Biodiversity Indicators for National Use

Ecuador, Kenya, Philippines, Ukraine

UNEP

Medium-Sized Project
GEF Project ID: 1384
UNEP Project ID: 341

Terminal Evaluation

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I. KEY CONCLUSIONS AND RECOMMENDATIONS

The medium-sized GEF project Biodiversity Indicators for National Use had the goal of promoting the conservation and sustainable use of biodiversity by improving the information on which decisions are based. The project had four main objectives:

a) To operationalise ecosystem-specific indicator frameworks and core sets of indicators for use at national level, using a case study approach and building on work already carried out under the CBD.

b) To develop a methodology for biodiversity monitoring at national level (taking into account international reporting, especially in the context of the CBD).

c) To assist policy- and decision-makers to apply information supplied by biodiversity indicators to national planning and decision-making.

d) To support global and regional development of indicators under the CBD

The project was approved by the GEF on March 22, 2002, began implementation July 1, 2002, and was completed June 30, 2005. The project budget was $1.46 million, with $0.82 million in GEF funding. UNEP was the implementing agency for the project.

Based on the evidence gathered throughout the terminal evaluation, the project is rated satisfactory. The project had two main achievements. The first was demonstrating that functional national level biodiversity indicator frameworks can be created with data currently available. Within the data used by the BINU countries there were many gaps, but the countries brought all the available data together to create an overall picture of the status of biodiversity within a certain ecosystem within their country. BINU presented the first opportunity within the participating countries to put together an aggregate picture of biodiversity at the national level.

The second significant result was the building of capacity by bringing together diverse stakeholders working on biodiversity conservation-related issues within each country. Many project participants cited this aspect as the single greatest achievement of the project. Participating stakeholders found it very valuable to be able to increase their personal knowledge base and professional network through their involvement in the BINU project.

The project was successful in developing a framework of indicators for the relevant ecosystems in each of the participating countries, but the project did not fully achieve all of the objectives set out in the project document. In particular, the project made very little progress in assisting policy- and decision-makers to apply information supplied by biodiversity indicators to national planning and decision-making. The project document was overambitious in anticipating the policy influence the project would be able to achieve with the limited time and resources budgeted.

Recognizing that the evaluation key questions are meant to provide a framework for the evaluation as a whole, this section summarizes the conclusions from the evaluation in providing a direct reply to each of the key questions outlined in the evaluation Terms of Reference.

1a. What is the extent of use of the ecosystem-specific indicator frameworks and core sets of indicators at national and sub-national levels?

The indicator frameworks and indicator sets developed by the project are in varying degrees of use in each of the respective countries and internationally. There are multiple examples of the indicators continuing to be used in each of the countries. For example, in Ukraine and Ecuador the indicators have been included by state agencies in national statistical reporting, and in Ukraine the National Agricultural University is teaching the concept of indicators to students studying natural resource and protected area management. In Kenya there has been some governmental uptake of the indicators, particularly by KWS, which was well positioned to utilize the indicator framework in its resource management mandate. In the Philippines indicators are being used by civil society organizations working on marine environmental conservation. However, there is little evidence that the indicator sets have been or are being used in biodiversity-relevant policy decisions by policy-makers to a significant degree.

1b. To what extent has the project directly or indirectly assisted policy and decision-makers to apply information supplied by biodiversity indicators in their national planning and decision-making?

This is one of the weakest areas of the project. The project document was much too ambitious with regard to its goals to integrate the indicator frameworks in the policy process. Policy development and policy change is a multi-year process in many countries. This process requires a long-term targeted awareness and education effort to influence policy. Considering the initial low level of awareness and understanding of biodiversity among stakeholders in the BINU countries at the time the project began, having a significant influence on national planning and decision-making within the expected time frame of the project was not realistic. For the most part it was all the respective country projects could do to develop the indicator frameworks and gather the data within the time frame of the project; even then the project received a no-cost six month extension.

2a. Has the project led to a systematic monitoring of trends in the status and use of biodiversity in focal ecosystems in the target countries?

This is the second significant weakness of the project. Just gathering the initial set of data to develop the indicator framework required all of the time and resources available from the project. Instituting a comprehensive monitoring program in any of the countries involved would require extensive additional time and resources. At the same time, the project made use of data that was already in existence in each of the countries - data that had already been collected before the initiation of the project - and thus by means likely to remain in existence after the project was completed. In each of the countries data has been and continues to be collected by government agencies, universities, and civil society organizations. The achievement of the project was to identify these various sources of data, make those collecting data aware of each other's work and bring researchers together, and then to use the data to develop the indicator framework. However there is not a mechanism in place to provide for the systematic aggregation of this data in the future.

2b. To what extent are indicator sets used in national reporting to the CBD?

There has been some discussion of the indicator sets used in the participating countries national reports to the CBD. The BINU project and the indicator frameworks developed under the project were highlighted in the Third National Reports to the CBD of Kenya, the Philippines and Ukraine. Ecuador has not submitted a second or third national report to the CBD. All of the countries participated in side-events at SBSTTA that discussed the indicator frameworks for the respective ecosystems. In addition, multiple documents were submitted to the CBD that described the project results.[1] The true test of the indicators relevance will come in 2009 when the countries submit the fourth national reports to the CBD to describe their progress towards the 2010 target.

2c. Have the indicator sets been utilized beyond the countries participating in the project?

There is little or no evidence that the indicator frameworks developed have been used by countries other than those that participated directly in the project. This is a difficult area to assess however, because it is not possible to learn the extent of biodiversity indicator related activities in other countries. There is evidence that other countries are aware of and interested in the process that the BINU countries undertook. For example, the side-events held at the respective SBSTTA meetings were very well attended. The BINU-related documents are the most frequently accessed of all documents on the ULRMC website. In general however, the BINU project did not specifically instigate cooperation between the BINU countries and their regional neighbors on the topic of indicators. This was likely due to the short timeframe of the project which challenged countries to complete their own indicator frameworks before the project came to a close. In addition, other than the public awareness and education activities at the international level, the project did not have a replication plan designed to extend the use of

[1] Specifically, documents SBSTTA/9/INF/19 - *Biodiversity Indicators for National Use: Preliminary Lessons from the GEF Project*, and SBSTTA/11/INF/16 – *Biodiversity Indicators for National Use: Experiences from Five Countries*. The second document includes a summary from each country of the findings regarding the status of biodiversity as derived from the data gathered under the indicator frameworks.

the indicator frameworks to the neighbors of the BINU countries. On the other hand, the experience of the BINU project indicates that due to a low level of awareness and understanding of biodiversity indicators in most countries, the actual process of developing respective national biodiversity indicator frameworks is highly valuable in itself, and a country cannot expect to simply adopt the indicators from another country and expect them to be used effectively or extensively. Furthermore, even if a country is able to transpose a general indicator framework, it is still necessary to go through an extensive and laborious process of bringing together the necessary national data to actually be able to use the indicators to understand the status of biodiversity.

3. Was the scientific approach and methodology for indicator development sufficiently rigorous and credible?

This was another strong area of the project. The technical indicator work done in each of the countries was rigorous and robust, with minor exceptions. In each of the countries internationally known research institutes and government agencies participated in the development of indicators. Other participants included national universities and non-governmental organizations that have extensive technical credibility. In some countries project results were published in peer-reviewed scientific journals, books and other publications. In addition, the indicator frameworks were presented in side-events at meetings of SBSTTA, the technical body of the CBD. The project also built on and made use of some indicator frameworks that have been through years of international collaborative development, such as the Living Planet Index and the Natural Capital Index.

4a. Has the methodology and approach used for developing biodiversity indicators effectively built relevant capacity?

Without pre-project capacity baselines established in each of the participating countries it is impossible to objectively answer this question. Furthermore, measuring capacity continues to be a challenge in evaluation. Nonetheless, data gathered during this evaluation indicated that significant technical and institutional capacity had been built within each of the participating countries as a direct result of this project.

4b. Has the methodology and approach used for developing biodiversity indicators effectively built stakeholder ownership at all levels?

The BINU project did build stakeholder ownership within each of the countries, but not at all levels. The institutions and organizations responsible for managing the project within each of the countries had a very high level of ownership of the process, with the possible exception of the Philippines. However, in the Philippines the partner institutions involved in the project, especially WWF-Philippines, ensured that the project was effectively implemented.

Table 1 shows a summary of the evaluator's project ratings. The full ratings table with the evaluator's summary comments can be found in section V.

Table 1. Summary Rating Table

Criterion	Evaluator's Rating
A. Attainment of project objectives and results (overall rating) **Sub criteria (below)**	**S**
A. 1. Effectiveness	**MS**
A. 2. Relevance	**HS**
A. 3. Efficiency	**S**
B. Sustainability of Project outcomes (overall rating) **Sub criteria (below)**	**ML**
B. 1. Financial	**MU**
B. 2. Socio-Political	**ML**
B. 3. Institutional framework and governance	**ML**
B. 4. Ecological	**L**
C. Achievement of outputs and activities	**S**
D. Monitoring and Evaluation (overall rating) **Sub criteria (below)**	**S**
D. 1. M&E Design	**S**
D. 2. M&E Plan Implementation (use for adaptive management)	**HS**
D. 3. Budgeting and Funding for M&E activities	**HS**
E. Catalytic Role	**U**
F. Preparation and readiness	**MU**
G. Country- ownership / drivenness	**S**
H. Stakeholders involvement	**S**
I. Financial planning	**S**
J. UNEP Supervision and backstopping	**MS**
Overall Rating	S

Recommendations

Any organization or country interested in developing national-level biodiversity indicators is encouraged to consider the lessons from the BINU experience, as described in this evaluation and other publications and documentation of the BINU project. The BINU project activities have come to a close, and thus this evaluation does not put forth recommendations for BINU participants or proponents. This summary of recommendations includes recommendations both for UNEP-GEF and the GEF Secretariat.

UNEP-GEF should ensure that the time required to set up a project's administrative and operational structures is factored into a project's overall implementation time.

UNEP-GEF should develop a "GEF Project Manager's Handbook" which outlines the policies and procedures required for managing a GEF project for which UNEP is the implementing agency.

This evaluation recommends that before the next CBD-COP, UNEP-GEF evaluate its potential contribution to education and awareness-building at the international level on the topic of biodiversity indicators.

The GEF Secretariat should ensure that all projects have a clear replication plan before receiving final approval.

The GEF Secretariat should ensure that a project's prospects for success have not been reduced as a result of the length of time required for the project to receive approval.

The GEF Secretariat should ensure that all options for project management and oversight arrangements have been evaluated, and that the least-cost option that will still allow the project to achieve its objectives has been proposed.

II. INTRODUCTION AND BACKGROUND

The Biodiversity Indicators for National Use project was approved by the GEF on March 26, 2002, and officially began implementation July 1, 2002. The project received a six-month no-cost extension, and was completed June 30, 2005. Multiple factors led the project terminal evaluation to be delayed to the present time. The UNEP Evaluation and Oversight Unit made several attempts to recruit an independent evaluator which were not realized due to time constraints of the evaluators involved.

This terminal evaluation was begun in February 2007, and completed in May 2007. In February 2007 field visits were carried out to ULRMC in Kiev, Ukraine; MNP-RIVM in Bilthoven, Netherland; and UNEP-WCMC in Cambridge, United Kingdom.

