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**UNDP/GEF PROJECT ENTITLED “REDUCING ENVIRONMENTAL STRESS IN THE  
YELLOW SEA LARGE MARINE ECOSYSTEM”**

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**Second Regional Technical Meeting on  
Preparation of the Implementation Plan  
for the UNDP/GEF Yellow Sea Project**  
*Ansan, Korea, 3-5 March 2005*

**BRIEF INTRODUCTION ON  
THE TDA/SAP PROCESSES AND THEIR REQUIREMENTS**



## **1. BACKGROUND**

During the First Regional Technical Meeting of the UNDP/GEF Yellow Sea Project (Beijing, China, 14-16 December 2004), some of the participants did not have a clear idea on the objectives and procedures of the Transboundary Diagnostic Analyses (TDA) and Strategic Action Programme (SAP), and how to implement the relevant activities to facilitate implementation and completion of the TDA and SAP.

Based on the TDA/SAP training module prepared by the TRAINSEACOAST, this document will provide some basic ideas on the TDA/SAP process to facilitate understanding of the participants. It will also facilitate the discussions on the relevant project activities and actions to be taken under the UNDP/GEF Yellow Sea Project.

The members of the meeting will be invited to read this document before the meeting, and note the importance and requirements of the TDA/SAP process during the consideration of the draft implementation plan of the project.

## **2. TDA AND ITS PROCEDURE**

The production of a Transboundary Diagnostic Analysis (TDA) followed by a Strategic Programme of Action (SAP) is a requirement for most OP8 and OP9 projects proposed for financing in the GEF International Waters Focal Area.

The TDA is a scientific and technical fact-finding analysis used to scale the relative importance of sources, causes and impacts of transboundary waters problems. It should be an objective assessment and not a negotiated document.

The analysis is carried out in a cross sectoral manner, focusing on transboundary problems without ignoring national concerns and priorities. In order to make the analysis more effective and sustainable it should include a detailed 'governance analysis' which considers the local institutional, legal and policy environment.

Furthermore, the TDA should be preceded by a full consultation with all stakeholders, with the stakeholders involved throughout the subsequent processes. Four key points that underpin the TDA are:

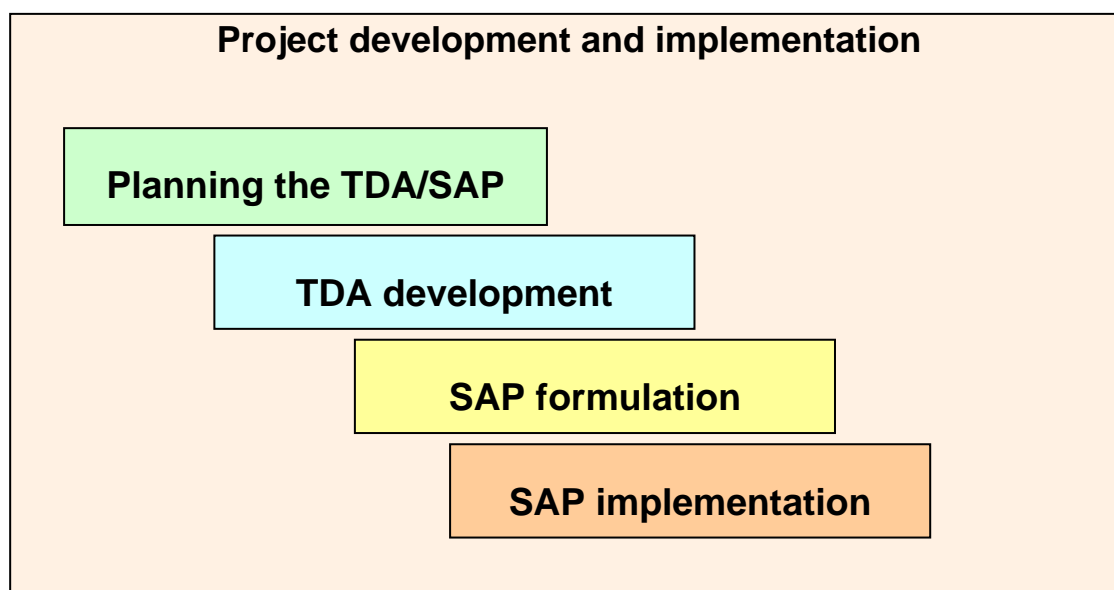
- Joint fact-finding;
- Prioritisation;
- Participation; and
- Consensus.

