



Global Environment Facility

GEF/C.22/Inf.8
November 11, 2003

GEF Council
November 19-21, 2003

PROGRAM PERFORMANCE INDICATORS FOR GEF INTERNATIONAL WATERS PROGRAMS

(Prepared by the Monitoring and Evaluation Unit)

Formatted

Program Performance Indicators for GEF International Waters Programs

~~Draft~~

11/1007/02/03

~~Prepared for the GEF International Waters Program Indicators Steering Group
with the assistance of Gareth Porter, project consultant. GEF Monitoring & Evaluation
Unit~~

This paper was prepared by the GEF Monitoring & Evaluation Unit with important contributions from Gareth Porter, Aaron Zazueta, Jarle Harstad, Andrew Hutzon, Marea Hatzios, Alfred Duda, Juha Uitto, Andrea Merla, John Pernetta, Alexis Maimov and Vladimir Mamaev.

Table of Contents

| | |
|--|----------------------|
| Abstract..... | 4 |
| Glossary..... | 5 |
| List of Acronyms..... | 7 |
| I. The Conceptual Framework..... | 8 |
| II. Coverage Indicators..... | 134 |
| III. Process <u>Outcome</u> Indicators..... | 167 |
| IV. Indicators for Stress Reduction..... | 314 |
| V. Indicators for Environmental Status..... | 348 |
| VI. Indicators for Results of Scientific Assessments..... | 3540 |
| VII. Indicators for Results of Knowledge Management Activities..... | 42 |
| VII. Presentation of Process and Stress Reduction Indicator Data..... | 3644 |
| Annex 1..... | 3486 |
| Annex 2..... | 408 |
| Annex 3..... | 51 |

[Annex 4](#)

List of Tables

| | |
|--|----------------------|
| Table 1: Process Outcome Indicators for TDAs..... | 212 |
| Table 2: Process Outcome Indicators for SAPs..... | 234 |
| Table 3: Process Outcome Indicators for Joint Institutional Arrangements..... | 265 |
| Table 4: Process Outcome Indicators for Inter- ministerial ministry Committees..... | 278 |
| Table 5: Indicators for Obtaining Financing for Investment Needs..... | 289 |
| Table 6: Indicators for Demonstration Activities..... | 3034 |
| Table 7: Indicators for Monitoring of Stress Reduction | 335 |
| Table 8: Indicators of Success in Stress Reduction..... | 336 |
| Table 9: Indicators of Monitoring and Reporting on Changes in Environmental Status..... | 357 |
| Table 10: Indicators for Results of Scientific Assessments..... | 3640 |
| Table 11: Ways of Presenting Program Indicator Data..... | 41 |

Abstract

This paper presents a proposed system of program performance indicators for the three GEF Operational Programs in the International Waters focal area—OPs 8, 9 and 10. This scheme will be applied for a trial period, in order to test its usefulness and to make the changes necessary to best serve the needs of the GEF International Waters programs. The proposed system includes coverage indicators, process indicators, stress reduction indicators and environmental indicators, as well as indicators of results of scientific assessments and knowledge management activities.

Coverage indicators measure how much of the worldwide problem is covered by GEF projects and how well they are distributed geographically and functionally. Coverage indicators for OP 8 and OP 9 are the same, but they are different from the coverage indicators for OP 10. Process indicators measure the quality and effectiveness of the multilateral and single-country actions supported by the GEF. Stress reduction indicators measure the degree of change, associated with the GEF project, in human activities or their proxies that cause environmental stress. Environmental status indicators measure changes in actual environmental quality. All three OPs will use the same set of process indicators. However, the indicators system recognizes that each of the three Operational Programs involve different circumstances and therefore should not be compared directly with one another in terms of project results. No sets of specific stress reduction and environmental status indicators are proposed in this system. Instead the system proposes to measure progress toward implementing a system of monitoring and reporting regarding stress reduction and environmental status and reporting on how well projects that have adopted stress reduction and environmental status targets have done in achieving the targets. Indicators on GEF international waters scientific assessments and knowledge management activities focus on the quality, accessibility and usefulness of the knowledge generated by these activities to policymakers and relevant stakeholders.

The data gathered on the basis of the sets of indicators provided for various purposes can be displayed based on three distinctions: (a) the Operational Program; (b), whether the data is aggregated or compared; and (c) type of ecosystem.

Glossary

baseline: The situation that existed at the beginning of a project, defined in terms of inter-governmental institutional arrangements, human activities that degrade the environment or environmental status.

coverage indicator: A measure of the adequacy of the scope and distribution of projects in the Operational Programs of a GEF focal area.

geographically-based approach: A strategy for a given region involving a series of international waters projects over time aimed at building capacity and political commitment for intergovernmental cooperation and implementation of agreed policy and institutional reforms; also known as **programmatic approach**.

inter-ministerial ministry committee: A mechanism representing all relevant government agencies formed to decide on government policy and regulatory reforms in response to a Transboundary Diagnostic Analysis and/or Strategic Action Programme.

joint institutional arrangement : Intergovernmental mechanism established to coordinate or harmonize government actions in regard to a waterbody.

joint process indicator: Measure of effectiveness of intergovernmental actions.

process indicator: Measure of effectiveness of a multilateral or single-country actions.

Large Marine Ecosystem: A large region of ocean encompassing coastal areas from river basis and estuaries to the seaward boundary of continental shelves and the seaward margins of coastal current systems.

Operational Program: A conceptual and planning framework for the design, implementation and coordination of a set of projects to achieve global environmental objectives in a particular focal area.

programmatic approach: A strategy for a given region involving a series of international waters projects over time aimed at building capacity and political commitment for intergovernmental cooperation and implementation of agreed policy and institutional reforms; also known as **geographically-based approach**.

project impact indicator: Measure of results of a project.

project implementation indicator: Measure of progress in carrying out planned tasks in a project.

replication: Conscious application in project design of an approach proven to be successful in another project.

Formatted

scalar indicator: Tool for measurement of process quality or results that uses ascending levels of achievement.

stress reduction: Reduction in the level of human activity that negatively affects environmental quality.

Strategic Action Programme: An agreement among participating countries on actions needed to resolve priority threats to international waters, including actions for the national benefit of each country, actions addressing trans-boundary issues and institutional mechanisms at regional and national level for implementation of those actions.

Trans-boundary Diagnostic Analysis: A scientific-technical assessment by which environmental issues affecting international waters in a region are identified and quantified, their causes analyzed and their impacts assessed, and the main actions needed to improve the problem are identified.

List of Acronyms

GEF: Global Environment Facility

| IC: Inter-~~ministerial~~ministry committee

IW: International Waters

JIA: Joint Institutional Arrangements

LME: Large Marine Ecosystem

SAP: Strategic Action Programme

TDA: Trans-boundary Diagnostic Analysis

UNEP: United Nations Environment Programme

I. The Conceptual Framework

A. Why Performance Indicators are Needed

1. A system of performance indicators is needed at the program level to assess as accurately as possible what has been accomplished in the aggregate by the International Waters projects in each Operational Program. Such indicators should also serve as a valuable tool for strategic planning by revealing patterns of results that had not previously been evident. The creation of such a system of program performance indicators implies a degree of uniformity in the selection of indicators at the project level, insofar as projects in different waterbodies have common characteristics, whether in regard to the process assisted by the GEF or the nature of the threats to the waterbodies.
2. Program level indicators provide the basis for collecting data at the project level, which can then be both aggregated and compared across all relevant projects. They should eventually allow the GEF to view snapshots of the entire portfolio or of relevant subgroups of the portfolio of IW projects showing the relative performance by waterbody in regard to a particular indicator.

B. Performance Indicators for Operational Programs

3. The conceptual framework for the system of program performance indicators in the International Waters focal area distinguishes among the three Operational Programs in the focal area -- OPs 8, 9 and 10 -- in regard to both, indicator selection methods of displaying the data collected on the indicators. Although OPs 8 and 9 have both aspects in common, they have important points of difference in regard to performance indicators, which are reflected in the scheme.
4. Both OP 8 (Waterbody-Based Operational Program) and OP 9 (Integrated Land and Water Multiple Focal Area Operational Program) aim at assisting groups of countries having access to a waterbody, whether freshwater or marine, to work collaboratively in making changes in sectoral policies and activities leading to reduced threats to the waterbody from pollution, overfishing, habitat degradation and non-indigenous species. Under both of these Operational Programs the GEF carries out a range of interventions, including assisting groups of countries in conducting trans-boundary diagnostic analyses (TDAs), in the formulation of strategic action programmes (SAPs), and in the adoption of approaches to the management of aquatic resources, such as integrated coastal management. In doing so, the GEF assists individual countries in carrying out follow-up activities aimed at policy and regulatory reforms. Program performance indicators are not clearly differentiated, therefore, between these two Operational Programs.
5. However, these two Operational Programs differ in important ways in regard to the nature of the threats with which each deals. OP 8 focuses on the most seriously threatened waterbodies, in which the trans-boundary threats to each country involved are

relatively well-recognized. The emphasis in OP 8 is on remedial measures to address those threats. Therefore participating countries have a relatively strong incentive to commit political capital as well as financial resources to the processes of analysis, prioritization and policy/regulatory reform that the GEF supports.

6. OP 9, on the other hand, includes projects in which the trans-boundary threats have not yet become so serious. It puts more stress on prevention of damage than on remediation. The focus of OP 9 is less on the waterbody itself than on integrated approaches to the use of land and water resources and management practices. Therefore, countries participating in OP 9 projects have less incentives for strong commitments than those countries participating in OP 8 projects. Projects in OP9 often provide benefits in more than one focal area.

7. Reflecting these differences between OP 8 and OP 9, data that is collected on the indicators for processes in OP 8 projects would not be compared or aggregated with data collected for OP 9 projects.

8. OP 10, the contaminant-based Operational Program, supports projects aimed at demonstrating ways of overcoming barriers to adoption of best practices for limiting contamination of international waters. OP10 has four distinct components: the Land-Based Activities Demonstration, the Global Contaminants, the Ship-Related Contaminants, and the Regional and Global Technical Support component.

9. The Land-Based Activities Demonstration component was designed to include a series of demonstration projects consisting of basins or areas draining to coastal/marine waters. Demonstrations involving the use of economic instruments are a high priority. OP 10 sets the target of having at least one demonstration project in each development region of the world.

10. The Global Contaminants component of OP10 is designed to support activities that help characterize the nature, extent and significance of “global contaminants” and support activities that demonstrate prevention or reduction of releases in recipient countries.

11. The Ship-Related Contaminants component addresses issues related to releases of oil and garbage from ships, transfer of non-indigenous species in ship ballast water, and ship collisions in busy corridors.

12. The fourth component, Regional and Global Technical Support, focuses on regional or global capacity-building projects that can help groups of countries share experiences and lessons on other areas. This component also includes global projects of a strategic nature that assess the contribution of contaminants to the environmental status of international waters or that develop longer-range approaches.

13. OP 10 projects represent interventions that are generally very different from those of OP 8 and OP 9. Therefore the program level indicators selected for OP 8 and 9, cannot be applied to all projects in OP 10. Furthermore, projects within OP 10 vary so widely from one another that common indicators cannot be applied across most of its

projects. Some OP 10 projects, however, share characteristics that are common to OPs 8 and 9, in that they involve the development of national plans of action, including sectoral policy and regulatory reforms. In those cases, the same indicators for inter-[ministerial](#) committee processes that are used for OP 8 and 9 projects would be used for OP 10 projects.

C. Different Levels of Indicators

14. The conceptual framework for the system of program performance indicators builds on the system proposed by the International Waters Task Force for the project level, which includes process indicators, stress reduction indicators and environmental status indicators. This framework adds program coverage indicators to these three levels, redefines the role of stress reduction indicators in relation to program performance indicators and recognizes the limitations on environmental status indicators in international waters projects.

