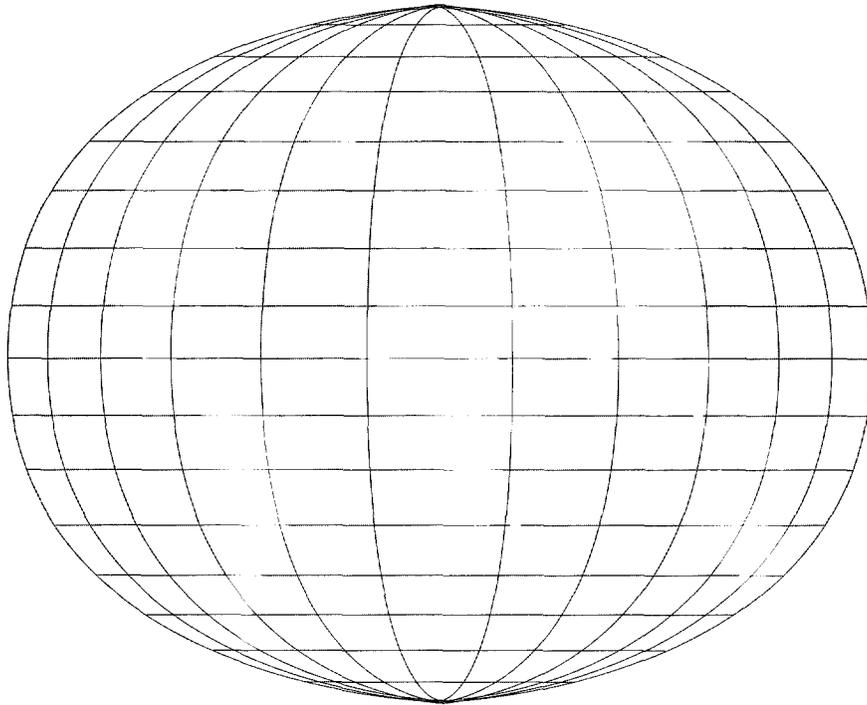


Report of Audit

**Audit of USAID/Ecuador's Implementation of the Government
Performance and Results Act for Environment--Natural Resources
Management and Biodiversity Activities**

**Audit Report No. 1-518-97-001-P
July 23, 1997**



**OFFICE OF INSPECTOR GENERAL
U.S. AGENCY FOR INTERNATIONAL DEVELOPMENT**



EXECUTIVE SUMMARY

In August 1993, Congress enacted Public Law 103-62 entitled the *Government Performance and Results Act of 1993*. Among the purposes of this Act are to improve Federal program effectiveness and public accountability by promoting a new focus on results, service quality and customer satisfaction, and to help Federal managers improve service delivery.

The Act requires Federal agencies to develop strategic plans of five years or more and annual performance plans, and report annually on actual performance compared to goals. It also sets forth the major tenets of a results-oriented management approach that focuses on using resources and information to achieve measurable progress toward program outcomes and goals (page 1).

This audit is part of the Office of Inspector General's worldwide assessment of the implementation of this process by the U.S. Agency for International Development (USAID). It specifically focuses on whether USAID's Mission in Ecuador developed a strategic and annual plan and performance indicators, collected and reported accurate data, and used performance data to effectively manage key aspects of its environmental program.

Promotion of natural resources management and biodiversity are the principal activities of USAID/Ecuador's strategic objective for the environment. These efforts are designed to preserve Ecuador's rich biodiversity and alleviate environmental degradation caused by extensive deforestation and urban growth (page 1). As discussed below, USAID/Ecuador made substantial progress in developing and implementing a strategic and annual plan, and the associated strategic framework, for its environmental activities; however, significant improvements were needed in the framework's design and related performance monitoring systems to meet USAID standards.

The audit showed that, except for two areas needing improvement, USAID/Ecuador developed a strategic plan and an annual plan that were generally consistent with the Agency's strategic framework. As required by Agency guidance, these plans were directly linked to the Agency's environmental goal and related objectives, were supported by the required data analysis, and contained components for monitoring and evaluating progress (page 5). However, the strategic objective was too broadly defined for USAID/Ecuador to materially and measurably affect through its current and planned activities. In addition, the strategic framework did not include causal linkages between the various levels of the framework and, therefore, did not demonstrate how lower level activities would affect higher level results, and ultimately how USAID's program was to result in the intended

benefits to the environment in Ecuador (page 9).