The TDA approach is not only a proven way of achieving progress, it also acts as a diagnostic tool for measuring the effectiveness of SAP implementation.

### **The TDA/SAP Process**

The TDA/SAP process is divided into 4 Phases, all of which fall within the development and implementation of a GEF International Waters project:

Figure. 1. GEF project development and implementation.



Each phase will normally take a minimum of several months, while the whole development and implementation process can range from a year in a very small project to several years in a major one. The main activities covered in the overall project and the first three phases are shown in Figure 2, below, with brief explanations. Detailed sets of tasks for each phase are described later.

### **Major Tasks of the TDA**

Development of the TDA is a scientific and technical process of fact-finding (or diagnosing) the state of, and threats to, international waters. The major tasks outputs of the TDA include the following elements:

- TDA preparation: Information and data 'stock taking' exercise;
- Identification and initial prioritisation of transboundary problems;
- Analysis of impacts/consequences of each transboundary problem;
- Final prioritisation of transboundary problems; and
- Governance analysis.

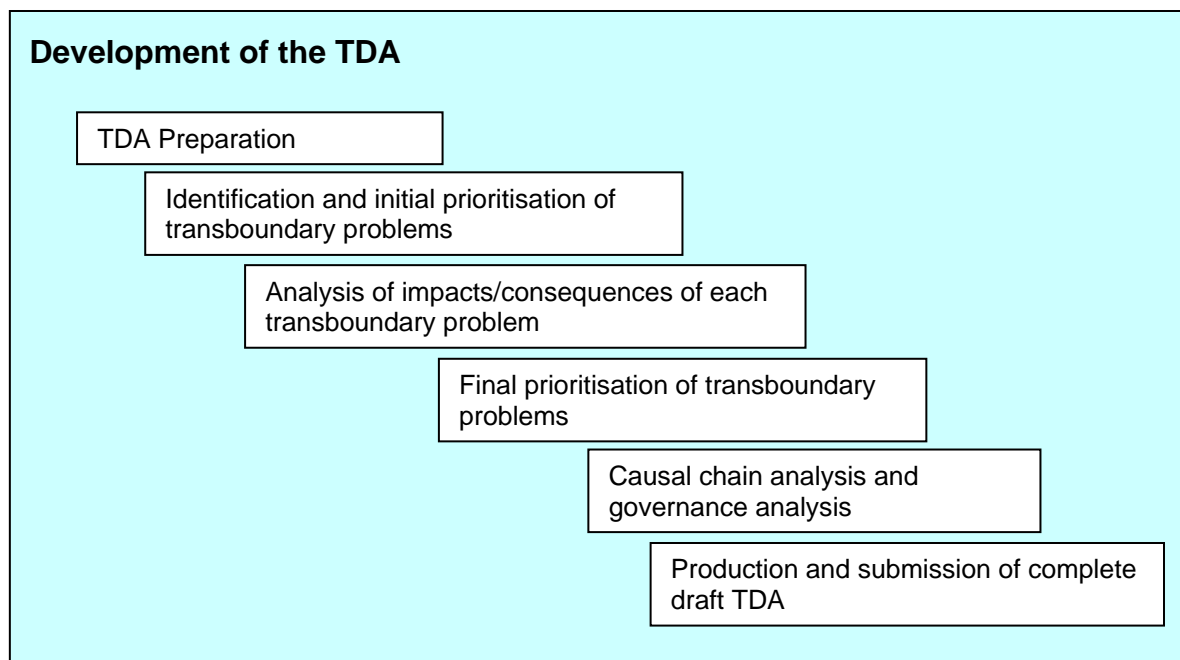
Where possible, experts from the countries involved should do the work, but often international experts may also be needed, the emphasis being on using the best available independent expertise.