15. Coverage indicators provide measures of the scope and distribution of GEF projects according to various criteria, whether geographic, ecosystem type or others. The indicators chosen are based on program coverage issues raised in the Operational Programs themselves as well as in other GEF documents.

16. Process indicators are those which measure the effectiveness of a selected set of actions taken jointly or singly by states participating in projects supported by the GEF. They are based on the types of GEF interventions identified in the Operational Strategy – the elaboration of a trans-boundary diagnostic analysis (TDA) or a Strategic Action Programme (SAP), the establishment or strengthening of joint institutional arrangements (JIAs) or the operation of an inter-[ministerial](#) committee to plan policy and regulatory reforms in various sectors. These processes indicators are the same for all waterbodies in which one of these four processes is carried out.

17. Stress reduction indicators are measures of the degree of success achieved by projects in reducing the human behaviors that are known to contribute to the degradation of the international waters addressed by the GEF project. However, the specific measures of stress reduction chosen for one project are unlikely to be the same as those chosen for any other. Consequently, this system of program performance indicators does not propose common stress reduction indicators. It does propose a measure of how far a project has gone toward actually monitoring and reporting on the change that has occurred in the stresses it has chosen to monitor, compared with the baseline.

18. Environmental status indicators are measures of change in the state of the environment. Although they are included in the framework, their applicability is limited primarily to basins that have been the object of a “programmatically approach” or “geographically-based approach” by the GEF. Examples of basins to which they would apply are the Black Sea-Danube Basin and the Yellow Sea. Status indicators might also apply to other basins in which GEF projects are directly related to the reduction of a particular stress or set of stresses. This could be case, for example, in activities designed to reduce over-fishing.

19. Environmental status indicators for each basin would not be comparable because each country with a stake in that basin may choose a different set of environmental status indicators related to its specific targets. Therefore, this system does not prescribe common environmental status indicators. Instead, as in the case of stress reduction indicators, this system proposes to measure how far a project has gone toward actually monitoring and reporting on the change that has occurred in the environmental status it has chosen to monitor, compared with the baseline.

Two additional sets of indicators are included for the results of GEF international waters scientific assessments and knowledge management activities. In both cases, the criteria for evaluation focus on the quality of the knowledge produced and the accessibility and usefulness of the activities to policymakers and relevant stakeholders.

20. This framework proposes to measure program performance by aggregating data on project results where such aggregation is possible. For process indicators, the aggregation would be among all projects involving common processes. For projects in which stress reduction indicators are being measured, the results can be aggregated in terms of both progress toward reporting stress reduction and the degree to which the different stresses have been reduced. Results from the projects that monitor environmental status would not be aggregated, however.

D. Project Impact Indicators vs. Project Implementation Indicators

21. The difference between indicators of project implementation and indicators of project impact or success is a starting point for understanding the role of indicators in measuring program performance. When they are asked for indicators of implementation progress, project managers sometimes list the expected project outputs or tasks to be carried out, such as setting up a steering committee, holding a [ministerial ministry](#) conference to endorse a SAP or enhancing public awareness. Although these outputs can be considered measures of progress in implementation of the project, they are not the same as indicators of the project's impact. The question of interest to the program evaluator is whether a given process has advanced toward outcomes (such as policy reforms, a better understanding of the problem or institutional capacities) that will be effective in changing the relevant human behaviors that degrade international waters.

22. Similarly, project impact indicators are sometimes confused with the specific *objectives* of the project. Thus "institutional strengthening" and "reduced pollution load," which are actually specific project objectives, may be listed as indicators. But institutional strengthening could be a criterion for project success, whereas an indicator of that criterion might be how many of the governments involved in the project have line items in their budgets to support the institution responsible for the management of the waterbody. An indicator of reduced pollution load would be the percentage change in nitrogen levels at a selected set of monitoring sites in the waterbody. Indicators thus involve either a quantitative or qualitative measure of how successfully a major action has been to achieve its objective or the quality of the process involved.

E. The Importance of the Baseline

23. Each project or water body proceeds from a different set of circumstances, and it is important in assessing both project and program performance that the existing level of cooperation—or lack of it—be carefully documented. Thus, for process, stress reduction and environmental status indicators, the establishment of an accurate baseline is of utmost importance in making the indicator meaningful. The baseline is the situation that exists at the beginning of the GEF involvement in a initiative project. Collecting data that identify that situation in quantitative or qualitative terms makes it possible to measure the degree of change that takes place as a result of the project or series of projects in a given waterbody or basin. The baseline will be established by applying these indicators before project approval by GEF. This will provide an information base that will permit to track changes in the indicators thought GEF involvement and beyond. For example, if a joint institution arrangement already exists before the project is implemented, the functions of that institution and other characteristics that indicate how effective the institution has been in facilitating joint efforts to reduce environmental threats to transboundary waters should be noted.

Formatted

24. Also, for process indicators, the baseline data will take the form of a quantitative or qualitative characterization of the level or degree of cooperation or conflict among the countries, institutions or stakeholders participating in the trans-boundary waterbody project. For stress reduction indicators, the baseline required would measure the extent of the human activity contributing to the environmental degradation at the outset of the project or if the indicator chosen is related to the progress of a government program aimed at reducing a particular stress, the initial status of the human activity involved (annual rate of reforestation, rates of fish catches proportion of farmers using best practices, etc.). And for environmental status indicators, the baseline would measure the quality of the environment in regard to the chosen a manageable set of indicators with which later data can be compared. Stress reduction and environmental status indicators are only required for SAP implementation and GEF activities with a programmatic approach.

Formatted: Bullets and Numbering

Formatted

24. _____

F. Implementing the Program Performance Indicators System

25. The GEF Monitoring and Evaluations Unit will be responsible for compilation and presentation of coverage indicators. The implementing agencies will be responsible for carrying out the necessary monitoring and evaluations on other indicators at the project level, in accordance with agreed operational methodologies. Project monitoring staff will ensure that their monitoring plans integrate the collection of data on the program performance indicators into their work.

26. When the data has been collected, the implementing agency will be responsible for reporting it to the GEF Monitoring and Evaluations Unit. The M & E Unit will then compile and analyze the data from different projects periodically for the purpose of

issuing reports presenting the data. (For discussion of the ways in which the data can be presented, see pp. 32-33.)

~~26.~~

Formatted: Bullets and Numbering

II. Coverage Indicators

Coverage indicators should provide a clear picture of how the program's portfolio of projects relates to the scope of the problems that it is intended to address on the global scale. They help answer such questions as how much of the problem is encompassed by the portfolio, and how much is left out, and what balance has been struck among different threats, different types of project interventions and different geographic areas. They should also tell us whether all the main threats to international waters are being addressed in the Operational Programs in the International Waters focal area. Thus coverage indicators should help in assessing the overall pattern of programming in specific Operational Programs and in the focal area as a whole.

A. Coverage Indicator for all OPS

Only one coverage indicator is proposed that spans the three Operational Programs: the distribution of projects by project intervention type. Ten frequent types of activities supported by the GEF include:

- [-Trans-boundary Diagnostic Analysis \(TDA\)](#)
- Strategic Action Programme (SAP) or equivalent international programming process.
- Demonstration
- Scientific Assessment
- Knowledge Management
- National Reform
- Regional Reform
- National Capacity Building
- Regional Capacity Building
- Implementation of SAP or equivalent programming instrument

27.B. -Coverage Indicators for OPs 8 and 9

28.27. The following coverage indicators are proposed for OP 8 and OP 9.

~~Proportion~~ Proportion of the number and area (Km2) of the world's GEF-eligible Large Marine Ecosystems (LMEs) in which the GEF has projects. The Lists of GEF-eligible LMEs and the LMEs in which the GEF has projects is

Formatted: Bullets and Numbering

Formatted: Bullets and Numbering

shown Annex ~~12, Table A~~. The list is based on the Large Marine Ecosystems of the World website (<http://www.edc.uri.edu/lme/clickable-map.htm>).⁴

~~Proportion~~ ~~Proportion~~ of GEF-eligible LMEs in which the GEF has helped catalyze adoption of management frameworks for priority actions agreed by riparian countries (See Annex ~~12, Table A~~).

~~Proportion~~ ~~Proportion of numbers and area (Km2) of~~ GEF eligible International River Basins. ~~(See Annex 2, Table B. This table is to be developed-International river basins will be identified~~ on the basis of ~~i~~ international river basins information provided in www.transboundarywaters.orrst.edu.~~)~~

Distribution of GEF project components by major category of threat. The distribution of GEF project components according to the threats addressed was analyzed on the basis of a review of project documents². ~~Annex 2 includes a list of threats addressed by GEF projects. The complete distribution of project components by threat is shown in Annex 2, Table C.~~³

Distribution of GEF project components between remedial and preventive activities.

Distribution of GEF projects by ~~type of environment-ecosystem type,~~ including:

- [Marine,](#)
- [Surface fresh water, and](#)
- [Groundwater.](#)

Formatted: Bullets and Numbering

Distribution of GEF projects by geographic region. [The regions considered in this monitoring system are:](#)

- [East Asia, South Asia, and the Pacific](#)

Formatted: Bullets and Numbering

⁴ ~~The proportion of GEF-eligible LMEs in which the GEF has projects is 15 out of 24. Of these 15 projects, six involve the adoption of management frameworks for priority actions agreed by riparian countries. See Annex 3, Table A.~~

² ~~The leading category of threat is transboundary pollution involving more than one type of transboundary pollutant, with 26 projects. The second largest category is excessive nutrient load, with 20 projects. Over fishing is addressed in 17 projects and land degradation or sedimentation in 10. See Annex 3, Table C.~~

³ ~~The leading category of threat is transboundary pollution involving more than one type of transboundary pollutant, with 26 projects. The second largest category is excessive nutrient load, with 20 projects. Over fishing is addressed in 17 projects and land degradation or sedimentation in 10. See Annex 3, Table C.~~

- [Europe and Central Asia.](#)
- [Africa](#)
- [Middle East and North Africa](#)
- [Latin America and the Caribbean.](#)

C. Coverage Indicators for OP 10

~~29.28.~~ Coverage indicators for OP 10 must reflect the fact that they are not focused on threats to a particular transboundary waterbody but at demonstrating particular approaches to reducing the threat of contamination of waterbodies globally.

Formatted: Bullets and Numbering

~~30.29.~~ The coverage indicators proposed for OP 10 are:

- Number of demonstration projects ~~by region.~~
- Distribution of ~~g~~Global ~~c~~Contaminant projects by contaminant type.
- ~~Distribution of Ship Related Contaminant projects by issue.~~
- ~~_____~~
- ~~_____~~ Distribution of ~~Regional and Global t~~Technical ~~s~~Support projects by subject.

Formatted: Bullets and Numbering

III. Process Outcome Indicators

~~31.30.~~ The primary role of the GEF in International Waters is to catalyze and support effective joint and individual state responses to threats to trans-boundary waterbodies. The most important measures of the effectiveness of the portfolio of projects in the focal area, therefore, are process and institutions that GEF activities help establish and strengthen. The framework presented here seeks to provide measures of the quality or effectiveness of processes and institutions that GEF projects help catalyze.

Formatted: Bullets and Numbering

~~32.31.~~ Although GEF Operational Programs 8 and 9 differ in regard to the degree of trans-boundary threat involved and their emphasis on remedial (OP #8) and preventive (OP #9) measures, the basic processes for the countries involved to determine priority causes and the measures required to address them are similar. Therefore the same process outcome indicators apply to both OPs. Some OP 10 projects also involve the same actions at the national level as are found in OPs 8 and 9.

A. Three Types of Process Indicators

~~33.32.~~ Three types of process outcome indicators may be distinguished: indicators for joint multi-country processes, indicators for single-country processes, and indicators for demonstration projects.