The audit also found that the Mission had not developed performance indicators consistent with Agency guidance and development goals. For example, performance indicators for the strategic objective were not consistent with indicators at the Agency objective level, nor did they measure the intended changes in the environment resulting from USAID/Ecuador's activities. Additionally, the performance indicators in general were not precisely defined and explicit enough to measure performance in an objectively verifiable manner (page 12). Problems also existed with performance targets and baselines. Specifically, baselines were undocumented and not derived from the original values and trends of the related indicators. Performance targets were also undocumented and not always realistic (page 16).

With respect to the development of its performance monitoring system, USAID/Ecuador did establish a system for collecting and reporting accurate performance data at the activity and subactivity levels. Although the data generated by this system was useful for activity managers, the system had not been updated to incorporate performance data for the indicators contained in the strategic framework, resulting in reporting errors and information gaps for the framework.

The above conditions occurred because USAID's reengineering requirements and implementing guidance are relatively new and not yet fully understood by program managers. Until needed improvements are made, USAID/Ecuador will be unable to fully evaluate the impact and relative value of its activities, intermediate results and development hypothesis, thus, impairing its ability to review, evaluate and revise, as necessary, the many components of its strategy for improving the environment.

To address these conditions, the report makes five recommendations to USAID/Ecuador to (1) better define its strategic objective, (2) strengthen and clarify the linkages between its intermediate results and the strategic objective, (3) redesign its performance indicators, (4) substantially revise and document its interim and final performance targets and baselines, and (5) establish a monitoring plan with improved collection and reporting of performance data.

We were unable to determine whether USAID/Ecuador used performance information from its current strategic framework to enhance program effectiveness. This was due to the fact that the framework was in its first full year of implementation and the annual performance data was not yet complete at the time of our audit.

For the individual activities tested, USAID/Ecuador's natural resources management and biodiversity activities were making satisfactory progress toward achieving the intended benefits as defined by the development partners' respective agreements with USAID. We are unable, however, to express an opinion concerning whether these activities represented satisfactory progress toward achieving the USAID/Ecuador's strategic objective. Due to

the problems we found with the strategic framework as reported above, we were unable to use the performance indicators in its strategic framework to support an audit opinion on whether activities were achieving the intended benefits. Instead, we employed alternative auditing procedures and used performance data reported through USAID/Ecuador's already existing monitoring system prior to reengineering. Therefore, our opinion is limited to progress as measured by the final planned progress as stated in the partners' respective agreements (page 24).

The goal of these activities was to develop ecologically, economically and socially sustainable incentives for resource management in and around selected ecological reserves in order to preserve biodiversity and improve the economic well-being of local communities. By achieving these goals, pressure from local communities on critical protected areas and the environment in general will be reduced, ultimately conserving biodiversity and natural resources.

For the sixteen reported accomplishments reviewed, USAID/Ecuador's activities were making satisfactory progress toward achieving the intended benefits as set forth in the partners' implementing agreements.

Office of Inspector General
Office of Inspector General
July 23, 1997

Table of Contents

	<u>Page</u>
EXECUTIVE SUMMARY	i
INTRODUCTION	1
Background	1
Audit Objectives	3
REPORT ON AUDIT FINDINGS	5
Did USAID/Ecuador, for its natural resources management and biodiversity activities, in accordance with Agency directives and in support of USAID's actions to comply with the <i>Government Performance and Results Act</i> :	
Develop a strategic plan and an annual plan which were consistent with the Agency's strategic framework?	5
USAID/Ecuador Needs to Redefine Its Strategic Objective for the Environment to Better Reflect Program Activities and Geographic Scope	6
USAID/Ecuador Needs to Revise Its Strategic Framework to Include Causal Linkages Between the Strategic Objective and Intermediate Results	9
Develop performance indicators which were consistent with Agency goals?	11
USAID/Ecuador Needs to Develop Performance Indicators That Are More Consistent with Agency Guidance and Development Goals	11
USAID/Ecuador Needs to Develop Performance Targets and Baselines That Are Documented, Realistic and Consistent With Reengineering Guidance	16
Develop a system for collecting and reporting accurate performance data?	20

USAID/Ecuador Needs to Revise Its Performance Monitoring Plan to Establish Procedures to Ensure That Accurate Data is Collected and Reported	21
Use performance information to enhance program effectiveness?	24
Were USAID/Ecuador's natural resources management and biodiversity activities making satisfactory progress toward achieving the intended benefits?	24
Management Comments and Our Evaluation	27
APPENDICES	<u>Appendix</u>
Scope and Methodology	I
Management Comments	II
Strategic Framework	III
Glossary of Terms Used in Report	IV

B

INTRODUCTION

Background

In August 1993, Congress enacted Public Law 103-62, the *Government Performance and Results Act of 1993* (Results Act). Among the purposes of this Act are to:

- initiate program performance reform with a series of pilot projects in setting program goals, measuring performance against those goals and reporting publicly on their progress;
- improve Federal program effectiveness and public accountability by promoting a new focus on results, service quality and customer satisfaction; and
- help Federal managers improve service delivery by (i) requiring that they plan for meeting program objectives and (ii) providing them with information about program results and service quality.