Because of the nature of the BINU project, some evaluation parameters are not relevant for this terminal evaluation. For example, the question of environmental constraints to sustainability has limited applicability in the context of this project.

Project Description

The Biodiversity Indicators for National Use project was a global Medium-sized Project supported by the GEF and other co-financers,[2] with UNEP as the implementing agency. The project central coordination unit was based at the World Conservation and Monitoring Centre, Cambridge, UK, and the four participating countries were Ecuador, Kenya, Philippines, and Ukraine.

According to the project document, the goal of the project was "To promote conservation and sustainable use of biodiversity by improving the information on which decisions are based."

[2] For a complete list of co-financing organizations see Annex 6.

The project had four objectives:

a) To operationalize ecosystem-specific indicator frameworks and core sets of indicators for use at national level, using a case study approach and building on work already carried out under the CBD.

b) To develop a methodology for biodiversity monitoring at national level (taking into account international reporting, especially in the context of the CBD).

c) To assist policy- and decision-makers to apply information supplied by biodiversity indicators to national planning and decision-making.

d) To support global and regional development of indicators under the CBD

The four countries in the project each focused on a specific ecosystem. The ecosystems to be addressed by each country were:

- **Ecuador**: Forest and terrestrial ecosystems
- **Kenya**: Wetland and freshwater ecosystems
- **Philippines**: Marine and coastal ecosystems
- **Ukraine**: Agricultural ecosystems

A framework methodology for developing biodiversity indicators was disseminated and communicated by the central coordination and technical support team. Each of the four countries undertook an individual process to identify, develop, and communicate the indicators addressing their respective ecosystems.

In addition to the UNEP-WCMC central coordination unit, the project also received technical support from UNEP-WCMC and MNP-RIVM. A Steering Committee was convened to provide technical guidance; the Steering Committee consisted of representatives from the GEF Secretariat, the CBD Secretariat, UNEP-WCMC, MNP-RIVM, and two developing country representatives with expertise in indicators.

III. EVALUATION SCOPE, OBJECTIVE AND METHODS

The scope of this evaluation is limited to the activities undertaken as part of the Biodiversity Indicators for National Use project. This may include activities related to the project that were

catalyzed by the project but not necessarily funded from the project budget. The objective of this terminal evaluation is to examine the extent and magnitude of any project results to date and determine the likelihood of future impacts. The evaluation will also assess project performance and the implementation of planned project activities and planned outputs against actual results. The evaluation focused on the following key questions, drawn from the evaluation Terms of Reference:

Terminal Evaluation Key Questions

1a. What is the extent of use of the ecosystem-specific indicator frameworks and core sets of indicators at national and sub-national levels?

1b. To what extent has the project directly or indirectly assisted policy and decision-makers to apply information supplied by biodiversity indicators in their national planning and decision-making?

2a. Has the project led to a systematic monitoring of trends in the status and use of biodiversity in focal ecosystems in the target countries?

2b. To what extent are indicator sets used in national reporting to the CBD?

2c. Have the indicator sets been utilized beyond the countries participating in the project?

3. Was the scientific approach and methodology for indicator development sufficiently rigorous and credible?

4a. Has the methodology and approach used for developing biodiversity indicators effectively built relevant capacity?

4b. Has the methodology and approach used for developing biodiversity indicators effectively built stakeholder ownership at all levels?

This terminal evaluation was conducted using a participatory approach by conducting interviews and gathering data directly from persons involved in the project.[3] The findings of the evaluation are based on the following:

1. A field visit to Kiev, Ukraine, to UNEP-WCMC in Cambridge, UK, and to MNP-RIVM in Bilthoven, Netherlands.
2. A desk review of project documents including, but not limited to:

[3] See Annex 3 for a complete list of persons interviewed.

(a) The project documents, outputs, monitoring reports (such as progress and financial reports to UNEP and GEF annual Project Implementation Review reports) and relevant correspondence.
(b) Review of specific products including the 'experience and guidance' publication, and final reports from country executing agencies.
(c) Other BINU related material produced by the UNEP-WCMC or country executing agencies
(d) Relevant material published on web-sites maintained by UNEP-WCMC or the countries participating in the project.

3. Interviews with project management (including the Project Coordinator, Country Coordinators and members of the Steering Group).
4. Interviews and telephone interviews with intended users for the project outputs and other stakeholders involved with this project. As appropriate, these interviews were supplemented by email communication.
5. Interviews with relevant GEF Secretariat staff.

IV. PROJECT PERFORMANCE AND IMPACT

Project History

At its third meeting, in 1997, SBSTTA stated a need for a core set of 'universally applicable' biodiversity indicators for the CBD. According to those involved in the development of the project, also sometime in 1997 a UNEP-GEF representative suggested to members of the CBD Working Group on Indicators that a project to develop national level biodiversity indicators would be an interesting proposal. Throughout 1998 exploratory discussions were held with a variety of institutions, such as IUCN, that might be able and willing to undertake and manage such a project. Ultimately UNEP-WCMC agreed to manage the project.

In seeking to identify countries that would be candidates for participation, project planners considered countries that were actively involved in CBD meetings and activities. It was thought that it would be preferable to go "deep" by focusing in-depth on a small number of countries, rather than attempting a "broad" project in many countries. The project was to focus on

indicators for different ecosystems in a small number of countries. Project planners sought geographically diverse countries - one country in Africa, Asia and Latin America. Smaller countries were preferred because it was thought that the scope of developing indicators in larger countries (e.g. Brazil) would present too great a challenge for a demonstration project such as BINU. In the 1997 – 1998 timeframe initial discussions were held with Ecuador, Kenya and Philippines to determine their interest and willingness to join the project. Ukraine was brought in later to represent Central/Eastern Europe.

A PDF-A grant was received from UNEP-GEF to hold an exploratory workshop which would help identify participating institutions in each country, and which would provide the basis for the project to be developed further. Project organizers wanted to find a partner institution in each country that was positioned to reach the realms of both science and policy. The inception workshop took place in Lake Naivasha, Kenya, in June 2000. The box below shows a timeline of the project, starting with the inception workshop.

Project Timeline

2000

June – PDF–A Inception Workshop, Lake Naivasha, Kenya

2002

March 26 – GEF Work Program Approval

July 1 – UNEP Approval, Project Inception

October – First Meeting of the Project Steering Committee

December – Draft workplans and budgets prepared for participating countries

2003

January – March – Initiation workshops in each country

June 30 – July 3 – Project Mid-term Review Workshop and Steering Committee Meeting, Cambridge, UK

November – SBSTTA 9 Meeting – BINU Side-Event

2004

June 14 – 18 – Second Project Workshop, Yalta, Ukraine

December 31 – Expected Project Completion

2005

February – SBSTTA 10 Meeting – BINU Side-Event

June 30 – Project Completion

Planning / Pre-Implementation

Two years passed between the PDF-A inception workshop and the start of project implementation. During this time the project development team crafted the project document for approval by the GEF. According to those involved in the project development process, the project document had to go through many drafts to ensure that the appropriate GEF terminology and "buzzwords" were included within the project document before it was finally approved. One project developer asked, "Does the GEF have to be quite SO complicated?!"[4]

At the time the project was being reviewed by the GEF there was limited availability of funding due to the end of the GEF's four year replenishment cycle, and the extended time for project approval may have been due to a need by the GEF to postpone the approval of some projects in the 2001-2002 timeframe. The GEF finally approved the project in March of 2002. UNEP approved the project and the project began implementation July 1, 2002. Although the project technically began implementation at this point, additional months were required to get the project management and financial structures and technical guidance framework in place before the countries involved could actually begin work. For example, Ukraine did not actually sign an agreement to begin implementation until December 2002. According to the project management team, the slow start by the countries was also partially due to the long lag time since the Naivasha inception workshop; the national level inception workshop participants had become occupied with other activities during the two year project approval period, and could not immediately turn their attention to BINU. This situation led to the project management team's decision to modify the project workplan and hold national kick-off workshops to facilitate the start of project activities at the national level.

[4] The recent "Joint Evaluation of the GEF Activity Cycle and Modalities," completed by the GEF Evaluation Office, highlights many issues surrounding the complexity of the process for developing and obtaining approval for GEF projects. Many GEF projects face a lengthy approval process; the BINU project was not unique in this regard.

The project was developed prior to the implementation of the Biodiversity Strategic Priorities for GEF-3. Nonetheless, the project did fit within the Strategic Priorities under Strategic Priority Four: Best Practices.[5, 6]

The project design was overambitious. The level of anticipated policy impact was unrealistic for a project of this size, timeframe, given the general low level of understanding and awareness of biodiversity indicators in the participating countries. Persons directly involved with the project's development concurred that the project document outlines objectives that were beyond the practical reach of the project. It is not clear what factors might have led to the expectation that the project could have a significant policy impact within the short-time frame, but over-ambitiousness at the planning stage seems to be a symptom of many GEF projects.[7]

Management / Oversight

Oversight by UNEP

UNEP, as the implementing agency, was responsible for oversight of the project. UNEP provided support through the project development and approval process, including facilitating communication between the GEF Secretariat and the project development team. In addition, UNEP provided insight on GEF-specific requirements such as the incremental cost analysis.

All information collected during the evaluation indicates that UNEP played a sufficient oversight role throughout the project. Annual Project Implementation Reports were provided to the GEF, and UNEP collected quarterly progress reports from the project management team. The project met all requirements in terms of financial standards and progress reporting to UNEP.

Although UNEP oversight was sufficient, starting with the implementation phase of the project, support and attention from UNEP was greatly reduced compared to the development phase. At

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[5] See Biodiversity in the GEF Operational Strategy: Strategic Priorities, at http://www.thegef.org/Projects/Focal_Areas/bio/bio_ops.html, as accessed on May 1, 2007.
[6] The Biodiversity Strategic Priorities for GEF-4, as currently proposed, do not contain an envelope into which a project such as BINU would fit. The GEF-4 Strategic Priorities will be discussed at the June 2007 GEF Council meeting.
[7] See the Joint Evaluation of the GEF Activity Cycle and Modalities.

the beginning of the project in particular, UNEP provided little support to the project management team in terms of guidance on logistical and process aspects of project management. Since the project manager did not have prior experience managing a GEF project, especially a complex multi-donor, multi-country project, additional support from UNEP could have helped the project start-up process be more cost-effective. According to the project management team, additional feedback, guidance, and insight from UNEP would have been valuable. For example, a document such as "Notes for Managers of GEF Projects" which highlighted the reporting and procedural requirements would have been helpful.

The project's terminal evaluation did not take place until more than one and a half years after the project finished. Although there are potential benefits to the evaluation taking place at this time, the GEF typically requires that project terminal evaluations be completed within a year of the end of the project. The evaluation was delayed by difficulties in completing arrangements for an evaluator to undertake the terminal evaluation.