Formatted: Bullets and Numbering

1. Multi-country Joint Process Indicators.

~~34.33.~~ These indicators measure the results achieved and quality of process in “Initial Strategic Regional Projects” by joint processes involving two or more countries that use and affect the same waterbody. These process outcomes include:

Formatted: Bullets and Numbering

- Completion of a trans-boundary diagnostic analysis (TDA), aimed at establishing priorities, identifying root causes of the transboundary problems and the actions needed to address the environmental threats.
- Completion of a strategic action programme (SAP), that includes priority policy, legal and institutional reforms and investments.
- Establishment and operation or strengthening of operation of joint institutional arrangements for policy coordination and management of international waters.

~~35.~~ The use of indicators of results of joint processes requires a comparison with the baseline situation regarding international cooperation on addressing transboundary waters problems. Each project or waterbody proceeds from a different set of circumstances, and it is important in assessing both project and program performance that the existing level of cooperation—or lack of it—be carefully documented. If a joint institution arrangement already exists before the project is implemented, the functions of that institution and other characteristics that indicate how effective the institution has been in facilitating joint efforts to reduce environmental threats to transboundary waters should be noted. The criteria for the collection of baseline data on joint institutional

Formatted: Bullets and Numbering

~~arrangements should be the same as those used to measure the effectiveness of the process.~~

2. Single-country Process Outcome Indicators

~~36.34.~~ The second type of process outcome indicator relates to the results achieved by and quality of the process associated with actions by a single country. In many cases, these actions may represent implementation of the strategies or agendas for action negotiated by two or more countries. In other cases, they are national plans of action on a multi-sectoral problem or simply policy and regulatory reforms that require the participation of several government agencies. The actions that will be measured by single-country process indicators include the following:

Formatted: Bullets and Numbering

- Establishment and successful operation of inter-~~ministerial~~ ministry committees for the adoption and implementation of sectoral policy and regulatory reforms.
- Mobilization of resources to implement agreed upon activities.
- Integration of investment priorities into the country's relationships with bilateral and multilateral development assistance agencies.
- Ratification and implementation of a regional convention, where relevant.

3. Demonstration Projects

~~37.35.~~ GEF-supported demonstration projects are actions undertaken at one or more sites with the objective of showing that a particular approach to protection of international waters or remediation of damage to them, is both effective and replicable. Demonstration projects may be undertaken by multi-country groups or by a single country. Because these actions are fundamentally different from the other actions that are to be assessed under this indicators scheme, a separate set of indicators is proposed for the evaluation of the process quality and effectiveness of such projects.

Formatted: Bullets and Numbering

B. Indicators of Results and Process Quality

~~38.36.~~ Some process outcome indicators can be scored on the basis of yes or no answers. The question of ratification of relevant regional treaties obviously lends itself to such a positive or negative score. The question of integration of investment priorities into bilateral and multilateral development assistance agencies can also be translated into such scoring by asking whether the country has integrated priority actions found in the SAP into Country Assistance Strategies agreed upon between the country and the World Bank, or the UNDP's Country Cooperation Frameworks or into bilateral aid agencies' country plans.

Formatted: Bullets and Numbering

~~39.37.~~ Process outcome indicators for other multilateral or single-country actions will provide a measure of the success of actions taken by governments on a scale rather than simply recording whether or not an action was taken. A scalar indicator can be used

either for a joint inter-government process --a trans-boundary diagnostic analysis (TDA), Strategic Action Programme (SAP), or Joint Institutional Arrangements (JIA)-- or for the single-country process of establishment and operation of an inter-~~ministerial~~ministry committee (IC). Whether a scalar indicator is applied to one of the three joint processes or to the IC at the single-country level, it should measure one of two things: (1) how effective the process was in contributing to ~~address the problem~~necessary policy or regulatory changes or (2) the extent to which the process meets criteria for adequate government involvement, stakeholder participation, and availability of varied sources of information.

40.38. Scalar indicators are based on a suite of descriptions of possible outcomes in ascending or descending order of effectiveness or quality in different dimensions of the process. These different levels of process quality may also represent different stages of development of a project. Thus the scalar indicators of government involvement, stakeholder participation, or access to sound information may be changed at different stages of the project.

41.39. Indicators of the results of a process provide scales of effectiveness of the quality and outcome of the process, whether it is a TDA, a SAP, JIA or agreement on policy and regulatory change by the IC. Each of these scales range from an outcome that represents no progress whatever, at the low end of the scale, to major steps toward bringing about necessary changes, at the high end of the scale.

42.40. Scalar indicators of government involvement measure the degree to which governments have committed to processes or the extent to which relevant ministries engage in single-country follow-up processes. Depending on the type of process, the extent of high-level endorsements of the process, multi-~~ministerial~~ministry support, staff and financial support, and the assignment of ranking officials are generally indicators of how committed governments have been to the intergovernmental or inter-~~ministerial~~ministry process.

43.41. Based on the “Good Practice Note Addressing Social and Participation Issues in GEF-Financed International Waters Projects,” prepared by the GEF International Waters Task Force, scalar indicators for stakeholder participation focus on three dimensions of participation. The first dimension is stakeholder identification, i.e., the degree to which all relevant stakeholders have been identified. This process would involve addressing a series of pertinent questions about what social and economic groups depend on the water resources in question. The second dimension is the formulation and implementation of a public plan for stakeholder involvement, involving information dissemination and consultation with relevant stakeholders. The third dimension, which builds on the first two, is the degree of stakeholder satisfaction with their participation in the process. The scalar indicators for stakeholder participation are the same for all the processes to be evaluated.

44.42. Indicators for “sound information” in the multilateral and single-country processes outcome measure the extent to which mechanisms to obtain the best available scientific information and other types of information are in place and are operating

effectively. Some kind of scientific advisory mechanism should be established and utilized. The absence or ineffectiveness of such a mechanism warrants a lower value on this scale. The process should have a means of accessing both scientific and other forms of knowledge (for example, local or traditional knowledge), where appropriate.

45-43. The scalar indicators of process results and process quality for each of the four processes (i.e., TDAs, SAPs, joint institutional arrangements and inter-ministerial/ministry committees) have been combined in a single table showing four different values for each dimension (i.e. government involvement, stakeholder participation, sound information, and process results) in descending order of effectiveness or quality. The tables are presented below.

1. Indicators for the Trans-boundary Diagnostic Analysis Process

46-44. The scalar measures for process results and process quality for the Trans-boundary Diagnostic Analysis (TDA) process are shown in Table 1.

47-45. The inter-governmental process of producing a TDA does not by itself generate commitments to specific actions by the participating governments. However, it should prioritize major environmental threats to international waters and diagnose their causes, identifying the primary sources of environmental stress and the options for addressing them.

48-46. The scale for the results of the TDA process outcome measures how far the TDA goes toward specifying the causes of trans-boundary environmental threats and identifying the options for required action by the governments. The highest value would be assigned to a TDA that has specified sources, locations and sectors of threats to the environment, and identified ~~the o/p a~~ manageable set of options for action allowing distinction between domestic and transboundary contributions to the problem. Next highest in the scale is a TDA that identifies the specific sources but not the options for action. Next to last is a TDA that fails to specify the sources, and the lowest is a TDA that fails to identify all relevant causes of the environmental threats.

49-47. The degree of government participation is measured in terms of the extent and level of government endorsement of the TDA and the extent of provision of staff and funding by governments for their activities in support of the TDA. In the actual evaluation each of these two dimensions of government participation would have its own separate scale.

50-48. For TDA processes that have concluded, in the scale for government endorsement, the highest value would be assigned to a TDA process that has have proof of agreement of all participating governments with the TDA results, high level endorsement by all participating governments at the chief of state level. The next highest value would be assigned TDA processes that have proof of agreement of TDA results of less than 100 percent all governments or more than 80 percent of the participating governments have endorsed the TDA but not necessarily at the chief of state level. The next highest value would be assigned TDA processes that have proof of agreement of

Formatted: Bullets and Numbering

TDA results of less than 80 percent but more than 50 percent of the participating governments. The next value in descending order would be assigned to a TDA process that has not been endorsed by one government. The lowest value would be assigned to TDA if the process that have proof of agreement of TDA results of less than 50 percent of participating governments. has not been endorsed by more than one government.

49. For TDA processes that have not concluded, in the scale for government staff and funding support, the highest value would go to a TDA process in which all governments have provided the resources necessary for their TDA-related activities. The next highest value would be assigned TDA processes in which less than 100 percent but more than 80 percent of participating governments have provided the resources necessary for their TDA-related country activities. The next highest value would be assigned TDA processes in which less than 80 percent but more than 50 percent of participating governments have provided the resources necessary for their TDA-related country activities. The lowest value would be assigned to TDA process that in which less than 50 percent of the participating governments have provided the resources necessary for TDA-related country activities.

52-50. A similar process for providing values for the remaining two dimensions (i.e. Stakeholder Participation and Sound Information in descending order of effectiveness or quality is shown in Table 1. Stakeholder Participation will give special consideration to the extent to which the TDA process has included local scientists and other relevant stakeholders. Incorporation of Sound Information into the process will focus on the efficacy of interministerial committees as a tool to incorporate intersectoral information into the TDA process and on the incorporation of stakeholder recommendations.

**TABLE 1: PROCESS OUTCOME INDICATORS FOR TRANSBOUNDARY
DIAGNOSTIC ANALYSES**

| <i>Government Involvement</i> | <i>Stakeholder Participation</i> | <i>Sound Information</i> | <i>Process Results</i> |
|---|--|---|---|
| Degree to which governments support and endorse the TDA | Degree to which the process incorporates stakeholders | Degree to which a process has been established to access the best available information | Degree to which TDA analyzes specific causes and options for addressing them |
| <p>- For concluded TDA's the TDA process has proof of agreement of all participating governments. TDA has endorsement by the chiefs of state of all governments.</p> <p>-For ongoing TDA processes in which All governments have provided necessary staff and funding for the country's TDA-related activities.</p> | <p>TDA process was/is carried out under the leadership of local scientists with the support and advise of expatriate consultants- Stakeholder analysis has been carried out and has identified all significant stakeholders.</p> <p>-Detailed public stakeholder participation plan is implemented and documented.</p> <p>-All significant stakeholders consider/feel they are being (for ongoing TDAs) or have been (for finished TDAs) adequately involved/consulted.</p> | <p>-Advisory group interministry committee or other similar mechanism is established to ensure access to best available <u>intersectoral</u> information from all relevant sources. It has adequate resources and meets regularly.</p> <p>-TDA process incorporates most recommendations and information from <u>stakeholders/mechanisms</u> and provides feedback to them.</p> | <p>-TDA addresses/analyzes the <u>root</u> causes of trans-boundary environmental degradation, specifying sectors, socio-economic sources, and locations, and identifies a <u>realistic set of</u> options for addressing them <u>allowing a distinction between domestic and transboundary contributions to the problem.</u></p> |
| <p>- For concluded TDA's, the TDA has endorsement of all governments at the chief or state or ministerial level. TDA process has proof of agreement of TDA results of less than 100 percent or more than 80 percent of the participating governments</p> <p>-For ongoing TDA processes in which less than 100 percent but more than 80 percent of participating governments have provided the resources necessary for their TDA-related country activities. One government has not provided necessary staffing and/or financial support for the country's TDA-related activities.</p> | <p>-Stakeholder analysis TDA process was carried out or is being carried out under the leadership of expatriate consultants with systematic involvement of local scientists and stakeholders, carried out but has not identified all significant stakeholders.</p> <p>-Not all of public stakeholder participation plan is implemented or documented.</p> <p>-All but a few <u>key</u> stakeholders feel they have been adequately involved/consulted.</p> | <p>-Advisory group interministry committee, or other mechanism to <u>obtain intersectoral information</u> is established but resources are inadequate or meetings are sporadic.</p> <p>-TDA process incorporates some recommendations and information but does not provide feedback.</p> | <p>-TDA analyzes the causes of environmental degradation, specifying sectors, socio-economic sources, and locations, <u>and but does not identifies any realistic set of</u> options for addressing them.</p> <p>-TDA does not allow distinction <u>between domestic and transboundary contributions to the problem.</u></p> |
| <p>-For concluded TDA's, the TDA has endorsement of all but one government. TDA process has proof of agreement of TDA results of less than 80 percent but more than 50 percent of the participating governments.</p> <p>-For ongoing TDA processes in which less than 80 percent but more than 50 percent of participating governments have provided the resources necessary for their TDA-related. More than one but less than half the governments have not provided necessary staffing and/or financial support to the country's TDA-related activities.</p> | <p>-TDA process was carried out or is being carried out under strong leadership of expatriate consultants with occasional inputs from local scientists and stakeholders. Stakeholder analysis has been carried out but has failed to identify several significant stakeholders.</p> <p>-Much of the stakeholder participation plan is not implemented.</p> <p>-A large number of <u>key</u> stakeholders consider/feel they have not been adequately involved/consulted.</p> | <p>-<u>Advisory group interministry committee</u>, or other mechanism is established to <u>obtain intersectoral information</u> but have few resources or seldom meet.</p> <p>-TDA process does not incorporate <u>any</u> recommendations and provides no feedback.</p> | <p>-TDA analyzes <u>root</u> causes, specifying sectors, socio-economic sources, and locations, but does <u>identify a set of options for addressing problems, not specify sources, location and sectors.</u></p> |
| <p>-For concluded TDA's, the TDA process has proof of agreement of TDA results of less than 50 percent of participating governments. More than one government has not endorsed the TDA.</p> <p>-For ongoing TDA processes in which Half or more of 50</p> | <p>TDA process was carried out, or is being carried out mainly by expatriate consultants with little involvement of local scientists and other relevant stakeholders.</p> <p>-Stakeholder analysis has not been carried out.</p> <p>-Governments have not</p> | <p>-No <u>advisory group interministry committee</u>, or other mechanism for access to <u>best available intersectoral information</u> is established.</p> | <p>-TDA does not address <u>root/analyze all relevant</u> causes of trans-boundary environmental degradation.</p> |