The Results Act sets forth the major tenets of a results-oriented management approach, focusing on using resources and information to achieve measurable progress toward program outcomes and goals. In implementing this legislation, Federal agencies are to develop strategic plans of five years or more and annual performance plans for fiscal years 1997 and 1999 respectively, and, beginning in March 2000, report annually on actual performance compared to goals. However, in 1994, the U. S. Agency for International Development (USAID) was designated as a pilot agency for conforming to the Results Act by the end of fiscal year 1996. During this period the Agency also undertook a major management restructuring which it termed "reengineering." A glossary of terminology related to this restructuring is contained in Appendix IV of this report.

This audit is part of the Office of Inspector General's worldwide assessment of this process at the mission level. The audit focuses on whether USAID's Mission to Ecuador developed a strategic plan and performance indicators, collected and reported accurate data, and used performance information to effectively manage its activities under the natural resources management and biodiversity objectives. The Mission is not directly responsible for complying with the Results Act, but rather is required to support USAID in its efforts to implement this legislation.

USAID's Global Environmental Strategy

In 1994, USAID identified *Protecting the environment* as one of five "pillars" upon which the Agency would focus its resources in the future. According to USAID, factors

indicating severe environmental problems in developing countries include quantifiable losses in GDP due to natural resource depletion, rapid rate of degradation of key ecosystems, and environmental health risks such as air and water pollution.

In its September 1995 Strategic Framework, the Agency defined its environmental goal as the *Environment managed for long-term sustainability* and established five objectives to accomplish this goal:

- conservation of biological diversity;
- reduction of global climate change threat;
- promotion of sustainable urbanization and prevention of pollution;
- increased provision of environmentally sound energy services; and
- sustainable management of natural resources.

Each of these objectives has received investment by USAID. However, unlike the others, the natural resources management and biodiversity objectives have activities in the environmental portfolio of most recipient countries. Therefore, this centrally planned and coordinated audit focused on those two activities.

USAID's Environmental Strategy in Ecuador

Ecuador has been identified by international environmental organizations as being within three of the richest--but most threatened--biodiverse locations in the world. For example, Ecuador reportedly has more than 1,500 known bird species, which is almost twice as many as in the U.S. and Canada combined. The nation's rich biodiversity, however, is endangered. Ecuador reportedly suffers the highest rate of deforestation among the Amazonian countries and the third highest rate in the world, primarily due to colonization, timber extraction and petroleum production. Another significant threat, Ecuador's urban growth rate--among the highest in the hemisphere--is placing increased demands on the national and local governments for critical environmental services and pollution control.

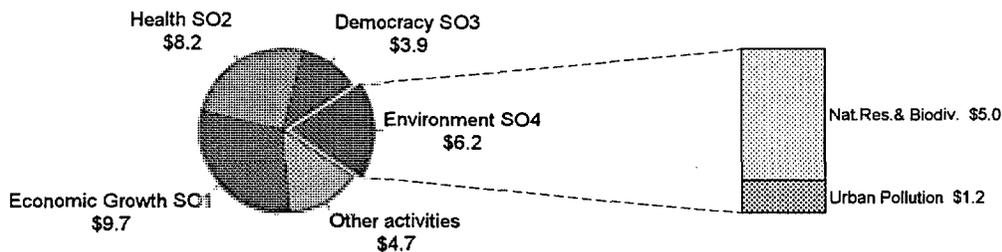
Ecuador's territory also includes the Galápagos Marine Reserve, which is the second largest marine park in the world. Nevertheless, the Reserve reportedly remains largely a "paper park" with many problems, such as conflicts between fishermen and researchers, and certain species are being exploited to the point of local extinction.

To alleviate these threats, USAID/Ecuador established *The environment managed for long-term sustainability* as one of its four strategic objectives in Ecuador, with lower level program areas directly linked to the Agency's objectives for conservation of biological diversity, sustainable management of natural resources, and promotion of sustainable urbanization and prevention of pollution.