UNEP-WCMC Project Management

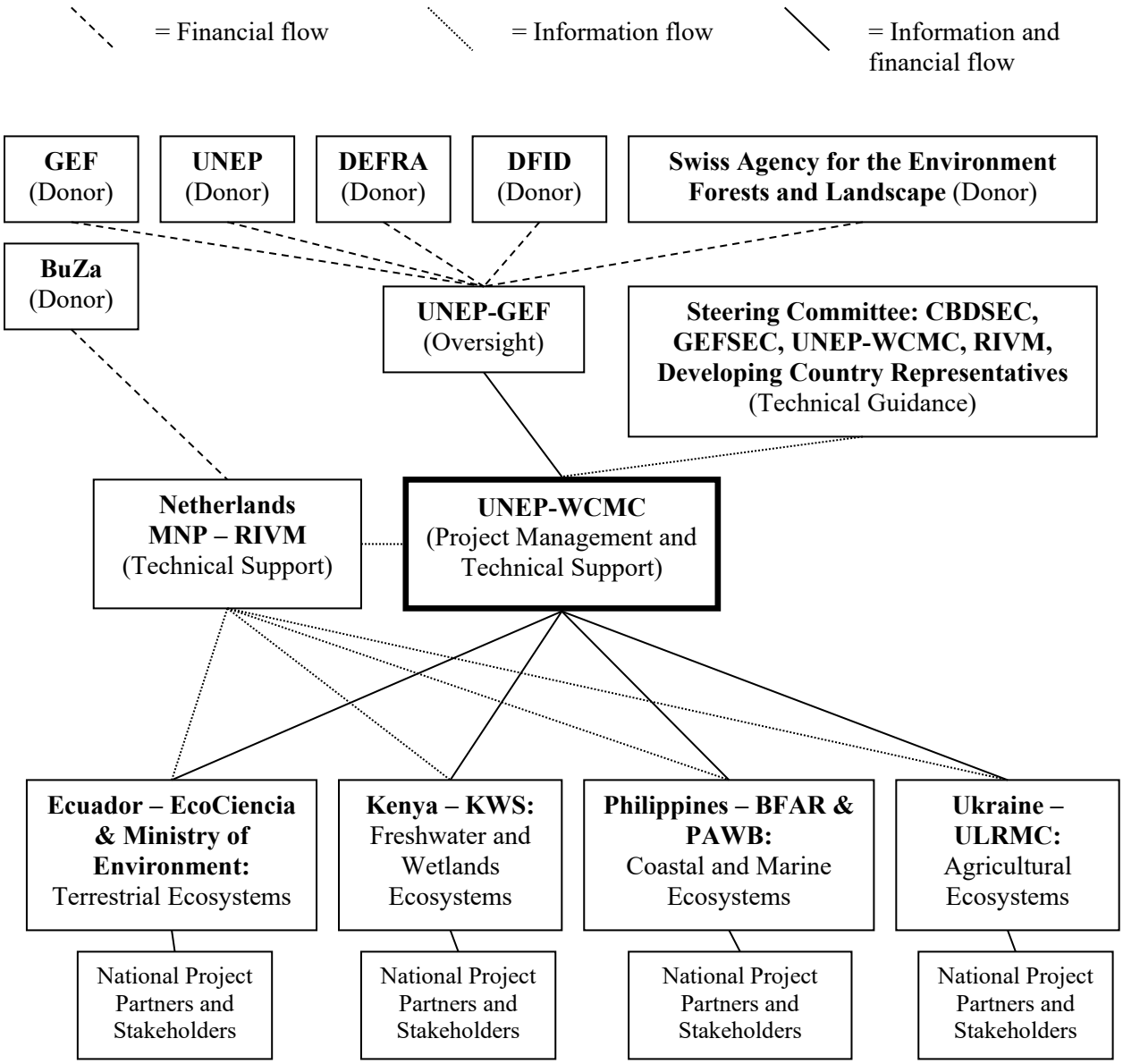
UNEP-WCMC was responsible for the day-to-day project management as well as providing technical support to the respective country teams. All indications are that the project management team performed at the highest professional level. Management of a technically demanding, multi-country, multi-donor project was a highly challenging task, and the project management team successfully performed all tasks required to ensure achievement of significant results. This evaluation notes that there were shortcomings in various aspects of the project, but none of these can be attributed to a lack of performance by the project management team. Within the constraints imposed on the project by the project document, the time frame, and the resources available, the project management team provided highly competent support and guidance. National level project participants indicated that the central project management team was fully responsive to their needs and requests.

At the beginning of the project the central management team worked with the individual countries to develop country-specific work plans to carry out the project.[8] If a country needed to deviate from its previously agreed work plan during the course of the project, it simply consulted with the central management team and a revision was agreed upon.

Figure A. below outlines the overall institutional structure of the project, with UNEP-WCMC in the central management role. Project funding flowed from the donor agencies to UNEP-GEF, and then was disbursed to UNEP-WCMC and finally to the individual countries. At the national level some projects did provide limited financial support or equipment (a computer) to participating national stakeholder institutions and organizations.

[8] For an example of a country work plan, see http://www.ulrmc.org.ua/services/binu/prmaterials/workplan.html.

Figure A. BINU Institutional Structure



Technical Support

UNEP-WCMC and MNP-RIVM provided technical input to the national level projects. Some of the foremost international experts on biodiversity indicators were involved in providing technical support. At the same time the technical experts involved indicated that their participation in the project presented myriad learning experiences for them as well. It was noted that the technical guidance was not a top-down process, but rather a process of learning and working together.

Multiple sources cited the infusion of technical guidance at various points through the national projects as a key contributor to project success. In particular, in the Philippines, it was noted that the project seemed to make the most progress during and immediately after the visits by external technical experts.

Adaptive Management

One key to the success of a project is the extent to which the management team is able to adapt to unforeseen circumstances or events to ensure that the project remains on track to meet its objectives. The BINU project management team was very successful in taking adaptive management measures.

When the project first started in July 2002, there was little activity at the national level for the first six months. It was recognized late in 2002 that to really kick-off the project in each country it would be necessary to hold national-level inception workshops. These workshops were arranged and carried out through the first months of 2003. In another example, the mid-term workshop held in Cambridge in mid-2003 was the only international BINU workshop provided for in the original project document. However, after the Cambridge workshop proved to be highly valuable, the project management team determined that it would be helpful to hold a second international workshop at the end of the project; the management team then made arrangements for the Yalta workshop in June 2004.

The implementation approach undertaken in the Philippines is a final example of adaptive management. The project management team in the Philippines determined that the suggested methodology for the development of an indicator framework was not appropriate for the Philippines. According to the project management team, the relevant stakeholders within the Philippines were very sophisticated in terms of the technical aspects of biodiversity conservation, and the primary task required for the BINU project was simply to identify which indicators were relevant and implementable, and then to bring together the necessary data to calculate the indicators. This was achieved by contracting the relevant technical specialists. By the end of the project the Philippines BINU project had achieved as much as the other countries which utilized the original suggested methodology.

Despite these successes in adaptive management, the project management team indicated that some opportunities for additional beneficial shifts in the course of the project may have been missed because project management and coordination staff was overburdened with bureaucratic project management issues, such as the financial management of resources coming from multiple donors in multiple countries. One example of a problematic technical project design issue that the management team recognized but did not have the time or resources to address was the process for identification of key questions. Project participants found that the identification of key policy questions is critical for the development of relevant indicators, but identifying these questions was a confusing and difficult process. After the fact, those involved in the identification of key questions felt that there is a point at which key questions are "good enough" even if they are not perfect, and the indicator development process can move forward. Though the management team recognized the challenges of the key questions process during the project, alternative approaches were not implemented.

Financial Management

This evaluation has not attempted to conduct a financial audit of the project. A third party conducted an audit of the project's financial records at the end of the project, as required. The audit found no irregularities in the project's financial records. All evidence gathered by this evaluation indicates that the conclusion of the audit is fully valid.

The project received $0.585 million dollars co-financing. Table 2 shows the sources of project co-financing, as anticipated and as received. This was the amount anticipated when the project was originally approved. The project did not receive any co-financing that was not anticipated at project approval.

Table 2 shows the project's actual expenditures of GEF funds, broken down as required by UNEP for reporting.

Table 2. BINU Project Co-Financing

Co financing (Type/Source)	IA own Financing (mill US$)		Government (mill US$)		Other* (mill US$)		Total (mill US$)		Total Disbursement (mill US$)	
	Planned	**Actual**	**Planned**	**Actual**	**Planned**	**Actual**	**Planned**	**Actual**	**Planned**	**Actual**
– Grants	0.030	0.030	0	0	0.118	0.118	0.148	0.148	0.148	0.148
– Loans / Concessional (compared to market rate)	0	0	0	0	0	0	0	0	0	0
– Credits	0	0	0	0	0	0	0	0	0	0
– Equity investments	0	0	0	0	0	0	0	0	0	0
– In-kind support	0	0	0.352	0.352	0.085	0.085	0.437	0.437	0.437	0.437
– Other (*)	0	0	0	0	0	0	0	0	0	0
Totals	**0.030**	**0.030**	**0.352**	**0.352**	**0.85**	**0.85**	**0.585**	**0.585**	**0.585**	**0.585**

Table 2. BINU Project Actual Reported Expenditures (GEF Funding Only, UNEP Format)

Actual Reported Expenditures - UNEP Format	2002	2003	2004	2005	Total
Project Personnel Component	$30,498	$26,945	$35,486	$20,531	$113,460
Sub-Contract Component					
Kenya		$84,375	$72,466	$54,261	$211,102
Ecuador			$41,740	$11,325	$53,065
Philippines		$139,255	$17,153	$7,192	$163,600
Ukraine		$58,164	$51,627	$58,426	$168,217
Training Component		$26,697	$10,726	$729	$38,152
Equipment and Premises Component	$3,279	$16,955	$18,875	$2,996	$42,105
Miscellaneous Component	$6,238	-$2,125	$3,168	$22,531	$29,812
Total	**$40,015**	**$350,266**	**$251,241**	**$177,991**	**$819,513**

Project Monitoring and Evaluation

The M&E plan outlined in the project document is very general. The project objectives, outcomes, and activities have indicators listed which generally fit the SMART criteria. There are no impact indicators identified in the project document. There was a sufficient budget allocation for M&E activities. In practice the monitoring aspect of the project was a dynamic process of communication between the central project management team and the national level project management units. This dynamic monitoring process allowed the project management team to make successful adaptive management decisions as outlined above. The project document did not include a long-term M&E plan.

The project successfully fulfilled the monitoring and reporting requirements of the GEF and UNEP. Quarterly progress reports were submitted to UNEP, and annual PIRs were submitted to the GEFSEC.

Steering Committee

According to the project document the Steering Committee was "responsible for overall guidance to the project." The Steering Committee was made of up representatives from UNEP-WCMC, MNP-RIVM, the CBD Secretariat and the GEF Secretariat, and two developing country representatives with expertise on indicators. The Steering Committee met for the first time in October 2002, four months after the project began implementation. The Steering Committee met again during the July 2003 workshop in Cambridge, and members of the Steering Committee attended the workshop in Yalta.