Formatted

|

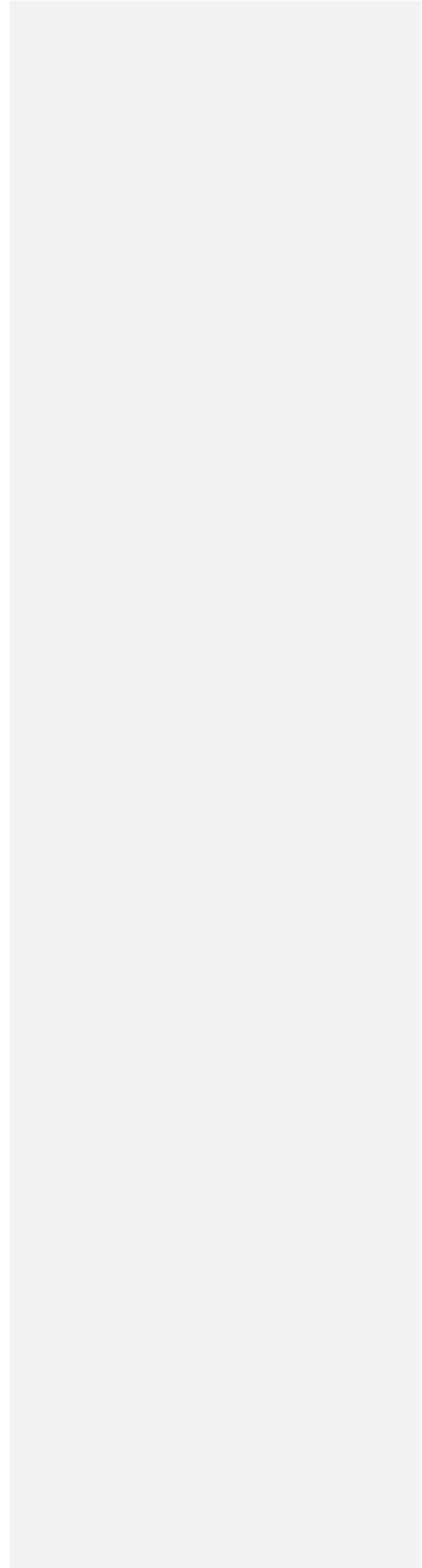


TABLE 1: PROCESS OUTCOME INDICATORS FOR TRANSBOUNDARY DIAGNOSTIC ANALYSES

2. Indicators for the Strategic Action Programme Process

~~53.51.~~ A set of scalar indicators for the effectiveness of a Strategic Action Programme (SAP) is shown in Table 2.

Formatted: Bullets and Numbering

~~54.52.~~ For the SAP process, the highest value for the process results would be assigned if the SAP presents a manageable programme that includes quantitative targets, timetables for policy or regulatory reform for all the critical problems identified in the TDA. If the SAP lacks one or more such targets, timetables or has none at all, progressively lower values would be assigned. The lowest value would be assigned for a SAP that has no specific policy/regulatory reforms for all problems identified in the TDA.

~~55.53.~~ The scalar measure for government involvement of the SAP process is similar to the one for government involvement in TDAs, with the difference that it focuses of formal government endorsement of completed SAPs. The scalar indicators for stakeholder participation focuses on the extent to which the stakeholders were appropriately identified, a stakeholder participation plan was developed and implemented and the extent to which stakeholders consider they have been adequately included in the SAP elaboration process. ~~and sound information scalar indicator criteria focus on the extent to which SAP reflect the information and analysis of the TDA and the extent to which advisory groups function as tools to insure the SAP considered information from the relevant sources and perspectives, are the same as in the TDA process.~~

3. Priority issues addressed by SAPs

Formatted: Bullets and Numbering

~~SAPs are intended to address the priority transboundary issues affecting a water body. Annex 3 presents an illustrative list of priority issues that a SAP might address. Ideally priority issues identified in SAPs are a manageable number and address key root causes affecting waterbodies.~~

TABLE 2: PROCESS OUTCOME INDICATORS FOR STRATEGIC ACTION PROGRAMMES

| <i>Government Involvement</i> | <i>Stakeholder Participation</i> | <i>Sound Information</i> | <i>Process Results</i> |
|--|---|--|--|
| Degree to which governments support the SAP | Degree to which the process incorporates stakeholders | Degree to which a process has been established to access the best available information | Specificity of commitments to policy/regulatory reform |
| <p>- For concluded SAPs the SAP process has been formally endorsed by all participating governments.</p> <p>-For ongoing SAPs processes in which all governments have provided necessary staff and funding for the country's SAP-related activities.</p> <p>-SAP has endorsement by the chiefs of state of all governments.</p> <p>-All governments have provided necessary staff and funding for the country's SAP-related activities.</p> | <p>-Stakeholder analysis has been carried out and has identified all significant stakeholders.</p> <p>-Detailed public plan for stakeholder participation is implemented.</p> <p>-All significant stakeholders feel they have been adequately consulted <u>and that their concerns are adequately reflected in the SAP.</u></p> | <p>-SAP fully reflects information and analysis in TDA.</p> <p>-Advisory group or other mechanism is established to ensure access to information from all relevant sources which is incorporated into the SAP.</p> | <p><u>The SAP consists of a set of manageable set of actions including specific -For each problem identified in the TDA, the SAP includes commitments to quantitative targets, timetables for policy/regulatory reform, investments and other pertinent actions to address root causes identified during the TDA.</u></p> |
| <p>- For concluded SAP's, the SAP has formal endorsement of less than 100 percent or more than 80 percent of the participating governments</p> <p>-For ongoing SAP processes in which less than 100 percent but more than 80 percent of participating governments have provided the resources necessary for their SAP-related country activities.</p> <p>-SAP has endorsement of all governments at the chief or state or ministerial level.</p> <p>-One government has not provided necessary staffing and/or financial support for the country's SAP-related activities.</p> | <p>-Stakeholder analysis carried out but has not identified all significant stakeholders.</p> <p>-Not all of stakeholder participation plan is implemented and documented</p> <p>-All but a few stakeholders feel they have been adequately consulted <u>and that their concerns are adequately reflected in the SAP.</u></p> | <p>-SAP reflects most information and analysis in TDA.</p> <p>-Advisory group or other mechanism is established and some information is incorporated into the SAP.</p> | <p>- SAP commitments to policy /regulatory reform, investments and other actions have specific targets and timetables but do not address critical root causes identified in the TDA or fails to concentrate on a manageable set of priority issues. <u>For one or more problems identified in the TDA, commitments to policy/regulatory reforms lack specific targets, timetables, and</u></p> |
| <p>- For concluded SAP's, the SAP has the endorsement of less than 80 percent but more than 50 percent of the participating governments.</p> <p>-For ongoing SAP processes in which less than 80 percent but more than 50 percent of participating governments have provided the resources necessary for their SAP-related .</p> <p>-One government has not endorsed the SAP.</p> <p>-More than one but less than half the governments have not provided necessary staffing and/or financial support to the country's SAP-related activities.</p> | <p>-Stakeholder analysis carried out but has not identified several significant stakeholders.</p> <p>-Much of the stakeholder participation plan is not implemented or documented.</p> <p>-A number <u>key</u> of stakeholders feel they have not been adequately consulted <u>and that their concerns are not adequately reflected in the SAP.</u></p> | <p>-SAP fails to incorporate TDA information and analysis on several important points.</p> <p>-Advisory group or other mechanism is established but little of the information is incorporated into the SAP.</p> | <p>-SAP <u>no</u> commitments to policy /regulatory reform, investments or other actions proposed <u>do not</u> have specific targets <u>or</u> timetables.</p> |
| <p>- For concluded SAP's, the SAP has the endorsement of less than 50 percent of participating governments.</p> <p>For ongoing SAP processes in which 50 percent or more of the participating governments have not provided necessary staffing and/or financial support for the country's SAP-related activities.-</p> <p>More than one government has not endorsed the SAP.</p> <p>-Most governments have not provided necessary staffing an/or financial support for the country's SAP-related activities.</p> | <p>-Stakeholder analysis has not been carried out.</p> <p>-Governments have not published a detailed plan for stakeholder participation.</p> <p>-Most stakeholders feel they have not been adequately consulted <u>and that their concerns are not adequately reflected in the SAP.</u></p> | <p>-SAP fails to reflect most information and analysis in TDA.</p> <p>-No advisory group or other mechanism for access to best available information is established.</p> | <p>-SAP does not include <u>specific</u> commitments to <u>specific</u> policy/regulatory reforms addressing <u>the all</u> problems identified in the TDA.</p> |

TABLE 2: PROCESS OUTCOME INDICATORS FOR STRATEGIC ACTION PROGRAMMES

3. Indicators for Joint Institutional Arrangements

~~56.54.~~ Some projects focus on the formation or strengthening of joint institutional arrangements (JIAs) for the waterbody. JIAs inter-government institutions that have the formal participation of two ore more riparian governments and have as a mandate to address an issue or set of issues concerning the international water body. In some cases they are an outcome of GEF projects while in other cases they are intergovernmental mechanisms that predate GEF involvement. These arrangements may involve just one ~~JIA institution~~ or several ~~institutions,JIAs,~~ each ~~having afor~~ different functions, such as joint monitoring and policy coordination ~~or,~~ harmonization or the implementation of other joint activitiesion.

~~57.55.~~ The scalar indicators of process results and process quality for ~~theeach of~~ JIAs and the quality of processes associated with them are shown in Table 3. In projects with multiple JIAs, project managers are requested to report on the aggregate results and process quality of relevant institutions.