To accomplish this strategic objective, the Mission developed a strategic framework containing various activities (see Appendix III). The primary activity for biodiversity and

natural resources was designed to develop ecologically, economically and socially sustainable incentives for resource management in and around critical ecological reserves and to improve the economic well-being of local communities. The Mission believes that by achieving these goals, the pressure from local communities on critical ecological reserves and surrounding areas will be relieved and natural resources and biodiversity will be conserved. USAID is also providing assistance to other activities such as promoting additional environmental protection for the Galápagos Islands. USAID/Ecuador's obligations and expenditures for the life of the program for natural resources conservation and biodiversity activities totaled \$10.7 million and \$8.1 million, respectively, as of September 30, 1996. Funding provided for the various strategic objectives in the Mission's entire framework for the preceding three fiscal years is presented below.¹

USAID/ECUADOR
Fiscal Year 1994, 1995, 1996 Obligations
(millions)



Note: SO is an abbreviation for strategic objective.

Audit Objectives

As part of the Office of Inspector General's worldwide assessment of USAID's implementation of the *Government Performance and Results Act of 1993*, this audit was conducted to answer the following objectives:

1. **Did USAID/Ecuador, for its natural resources management and biodiversity activities, in accordance with Agency directives and in support of USAID's actions to comply with the Government Performance and Results Act:**
 - (a) **Develop a strategic plan and an annual plan which were consistent with the Agency's strategic framework,**

¹Unaudited financial data derived from USAID/Ecuador's Mission Accounting and Control System.

- (b) **Develop performance indicators which were consistent with Agency goals,**
 - (c) **Develop a system for collecting and reporting accurate performance data, and**
 - (d) **Use performance information to enhance program effectiveness?**
- 2. Were USAID/Ecuador's natural resources management and biodiversity activities making satisfactory progress toward achieving the intended benefits?**

Appendix I describes in detail the audit's scope and methodology.

REPORT ON AUDIT FINDINGS

Did USAID/Ecuador, for its natural resources management and biodiversity activities, in accordance with Agency directives and in support of USAID's actions to comply with the Government Performance and Results Act, develop a strategic plan and an annual plan which were consistent with the Agency's strategic framework?

USAID/Ecuador developed strategic and annual plans for its natural resources management and biodiversity activities which were generally consistent with the Agency's strategic framework and in accordance with Agency directives related to the implementation of the *Government Performance and Results Act*. However, two aspects of these plans needed significant improvements to assure their effectiveness in managing USAID's environmental program in Ecuador.

USAID/Ecuador developed a strategic plan and an annual plan which were generally consistent with the Agency's strategic framework². In addition, the Mission's strategic plan contained the information required by the Agency's Automated Directives System (ADS)³. The Mission obtained the required management contract with USAID's Latin America and Caribbean (LAC) Bureau. As part of the strategic plan, it developed a strategic objective that was consistent with U.S. foreign policy and linked directly to the Agency's goal for the environment and three of the Agency's objectives under that goal. To document the development of the strategic plan, the Mission included an overview and a description of its customers. Furthermore, the strategic plan was supported by a problem analysis, critical assumptions, involvement of other development partners, illustrative approaches and an explanation of sustainability. The plan also contained performance indicators and a monitoring plan with interim targets for assessing progress, as well as resource requirements and programming options.

Nevertheless, as discussed below, the Mission's strategic objective (see Appendix III) was too broadly defined and overstated in terms of geographical coverage. As a result, the

²Due to local political priorities resulting from national elections, USAID/Ecuador, with the concurrence of USAID's Latin America and Caribbean Bureau, did not prepare an actual strategic plan in fiscal year 1996, but used other documents which contained the required elements of a strategic plan. Similarly, USAID/Ecuador did not prepare a distinct annual plan, but used portions of its annual R4 submission as a substitute.

³USAID's Automated Directives System contains the official policies, procedures and guidance to be used in managing Agency operations.

planned impact of the Mission's environmental program could not materially and measurably affect its current strategic objective. In addition, USAID/Ecuador did not develop a strategic framework that was based on causal linkages between the strategic objective and intermediate results, and thereby, did not demonstrate how the framework's activities were expected to improve environmental conditions in Ecuador.

**USAID/Ecuador Needs to Redefine Its Strategic
Objective for the Environment to Better Reflect
Program Activities and Geographic Scope**

USAID guidance defines a strategic objective as the highest level of impact on a particular program area that an operational unit and its partners can materially achieve and for which it is willing to be held responsible. To assist in this achievement, a strategic objective must be precise and clearly expressed in terms of a result or impact, and be defined in a manner which permits objective measurement. USAID/Ecuador's strategic objective for the environment was too broadly defined and not sufficiently precise for the Mission to materially affect through its current environmental activities. This occurred because the Agency's reengineering guidance and requirements were relatively new and, when designing its strategic objective, the Mission did not fully understand the alternatives offered under the new guidance. As a result, USAID/Ecuador could not effectively monitor progress of its environmental program towards accomplishing its strategic objective.