The TDA thus provides the factual basis for the formulation of the SAP based on a reasoned and multi-sectoral consideration of the problems. But it also shows countries how to exchange information and work together. This is valuable for the eventual formulation of the SAP.

#### **(i) TDA preparation: Information and data 'stock taking' exercise**

There is often a wealth of information and data available. However, it generally comes from multiple sources, its generation and use is often uncoordinated, and it is frequently neither accessible nor entirely appropriate.

Figure 2. Steps carried out during the TDA development process.



Therefore, prior to developing the TDA, a simple information and data ‘stock taking’ exercise should be initiated (often termed a meta data study). This will ascertain the sources of information/data, its availability and gaps in knowledge.

#### **(ii) Identification and initial prioritisation of transboundary problems**

The main analytical and diagnostic work has often been called Scaling – Scoping – Screening. This means that the scale (or timescale and geographical area) of each problem, and its scope (magnitude) must be determined, and then the problems must be screened to sort out those of high priority from the low.

The first step in the TDA process is to agree on the transboundary problems. The initial stakeholder consultation will have already highlighted the main problems, but it is important to revisit them, agree on whether or not the list is complete, examine their transboundary relevance, determine preliminary priorities and examine the scope of each.

The experts should brainstorm the list of problems with emphasis on their transboundary nature, and then conduct a simple exercise to assign priorities (high-medium-low) from an environmental and social/economic standpoint. The geographical extent of the problems associated with each problem can then be stated.

#### **(iii) Analysis of impacts/consequences of each transboundary problem**

The environmental impacts and socio-economic consequences of the relevant transboundary problems should also be identified. Some of this information may have been gathered from the stakeholder consultation process since stakeholders may identify impacts or consequences and it is on this basis that problems are identified. However, the project must ensure that the entire range of impacts and consequences are identified and quantified, and this may require additional research.

The final reports for each problem will be quite brief (typically some 5 pages per transboundary problem), but should contain objective and quantitative information. The work will normally be conducted by select individual specialists.

#### **(iv) Final prioritisation of transboundary problems**

After the completion of the analysis of impacts/consequences, a final prioritisation should be carried out. Final prioritisation is vital since it ensures that the causal chain analysis concentrates on those problems that are the most significant to stakeholders and represent the best investment of their resources.

#### **(v) Causal chain analysis and governance analysis**

Future corrective actions can only be proposed with confidence if the whole chain of symptoms, causes and effects is understood. Such a causal chain analysis has to be carried out for each priority problem. The completed causal chain analysis should help to locate potential areas of intervention for the GEF, and is an important basis for the design of the practical actions that will be included in the SAP.

The causal chain relates the problems to their immediate physical causes and their social and economic underlying causes. However, there is a danger here of confusing problems and immediate causes. For example, take the question of 'pollution hot spots'. Should the existence of hot spots be described as the problem to be dealt with?

The outlined causal chain diagram in Figure 3 shows that this could be wrong. The hot spot is the immediate cause of the problem.