~~58.~~The criteria for assessing the results of the JIA sponsored processes will focus on the JIAs credibility and actual influence on member governments decisions regarding policies, reforms, investments and other relevant actions to move forward agreed upon plans and programmes. ~~character of each of the JIA is how much influence and authority the institution is given for its joint functions and the extent to which it has an adequate staff of its own. These two criteria would be the basis for separate scales in the evaluation.~~

~~59.~~The best outcome on the scale for authority is a JIA that has authority to make policy recommendations and actually influences the policies of its member states. Next best would be one that has the authority but lacks influence on member states. Third best would be one in which the institutional mechanism has been given no authority. The lowest value would be failure to establish a joint institutional arrangement or to strengthen an existing arrangement.

~~60.56.~~ The criteria for government involvement in the JIA are then umber of governments that undertake each of the three forms of support to the JIA: Allocation of staff resources, assignment of high-level officials and maintaining a line item in the budget in support of it. Each of these criteria would have its own scale in the actual evaluation. The highest value on each of the scales would be assigned if all governments provide the support, whereas the lowest value would be assigned if most governments fail to do so.~~The criteria for government involvement in the JIA are the number of governments that undertake each of three forms of support to the JIA: allocation of staff resoureces, assignment of high level officials and maintaining a line item in the budget in support of it. Each of these criteria would have its own scale in the actual evaluation. The highest value on each of the scales would be assigned if all governments provided the support, whereas the lowest value would be assigned if most governments fail to do so.~~

Formatted: Bullets and Numbering

64.57. The scalar indicators for stakeholder participation and sound information focus on the establishment and functioning advisory groups or similar mechanisms as tools to incorporate information, perspectives and interests of stakeholders in the activities carried out by JIAs. are the same as those for TDAs and SAPs.

TABLE 3: SCALAR PROCESS OUTCOME INDICATORS FOR JOINT INSTITUTIONAL ARRANGEMENTS

| <i>Government Involvement</i> | <i>Stakeholder Participation</i> | <i>Sound Information</i> | <i>Process Results</i> |
|---|--|---|---|
| Degree to which governments support the JIA | Degree to which the process incorporates stakeholders | Degree to which a process has been established to provide the best available information | Degree of authority and level of staffing of the JIA, Credibility and influence among member governments |
| <p>- All member governments:</p> <p>- Allocate staff resources to the JIA.</p> <p>- Assign high level officials to the JIA.</p> <p>- Have line items for support of the JIA in their budgets.</p> | <p>- Stakeholder analysis is carried out and all significant stakeholders are identified.</p> <p>- Public detailed plan for stakeholder participation is implemented and documented.</p> <p>- All significant stakeholders feel they have been adequately consulted.</p> <p>- Advisory group or other consultative mechanism is established to ensure access to best available information from all relevant sources (including local scientists).</p> <p>- Mechanism has adequate stakeholder representation.</p> <p>- Meets regularly.</p> | <p>- Advisory group or other mechanism is established to ensure access to best available information from all relevant sources. It has adequate resources and meets regularly.</p> <p>- JIA systematically incorporates information from a variety of stakeholders from mechanisms into its operations and has properly functioning mechanisms that provides information and feedback to them to relevant stakeholders.</p> | <p>- JIA has authority to coordinate activities between countries, make policy recommendations to member countries and consistently influences significant policies or actions of member states.</p> <p>- JIA has adequate full-time staff.</p> |
| <p>Less than 100 percent but more than 80 percent of member governments</p> <p>One government does not:</p> | <p>- Advisory group or other consultative mechanism is established but lacks clear mandate.</p> <p>- Mechanism has the</p> | <p>- Advisory group or other mechanism is established but resources are inadequate or meetings are sporadic.</p> | <p>- For JIAs in which which have developed credibility and consistently influences policies and actions of</p> |

| | | | |
|---|--|--|--|
| <p>-Allocate staff resources in support of the JIA. -Assign high level officials to the JIA. -Have a line item in its budget <u>for</u> support of the JIA.</p> | <p><u>representation of most relevant stakeholders</u> -Meets irregularly. -Stakeholder analysis carried out but not all significant stakeholders are identified. -Not all of the plan for stakeholder participation is implemented or documented -All but a few stakeholders feel they have been adequately consulted.</p> | <p>-JIA incorporates some information from <u>a variety of stakeholders</u> mechanisms into its operations but provides little or no feedback <u>and has not established mechanisms to provide information and feedback to stakeholders.</u></p> | <p><u>less than 100 percent but more than 80 percent of JIA has formal management authority for management functions but has member governments little influence on the policies of member states.</u> -JIA has inadequate full-time staff.</p> |
| <p><u>More than one but less than half of the governments</u> Less than 80 percent but more than 50 percent of member governments do not: -Allocate staff resources. -Assign high level officials. -Have a line item in its budget <u>in support of</u> the JIA.</p> | <p>-<u>Advisory group or other consultative mechanism is established but seldom meets.</u> -<u>Mechanism lacks representation of various key stakeholder stakeholders.</u> -Stakeholder analysis carried out but several significant stakeholders are not identified. -<u>Much of stakeholder participation plan is not implemented.</u> -<u>A number of stakeholders feel they have not been adequately consulted</u></p> | <p>-<u>Advisory group or other mechanism is established but have few resources or seldom meet.</u> -JIA <u>does not</u> sporadically incorporate any recommendation into its operations <u>from stakeholders other than the formal government representatives in the JIA</u> and provides <u>little or no feedback to other stakeholders.</u></p> | <p>--For JIAs in which which have developed credibility among less than 80 percent but more than 50 percent of member governments to influence on the policies. -JIA has formal authority for management functions but has no influence on policies. -JIA has little or no full-time staff of its own.</p> |
| <p><u>More than 50 percent of member</u> Most governments do not: -Allocate staff resources. -Assign high level officials. -Have a line item in <u>their budget for the JIA</u> support of the JIA in its budget.</p> | <p>-<u>No advisory group or other consultative mechanism for access to best available information is established.</u> -Stakeholder analysis has not been carried out. -<u>No detailed plan for stakeholder participation is published.</u> -<u>Most stakeholders feel they have not been adequately consulted.</u></p> | <p>-<u>No advisory group or other mechanism for access to best available information is established.</u> -JIA does not incorporate recommendations from stakeholders other than the formal government representatives in the JIA.</p> | <p>-For JIAs in which which have developed credibility among less than 50 percent of member governments to influence on the policies -JIA has no formal management authority. -JIA has no staff of its own.</p> |

4. Indicators for the Inter-Ministry Committee Process

~~62.58.~~ An action by countries participating in GEF projects that is central to measuring program success is the establishment and operation of an inter-ministerial ministry committee (IC) or other national mechanism for ensuring that needed sectoral policy and regulatory reforms, investments and other actions to address root causes are formulated and implemented. The scalar indicators of the inter-ministerial ministry committee's effectiveness and the quality of its processes are shown in Table 4.

~~59.~~ The effectiveness of the individual state's IC will depend on how far it goes toward adopting binding, quantitative targets, timetables for sectoral policy and regulatory reforms, investments and other actions. The timely achievement of most agreed upon adoption of such targets and timetables for all issues identified in the SAP is the highest value on the scale. The second highest would be to situations in which expected outcomes have not yet been achieved but activities are in time and IC functions as an effective coordinating mechanism among different ministries by adopting specific targets and timetables for priority actions assigned if it does so for some but not all the issues identified. The next lowest value would be given if activities are late or if the IC does not adopt any targets and timetables but calls for specific reforms, investments or activities in all planned for all priority actions. The lowest value would be assigned if the IC ~~does not~~ has not adopted commitments to specific reforms for all priority actions in the SAP and no activities have been carried out.

~~60.~~ The criteria for government involvement in the IC are similar to those of the JIA: the number of governments that undertake each of the three forms of support to the JIA: Allocation of staff resources, assignment of high-level officials and maintaining a line item in the budget in support of it. Each of these criteria would have its own scale in the actual evaluation. The highest value on each of the scales would be assigned if all governments provide the support, whereas the lowest value would be assigned if most governments fail to do so.

~~64-61.~~ The scalar indicators for stakeholder participation and sound information focus on the establishment and functioning advisory groups or similar mechanisms as tools to incorporate information, perspectives and interests of stakeholders in the activities coordinated by ICs. The indicators for government involvement of the inter-ministerial committee process are based on the extent to which relevant ministries support the committee's endeavor to adopt necessary sectoral reforms. The indicators of this support would be the allocation of staff resources, the assignment of high-level officials and responding to information requests.

~~65.~~ Again, the indicators for stakeholder participation and sound information are the same as those in the previous three processes.

Formatted: Bullets and Numbering

TABLE 4: PROCESS OUTCOME INDICATORS FOR INTER-MINISTERIAL/MINISTRY COMMITTEES

| <i>Government Involvement</i> | <i>Stakeholder Participation</i> | <i>Sound Information</i> | <i>Process Results</i> |
|---|--|--|--|
| <p>The degree to which relevant ministries have given political support to the process</p> | <p>Degree to which the process incorporates stakeholders</p> | <p>The degree to which mechanisms are established to provide the best available information and analysis</p> | <p>Specificity of commitments to policy/regulatory reform, investments and other actions included in the SAP</p> |
| <p>In all participating countries, the relevant ministries support the process by:</p> <ul style="list-style-type: none"> -allocating staff resources -assigning a high level official -responding to information requests. -collaborating in the implementation of a plan with targets that can be monitored and that are being met. | <p>-Advisory group or other consultative mechanism is established to ensure access to best available information from all relevant sources (including local scientists).</p> <p>-Mechanism has adequate stakeholder representation.</p> <p>-Meets regularly.</p> <p>-Stakeholder analysis carried out and all significant stakeholders are identified.</p> <p>-Public detailed plan for stakeholder participation is implemented and documented</p> <p>-All significant stakeholders feel they have been adequately consulted.</p> | <p>-IMC systematically incorporates information from a variety of stakeholders into its operations and has properly functioning mechanisms that provide information and feedback to relevant stakeholders.</p> <p>-Advisory group or other mechanism is established to ensure access to best available information from all relevant sources. It has adequate resources and meets regularly.</p> <p>-Committee incorporates most recommendations and information from mechanisms into its deliberations and provides feedback to them.</p> | <p>-ICCommittee has been instrumental in the timely achievement of most agreed upon targets to adopt quantitative targets and timetables addressing all priority actions root causes identified in the SAP or action plan.</p> |
| <p>In up to 80 percent of participating countries, relevant ministries; one relevant ministry does not support the process by failing to:</p> <ul style="list-style-type: none"> -allocate staff resources -assign high level officials -respond to information requests. | <p>-Advisory group or other consultative mechanism is established but lacks clear mandate.</p> <p>-Mechanism has the representation of most relevant stakeholders</p> <p>-Meets irregularly.</p> <p>-Stakeholder analysis carried out but not all significant</p> | <p>-IMC incorporates some information from a variety of stakeholders into its operations but provides little or no feedback and has not established mechanisms to provide information and feedback to stakeholders.</p> | <p>-Expected outcomes have not yet been partially achieved and process is in time and ICCommittee coordinates well with various ministries by adopting targets and timetables for most some but not all p priority actions</p> |

| | | | |
|---|--|--|--|
| <p>-targets can not be monitored. -- are collaborating well in implementation targets are not being met.</p> | <p>stakeholders identified. -Not all the plan for stakeholder participation is implemented or documented -All but a few stakeholders feel they have been adequately consulted.</p> | <p>-Advisory group or other mechanism is established but resources are inadequate or meetings are sporadic. -Committee incorporates some recommendations and information into its deliberations but does not provide feedback.</p> | <p>identified in the SAP.</p> |
| <p>In up to 50 percent of participating countries, relevant ministries: More than one but less than half the relevant ministries do not support the process by failing to:</p> <p>-allocate staff resources. -assign high level officials. -respond to information requests. -no clear targets set. are collaborating well in implementation</p> | <p>-Advisory group or other consultative mechanism is established but seldom meets. -Mechanism lacks representation of various key stakeholder stakeholders. -Rarely meets-Stakeholder analysis carried out but several significant stakeholders not identified. -Much of stakeholder participation plan is not implemented. -A number of stakeholders feel they have not been adequately consulted.</p> | <p>-IMC sporadically incorporate recommendation into its operations from stakeholders other than the formal government representatives in the IMC and provides little or no feedback to other stakeholders. -Advisory group or other mechanism is established but have few resources or seldom meet. -Committee does not incorporate any recommendation into its deliberations and provides no feedback.</p> | <p>-IC Committee adopts commitments to specific policy and regulatory reforms for all priority actions identified in the SAP but expected outcomes are significantly delayed or no targets and timetables are specified.</p> |
| <p>In less than 50 percent of participating countries relevant ministries tend toMost relevant ministries do not support the process by failing to:</p> <p>-allocate staff resources -assign high level officials -respond to information requests. are collaborating well in implementation</p> | <p>-No advisory group or other consultative mechanism for access to best available information is established - Stakeholder analysis has not been carried out. -No detailed plan for stakeholder participation is published. -Most stakeholders feel they have not been adequately consulted.</p> | <p>-IMC does not incorporate recommendations from stakeholders other than the formal government representatives in the IMC. -No advisory group or other mechanism for access to best available information is established.</p> | <p>-IC has not made clear contributions to the process nor Committee does not adopt specific commitments, targets or timelines to specific policy/regulatory reforms for any priority actions identified in the SAP.</p> |