Recommendation No. 1: We recommend that USAID/Ecuador revise its strategic objective for the environment to reflect the development approaches and geographical scope of its environmental activities so that the intended results of these activities will be able to materially and measurably affect the strategic objective.

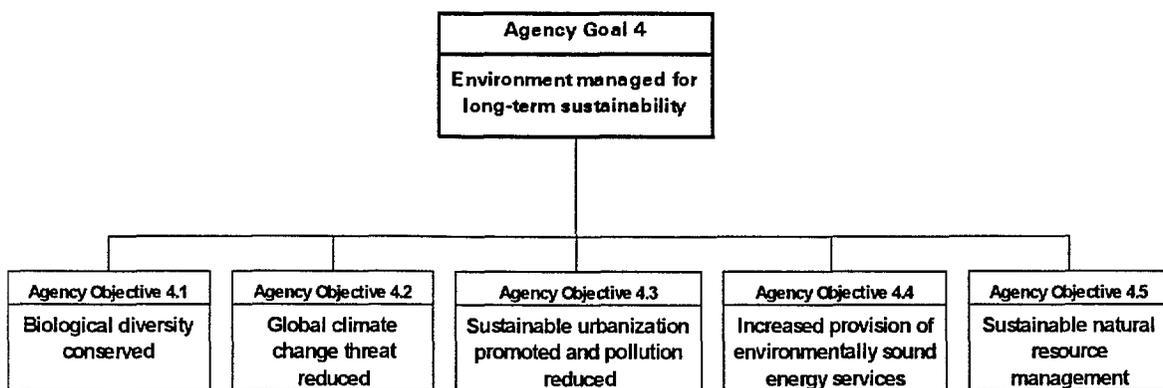
The ADS defines a strategic objective as the most ambitious result (intended measurable change) in a particular program area that a USAID operational unit, along with its partners, can materially affect and for which it is willing to be held responsible. The strategic objective forms the standard by which the operational unit is willing to be judged in terms of its performance, and sets the direction for the selection and design of its assistance activities. A strategic objective must be expressed in terms of a result or impact, be defined in a manner which permits objective measurement, and be clear and precise.

In the context of defining a strategic objective, it is necessary to identify the intermediate results which are necessary to accomplish that objective. The results framework, consisting of the strategic objective and its intermediate results, must adequately illustrate the development hypothesis represented in the strategy. The results framework is intended to be a management tool to gauge progress toward achievement of intermediate results and their ultimate contribution to the achievement of the strategic objective.

In order to assess performance of the development hypothesis, operating units must establish performance monitoring systems which meet Agency standards for performance indicators and baselines. Performance monitoring is to focus on the achievement of strategic objectives to provide information on all aspects of performance relating to USAID-funded assistance.

USAID/Ecuador's strategic objective for the environment was too broadly defined and insufficiently precise for the Mission to materially and measurably affect through its current environmental activities. Its strategic objective, *The Environment managed for long-term sustainability*, is identical to Goal No. 4 in the Agency's strategic framework

Agency Environment Strategic Framework



as shown above. As such, it presumes that the planned impact of the program's activities in Ecuador will materially affect the environment of the entire country. However, the Mission's three program areas under this strategic objective are linked to only three of the Agency's five objectives under Agency Goal No. 4, which are Objective 4.1, Objective 4.3, and Objective 4.5. The Mission's program does not address Objectives 4.2 and 4.4 above, and therefore, is not as comprehensive as the Agency's environmental goal, although the Mission's strategic objective implies this to be the case.

The Mission divided its strategic objective 4 into two intermediate results. Under the first, entitled *Improved conservation and management of natural resources*, the portfolio is dominated by a \$9.6 million activity entitled Sustainable Uses for Biological Resources (SUBIR). SUBIR is designed to develop sustainable incentives for resource management in and around selected ecological reserves to preserve biodiversity and improve the economic well-being of local communities. It is currently operating primarily in buffer areas adjacent to two ecological reserves--the Cotacachi-Cayapas Ecological Reserve and the Cayambe-Coca Ecological Reserve. Additional environmental activities include promoting increased environmental protection for the Galápagos Islands Reserve. There is also an activity to preserve and protect the Andean condor.