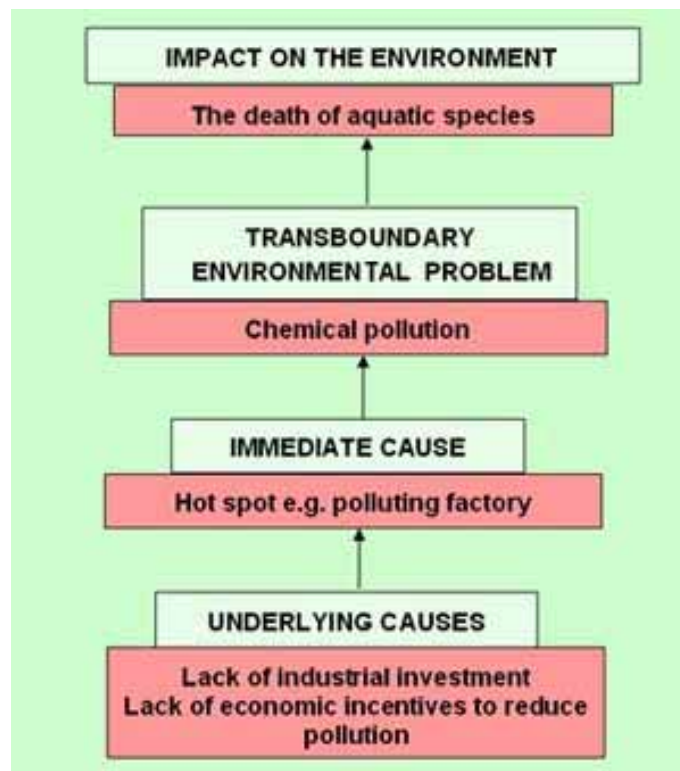
During the TDA, the interaction between causes and effects of key transboundary problems has to take into account the **geographical scale** of the environmental and social impacts of a problem. Remember: the problem itself and the causes of the problem may be different.

Completion of a causal chain analysis for each of the priority problems requires a mixture of expertise: scientific for the immediate causes, and social and economic for the underlying and root causes.

**Immediate causes** are usually technical in nature and should be quantified, prioritised and geographically located. **Underlying causes** are those that contribute to the immediate causes. They can broadly be defined as **sectoral** resource uses and practices, and their related social and economic causes.

Beyond the sectoral causes however, are deeper **root causes** of the problems, often macroeconomy, demography, consumption patterns, environmental values and access to information and democratic processes. Most of these are beyond the scope of GEF's intervention but it is necessary to document them. The reason for this is that some proposed solutions may be unworkable if the root causes of the problem in question are overwhelming. Furthermore, actions taken nearer to the root causes are more likely to have a lasting impact on solving the problem.

Figure 3. Outline of causal chain diagram.



#### (vi) Governance analysis

The term 'governance' is shorthand for the whole political environment: institutions, laws, policies and projected investments that affect environmental problems. The analysis of these is known as **governance analysis**.

The existence of a problem implies that some parts of the current mechanisms or their implementation are insufficient, otherwise the problem would not exist. Therefore, these mechanisms and the reasons for any failure must be documented in order that appropriate interventions can be suggested.

An important characteristic of governance analysis is to find out where decision-making power really sits, and how the mechanisms actually work, as opposed to how they are supposed to work.

Governance analysis should describe the dynamic relations within political and social structures that underpin such aspects as legislative and regulatory frameworks, decision-making processes and budgetary allocations. In carrying out the causal chain analysis, many cross-cutting underlying causes will be found to be governance issues.

It is also vital to know what relevant projects, programmes and investments have been approved, or are in the pipeline, for the forthcoming decade. Investment project cycles are generally very long, so the current development portfolios become an integral part of the TDA.

The governance analysis should be conducted by regional experts, and there should be regular feedback between all groups in order to understand the dynamics and synergies between the causes of transboundary problems and possible failures in governance.

### (vii) Production of the complete draft TDA and submission for final approval

Up to this point, all the fact-finding, analysis and diagnosis has been carried out separately for each key problem or related set of problems. These now have to be combined into a single document.

This complex task is conducted under the supervision of the Project Manager, who may appoint specialists to help. The draft TDA should have a jargon-free executive summary and the main text should be lucid and concise. There should be easy to understand **maps** (either sketch, GIS or photographic) illustrating the geographic scale and scope of the priority transboundary problems, impacted areas and the location of immediate causes (such as hot spots, river diversions, urban developments).