The inclusion of the Steering Committee was requested by UNEP-WCMC at the end of the project design. Considering that BINU was a highly technical demonstration project, the creation of a high level steering committee to provide guidance could have been a valuable component of the project design. There is evidence that during the July 2003 workshop Steering Committee members contributed important guidance regarding the use by BINU countries of previously developed index indicators and frameworks, such as the Living Planet Index, the Natural Capital Index, and the GEF biodiversity indicator framework. Unfortunately, input from Steering Committee members who were not also technical experts for the project appears to have

dropped off significantly after the initial project workshop in Cambridge. In the 2005 PIR, the project rated its own performance under "Effectiveness of Project Steering Committee and other institutional implementation arrangements" as "marginally satisfactory."

Country Ownership / Drivenness

The project did not originate from within the participating countries, and in this sense the project was not country-driven. The countries involved in the project were pre-identified by project proponents. Once the project was underway Ecuador, Kenya and Ukraine had strong country ownership, while the degree of ownership in the Philippines grew throughout the implementation of the project. Ecuador, Kenya and Ukraine had achieved some important progress by the mid-term workshop in Cambridge in 2003, and following the sharing of preliminary project results at the Cambridge workshop the Philippines began making more rapid progress.

Initially activity on the project in the Philippines was minimal due to the long-gap between the PDF workshop in Lake Naivasha and project approval, which meant that the Philippines project partners were not immediately available to undertake project activities. A national-level project participant asked in an exasperated tone, months after the project had started, "What exactly is it that you want us to do?!" This does not imply a high level of country ownership or drivenness. Once the project started, the stakeholders involved in the project believed that the project had a great deal of value. At the end of the project, the Philippines was the first country to complete its national report, which was of high technical quality. The Philippines report also recommended specific policy measures to the government.

All of the countries involved fulfilled their expected level of in-kind contribution.

Replication

The catalytic role of the GEF is one of the operational principles GEF projects are intended to fulfill. One of the primary ways by which this occurs is through the replication of project results within the country or in other countries where similar opportunities are present. Historically, replication has not been a strong aspect of GEF projects, or at least it has not been documented as such. The Joint Evaluation of the GEF Activity Cycle and Modalities noted that GEF projects

continue to experience "weak planning for sustainability and replication." The BINU project was no exception to this. The project document notably lacks a replication strategy.

In spite of a lack of explicit planning, some very limited replication of BINU has occurred or is occurring. Some technical advisors involved in the project are now working on similar efforts in other parts of Latin America and Asia. In Kenya some in-country replication took place as well. After the BINU project was complete, KWS received additional funding to develop indicator frameworks for all other ecosystem in the country. This work was apparently completed very quickly due to the experience gained through BINU.

Other than these limited examples there has been little to no replication. As yet the BINU countries do not cooperate with their regional neighbors on the issue of biodiversity indicators, and have not specifically initiated bilateral or regional discussions to help other countries develop indicator frameworks as well. Actual replication should not be confused with dissemination of information and lessons. There were multiple methods by which the countries disseminated information about their BINU experiences, most notably in the SBSTTA side-events, which were well attended. There just is not, as yet, evidence that other countries have attempted to undertake the development of indicator frameworks. As noted elsewhere in this evaluation, more replication may occur over the next two years as countries put together the next round of national reports for the CBD which will discuss progress toward the 2010 targets.

Incremental Cost Analysis

The mandate of the GEF is to fund the incremental cost of global environmental benefits. All GEF project documents are required to contain an incremental cost analysis demonstrating how the GEF support will be incremental and will support global benefits. The BINU project document does contain an incremental cost analysis, but it is poorly prepared, and the analysis was conducted in a misguided way. In general, the incremental cost concept has proven to be highly challenging for GEF project proponents to deal with. A main conclusion of the GEF

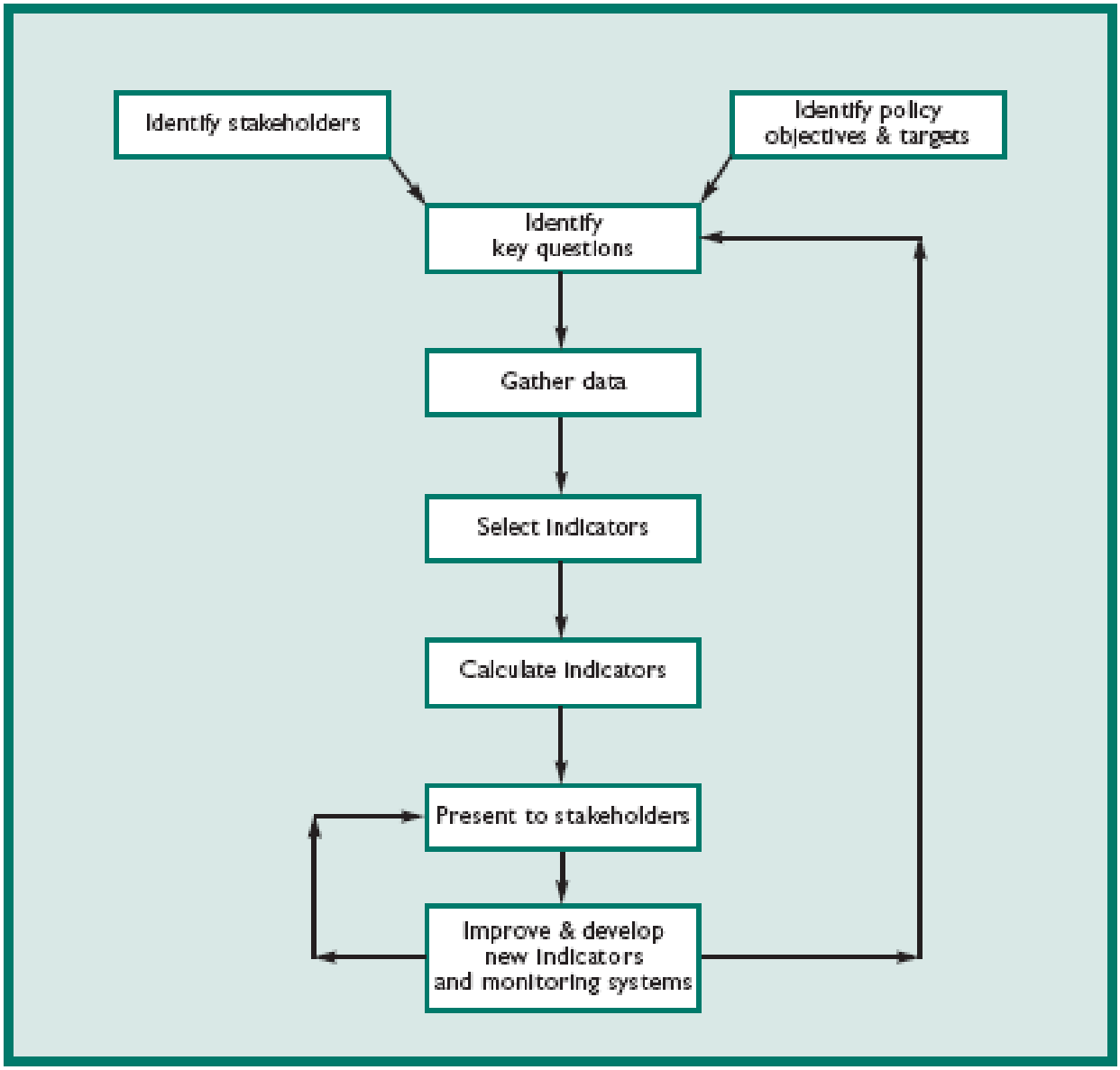
Evaluation Office's recent Evaluation of Incremental Cost Assessment was that "There remains weak understanding and much confusion about incremental cost concepts and procedures."[9]

Project Results: Outputs and Outcomes

There were many activities and components of implementation of the BINU project within each of the participating countries. This report does not attempt to document or mention all implementation activities within each country, but only to identify and highlight aspects of the BINU project relevant for this evaluation. Figure B. below shows the general process followed by each of the countries as they developed their indicator frameworks. The following sections highlight specific characteristics of the implementation process in each of the countries.

[9] GEF Evaluation Office. 2006. "Evaluation of Incremental Cost Assessment," GEF Evaluation Office, Washington, D.C.

Figure B. BINU Project Implementation Process[10]



BINU Ecuador

BINU provided the opportunity for the first comprehensive evaluation in Ecuador of the status of ecosystems at the national level. The project was managed by EcoCiencia, an NGO, in close collaboration with the Ministry of Environment. In Ecuador the project took a slightly different tack than in the other countries by focusing on the development of biodiversity indicators in the

[10] Source: Bubb, P., Jenkins, J., Kapos, V., 2005. "Biodiversity Indicators for National Use: Experience and Guidance," UNEP-WCMC, Cambridge, UK.

context of social development. Ecuador focused on terrestrial ecosystems as they related to social conditions. One of the primary partners in Ecuador was the Secretaria Tecnica del Frente Social, a coalition of government ministries working on social issues.

EcoCiencia had strong interaction with the Ministry of Environment, and it was noted that the Ecuador project manager visited the Ministry of Environment once a week on average to build cooperation, buy-in and awareness. In Ecuador the Ministry of Environment was seen as the primary user of the indicators being developed, and the project was managed on that precept. At the beginning of the project multiple workshops were held with various ministries and other institutions to determine what the relevant indicators would be, and how they would be useful in the work of the participating organizations. In Ecuador, an "explanation period" at the beginning of the project was very helpful in allowing policy-makers to understand the objective and value of the project. EcoCiencia primarily took on the responsibility of developing the indicator framework and gathering the necessary data. Many partner organizations were involved in project workshops held to increase awareness and understanding of the project, but the project partners were not deeply involved in developing the indicator framework. The project was valuable for the partner organizations in terms of capacity building, and the CD-ROM produced by the project includes useful technical tools. Among institutions participating in the project, approximately 70% were governmental and 30% were non-governmental.

Ecuador, along with Ukraine, succeeded in making information regarding the indicator framework available on a website.[11] Websites have to be publicized for potential users to be made aware of them, but they allow for potentially a much broader uptake of results than publications or CD-ROMs, which require physical dissemination.

There are signs that the BINU project in Ecuador will have some sustained results. In Ecuador, again as in Ukraine, the government statistics body has integrated the indicators into its reporting process. The Ministry of Public Works is also using information from the BINU project to build maps showing the impact of roads in Ecuador. In Ecuador, as in all the countries, there does not

[11] http://www.socioambientalecuador.info/

appear to be an immediate mechanism for monitoring, which would allow the indicators to be updated on a regular basis.

BINU Kenya

The Kenya Wildlife Service was responsible for managing the project in Kenya. The project in Kenya generally followed the same activities outline as in Ecuador and Ukraine, with the primary difference being that Kenya formed four task forces to focus on each of the main wetland types in Kenya. Each task force targeted their work around four focal sites that represented each of the different wetlands types: Lake Naivasha (freshwater lakes), Lake Nakuru (saline-alkaline lakes), Tana River (riverine wetland), and Yala Swamp (swamps). Each task force developed indicators representing their specific wetland type. This data was then aggregated to the national level in a national level workshop.