Under the second intermediate result, *Improved management of urban environment and pollution prevention*, the Mission's activities promote tariff reforms to improve cost recovery for urban services. Other activities involve pollution prevention and mitigation programs, solid waste management, and decentralized potable water systems.

In addition to not addressing the Agency's objectives of global climate change and energy services, the Mission's environmental objective does not address other Ecuador-specific problems with programs needed to manage the entire environment for long-term sustainability. Also, some of the Mission's program areas are not country-wide in their application. For example, the Mission states in its planning documents that Ecuador suffers the highest rate of deforestation among the Amazonian countries and the third highest in the world. This is a crucial aspect of protecting biodiversity and achieving sustainable natural resources management. However, the Mission does not have activities that directly affect country-wide deforestation. A second example is the SUBIR project, which is developing and implementing plans for sustainable land management. The land scheduled for these plans, however, is located in and around only two ecological reserves, significantly limiting the project's geographic impact.

As indicated above, the Mission's environmental portfolio addresses only certain segments of Ecuador environmental management. However, strategic objective 4 as stated implies that the entire environment is managed for long-term sustainability, which is not the case. The Mission's results framework is simply not sufficient to materially affect the overall result as currently defined by strategic objective 4.

This occurred because the Agency's reengineering guidance and requirements were relatively new and, when designing its strategic objective, the Mission did not fully understand the alternatives offered under reengineering guidance for defining strategic objectives. A Mission official stated that the strategic objective team intended to keep the strategic objective as simple as possible without making it multi-dimensional. When establishing the strategic objective, they had considered reducing its scope by defining it in terms of biodiversity, natural resources management, and urban environment and pollution; however, they rejected this idea believing that the strategic objective defined in this way would then be multi-dimensional. A Mission official stated that the team had also considered establishing three separate strategic objectives, one for each program area under environment, but were uncertain whether reengineering guidance allowed multiple strategic objectives for the environmental program. Because USAID/Ecuador's strategic framework was approved by LAC Bureau, a contributory cause can be attributed to the need for improved review procedures within the Bureau.

With an overstated strategic objective, the Mission's results framework did not present the true development hypothesis of how its lower level activities could materially and measurably affect the upper level intermediate results and ultimately the strategic objective. Nor did it accurately define the intended results or changes to be achieved by the program in order to effectively demonstrate impact on the environment.

In defining a strategic objective, it is necessary to identify the required intermediate results to accomplish that objective and which must be monitored to indicate progress. If the strategic objective is overstated and unrealistic, there is no valid development hypothesis representing the relationship between the strategic objective and the intermediate results. Therefore, the framework is not a useful management tool and can not be used to accurately gauge progress toward achievement of intermediate results and their contribution to the achievement of the strategic objective.

Additionally, the strategic objective, as stated, may adversely affect the consolidation of performance data at the Agency level. Since the strategic objective implies that the environment in the entire country is managed for long-term sustainability, USAID/Washington may misinterpret the reported Mission accomplishments and overstate the Mission's impact on the country's environment.

USAID/Ecuador Needs to Revise Its Strategic Framework to Include Causal Linkages Between the Strategic Objective and Intermediate Results

USAID guidance requires that operating units establish strategic frameworks which identify intermediate results to be achieved and clearly show causal relationships between these intermediate results and related strategic objectives. USAID/Ecuador did not develop a strategic framework that was based on these causal linkages. Instead, the intermediate results were simply a restatement of the strategic objective, which did not demonstrate how the framework's activities were expected to affect the strategic objective. This occurred because the Mission had an existing portfolio of projects which were not designed under the requirements of the new reengineered management system. Additionally, the Agency's reengineering guidance and requirements were relatively new and the requirement for a causal relationship between intermediate results and the strategic objective was not fully understood by Mission officials. As a result, the effectiveness of the Mission's framework as a strategic planning document and management tool was impaired.

Recommendation No. 2: We recommend that USAID/Ecuador revise its strategic plan for the environment to:

2.1 identify the key intermediate results for its environmental program that have causal relationships to the strategic objective and represent the development hypothesis of the Mission; and

2.2 establish appropriate results packages for the new intermediate results.

In a results framework, the relationship between the results at different framework levels should be causal, and should represent the Mission's development hypothesis in order to facilitate strategic planning. Strategic objectives are the highest level result for which an

operating unit is held accountable. The lower level result, defined as an intermediate result, is a key result which must occur in order to achieve a strategic objective. It should be a necessary outcome, which contributes to the achievement of the higher level result.

