning so that subsequent proposals can be properly founded on priorities and actions highlighted in the NIP.

<sup>11</sup> UNEP/POPS/COP.1/31 decision SC-1/15 Technical assistance.

<sup>12</sup> Smaller projects have reduced project cycles and can be implemented more quickly.

## **CONCLUSIONS: PROMOTING GOOD ACTION-BASED PROJECTS TO THE GEF**

The NIP represents the culmination of a lengthy planning process and is the foundation for the implementation of action to reduce or eliminate POPs releases. The preliminary inventories are unlikely, this first time, to reflect the size of the problem in a country but can, with a good methodology diligently applied, determine its distribution or shape. Where the distribution is known, the priorities and action planning can proceed with some confidence.

The Convention is based on the precautionary approach and seeks to engage practical, available and feasible measures to address POPs threats. It is pragmatic and practical in character and realistic, 'concrete' actions need to follow from the planning phase.

The actions necessary to address POPs problems are likely to require the engagement of a wide variety of stakeholders from different sectors of the economy and operating at different levels of society. Government, industry and civil society groups all have important functions in Convention implementation. Similarly, responsibility for POPs actions is likely to extend beyond the mandate of the focal ministry and will require carefully coordination and collaboration between line ministries and other institutions.

It is important that such collaboration and commitment is obtained during the NIP development phase and constituted in such a way that it can continue after the completion of the NIP. This continuing responsibility, likely to form part of 'normal government business', is required to coordinate the diversity of POPs actions and to provide the materials for the Parties continuing reporting commitments to its Conference of the Parties.

Many of the actions identified as priorities in the NIP will be suitable for technical assistance support. The GEF is likely to be a significant and critical source of funding but is never the only source of finance for such opera-

tions. Co-financing at least equivalent to the GEF funding is required and country teams will need to be conversant with the programmes and priorities of potential donor agencies in order to build successful funding consortia. Project teams also need to be aware of the complex project cycle of the GEF, particularly where Full Size projects are proposed.

Even with such support, the likely total global cost of implementing the Convention means that Projects designed to introduce environmentally sound management and disposal will need to demonstrate measurable impacts and cost-effectiveness, perhaps through the calculation of 'unit abatement' cost. Parties will need to undertake careful problem and stakeholder analysis to determine the best interventions to remove sources of releases. Similarly, there is a clear need to link POPs actions to other national and regional initiatives to derive the significant co-benefits available.

The many stages in the management and disposal of POPs chemicals, and the problems of determining incremental costs, mean that preparing project budgets can be difficult. Nevertheless, the growing body of information from such projects can provide indicative costs for planning purposes.

While the GEF expects proposals to be country driven, a number of agencies are now available and ready to assist country teams to translate the priorities actions identified in their NIPs into proposals worthy of support.

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## **МОНИТОРИНГ ЗАПРЕЩЕННЫХ И НЕПРИГОДНЫХ К УПОТРЕБЛЕНИЮ ПЕСТИЦИДОВ В РЕСПУБЛИКЕ БОЛГАРИИ**

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Культурные растения и растениеводческая продукция подвергаются нападениям и повреждаются многими видами вредителей и болезней. Защита сельскохозяйственных культур и производ-

ство больше и более качественной продукции возможно главным образом с применением пестицидов.

В шестидесятых и семидесятых годах прошлого столетия у нас в результате укрупнения, концентрации и специализации растениеводческом производстве и после внедрения новых промышленных технологии произошли значительные перемены в агроценозах возделываемых культур. Создались экологические предпосылки для массового появления экономически важных болезней и вредителей, для возникновения эпифитотии и резкого увеличения численности вредителей. Черезмерное потребление инсектицидов, из за недостаточную ин-формацию об отрицательными воздействиями после применении химических средств защиты растений, привела к тому что многие виды превратились в серьезных вредителей. В то время при-