5. Indicators for mobilization of Resources

66.62. Another necessary follow-up action by individual states is to obtain the financing necessary to carry out investment projects that are identified as priorities by the TDA and SAP processes. The measurement of the effectiveness of this follow-up action is based on the proportion of the funds needed for the priority investment projects identified in the SAP. This assessment requires the list of investment projects identified in the SAP and their estimated costs. A scalar measure of effectiveness can then be used to measure how much of the financing for the investment projects identified was obtained, as shown in Table 5.

Formatted: Bullets and Numbering

TABLE 5: INDICATORS FOR MOBILIZATION OF RESOURCES
(LEAST TO MOST EFFECTIVE)

| | | | |
|---|---|---|---|
| Financing found for few needed investments (<25%) | Financing found for less than half of investment needs (<50%) | Financing found for most of investment needs (>75%) | Financing found for all investment needs (100%) |
|---|---|---|---|

6. Indicators for Demonstration Activities

67-63. In addition to GEF's catalytic role in supporting inter-governmental and national government processes aimed at sectoral policy and regulatory reforms and investments, all three GEF International Waters programs support a large number of demonstration projects and project components. Nearly a third of all International Waters projects involve demonstration activities and the central purposes of a number of them is to demonstrate that a particular approach can be successful in addressing an environmental threat to international waters. Program performance indicators are needed to measure what has been achieved in these demonstration activities.

68-64. The purpose of demonstration activities is to interest local, regional authorities with similar conditions and problems in replicating techniques and approaches that are shown to bring the desired results in terms of pollution reduction or habitat preservation. The most important generic criteria for success of such projects, therefore, regardless of the specific problem being addressed by the project, are: (1) the extent to which demonstration projects were selected on the basis of a need identified across a region and responding to criteria agreed upon by the riparian countries. (2) the degree to which they have used appropriate indicators for judging the effectiveness of the demonstration of the approach in providing a solution to the environmental problem, (3) the degree to which they have implemented a strategy for monitoring and evaluation of the success of the project, and (4) the degree to which they have implemented a strategy for ensuring replication of the demonstration, including the involvement of those who are in a position to replicate project activities in design and implementation of the pilot. The program performance indicators should also measure actual results in terms of activities aimed specifically at bringing the technology or approach to the attention of those who are in a position to replicate them.

69-65. The scalar indicators of effectiveness of demonstration activities are shown in Table 6:

Formatted: Bullets and Numbering

TABLE 6: PROCESS OUTCOME INDICATORS FOR DEMONSTRATION ACTIVITIES

| Replication Strategy | Criteria for Success | Monitoring and Evaluation |
|---|---|---|
| Degree of success of replication strategy | Appropriateness and measurability of criteria for successful demonstration | Effectiveness of monitoring and evaluation of success |
| Replication strategy is in place and elicits strong interest by stakeholder. Significant replication is taking place. | Criteria for success are both appropriate and measurable | Plan for monitoring and evaluation of success results and replication has been implemented in and data has been collected and analysed analyzed |
| Replication strategy or plan is in place and elicits interest by stakeholders in replication, but minimal or no replication taken place. | Criteria for success are appropriate but not measurable | Plan in place for monitoring and evaluation of success and replication is under implementation, data is collected but there is no analysis or reporting. |
| Replication strategy has been developed and adopted but elicits no interest in replication from stakeholders. | Criteria for success are not appropriate or measurable | Plan for monitoring and evaluation of success is drafted but not under implementation. |
| No strategy or plan has been developed aimed at encouraging Replication or no significant actions have been taken to adopt plan or strategy | No criteria for success of demonstration are adopted | No plan for monitoring and evaluation of success is drafted |

In addition to this scalar measure, projects will be ask to report the demonstration selection criteria. In this regards it will be particularly important to indicate if demonstration was selected on the basis of agreed upon criteria that refer to needs across a region or geographical area were the project is meant to be replicated or if the project demonstration projects were selected independently by countries on the basis of funding quotas allocated by the project.~~which would indicate how successful demonstration activities in different projects and project components have been.~~ The success of the programs as a whole in encouraging replication can be measured by the total number of replications of demonstration projects or activities that are recorded.

IV. Indicators for Stress Reduction

A. Stress Reduction Indicators at the Project Level

[70-66](#). Stress reduction indicators measure the degree to which project activities have contributed to changes in the sectoral activities (or some proxy for those activities) that threaten the environmental quality of international waters, degrade or destroy habitats, or deplete marine resources. Specific stress reduction indicators for each project will differ according to the waterbody type and project objectives.

Formatted: Bullets and Numbering

[71-67](#). The stresses addressed by projects in OP 8 and OP 9 can be grouped under ~~six~~ six distinct categories of threats to international waters, one of which has been divided into three subcategories. These categories are shown in Box B. Examples of stress reduction indicators that could be used at the project level, grouped under each of the ~~six~~ six major threats addressed by international waters projects, are shown in Annex [24](#). These stress reduction indicators are intended to be merely indicative.

Box B

Diversity of Stress reduction indicators at the project level

The 17 Danube/Black Sea Basin countries have already committed formally through the Istanbul Commission and the International Committee for the Protection of the Danube River to the target of reducing nutrient levels and other hazardous substances to levels that would permit the Black Sea ecosystem to attain the water quality it had in the 1960s. However, this is a long-term target, and it is unclear how long it will take before any change in environmental status could be registered.

Other basins enclosed seas/LMEs and their associated drainage basins now covered by multiple GEF projects (for example, Guinea Current LME, South China Sea, and Plata Basin) could also become foci of the programmatic or geographically-based approach in the future, if the GEF decides to support further projects in those basins. If so, the states participating in projects would be expected to agree on certain targets for environmental quality in the transboundary waterbodies in question. However, it is unlikely that these would be the same issues chosen for targets by a GEF International Waters project in another waterbody.

[72-68](#). Some projects are far more likely than others to be able to document a reduction in specific stresses as a result of the project itself. Waterbodies that benefit from a “programmatic approach” can be expected to have a measurable impact on sectoral activities, whereas projects that support [the formulation of](#) TDAs and SAPs are not likely to have such an impact during the project implementation period. Projects for actual

Formatted: Bullets and Numbering

implementation of SAPs should have relatively short-term impacts on stresses in most cases.

73-69. Because of the wide range of stresses that may be measured in different international waters projects, it is not possible to identify a selected group of stress reduction indicators that could be compared across projects and serve as program performance indicators. Therefore, this system of program performance indicators does not propose a set of specific stress reduction indicators that would relate to the same stresses across a group of water bodies.

Box B: Stress Reduction Categories

1. Trans-boundary ~~P~~ollution
2. Over-fishing
3. Habitat ~~L~~oss
4. Water availability ~~Excessive W~~and water wWithdrawals
5. Land d~~E~~gradation
6. Vulnerability of human populations~~Invasive Species~~

Formatted: Bullets and Numbering

B. Program Performance Indicators Related to Stress Reduction

74-70. Instead of identifying specific stress reduction indicators at the program level, this system would measure project success on two dimensions: (1) the extent to which projects have properly identified, monitored and reported on stresses that are most relevant to the project and (2) the extent to which the project has succeeded in meeting its own objectives in regard to stress reduction, where such objectives have been adopted. These two indicators would be monitored and reported only by those projects where actual stress reduction is a project objective.

Formatted: Bullets and Numbering

1. Progress in Monitoring and Reporting on Selected Environmental Stresses

75-71. The scalar indicators of monitoring and reporting are shown in Table 7. The most desirable outcome of a monitoring and reporting system at the project level is that the monitoring plan has been implemented and has produced reporting of data on the change in the level of environmental stress or stresses from the baseline data, if any. The least desirable outcome would be that no monitoring plan for stress reduction is established. These ascending levels of achievement may represent stages of development of the project.

Formatted: Bullets and Numbering

TABLE 7: INDICATORS OF MONITORING AND REPORTING ON STRESS REDUCTION

(IN ASCENDING ORDER OF DESIRABILITY)

| | | | |
|--|--|---|---|
| No plan for monitoring stress reduction has been established | Monitoring plan for stress reductions has been established <u>data gathering responsibilities are clearly defined</u> , and adequate staff and budget provided | <u>Monitoring system established.</u> Monitoring plan for stress reduction is under implementation but no data have been reported | Monitoring systematically gathers and reports data related to the baseline. Data has been documented and <u>analysedanalyzed.</u> |
|--|--|---|---|

2. Progress in Achieving Stress Reduction Objectives

76-72. Although this indicators system does not adopt a set of specific stress reduction indicators to be used by different groups of projects, it proposes to aggregate and compare the data from projects on the degree to which they have achieved their stress reduction objectives where such objectives have been adopted. Stress reduction objectives may involve proxies for stress reduction indicators, such as concrete measures of progress in programs to change behaviors that stress the environment.

Formatted: Bullets and Numbering

77-73. The scalar indicator for the realization of stress reduction objectives is simple: either the project has not come close to realizing its stress reduction objective, progress in target, has come close to achieving project’s stress reduction the objective or has gone beyond it.

78-74. It may be that proxy indicators can be improved much more easily and more rapidly than indicators of human activities that put stress on the environment. Should that prove to be the case, the aggregation and comparison of data would have to be based on separation of proxy indicators from more direct indicators of stress reduction.

TABLE 8: INDICATORS OF RELATIVE SUCCESS IN ACHIEVING STRESS REDUCTION OBJECTIVES

| | | | |
|---|---|---|--|
| Progress towards achieving stress reduction objectives is significantly behind targets <u>or are not well documented.</u> | Progress in achieving stress reduction <u>are well documented and objectives is</u> on target. <u>Achievements are properly documented.</u> | Project has achieved or is close to achieving <u>and has documented the expected</u> targeted stress reduction <u>improvement.</u> <u>Achievements are properly documented.</u> | Project <u>has has documented stress reduction improvements gone</u> significantly beyond the targets, <u>ed-stress reduction improvement</u> <u>Achievements are properly documented.</u> |
|---|---|---|--|

VI. Indicators for Environmental Status

A. Limited Application and Non-Comparability of Environmental Indicators

79-75. This system of program performance indicators does not prescribe the environmental status indicators to be used at the project level. The reason is that, with few exceptions, only those waterbodies that benefit from a “programmatic approach” can be expected to have a measurable impact on environmental status during the time frame of a GEF project. And those few waterbodies that might have such a programmatic approach cannot be expected to focus on the same or similar environmental status measures. In this sense they will not be comparable. Moreover, the choice of environmental status targets will in each case be a political choice made jointly or singly by the participating states.