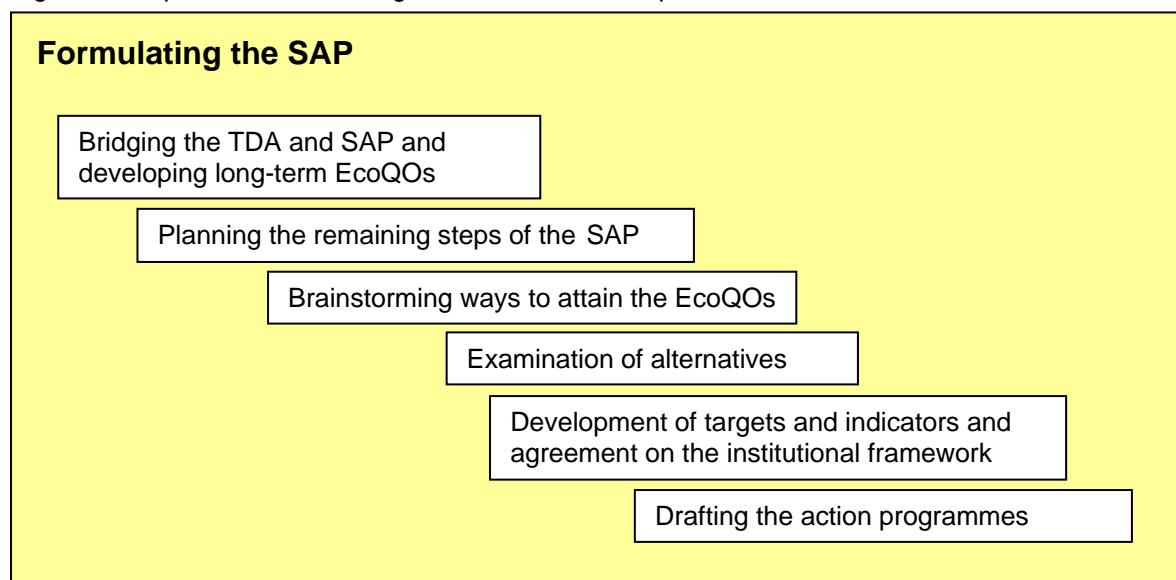
To obtain official standing, the TDA should be formally adopted by the Project Steering Committee following any technical and stakeholder reviews that may be advisable. This adoption gives a seal of authority on the document as an input into the more political process of the SAP.

### 3. FORMULATING THE SAP

The third phase takes the process into the political arena where objectivity may be affected by political pragmatism. A good TDA will have made it easier to develop logical, sustainable and politically acceptable solutions. This is why so much emphasis has been given to the groundwork in the first two phases.

Figure 4 shows the theoretical sequence of tasks, although of course some of these will go on in parallel.

Figure 4. Steps carried out during the SAP formulation process.



#### (i) Bridging the TDA and SAP and developing long-term EcoQOs

This is a crucial step, coming between the TDA and the SAP parts of the process, and provides the bridge between the two pictures. It links how the region is now with what it is



hoped to be in the future. The Ecosystem Quality Objectives (EcoQOs) are statements of the 'vision' of how the stakeholders would like to see the state of the system in the future.

Therefore the project should examine the 'vision' and each priority transboundary problem detailed in the TDA and ask the question, "What would be an acceptable environmental status that would be a sign of a solution for this problem"? A statement describing the status will represent a long-term EcoQO.

It is important that at this stage there is full consultation with all the stakeholder groups to encourage 'buy-in' and ownership. Remember, EcoQOs should be statements of the 'vision' of how the **stakeholders** would like to see the state of the system in the future. A practical way of achieving this is to involve stakeholder representatives in the bridging meeting and subsequent SAP meetings, who will report back to their respective groups on the outcomes.