The Kenya BINU project also involved stakeholders at a much broader level, including community groups and site-specific resource user groups. It was observed that in the project national start-up workshops in Kenya (as well as in the Philippines and Ukraine) policy-makers were generally absent. Many workshops and meetings were held to reach and involve the full-range of stakeholders. Involving such a broad range of stakeholders led to some challenges. It proved difficult in the process of key question development to find questions that fulfilled the priorities of all stakeholders. In addition, many stakeholders were approaching the issue of biodiversity indicators from widely varying points of view and levels of understanding of the concept of biodiversity. The Kenya National Project Experience Report specifically outlines many lessons learned from the process of involving many stakeholders in key question development. Notably, the report states that "Time and effort are required to build a common understanding for key concepts like biological diversity, definitions and importance of indicators, and geographical scales of interest."

Kenya faced many of the same challenges as the other countries in the process of data collection and aggregation. First, retrieving data from various institutions was tedious and slow; second, there were many gaps in the data; and third, the data was inconsistent in how it was recorded.

The process highlighted the need for a meta-database. Once the data was collected, indicators were mapped to key questions to ensure that they would be answered.

The indicator framework in Kenya showed that biodiversity in wetland areas had severely declined. According to one source, this conclusion led to a direct and immediate policy result that no new tourism infrastructure development would be allowed in protected areas. This result could not be verified, but assuming that this policy action was the result of information provided by the BINU project, this policy shift would represent the one documented instance of BINU having a direct impact at the policy level. This success in Kenya was likely due to KWS's institutional positioning as a government body with significant independence.

BINU Philippines

The Philippines presents an interesting case study in the development of indicators under the BINU project. The Philippines initially did not have strong country ownership of the project at the national level. This was partially due to the long-time period between the PDF-A workshop and the eventual project inception. When the project finally began, the institutions involved did not have sufficient time to take on and manage the project. There was a point during the first half of the project when the Philippines was nearly dropped from the project due to a lack of activity.

To finally achieve the objectives of the project, the Philippines undertook an indicator development methodology alternative to that prescribed to the other BINU countries. The technical aspect of indicator development was contracted out to technical experts with various biodiversity specialties, such as invertebrates, pelagic fish or sea turtles. These experts had a strong understanding of the data related to the particular aspect of biodiversity they had been contracted to address, including published data, gray literature, and other non-published sources. This allowed the indicators to be developed in a relatively rapid manner.

Feedback from the Philippines indicates that the biodiversity indicator development process was extremely valuable in many ways. The most important result was that BINU was the first time biodiversity data on the country's marine ecosystems had been brought together at a national

level, providing a coherent (if incomplete) picture of the Philippines marine biodiversity. As in the other countries participating in the BINU project, it was clear to the technical specialists involved that biodiversity was declining and significant policy steps needed to be taken. The project resulted in a set of indicators that can actually be used by stakeholders (even if they are not implemented at the national policy level); WWF-Philippines even recommended to the marine advisory group within the WWF network that the indicator framework be used at a broader level.

As in the other countries, the main insufficiency in the Philippines project was the lack of penetration of the indicators into government policy-making. The Philippines project did include specific policy recommendations in its final report,[12] but there is little evidence that these have been acted upon by the government. One source noted that moving the indicators forward into the policy realm was where the project had "failed miserably" in the Philippines.

BINU Ukraine

The evaluation field visit to Ukraine provided special insight into the project process and results in this country. It was immediately apparent from information gathered during the field visit that the project in Ukraine was the beneficiary of an extremely competent, capable and dedicated national project management team. ULRMC was identified as an appropriate institution to manage the project because of its institutional setting, linked to both science and policy arenas.

The highly dynamic and inclusive stakeholder involvement process undertaken by the BINU project was characterized as "revolutionary" for the Ukraine in light of the country's political history. There was a diverse set of stakeholders involved in the project, including the Ministry of Defense, which owns approximately 11% of the land in Ukraine. The scientists involved from the Ministry of Defense were among the most enthusiastic participants in the project. They published a book on nature conservation in military lands, partially building on their experience from the project.

[12] See BFAR, NFRDI, PAWB. 2005.

The primary question mark regarding the stakeholder involvement process in Ukraine is the apparently low level of involvement from the Ministry of Agriculture. Given that the project focused on agricultural biodiversity in Ukraine, and agricultural lands make up between 60% - 70% of Ukraine's territory, the Ministry of Agriculture should logically have been among the primary stakeholders. The Ministry of Environment's mandate covers environmental conservation in agricultural lands as well, but significant buy-in from the Ministry of Agriculture would be required for the indicator framework to have significant policy impact.

The BINU project in Ukraine was characterized by a high level of technical capacity. More than 50 indicator fact sheets were completed and posted to the ULRMC's BINU webpage. ULRMC also had extensive experience with GIS related technology, and the project produced the first agricultural land-use map for Ukraine. The other stakeholder organizations and institutions involved in the project also had a very high level of technical capacity including the National Agricultural University, the Institute of Zoology, and the Institute of Hydrology. One particular technical achievement of the Ukraine BINU project is the Composite Agro-biodiversity Index (CAI)[13] developed by the State Statistics Committee of the Ukraine as part of the project. The CAI brings together a large amount of data to convey a broad measure of the status of agricultural biodiversity in Ukraine. The CAI was presented as part of Ukraine's BINU experience in the document submitted to SBSTTA 11.

The project in Ukraine produced many useful outputs, including the previously mentioned website, indicator fact sheets, and maps, as well as multiple publications and books. A two-volume book was published which included many of the technical papers produced by the project. One innovative approach to dissemination of results in Ukraine was that ULRMC held a one month long public awareness building event called "UNEP-GEF BINU Project Completion Days in Ukraine." During all of June 2005 the project invited stakeholders and other interested parties to visit the ULRMC offices to learn about the project and receive project materials. Evidence indicates that this was a highly successful and well-received event.

[13] For a full overview of the CAI, see http://www.ulrmc.org.ua/services/binu/is/PDF/CAI_Eng.pdf

The Ukraine project team also made multiple presentations of the project results to officials within the Ministry of Environment. However, without a long-term sustained strategy on awareness building and education regarding biodiversity indicators, the project was not able to achieve significant penetration and effect on policy. The document outlining Ukraine's experience with the BINU project lists the activities the project undertook in the areas of dissemination, communication, uptake and use. This list is followed by the aspirational statement "We ***hope*** that all these actions will assure that the indicators are used effectively in the near future" [emphasis added]. Multiple other sources in Ukraine used the term "hope" to characterize the likelihood of uptake by the relevant government bodies. Given the time and resources available, the project did what it could to encourage uptake within the policy realm, but this was not sufficient to have documented effects.

Even if not in the policy realm, some of the results of the BINU project in Ukraine are likely to be sustained in the short- to medium-term. The database of indicators is maintained and updated periodically by the ULRMC. The BINU webpage continues to be among the most popular pages on the ULRMC website. The risk to sustainability is that the process of maintaining this information source is highly dependent on one or a very few individuals.
Additional indications of sustainability include:

- Other institutions involved, such as the Ministry of Defense, continue to make use of the indicator framework;
- A proposal was recently made to the Ministry of Environment by the National Agricultural University to make further use of the indicator framework developed;
- The State Statistics Committee will continue to report on the indicators. However, this agency noted that a government body should be created to update the indicators on a regular basis;
- Multiple stakeholders indicated that there needs to be an effort to develop forest indicators, based on the BINU experience.
- Stakeholders working on Ukraine's National Capacity Self-Assessment indicated that the section on biodiversity was developed partially based on the BINU experience.

The BINU Ukraine project had one very important achievement which will guarantee that some influence of the project is sustained over the long-term. One of the project partners, the National Agricultural University has included the concept of indicators in its curriculum for some classes focused on nature conservation. The university ordered copies of the book of BINU results produced by ULRMC to be used by students studying these issues. Although this achievement may not immediately stand out among the other project results, the fact that the Ukraine's conservation leaders of tomorrow are learning about and becoming familiar with biodiversity indicators is incredibly significant. According to the university professors, many students studying nature conservation at the university level are likely to end up employed by the Ministry of Environment or other government institutions, and in this way BINU will have a longer-term legacy.

BINU as the Sum of It's Parts

One of the most important outcomes of the project was the capacity that was built as a result of the involvement of many stakeholders in the development of indicator frameworks. Many sources cited the simple act of bringing people together as the most valuable aspect of the project. The indicator development process that each country went through resulted in individual and institutional capacity building. In addition, the project management team noted that being responsible for the management of this project also built capacity within UNEP-WCMC.

Notable outputs at the aggregate level included the two side-events held at the SBSTTA meetings and papers submitted to the CBD, multiple scientific publications, informative publications and other materials targeted at a general audience, and the websites produced by Ecuador and Ukraine disseminating information on indicators.

CBD Interaction and Relevance

Under Article 7(b) of the CBD countries have an obligation to monitor components of biological diversity. In 1997 a CBD working group was established to examine the issue of indicators and help guide countries in how to meet obligations under article 7(b). As previously discussed, BINU also had its genesis in relation to this working group, but as a project BINU was initially totally separate from the CBD indicator development process. During implementation BINU

project partners were involved with the CBD indicators working group and in 2003 the working group produced guidelines for developing national level monitoring programs and indicators.[14] The guidelines specifically mention BINU and include the indicator development process diagram initially conceived in the BINU planning process.

The BINU project held two very well attended side-events at SBSTTA meetings, the first in November 2003 at SBSTTA 9, and the second at SBSTTA 10 in February 2005. As part of the SBSTTA 9 side-event, the project submitted a paper on BINU's preliminary lessons and experiences.[15] The SBSTTA 10 side-event took place near the end of the project, and at this side-event the BINU countries were able to report more fully on the project experiences. The level of interest, and respect for the technical aspect contribution of the project, was symbolized by the fact that the side-event was moderated by the chair of SBSTTA. To fully document the results of the project once it had come to a close, a final paper was submitted to SBSTTA 11 in November 2005.[16] This paper continues to be widely read, as indicated by the fact that it is still regularly downloaded from the ULRMC website. Through these side-events and submitted papers the project was able to broadly disseminate the experience of the project to countries active in the CBD process.

Despite this significant effort in dissemination, it is unknown if other countries have attempted to emulate the BINU experience or will do so in the future. As such, the results of the project may not yet be fully apparent. Important opportunities for additional uptake of project results exist with respect to the 2010 targets and the preceding round of national reports to the CBD. The overall indicator process within the CBD, leading up to the 2010 targets, is outlined in Figure C. Following COP 9 in 2008, countries will be requested to submit the fourth round of national reports in 2009, which will include discussion on progress toward the 2010 targets. As countries attempt to bring together the data for their fourth national reports, the BINU countries' experiences have the potential for being incredibly valuable. However, there will be a significant gap between the end of the project in 2005 and the 2009 national reports. BINU was, as one

[14] See UNEP/CBD/SBSTTA/9/10.
[15] UNEP/CBD/SBSTTA/9/INF/19
[16] UNEP/CBD/SBSTTA/11/INF/16

source put it, ahead of its time with respect to the CBD process. According to those involved both with BINU and the development of global indicators under the CBD, the indicators developed by the BINU countries helped increase confidence in the indicator framework put forth in COP decision 7/30. A separate analysis would be required to determine if the national level BINU indicators could actually be rolled up to the global level.