80-76. Because the International Waters focal area has the resources only for catalytic interventions that are not expected in themselves to result in changes in environmental status during the period of the project, environmental status indicators generally will not be relevant to its Operational Programs. The exception to this generalization thus far is the Black Sea-Danube Basin, which is the one basin that has been the beneficiary of a “programmatic approach” by the GEF. A programmatic approach, also referred to as a “geographically-based approach,” means that several related projects have been supported by the GEF for the same waterbody or basin, and that the projects are implemented in stages that extend over a sufficient period of time that states have the possibility of adopting strategic targets for environmental quality.

81-77. The 17 Danube/Black Sea Basin countries have already committed formally through the Istanbul Commission and the International Committee for the Protection of the Danube River to the target of reducing nutrient levels and other hazardous substances to levels that would permit the Black Sea ecosystem to attain the water quality it had in the 1960s. However, this is a long-term target, and it is unclear how long it will take before any change in environmental status could be registered.

82-78. Other basins enclosed seas/LMEs and their associated drainage basins now covered by multiple GEF projects (for example, Ginea Current LME, South China Sea, and Plata Basin) could also become foci of the programmatic or geographically-based approach in the future, if the GEF decides to support further projects in those basins. If so, the states participating in projects would be expected to agree on certain targets for environmental quality in the transboundary waterbodies in question. However, it is unlikely that these would be the same issues chosen for targets by a GEF International Waters project in another waterbody.

83-79. Because the countries belonging to each such basin are likely to decide on different targets for environmental changes in the basin, it would be fruitless to propose a common set of environmental status indicators. Thus, each basin subject to a

Formatted: Bullets and Numbering

programmatic approach will be treated as having its own set of program-level environmental status indicators.

B. Indicators for Monitoring and Reporting on Environmental Status

84-80. Instead of proposing common environmental quality indicators for waterbodies in which a programmatic approach is being applied, this scheme for program level indicators provides a set of scalar process indicators for monitoring and reporting on environmental status in those projects where such monitoring is appropriate. It does not assess the appropriateness of the environmental status indicator chosen but only the process of monitoring and reporting itself.

Formatted: Bullets and Numbering

85-81. The scalar indicators for monitoring and reporting on changes in environmental status are the same as those for monitoring and reporting on stress reduction and reflect stages of development of the project. Table 9 shows the set of indicators for this purpose.

TABLE 9: INDICATORS OF MONITORING AND REPORTING ON CHANGES IN ENVIRONMENTAL STATUS

(IN ASCENDING ORDER OF DESIRABILITY)

| | | | |
|---|---|--|---|
| No plan for monitoring has been established or it lacks adequate staff and budget | Monitoring plan has been established with adequate staff with budget but has not been implemented | Monitoring plan is under implementation but no data have been reported | Monitoring systematically gathers, reports, documents and analyses data related to the baseline |
|---|---|--|---|

VII. Indicators for Results of Scientific Assessments

Formatted: Bullets and Numbering

82. GEF finances some International Waters projects to mount scientific assessments at various levels. These are project that are targeted to do research and are generally focused on issues of global or regional importance such as understanding global environmental threats, treats in a region or in a specific ecosystem. This projects may address some fundamental scientific issues. What they have in common, however, is that unlike TDAs, the scientific assessments referred to in this section are not meant in resulting in a SAP or a specific action programme, they are meant to generate information and to improve understanding of issues regional or global importance. Specific examples are Global International Waters Assessment, Nutrient and Carbon Cycles, and Climate and Coral Reefs.

83. Because these project are unique in their procedures and methods, their effectiveness and value cannot be reasonably evaluated on the basis of the process indicators applicable to other types of project activities. The sets of indicators proposed for these projects are therefore based on the quality of the results and methodology used rather than on processes. The criteria for desirable results are accessibility to relevant decision makers, usefulness to policy or programming decisions, quality of assessment outcome and rigor of methods used. A set of scalar indicators has been generated for each of these criteria, as shown in Table 10.

Table 10: Indicators for Results of Scientific Assessments

| <u>Accessibility of outcome to relevant decision makers</u> | <u>Usefulness of outcome to relevant policy or programming issues</u> | <u>Quality of assessment outcome</u> | <u>Rigor of methods used</u> |
|--|--|---|---|
| <u>All or nearly all decision makers are aware of and clearly understand key findings of the assessment</u> | <u>Assessment has been cited or used extensively in discussing and making decisions</u> | <u>The assessment carried out a comprehensive analysis that included consideration of all critical factors and issues, and presented convincing evidence..</u> | <u>Assessment is scientifically sound and draws on state of the art concepts and methods</u> |
| <u>Most decision makers are aware and understand key findings of the assessment</u> | <u>Assessment has been cited and used in several instances in discussing or making decisions.</u> | <u>The assessment carried out a comprehensive analysis, includes evidence, but not all critical factors and issues are included</u> | <u>Concepts and knowledge and overall rigor are state of the art. Rigor of methodologies used are debatable</u> |
| <u>A number of decision makers are unaware of or did not clearly understand key findings of the assessment</u> | <u>Assessment has rarely been cited or used in discussing or making decisions, but only slightly</u> | <u>The assessment carried out a is not comprehensive analysis, or fails to consider some critical factors and issues, or has some gaps in the evidence presented.</u> | <u>Concepts and knowledge are not state of the art. Rigor of methodologies used are debatable</u> |
| <u>Most decision makers are not aware of or did not understand key findings of the assessment</u> | <u>Assessment has not been cited or used at all in discussing and making decisions</u> | <u>The assessment has major gaps, or fails to consider critical factors and issues, or evidence presented is weak and not convincing.</u> | <u>Assessment definitely did not use state of the art knowledge and methods.</u> |

Formatted: Bullets and Numbering

VII. Indicators for Results of Scientific Assessments

86. One of the major activities supported by the GEF in International Waters programs is the mounting of scientific assessments at various levels. Some (e.g., Global International Waters Assessment, Nutrient and Carbon Cycles, and Climate and Coral Reefs) are global in scope and may involve some fundamental scientific issues. Most are focused on understanding environmental threats in a region or a specific ecosystem. What they have in common, however, is the application of scientific research to problems of importance to national policymakers or GEF officials responsible for programming or project development.

87. Because these activities are unique in their procedures and methods, their effectiveness and value cannot be reasonably evaluated on the basis of the process indicators applicable to other types of project activities. The sets of indicators proposed for these projects are therefore based on the quality of the results and research methodology used rather than on processes. The criteria for desirable results are accessibility to relevant policymakers, usefulness to policy or programming decisions, contribution to scientific knowledge and rigor of research methodologies used. A set of scalar indicators has been generated for each of these criteria, as shown in Table 10.

Table 10: Indicators for Results of Scientific Assessments

| Accessibility of outcome to relevant policymakers | Usefulness of outcome to relevant policy or programming issues | Contribution of outcome to scientific knowledge | Rigor of research methodologies used |
|--|---|---|--|
| All or nearly all policymakers are aware of and clearly understand key findings of the assessment | Assessment has been cited or used extensively in discussing and making decisions | Assessment clearly represents new scientific knowledge and understanding of issues. | Assessment is scientifically sound and draws on state-of-the-art concepts and methods |
| Most policy makers are aware and understand key findings of the assessment | Assessment has been cited and used in several instances in discussing or making decisions. | Assessment consistent with state-of-the-art scientific knowledge and understanding of issues. | Concepts and knowledge and overall rigor are state-of-the-art. Rigor of methodologies used are debatable |
| A number of policymakers are unaware of or did not clearly understand key findings of the assessment | Assessment has rarely been cited or used in discussing or making decisions, but only slightly | Contribution to scientific knowledge and understanding of issues are unclear or debatable | Concepts and knowledge are not state-of-the-art. Rigor of methodologies used are debatable |
| Most policymakers are not aware of or did not understand key findings of the assessment | Assessment has not been cited or used at all in discussing and making decisions | Assessment makes no significant contribution to scientific knowledge | Assessment definitely did not use state-of-the-art knowledge and methods. |

Formatted: Bullets and Numbering

VIII. Indicators for outcomes of Knowledge Management Activities

88. A number of GEF International Waters projects include knowledge management activities as major components. These activities involve the creation of management tools for the compilation, systematization and processing information related to the environmental threats addressed by the project and making the information available in accessible formats to relevant officials and other stakeholders. Knowledge management activities in GEF projects include creation of databases or knowledge bases and establishment of systems to disseminate this knowledge through the internet or other electronic means.

89. The criteria chosen for the scalar indicators for these activities focus on accessibility and usefulness to policymakers and stakeholders. No evaluation of the results of knowledge management activities in IW projects is possible on the basis of objective criteria. Evaluation of these activities depends, therefore, entirely on surveys of the relevant officials and stakeholders in regard to how accessible and useful they have found the information compiled, organized and disseminated. The criteria and indicators for knowledge management activities are shown in Table 11.

TABLE 11: INDICATORS FOR OUTCOMES OF KNOWLEDGE MANAGEMENT ACTIVITIES

| Accessibility to relevant stakeholders | Accessibility to relevant policymakers | Usefulness to stakeholders | Usefulness to relevant policymakers |
|--|--|---|---|
| All or nearly all relevant stakeholders are aware of the information and found it easy to access | All or nearly all relevant policymakers are aware of the information and found it easy to access | All or nearly all relevant stakeholders find some of the information useful in policymaking | All or nearly all relevant policymakers find some of the information useful in policymaking |
| Most relevant stakeholders are unaware of the information and found it easy to access | Most relevant policymakers are aware of the information and found it easy to access | Most relevant stakeholders find some of the information useful in policymaking | Most relevant policymakers find some of the information useful in policymaking |
| Many relevant stakeholders are unaware of the information or did not find it easy to access | Many relevant policymakers are unaware of the information or did not find it easy to access | Many relevant stakeholders do not find some of the information useful in policymaking | Many relevant policymakers do not find some of the information useful in policymaking |
| Few relevant stakeholders are aware of the information and found it easy to access | Few relevant are aware of the information and found it easy to access | Few relevant stakeholders find the information useful in policymaking | Few policymakers find the information useful in policymaking |

Formatted: Bullets and Numbering

IX. Presentation of Data on Program Performance Indicators

90:84. The presentation of data on program performance indicators will be based on three distinctions: (a) the Operational Program; (b) whether the data is aggregated or compared; and (c) whether the data pertains to all waterbodies or to waterbodies within each type of ecosystem. Therefore, for each of the OPs (8, 9 and 10), the data on process indicators and stress reduction-related indicators can be presented in four possible ways:

1. The data on process indicators will be presented in three possible ways: the first mode of presentation is by OP. The data would show how many projects in each of the OPs achieved each of the four levels measured for each of the processes assessed. If, for example, 18 projects have undertaken a SAP, of which nine projects are in OP 8 and nine in OP 9, the presentation of data would add up how many of the nine in OP 8 have achieved the highest level of achievement on the scalar indicators for Government Involvement in the SAP, how many have achieved the next highest level of effectiveness, etc. The data on the same nine projects would then aggregated for each of the four dimensions of process quality and process results for SAP. The same procedure would apply to each of the other three processes and for obtaining financing for investment needs.

3. Another form of data presentation would aggregate the data by both OPs and by ~~ecosystem~~ type of water body (LME, coastal zone, freshwater body, aquifer) showing how many waterbodies of each ecosystem type fell into each of the cells of the scalar indicators for each project.

4. Data could also be presented showing ~~all~~ of the projects in the same OP and type of ecosystem to be compared in regard to process results.