The ADS states that the results framework must provide sufficient information to adequately illustrate the development hypothesis (or cause and effect linkages) represented in the strategy, and therefore, assist in communicating the basic premises of the strategy. It must also be useful as a management tool and therefore, should focus on intermediate results which must be monitored to indicate progress. The framework is intended to be a management tool first and foremost for operating unit managers, allowing them to gauge progress toward achievement of intermediate results and their contribution to the achievement of the strategic objective.

The Mission's strategic objective 4 has two intermediate results, *Improved conservation and management of natural resources*, and *Improved management of urban environment and pollution prevention*. However, the intermediate results merely restate the strategic objective by dividing it, or the upper result, into two component parts; i.e. the relationship between the upper level strategic objective and the lower level intermediate results is basically categorical or definitional in nature. The two results capture the same level of impact as the strategic objective and do not illustrate the cause-and-effect linkages, nor the development hypothesis upon which the achievement of the strategic objective is based. Because the strategic objective and the intermediate results capture and report results at the same level, the performance indicators for these would have to be duplicated.

As with the previous finding, the above occurred because the Agency's reengineering guidance was relatively new and the requirement for a causal relationship between intermediate results and the strategic objective was not fully understood by Mission officials. In addition, the Mission was faced with the challenge of integrating within the new framework its existing portfolio of two separate categories of environmental activities which were not designed under reengineering guidance. Because USAID/Ecuador's strategic framework was approved by LAC Bureau, a contributory cause can also be attributed to the need for improved review procedures within the Bureau.

Since the Mission's results framework was essentially a listing of projects arranged in four categories, the framework does not present the Mission's development hypothesis. The actual intermediate results, which the Mission believes will lead to the achievement of the strategic objective, are either dropped down to the activity level, or are not represented in the framework at all, and therefore cannot be examined for their impact on the strategic objective. Without proper identification in the results framework, the intermediate results may not be adequately managed. This reduction in the effectiveness of the results framework makes it more difficult for the Mission to assess the contribution of intermediate results, gauge progress toward the intended result, and ultimately manage strategic objectives for results.

Did USAID/Ecuador, for its natural resources management and biodiversity activities, in accordance with Agency directives and in support of USAID's actions to comply with the Government Performance and Results Act, develop performance indicators which were consistent with Agency goals?

USAID/Ecuador did not develop performance indicators for its natural resources management and biodiversity activities which were consistent with Agency guidance related to the Results Act and to Agency development goals. Although USAID/Ecuador designed a strategic framework that included eleven⁴ performance indicators with interim and final performance targets, not all of these performance indicators, and their associated targets and baselines, were consistent with Agency development goals or guidance.

Regarding performance indicators, there were unique problems for the indicators at the higher levels of the framework because they did not measure the intended results and changes in the environment as defined by either the Agency's framework or the Mission's development hypothesis and strategic objective. Consequently, they were not consistent with Agency development goals⁵. At all framework levels, problems included indicators not sufficiently defined to measure performance in an objectively verifiable manner, an indicator measuring performance from other than USAID-financed activities, and an activity indicator measuring results at the strategic objective level and not the activity level. Therefore, these indicators were not consistent with Agency general guidance.

Problems also existed with the development of performance indicator targets and baselines. Specifically, baselines were not documented and did not consider prior indicator values and trends, and interim and final targets lacked documented analysis supporting the intended performance.

USAID/Ecuador Needs to Develop Performance Indicators That Are More Consistent With Agency Guidance and Development Goals

USAID guidance requires that performance indicators be established to monitor expected results and overall progress towards Mission strategic objectives. For its environmental program, USAID/Ecuador did not develop its performance indicators in accordance with this guidance. Specifically, the indicators at the upper two levels did not directly measure

⁴The Mission's framework actually had thirteen indicators, however, two indicators were duplicated at the activity and at the intermediate result level.

⁵Because the intermediate results were a restatement of the strategic objective, we consider the two intermediate results performance indicators as strategic objective indicators. Since there were no true intermediate results, there were no indicators for these.

the intended changes in the environment. Additionally, indicators at all three levels of the framework contained other problems. Six performance indicators were not sufficiently precise and explicit to measure performance in an objectively verifiable manner. Also, one indicator measured performance from other than USAID-financed activities, while one activity indicator measured performance at the strategic objective level and not at the activity level. These conditions were due to the problems encountered when the Mission attempted to place into the new reengineered management system its existing portfolio of projects which was not designed under reengineering guidance. Also, the Agency's reengineering requirements were relatively new and not fully understood by Mission officials. As a result, the Mission was unable to properly measure the results of its activities and progress toward its strategic objective, report that progress, and strategically manage its environmental portfolio for results.