## (ii) Planning the remaining steps of the SAP

Many of the solutions proposed in the initial brainstorming meeting will require action at a national level. It is important to engage the National Inter-Ministry Committees (IMCs) in the process as early as possible. One way to do this is to organise national meetings that mirror the initial brainstorming. These should be organised by the national IMCs and include a suitable range of stakeholders and technical specialists.

Each country's National IMC should appoint a **National Action Programme (NAP) Formulation Team** who will eventually generate draft NAPs. These teams will ensure that all actions are firmly anchored on realistic national policy, and promote a sense of national ownership.

In addition, a **SAP formulation team** should be created. This will include representatives of the TDA experts and NAP Teams in order to ensure adequate synergy to address regional priorities. This is of course a technical team that will not make political decisions.

## (iii) Brainstorming ways to attain the EcoQOs

The objective of the brainstorming activity is to work with stakeholder representatives and specialists to propose a number of practical options that make significant progress toward the EcoQOs.

A brainstorming meeting should be organised with participation of stakeholders and experts. Everyone is encouraged to be creative in their ideas. No attempt is made to limit the discussion to what seems reasonable or feasible. Because of this informality, it is not necessary to seek formal approval from the Steering committee for who should be invited.

The meeting examines each EcoQO and identifies possible options for achieving them. The process involves **working in small groups**, each of which develops part of a matrix (or table) of options, which should include:

- which part of the causal chain they address
- timeframes for implementing them
- responsible parties
- relative costs (where possible)
- indicative priorities to the solutions proposed.

This matrix will be the basis for further technical evaluation and should be as 'inclusive' as possible, since it does **not** represent a commitment.

#### **(iv) Examination of alternatives**

The high priority proposals emerging from the brainstorming now have to be evaluated for:

- their technical feasibility;
- their costs and environmental benefits; and
- their political and social acceptability.

Each of these analyses should be carried out nationally by the NAP formulation teams and national members of the SAP formulation team. However, the whole process should be steered regionally. Each of these three analyses is discussed below.

At this stage, firm decisions need to be taken by the Project Steering Committee and, most importantly, by the National Inter-ministry Committees. The outcome is ultimately reflected in the draft NAPS.

Parties committing themselves to implementing the SAP must be fully accountable for their actions. Therefore, the stakeholder group/sector/government agency responsible for implementing the actions proposed within the TDA must be clearly and unambiguously identified.

#### **(v) Development of targets and indicators**

To integrate the national actions detailed above into a coherent region-wide programme of action, three basic technical recommendations are required. These are:

- Development of short-term targets and priority actions;
- Agreement on the national/regional institutional framework; and
- Development of measurable M & E indicators for each target.

#### ***Development of short-term targets and priority actions***

The technical and political consultation process described above should enable the SAP formulation team to determine how far the political process can be taken, in the short/medium term, towards the long-term EcoQOs.

By careful accountancy of the environmental and social benefits, a set of 1 to 10 year targets and priority actions can be set. In addition, the targets should be reflected in measurable process, stress reduction or environmental status indicators. These indicators should answer the question "What measurable progress should be observable at the end of a decade?"

Short term targets are stepping stones on the way to an EcoQO; they define the pragmatic steps towards achieving agreed EcoQOs. The timescale of an EcoQO may be decades while a shorter-term target would be monitored and reported on perhaps annually.

Short term targets are goals towards which measurable progress should be observed over a period of, say, one, five or ten years. Targets may be environmental, such as some sort of water quality indicator or species abundance, or they may be more closely linked to societal factors such as the proportion of human sewage which is now being treated to secondary level. They should be unambiguous and easy to communicate to the public.

### ***Agreement on the Institutional Framework***

The TDA will have already examined national and regional institutional strengths and weaknesses. Proposals should be formulated on how the weaknesses should be corrected, through increasing the capacity of existing institutions or creating new ones.

For example, there may be a need to create a revised or new regional coordinating framework such as a commission for a river basin or large marine ecosystem. In parallel, there must be discussions on:

- the formulation of national policy;
- the need for legal and institutional reforms; and
- investment priority.