Figure C also highlights a potentially important opportunity for BINU follow-up: the UN is currently considering a proposal to integrate the CBD 2010 target with the Millennium Development Goals for 2015, specifically MDG 7: Ensure environmental sustainability. While the 2010 target stands alone under the CBD, the CBD can only support country processes – progress between countries cannot be measured and compared. However, as part of the MDG process, countries have to report on all of the MDGs and say what their status and level of progress is.

Biodiversity Impacts

In the traditional definition of impacts as direct influences on the status of biodiversity, the project fell short of actual measured impact. Given the intended nature of the project as a technical demonstration project, the lack of documented impacts is not particularly significant. The primary objective of the project was to develop indicator frameworks in order to measure and understand the status of biodiversity. The project should be seen as an enabling step towards positive biodiversity impacts. Policy outcomes that would eventually lead to biodiversity impacts were within the aspirations of the project document, but were not within the realistic scope of the project. The project document does not clearly outline a theory of change indicating exactly how the project intends to lead to biodiversity impacts. A proposed theory of change is outlined in Figure D. As the figure demonstrates, true biodiversity impacts may not be expected for some time in the future.

Sustainability

Aspects of sustainability at the national level have been discussed within the previous country-specific sections. Results that are likely to be sustained at the global level are the capacity built and the awareness raised about the importance of biodiversity. These are extremely difficult to

quantify however. The experience of the BINU project will also be carried over by UNEP-WCMC into a new GEF-funded project with the objective to track global progress with regard to the 2010 biodiversity target.[17]

Financial Sustainability: Multiple sources cited the need for a "BINU 2" to follow-on various aspects of the project. Significant additional results may have been achieved if the project had been designed as a two-phase project, but this is not the case. Those involved with "BINU 1" suggest that a "BINU 2" project would conceivably work to increase awareness and uptake of indicators in relevant national policy bodies. It would also increase replication of the process in the neighbors of the original BINU countries. The GEF does not typically provide financial support for follow-on efforts that were not specifically designed and originally approved as the second phase of the initial project. As one source noted, if the project was so great that it deserves a second round of financing, then sources other than the GEF should be forthcoming.

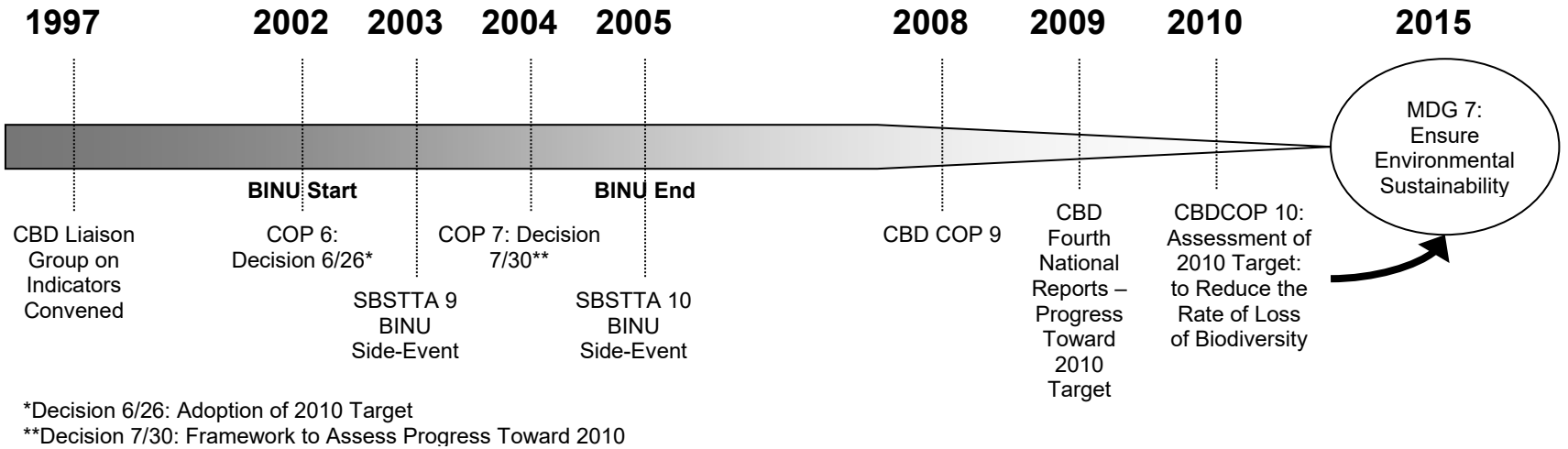
Socio-Political Sustainability: Within the national projects there was sufficient buy-in among project partner organizations to ensure that that indicator frameworks developed will find some uses in the future. As previously described, this does not include awareness and buy-in of national level government institutions, which is low.

Institutional Sustainability: The results of the project will be sustained to some extent within the organizations that managed the project at the national level. There were few, if any, national-level policies created as a result of the project. In the long-term, the results of the project will only be sustained if the institutional frameworks are further developed to ensure that the indicators developed are integrated in future policy decisions.

Environmental Sustainability: As previously discussed, the concept of sustainability with regard to environmental parameters is not applicable in the context of this project. The project was intended primarily to allow understanding of ecological status. One of the project objectives was to leverage policy changes that lead to ecological sustainability, but this did not occur.

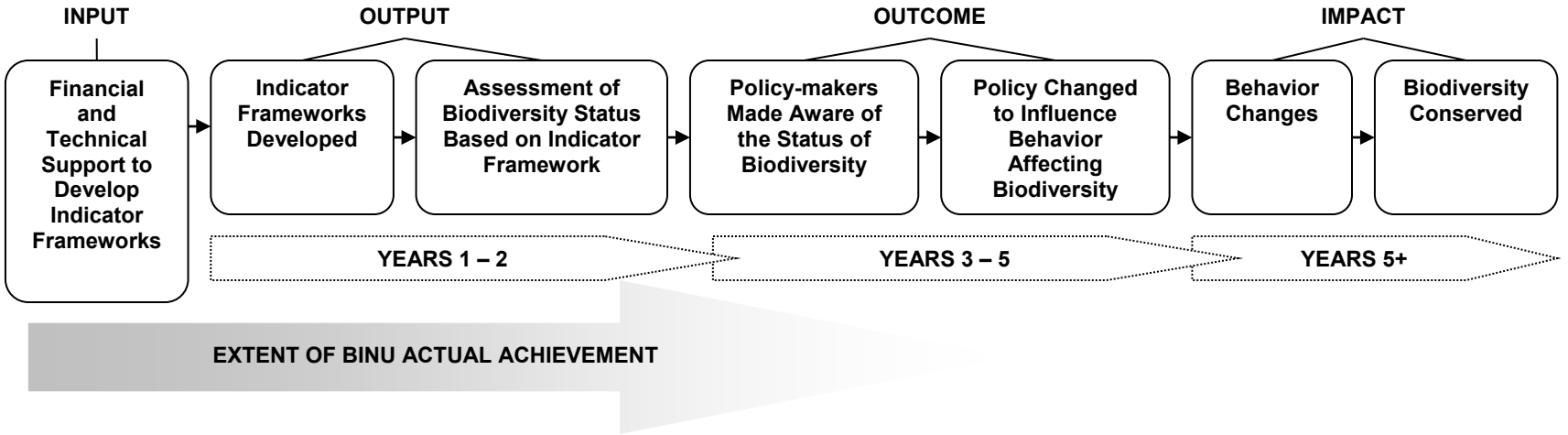
[17] See GEF Project ID #2796, "Building the partnership to track progress at the global level in achieve the 2010 biodiversity target. This project has not received final approval as of the date of this evaluation.

Figure C: The CBD: Indicator Development and Targets



*Decision 6/26: Adoption of 2010 Target
**Decision 7/30: Framework to Assess Progress Toward 2010

Figure D. Presumed Theory of Change for BINU Biodiversity / Ecological Impact



Comparative Analysis of Key Questions Developed by BINU Countries

To better understand the context in which countries approached the indicator development exercise, a comparative analysis of the key questions developed by each country at the beginning of the project was conducted. Five vectors that the key questions addressed were identified: 1. Pressure-State-Response; 2. Component of Biodiversity (Ecosystems, Species, Genes); 3. Scale (Local, National, Regional, International); 4. Aspect (Biological, Cultural, Economic, Political, Social); and 5. Temporal (Past, Present, Future). Each key question from each country was classified according to the above framework; any one question could be classified multiple ways within the same vector. For example, a key question could address all three components of biodiversity. The percentage of key questions addressing each vector was then graphed, as shown in Figure E. The classification of key questions is an inherently subjective exercise, and the evaluator welcomes any revisions that others may want to apply to this exercise.

Comparing the sets of key questions reveals some interesting differences which give further insight into the premises under which each country worked to develop their respective indicator framework. For example, Ecuador's key questions focused heavily on the social, political and economic aspects related to biodiversity indicators. Ecuador's key questions also focused more heavily than any other country on the pressures affecting biodiversity. Kenya also focused very heavily on the economic and social aspects related to biodiversity indicators. This helps explain why these countries' indicator frameworks targeted socio-economic factors affecting and influenced by biodiversity. Both Ecuador and Kenya also primarily addressed their present context, indicating a desire to deal with the immediate socio-economic hardships within each of these countries, and the socio-economic relationship to biodiversity.

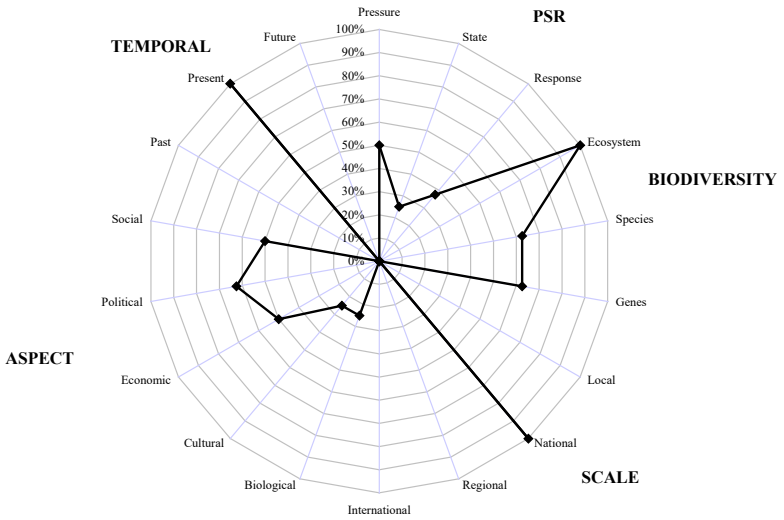
The Philippines and Ukraine focused more heavily on the biological aspects of biodiversity indicators, addressed all components of biodiversity, and dealt with a broader temporal range. The focus on biological aspects may reflect a heavy involvement of more biology and ecology technical specialists in these countries. For example, in the Philippines the indicator development work was primarily carried out by specialists involved in the biological and physical sciences rather than cultural or socio-economic specialists. In the Ukraine many of those involved in the development of indicators represented technical institutes, such as the

Institute of Zoology. This may also be why the Philippines and Ukraine addressed the broader range of biodiversity components. There are no immediately apparent explanations for why these two countries also addressed the past and the future timeframes as well as the present.