Formatted: Bullets and Numbering

**ANNEX 1:
DATA ON PROJECT INTERVENTION TYPE**

| Project | Regional Inst. Developm't | TDA | SAP | Demonstration | Scientific Assessment | Knowledge Management | National Plans/ Policy Reform | SAP Implem. |
|--------------------------|----------------------------------|------------|------------|----------------------|------------------------------|-----------------------------|--------------------------------------|--------------------|
| Lake Manzala | | | | ✓ | | | | |
| Red Sea/Gulf of Aden | | | | | | | ✓ | ✓ |
| Tumen River | | ✓ | ✓ | | | | | |
| Pacific SIDs | | | ✓ | | | | | |
| Caspian Sea TDA/SAP | | ✓ | ✓ | | | | | |
| Dnieper River SAP | | | ✓ | | | | | |
| IW Learn | | | | | | ✓ | | |
| Globalast | | | | ✓ | | | ✓ | |
| Rio de la Plata | | ✓ | ✓ | | | ✓ | | |
| Lake Victoria | | ✓ | ✓ | ✓ | | | ✓ | |
| Lake Victoria | | | | | | | | |
| Lake Victoria | | | | | | | | |
| Gulf of Aqaba | ✓ | | | | | | ✓ | |
| Lake Ohrid | ✓ | | | | | | | |
| Poland Rural Environment | | | | ✓ | | | | |
| Georgia ARET | | | | ✓ | | | | |
| Oil Spill Contingency | ✓ | | | | | ✓ | | |
| Aral Sea | | ✓ | ✓ | | | ✓ | | |
| East Asian Seas | | | | ✓ | | ✓ | | |
| GIWA | | | | | ✓ | | | |
| Sao Francisco Basin | | | | ✓ | | | | |
| Mekong Water Utilization | | | ✓ | | | ✓ | | |

| —Project | Region- al Inst. Devel- opm't | TDA | SAP | Demon- stration | Scientific Assess- ment | Know- ledge Manage- ment | National Plans/ Policy Reform | SAP Implem. |
|--------------------------------------|--|-----|-----|--------------------|-------------------------------|-----------------------------------|--|----------------|
| Ship-gen. waste management | | | | ✓ | | | | |
| Bermejo River SAP Implementation | | | | | | | | |
| Gulf of Aqaba Env. Action Plan | | | | | | | | |
| Train Sea Coast | | | | | | | | |
| SAP for Red Sea | | | | | | | | |
| Red Sea Coastal and Marine Resources | ✓ | ✓ | | | | | | ✓ |
| San Juan River Basin | | | | ✓ | | | | |
| Persistent Toxic Substances | ✓ | ✓ | | | | | | ✓ |
| West Indian Ocean | | | ✓ | | | | | |
| Brazil Pantanal & Upper Paraguay | | | | ✓ | | | | |
| Nutrient and Carbon Cycles | | | | ✓ | | | | |
| Indig. People of Russian North | | | | | | | ✓ | |
| Priority Actions Mediterranean Sea | ✓ | ✓ | | | | | | ✓ |
| Sub-Saharan Marine/Coastal Env. | | | ✓ | | | ✓ | | |
| Russian Fed. Arctic Marine Env. | ✓ | ✓ | | | | | | ✓ |
| Okavanga River Basin | | | ✓ | | | | | |
| Canary Current | | ✓ | | | | | | |

ANNEX 12: COVERAGE INDICATORS
Table A GEF-eligible Large Large Marine Ecosystems (Ecosystems –(LMEs) *

| | | | |
|--|--|--------------|----------------|
| <u>LATIN AMERICA & THE CARIBBEANAC</u> | | | |
| — | GEF project | — | SAP |
| 1 | — California Current | | |
| 2 | — Gulf of California | | |
| 3 | — Gulf of Mexico | | |
| 4 | — Pacific Central America Coast | | |
| 5 | — Caribbean Sea | — | X |
| 6 | — Humboldt Current | | |
| 7 | — Patagonia Shelf | — | X |
| 8 | — South Brazil Shelf | | |
| 9 | — East Brazil Shelf | | |
| 10 | — North Brazil Shelf | — | X |
| | | | |
| AFRICA | | | |
| 11 | — Mediterranean Sea | — | X |
| 13 | — Canary Current | X | — X |
| 14 | — Guinea Current | X | — X |
| 15 | — Benguela Current | X | — X |
| 16 | — Aqulhas Current | | |
| 17 | — Somali Costal Current | | |
| | | | |
| ASIA | | | |
| 18 | — Bay of Bengal | — | X |
| 19 | — Gulf of Thailand | — | X |
| 20 | — South China Sea | — | X |
| 21 | — Sulu-Celebes Sea | | |
| 22 | — Indonesia Sea | | |
| 23 | — East China Sea | — | X |
| 24 | — Yellow Sea | — | X |
| 25 | — Sea of Japan | | |
| | | | |
| <u>MIDDLE EAST AND NORTH AFRICA</u> | | | |
| <u>WEST ASIA</u> | | | |
| 26 | — Mediterranean Sea | — | X |
| — | — Arabian Sea | | |
| 27 | — Red Sea | — | X |
| | | | |
| EASTERN EUROPE | | | |
| 28 | — Baltic Sea | — | X |
| 30 | — Black Sea | — | X |

Formatted: Bullets and Numbering

Formatted: Bullets and Numbering

* Source : Large Marine Ecosystems of the World [Http://www.edc.edu/lme/clickable-map.htm](http://www.edc.edu/lme/clickable-map.htm) and GEF project files.

~~Annex 2: COVERAGE INDICATORS~~

~~Table B: GEF eligible Large Transboundary River Basins of the World~~

~~(Table to be developed on the basis of International river basins information provided in <www.transboundarywaters.orrst.edu>)~~

ANNEX 2: EXAMPLES OF STRESS REDUCTION INDICATORS

(BY CATEGORY OF THREAT)

1. Trans-boundary Pollution

1.A. Excessive Nutrient Load

- Reduction in fertilizer application rates kg/ha (N, P and K).
- Increase in percentage of urban sewage that is treated
- Increases in total and proportion of animal waste stored and spread properly

Formatted: Bullets and Numbering

Formatted: Bullets and Numbering

Formatted: Bullets and Numbering

1.B. Persistent Organic Substances

- Reduction in pesticide/herbicide use (weighted according to ecotoxicity) per hectare of farmland.

Formatted: Bullets and Numbering

1.C. Other Contaminants

- Reduction in area of water (in km²) affected by oil spills; reduction in total volume of oil spills.
- Reduction in total pollutants from point sources by type and source.
- Increase in completed investment projects to reduce point source pollution.
- Basin-wide increase in market share of zero-P detergent.
- Reduction in the amount of mine tailings containing heavy metals.

Formatted: Bullets and Numbering

2. Over fishing

- Elimination or reduction of the gap between actual fish catch and estimated maximum sustainable level of fish catch for modeled fish stocks.
- Reduction of fishing capacity, measured by total number of vessels multiplied by estimated average catching capacity per vessel at full utilization, as a proportion of estimated fishing overcapacity.
- Reduction of rate of by-catch of non-target species.
- Increase in area (in km²) of no-fishing zones.

Formatted: Bullets and Numbering

- Increase in area of fishery with seasonal limits on fishing.

3. Habitat Loss/Destruction

- Reduction in area of wetlands (in km²) converted to agriculture or other economic activities annually
- Reduction in annual fishing trips by demersal trawlers.
- Reduction in area fished (in km²) by demersal trawling.
- Reduction in the area of mangroves (in km²) converted to mariculture or other economic activities annually.
- Reduction in the annual rate of loss of coral reefs due to destructive fishing practices or other economic activities.
- Reduction in number of invasive species in ballast water.

Formatted: Bullets and Numbering

4. Water availability/ Water Withdrawals

- Increase of water availability per capita (m³/pc)
- Increase in water subject to recycling and reuse schemes annually (m³/year)
- Reduction in annual withdrawals of groundwater or surfaced water as % of available water (m³/m³)
- Reduction in irrigation water used per hectare of irrigated farmland (m³/hec)
- Reduction of the rate of volume extraction to volume recharged into the aquifer (m³/m³)

Formatted: Bullets and Numbering

5. Land Degradation/Sedimentation

- Increase in annual area of degraded land stabilized (Ha/year)
- Increase in annual area of degraded land restored (Ha/year)
- Increase in annual area reforested (Km²/year)
- Increase in annual area of land afforested (Km²/year)
- Increase in annual area of land under sustainable land management regimen.
- Reduction in anthropogenic sediment load to rivers/coastal area.

Formatted: Bullets and Numbering

Formatted

6 Vulnerability of human populations

Population with access to clean water and sanitation

Reduction of floods, inundation of coastal territories and droughts**ANNEX 4:
EXAMPLES OF STRESS REDUCTION INDICATORS**

(BY CATEGORY OF THREAT)

1. Trans-boundary Pollution

1.A. Excessive Nutrient Load

oReduction in fertilizer (N, P and K).

Formatted: Bullets and Numbering

o

Formatted: Bullets and Numbering

oIncreases in total and proportion of animal waste stored and spread properly

Formatted: Bullets and Numbering

1.B. Persistent Organic Substances

oReduction in pesticide/herbicide use (weighted according to ecotoxicity) per hectare of farmland.

Formatted: Bullets and Numbering

oBasin wide reduction in pesticide/herbicide and other chemicals use.

Formatted: Bullets and Numbering

1.C. Other Contaminants

oReduction in area of water (in km²) affected by oil spills.

Formatted: Bullets and Numbering

oReduction in total pollutants from point sources by type and source.

oIncrease in completed investment projects to reduce point source pollution.

oBasin wide increase in market share of zero P detergent.

oReduction in the amount of mine tailings containing heavy metals.

2. Overfishing

oElimination or reduction of the gap between actual fish catch and estimated maximum sustainable level of fish catch for modeled fish stocks.

Formatted: Bullets and Numbering

oReduction of fishing capacity, measured by total number of vessels multiplied by estimated average catching capacity per vessel at full utilization, as a proportion of estimated fishing overcapacity.

oReduction of rate of by-catch of non-target species.

- Increase in fishery area (in km²) in no fishing zones.
- Increase in area of fishery with seasonal limits on fishing.

3. Habitat Loss/Destruction

- Reduction in area of wetlands (in km²) converted to agriculture or other economic activities annually
- Reduction in annual fishing trips by demersal trawlers.
- Reduction in area fished (in km²) by demersal trawling.
- Reduction in the area of mangroves (in km²) converted to mariculture or other economic activities annually.
- Reduction in the annual rate of loss of coral reefs due to destructive fishing practices or other economic activities.

Formatted: Bullets and Numbering

4. Excessive Water Withdrawals

- Reduction in annual withdrawals of groundwater or surfaced water as % of available water (m³/m³)
- Reduction in irrigation water used per hectare of irrigated farmland (m³/hec)
- Reduction in water consumption per capita (m³/cap)
- Reduction of the rate of volume extraction to volume recharged into the aquifer (m³/m³)
- Increase in water subject to recycling and reuse schemes annually (m³/year)

Formatted: Bullets and Numbering

5. Land Degradation/Sedimentation

- Increase in annual area of eroded land stabilized (in hectares/year)
- Increase in annual area reforested (in km²/year)
- Increase in percentage of land users/managers using agreed best practices

Formatted: Bullets and Numbering

6. Invasive Species

- Increased proportion of ships visiting ports in demonstration sites following IMO ballast water management guidelines.
- Reduction in number of invasive species in ballast water

Formatted: Bullets and Numbering

ANNEX 3: COVERAGE INDICATORS

Table C: Distribution of IW Projects by Threat Addressed
(Most projects address more than threat)

| Threat Addressed by Project Component | Number of Projects |
|--|---------------------------|
| Excessive Nutrient Load | 20 |
| Persistent Organic Pollutants and other Transboundary Pollutants | 26 |
| Over fishing | 17 |
| Land degradation | 10 |
| Habitat destruction | 13 |
| Excessive water withdrawals | 11 |

wb151381

M:\Aaron\IW program Indicators\IW Program Indicators Paper\IW Program Indicators070203.doc
July 2, 2003 6:53 PM