These proposals will normally be formulated by the NAP teams, agreed by the National Inter-ministry Committees, and final agreement reached following the decision on the operational objectives.

The TDA/SAP is itself a policy process leading to concrete benefits, as Governments make commitments to institutional and policy changes, and may identify actions needed and carry them out during the progress of the TDA/SAP.

### ***Development of measurable M & E indicators for each target***

Monitoring and evaluation (M & E) indicators are long-term monitoring tools used to verify the implementation of the SAP. In order to achieve this, the SAP team should prepare a set of process, stress reduction and environmental status indicators based on the results of the TDA, but adapted according to the needs of the long-term EcoQOs and shorter term targets and priority actions.

Project monitoring and evaluation indicators for any subsequent GEF interventions should also be developed. There should be clear linkages between the indicators and the institutional capacity for monitoring them.

## **(vi) Drafting the action programmes**

### ***Drafting the Strategic Action Programme (SAP)***

Drafting the SAP has many similarities with the NAP drafting process. It should be prepared on the basis of identified regional priorities and agreed Ecosystem Quality Objectives. The various SAP and NAP meetings conducted during the SAP formulation process will have produced a great deal of material that will need to be integrated into one document.

The work of integration of the various materials of the SAP into a single document should be conducted under the supervision of the Project Manager and key members of the PMU and the SAP expert(s).

The SAP should be a concise jargon-free document with clear targets, quantifiable time-limited milestones and unambiguous assignment of responsibilities. It should embody:

- a statement of the priority problems;
- principles adopted for solving them;
- institutional arrangements;
- policy and legal reforms;
- joint planning and dispute settlement mechanisms;
- public participation;
- long term EcoQOs and short-term targets and priority actions;

- common measures to be taken; and
- monitoring and review arrangements and reporting.

It should include a series of annexes giving details such as monitoring and evaluation indicators, lists of stakeholders and contact points.

### ***Drafting the National Action Programmes (NAPs)***

Based on the regional SAP, each country involved in the TDA/SAP will need to develop a National Action Programme (NAP) or Integrated Water Resource Management Plan (IWRMP) / Poverty Reduction Strategy Paper (PRSP), as appropriate. The reason for this is that the underlying causes as well as the complex linkages between the sources of environmental degradation and threats mean that national actions must respond to the uniquely specific circumstances and priorities of each country.

Each country must select the approach that best suits geographic characteristics, political, institutional and regulatory frameworks, best available science and technology, current assessments, inventories and data. Furthermore, some countries will place the NAP higher in the political process than others, i.e. at a parliamentary level rather than ministerial. Therefore no two NAPs will have quite the same appearance, scope or focus.

### **(vii) Ministerial adoption**

As a long-term strategic programme designed to change government, corporate and public behaviour, the SAP (and the associated NAPs) must be formally endorsed by relevant government authorities. This is to ensure that they are adequately incorporated into planning and budgetary processes at all levels: national, state, province, district, municipal.

Solid support from government authorities is a key to successful implementation of SAP activities and strategies, including pilot projects. Particularly because it addresses a cross-sectoral range of issues, the SAP must be brought into the mainstream of policy, legal and budget provisions, enforcement mechanisms, and technical and scientific frameworks.

Official adoption of the SAP is also necessary to give the process the legitimacy and support that will be needed to bring on board a wide range of stakeholders, both from the public and private spheres.

### **(viii) Conducting a Donors Conference**

The SAP planning process itself should be encouraging to the various parties engaged in the endorsement process. One of the most efficient mechanisms is to call a donors (or partnership) conference, to allow bilateral and multilateral organisations to review the proposals and to engage in joint planning for future projects.

Suggested preparation for a meeting:

1. Inform relevant donors of planned meeting at least six months in advance.
2. Distribute preliminary NAPs at least two months prior to the meeting.
3. Distribute nationally endorsed SAP as soon as it is available.