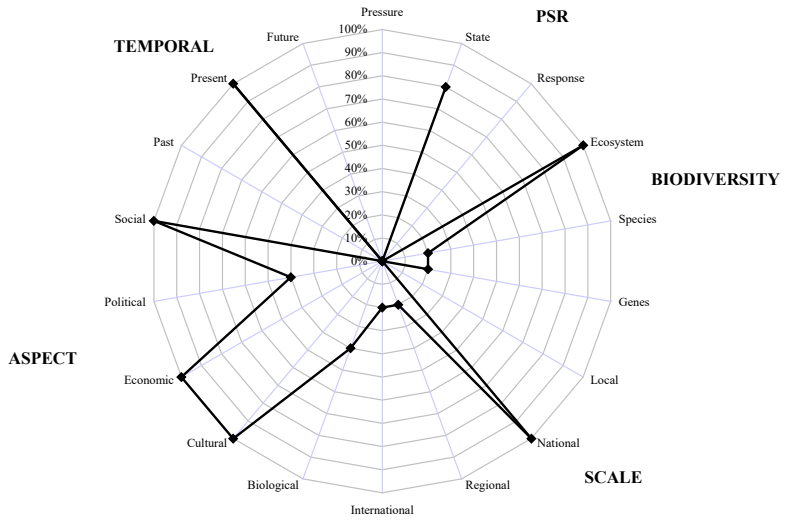
In terms of scale, all of the countries were focused very heavily on the national level. This can be expected given that the project was title "Biodiversity Indicators for *National* Use." It may be surprising that any of the countries' key questions did address the international and regional scales.

Figure E. Comparative Analysis of Country Key Questions: Percentage of Key Questions Addressing Individual Factors

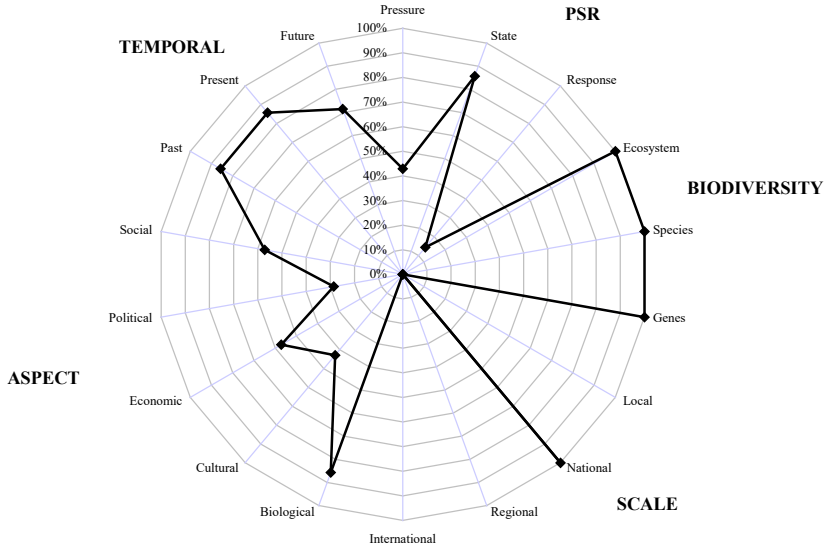
Ecuador Key Question Mapping



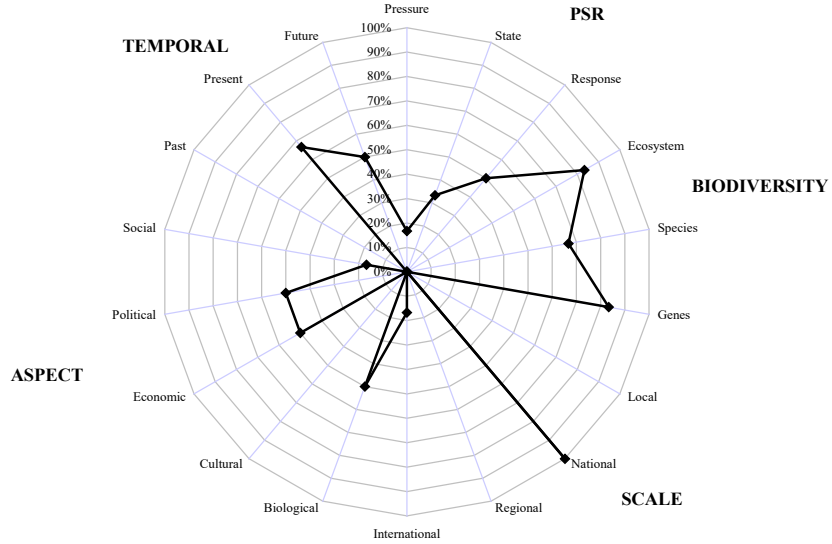
Kenya Key Question Mapping



Philippines Key Question Mapping



Ukraine Key Question Mapping



V. CONCLUSIONS AND RATINGS

There are two primary achievements of the project. The first is simply demonstrating that national-level biodiversity indicator frameworks can be developed even with limited or imperfect data. For each of the countries involved, BINU presented the first opportunity for a national level biodiversity assessment. These assessments were highly valuable for many stakeholders, even if there were no immediate results in the policy realm as envisioned in the project document.

The second important achievement was the increase in institutional and individual capacity resulting from bringing stakeholders together. This basic act of convening people with diverse viewpoints and knowledge was found to be extremely valuable. Building national and international level networks among professionals working on biodiversity conservation issues is certain to have created undocumented secondary benefits. Multiple stakeholders from multiple countries identified this convening aspect as the greatest achievement of the project.

Indicators are critical for understanding the status of biodiversity, and for measuring trends over time. Indicators lie between the realm of science, which is directed toward increasing knowledge, and the realm of policy, which focuses on taking action in a state of imperfect knowledge. Indicators can provide crucial information to help policy-makers develop effective conservation policies for specific ecosystems and species. However, the process of developing indicators, gathering data and establishing a monitoring system is extremely time and resource intensive. It remains to be seen if countries are able or willing to dedicate some portion of their scarce resources to the process of determining the status of biodiversity within their borders.

As part of the implementation of the Resource Allocation Framework the GEF Secretariat has had direct consultations with more than 100 countries to identify each country's priorities for GEF support. These consultations have not involved all relevant stakeholders within each country, but they have involved the government representatives responsible for guiding their respective countries' environmental priorities. Perhaps it is telling that within the biodiversity focal area, with the possible exception of the BINU countries, not one country has identified indicator development as a priority. Protected areas have been the most popular priority named.

Table 4 presents the evaluator's ratings of the project, in conjunction with the evaluator's summary comments.

Table 4. Evaluator Ratings

Criterion	Evaluator's Summary Comments	Evaluator's Rating
A. Attainment of project objectives and results (overall rating) **Sub criteria (below)**	The project was successful in developing a framework of indicators for the relevant ecosystems in each of the participating countries. At the time of this evaluation, the penetration of the indicators in national policy was very limited. The project did not fully achieve the objectives set out in the project document, but the project document was overambitious.	**S**
A. 1. Effectiveness	The project mostly achieved some of its objectives. The project successfully demonstrated the feasibility of developing relevant indicator frameworks at the national level, even with limited and incomplete data. The project did not sufficiently encourage uptake and integration of project results within national policy relevant to biodiversity.	**MS**
A. 2. Relevance	The project was highly relevant in the international context of the global effort to understand the state of biodiversity, and to decrease the rate of loss of biodiversity by 2010. The project was also relevant at the national level for each of the countries involved.	**HS**
A. 3. Efficiency	The project was efficient. Some adaptive management measures were taken throughout the project that helped ensure the achievement of objectives in a cost-effective manner. The project took notable measures to ensure that project funds were not misdirected, and there were no cases of misappropriation evident. The use of an institution based in a developed country where operational costs are extremely high reduced the overall cost-effectiveness of the project, even though UNEP-WCMC provided the project with extremely valuable institutional and technical capacity.	**S**
B. Sustainability of Project outcomes (overall rating) **Sub criteria (below)**	The sustainability of project outcomes varies within each of the countries involved, as well as at the international level. There are and there will continue to be initiatives that involve and make use of the indicator frameworks developed by the project in each of the countries. Within each of the countries the knowledge and awareness created in the project partners through the BINU indicator development process remains with the various institutions and organizations that participated in the project. In Ecuador and Ukraine the national statistical agencies have incorporated some of the indicators in their reporting. There have been some policy changes resulting from the project outputs in Kenya. However, without a plan and the resources to update the indicators with new data at some point, and a process to truly involve and inform relevant policy decision- makers, the long-term sustainability and relevance of the project results is in question.	**ML**
B. 1. Financial	Some project results and processes have been incorporated in subsequent related initiatives at the national and international levels. Multiple sources cited the need for a "BINU 2" to follow-up on various aspects of the project. The GEF is not prepared to provide follow-on financial support.	**MU**
B. 2. Socio Political	The "socio" side may be more sustainable than the "political" side. In multiple countries results of the project have been built on by other organizations and initiatives. In Ukraine, in particular, the	**ML**

Criterion	Evaluator's Summary Comments	Evaluator's Rating
	incorporation of indicators in university courses dealing with biodiversity conservation make it likely that BINU results will be sustained for a long time On the political side, the relative lack of penetration of the results of the project into the policy realm has left few vestiges to be sustained in this area.	
B. 3. Institutional framework and governance	The results of the BINU project will be sustained to some extent within the organizations that managed the project at the national level. Ukraine continues to maintain and update the BINU webpage on the ULRMC website. Again, however, the minimal impact at the national policy level hinders the institutional and governance sustainability.	**ML**
B. 4. Environmental	There are no anticipated environmental constraints to sustainability.	**L**
C. Achievement of outputs and activities	The project achieved almost all outputs and activities, even though some took longer than anticipated to complete.	**S**
D. Monitoring and Evaluation (overall rating) **Sub criteria (below)**	(see below)	**S**
D. 1. M&E Design	The project document includes a Monitoring and Evaluation Plan, although it is not very specific. The regularity and depth of the communication between the individual countries and the project management team was not specified. The project benefited from effective project management at the centralized level as well as at the national level for most of the countries, and as such the M&E plan outlined in the project document proved sufficient.	**S**
D. 2. M&E Plan Implementation (use for adaptive management)	Despite being a global project involving four countries in all different regions, the project successfully monitored project implementation throughout the length of the project. Quarterly progress reports were submitted to UNEP-GEF, the project successfully submitted Project Implementation Reports (PIRs) to the GEF, and the project completed a terminal report. The project also used the information gained through the monitoring process to make adaptive management decisions, such as the proposal of a second implementation workshop.	**HS**
D. 3. Budgeting and Funding for M&E activities	This was not a problem for the project.	**HS**
E. Catalytic Role	The project had no specific replication plan. There is evidence that the project results were relevant and of significant interest to other countries, but there is no known replication that has taken place. The BINU countries have limited, if any, cooperation with countries in their respective regions on the subject of indicator development. It will be possible to better assess this aspect following the round of national reporting to the CBD leading up to the assessment of the 2010 targets.	**U**
F. Preparation and readiness	The project document was much too ambitious for the time and resources available to the project. The participating countries barely had time to complete development of the indicator frameworks within the allotted timeframe, much less use this information to assist policy- and decision-makers to apply this information in national planning and decision-making.	**MU**
G. Country ownership / drivenness	The project originated externally and the participating countries were pre-identified by project developers. Once the project was initiated there was strong country-ownership in three of four countries. In the fourth country ownership grew during the course of the project. The countries successfully met their co-financing commitment.	**S**
H. Stakeholders involvement	In each country a wide range of stakeholders were involved in the project, and contributed to project results. The process of bringing	**S**

Criterion	Evaluator's Summary Comments	Evaluator's Rating
	stakeholders together to discuss biodiversity indicators in each of the respective countries was cited by multiple sources as one of if not the most valuable aspect of the project. In some countries not all relevant stakeholders were involved, in particular policy-makers.	
I. Financial planning	There were unforeseen financial requirements for the project, including the addition of the Steering Committee, the national inception workshops, and the second full project workshop in Yalta. Nonetheless these financial requirements were successfully met through adaptive management measures, and the project was not required to sacrifice any significant components as a result of these changes. The countries involved did indicated that time was a constraint rather than money.	**S**
J. UNEP Supervision and backstopping	UNEP-GEF provided strong support in the project development process, but once the project had been approved then the involvement of UNEP-GEF was greatly reduced. The project did not face any major threats to implementation that would have required significant intervention by UNEP-GEF. However, additional guidance during the project start-up phase would have helped the project management team to be more efficient and effective in the early stages. Whether a result of the effectiveness of the project management team or of UNEP-GEF oversight, the project met all progress and financial reporting requirements.	**MS**
Overall Rating		S

VI. LESSONS LEARNED

Lessons for Stakeholder Participation

The involvement stakeholders in the BINU process was critical for the success achieved by the project. Stakeholder participation has been discussed in specific terms at the national level, but it is important to consider what lessons can be drawn from these experiences in aggregate. In the early stages of the project in each country, potential stakeholder organizations were identified. There was a variety of stakeholders involved within each of the countries, and it does not appear that there was clear guidance regarding which level of stakeholder should be involved or how a relevant stakeholder should be defined. In particular with the BINU project in Kenya, the idea of "stakeholder" may have been expanded beyond the relevant context. If the objective of the project in Kenya was to influence policy and make policy-makers more aware of indicators, then local resource users were likely not an appropriate stakeholder group to identify key questions. If a stakeholder in the indicator development process is considered to be anyone with an interest in the status of biodiversity, then this could be anybody in the country. But some organizations or groups may not necessarily see themselves as stakeholders in the indicators process and as a result there are discordant expectations about the level of participation in the project, as occurred in Kenya. Among the specific lessons from Kenya is that it is easy to identify stakeholders, but

difficult to maintain their participation unless they see tangible results that have a direct relevance to their lives. GEF projects that involve diverse stakeholders in technical exercises may set varying criteria for stakeholder involvement depending on specific circumstances and the context within the country, but ultimately only stakeholders who see themselves as relevant should be involved.

In addition, all stakeholders do not need to be involved in the technical aspects of the indicator development process. Policy-makers make decisions based on information provided by indicators, but policy development is a long and iterative process. Thus it may not be useful to integrate the policy development process and the technical indicator development process. The lack of significant involvement of policy-makers in the project kick-off workshops in some of the countries, especially in identifying key questions, inherently limited the utility of the project in the policy realm. The key questions to be answered by GEF projects that seek to influence policy must directly relate to key national policy questions in order for the project outputs to be relevant for decision-making processes.

Lessons for Project Management and Oversight

Based on the experience of this particular evaluation, another lesson is that important insights and evidence can be gained by conducting evaluations some time after the project has been completed which would not be discernible if the evaluation were conducted immediately after the project finished. If this evaluation had occurred earlier it would have been more difficult to gain insight into the longer-term effects and lasting impacts of the project. For example, initiatives that build on the BINU results, such as those in Ukraine, are being currently being proposed. Examining this project after the next round of national reporting to the CBD would lead to even more insight into the sustained results of this project. On the other hand, if this evaluation had been conducted much later it would have been more difficult to access the relevant people, and for those people to have complete recollections of the project process. For all GEF projects the most appropriate point for the terminal evaluation should be evaluated. For projects with objectives heavily focused on influencing policy the most appropriate time for the evaluation will be when potential policy effects have had a chance to occur.

The project undertook at least two valuable financial management approaches that helped avoid any irregularities. Before the project was approved, in one country there was pressure for one government official to have control over the project budget, with the likely outcome that it would have been difficult for any external or internal source to have direct oversight over the project funds. The project successfully averted this situation by involving a range of project stakeholders in decisions about the use of project funding. In another country, the national project management team suggested that the funding for the project be transferred in small increments, because the project funding was likely to "disappear" if it was transferred in one large disbursement. In countries where GEF project proponents determine there is the potential for financial irregularities, these approaches could be employed to help alleviate risks.

Projects of this complexity require a high degree of management capacity, and UNEP-WCMC was able to provide this expertise. UNEP-WCMC was also the purveyor of significant technical capacity regarding biodiversity indicators in the sense that two of the leading experts on this area are UNEP-WCMC staff members. However, the management capacity provided by UNEP-WCMC was very expensive. The funding for project management largely came from non-GEF sources. Highlighting this issue should not be interpreted to imply that UNEP-WCMC was a poor choice for the managing institution; the project could easily have achieved far less under different management. Furthermore, in the case of BINU, because of the history of the project development, UNEP-WCMC was a logical choice for managing institution. The GEF and other donors must evaluate the costs associated with selecting a developed-country institution for project management responsibilities. Project proponents must ensure that the benefit resulting from utilizing a managing institution in a developed country outweighs the potential costs.

In general, the project was too short, had too few resources, and each country started from too basic a level of awareness and understanding of biodiversity indicators to achieve the full project objectives as outlined in the project document. An alternate approach for BINU, or for other countries attempting a similar process, would be a two-phase project. In the first phase, relevant biodiversity indicators would be identified by policy-makers and other stakeholders, and then developed in a technical context (ensuring technical rigor and practicality in terms of available data). The second phase would include education and awareness-raising for policy-makers to

ensure that indicators were adopted and used in policy making decisions. It would be critical in phase one to ensure that the technical indicators developed were responsive to policy needs, but policy specialists would not have to be involved throughout the technical process of indicator development.

With the BINU project, as with many GEF projects, there was a long time gap between the PDF activities and actual project implementation. As previously discussed, the BINU project found it necessary to hold project start-up workshops in each of the participating countries in order to launch the project. Project proponents should consider the utility of a project launch workshop during the project planning stages, especially if there has been a long time lag or activities gap from the PDF stage.

BINU in the Context of Other GEF Projects

Although the project was an atypical GEF project in terms of its objectives, it still suffered from the same issues that many GEF projects face. As previously discussed, the project was overambitious with regard to its scope. For example, in Kenya, the project sought to involve the full range of potential stakeholders, rather than a specific and concentrated subset required to allow the project to succeed in developing an indicator framework. The project was also overambitious with regard to its expected level of achievement. The objective of having discernible policy-related results within the short project timeframe was not realistic. Finally, the project was overambitious with regard to the amount of time required to achieve its stated objectives. Identifying indicators and bringing data together was very time consuming. One Ukrainian participant noted that the process of aggregating disparate data sources presented unexpected challenges.

BINU also suffered from many "classical" GEF project difficulties. The time from PDF to project start-up was more than two years, which made the project start-up process more difficult than it might have been. The project also lacked a specific replication plan, and had an insufficient incremental cost analysis. The GEF Evaluation Office's Joint Evaluation of the GEF Activity Cycle and Modalities documents these weaknesses as widespread throughout the GEF

portfolio. The slowing of project progress as a result of personnel turnover is a common challenge faced by GEF projects, and the BINU projects in Ecuador and Ukraine in particular had to deal with this issue.

In the BINU countries, as with many GEF projects, the weakness of the Ministry of Environment relative to other ministries presents challenges in terms of ensuring impact at the national level. The weakness of the environment ministry was specifically highlighted by project participants in Ecuador and Ukraine. Typically, a weak Ministry of Environment does not promulgate environmental protection policies able to withstand pressure from other more powerful ministries. According to stakeholders in Ukraine, as mandated by the law the Ministry of Environment theoretically has a lot of power, but in reality economic interests take precedent. This is an issue that many GEF projects have faced; the 2004 Biodiversity Program Study noted that "policy shortcomings or failures to mainstream biodiversity concerns across sectors undermined progress in a number of countries (for example, Albania, Congo, Croatia, Ecuador, Georgia, Lao, Mongolia, Russia, and Vietnam) where governments went ahead with infrastructure development projects in direct contravention of GEF project objectives."[18]

VII. RECOMMENDATIONS

Since the BINU project is completed, it is not necessary to make recommendations about what the project should or should not do in the future. Others who in the future may wish to develop biodiversity indicators at the national level should consider the lessons from the BINU project, including lessons not documented in this terminal evaluation.

Recommendations for UNEP-GEF

The significant time required for a project to put administrative procedures and structures in place before project activities can begin should be factored into the project timeframe. The BINU experience suggests that the time required could be six months, or even more for projects larger or more complex than BINU. In planning for future GEF projects, UNEP-GEF should realistically allow for time solely for initiation of project activities in the overall time expected

[18] GEF Evaluation Office, 2004.

for project implementation. Furthermore, to reduce the time required for a project to put administrative and operational structures in place, UNEP-GEF should develop a "GEF Project Manager Handbook" which details the rules and procedures necessary for setting up and managing GEF projects for which UNEP is the implementing agency.

Greater education and awareness-building at the international level regarding the value of indicators is needed before other countries can be expected to fully commit to an indicator development process. There is a significant opportunity for additional awareness building on the issue of biodiversity indicators in the coming years through the CBD process of assessing the 2010 targets. As countries bring together their biodiversity data in order to report on the 2010 targets there will be opportunities to build awareness about the BINU experience, and to educate interested parties about the utility of biodiversity indicators in general. Before the next CBD-COP, both UNEP and the new GEF project "2010 Biodiversity Indicators Project" should evaluate whether or not they are well positioned to contribute to such activities. UNEP-GEF should evaluate on an individual basis the interest and commitment of countries to the implementation of a biodiversity indicator framework before planning for additional similar efforts in other countries.

Recommendations for the GEF Secretariat

As previously discussed, the BINU project document did not have a clear replication plan, and little documented replication has occurred. For GEF projects to have a higher likelihood of replication, the GEF Secretariat should ensure that all projects have an explicit replication plan before they reach final approval.

The delay between the PDF phase and final project approval can negatively affect a project's ability to quickly ramp up, and may reduce the project's ability to deliver the anticipated results. There is a bell curve of value relating the degree of perfection and specificity required in a project document to the likelihood of project success. For the BINU project, the GEF approval process took the project document past the apex of this curve. A quicker, less rigorous approval process likely would have delivered a project document leading to results comparable to those achieved under the final project document which suffered through multiple extensive reviews.

At final approval, the GEF Secretariat should ensure that a project's prospects for success have not been reduced due to the length of time required for approval.

During the review process, the GEF Secretariat should strongly consider the cost-effectiveness of a project's management arrangements, and least-cost options that will still allow the project to achieve its objectives should be evaluated.

VIII. LIST OF ANNEXES