Recommendation No. 3: We recommend that USAID/Ecuador revise its strategic plan for environment so that:

3.1 the performance indicators at the strategic objective level are (a) direct and measure the intended impact on the environment, (b) adequate in number and scope to capture the results of all activity outcomes and outputs, either directly or through the intermediate results, that are anticipated by the Mission's development hypothesis, and (c) consistent with Agency development goals; and

3.2 the performance indicators at all levels of the framework are uni-dimensional, precisely defined, objectively verifiable, and are a measure of the performance of USAID-financed activities.

The Results Act requires agencies to establish performance indicators and to use these indicators in order to report actual program performance achieved compared with performance goals. To implement the legislation, USAID has issued the ADS which defines a performance indicator as a particular characteristic or dimension used to measure intended changes defined by an organizational unit's results framework (see Appendix IV). Performance indicators are used to measure actual results compared to expected results, answering whether a unit is progressing towards its objective rather than why or why not such progress is being made.

The ADS states that operating units and strategic objective teams must remain informed of all aspects of performance in order to effectively manage for results. In order to assess performance, operating units must establish monitoring systems which meet Agency standards for both performance indicators and baselines. A key element of this system is the performance indicator, which is to be defined for all strategic objectives, and intermediate results in the results framework that are directly supported by USAID funds. Performance indicators require quality data at intervals consistent with management needs. Quantitative performance indicators should be used in most cases.

The Agency's Center for Development Information and Evaluation (CDIE) has issued supplemental guidance, through its *Tips* series, to help missions implement this performance monitoring system. *Tips No. 6* describes seven criteria for assessing performance indicators. For example, a performance indicator should be direct, measuring the result it is intended to measure, and not relying on attribution. An indicator should also be objective about what is being measured, meaning that it is uni-dimensional, operationally precise, and a measure of only one phenomenon at a time. Indicators are also to be adequate, signifying that, taken as a group, a performance indicator and its companion indicators should adequately measure the result in question.

Although USAID/Ecuador designed a strategic framework with eleven performance indicators, it did not develop these indicators consistent with Agency guidance and development goals. The unique problems with the indicators at the strategic objective level, and the problems found at all levels of the framework, are discussed below.

Performance Indicators at the Strategic Objective Level

Under strategic objective 4, *The Environment managed for long-term sustainability*, the performance indicator is *Completion, approval, publication and implementation of a National Environmental Action Plan* (see Appendix III). This performance indicator does not meet Agency standards in three respects.

First, it is not a direct indicator that measures the intended change in the environment; rather, it is an indirect indicator that relies upon attribution to assume that change has occurred and that the strategic objective is being achieved.

Second, this indicator is not adequate in capturing the results of all the activities occurring in the environmental portfolio. For example, the Mission has an activity which seeks to protect the Andean condor from extinction; however, the strategic objective performance indicator does not measure the result of this activity. The outputs or outcomes from all activities undertaken need to be captured in the performance indicators. Otherwise, if activities are not contributing to the accomplishment of the strategic objective, they should not be undertaken. If they have no impact on the Mission's strategic objective, then they are technically not part of the Mission's development hypothesis.

Third, this indicator is not consistent with Agency development goals. Although USAID/Ecuador's strategic framework is linked in a definitional sense to the Agency objectives for biological diversity and natural resources management, the strategic objective performance indicator is not consistent with these two objectives. The indicator at the strategic objective level, as well as those at the intermediate results level, do not measure any actual direct impact on, or change in, the environment as defined by the two Agency objectives, and therefore are not linked to these two Agency objectives. Consequently, the indicators may adversely affect the consolidation and reporting of performance data at the Agency level.

Under Intermediate Result 4-A *Improved Conservation and Management of Natural Resources*, the two indicators are *Selected national parks, reserves and adjacent buffer zones under effective sustainable land use/natural resource management plans*, and *User fees disbursed for protected area management*. Since the relationship between the strategic objective and the intermediate results is categorical or definitional (with the strategic objective simply being restated), these indicators are essentially at the same level as the strategic objective, and therefore, are basically strategic objective performance indicators and not intermediate result indicators.

The first of these indicators, *Land under management plans*, could be a good indicator for an intermediate result if there were adequate assurances that the management plans are followed and that the plans produce the intended results. However, at the strategic objective level it is an indirect indicator that does not measure the actual impact on the environment. As with the environmental action plan, it is simply a means to possibly achieving the desired result and not a measure of the result itself.

Concerning the second indicator, *User fees disbursed*, this indicator does not represent an adequate strategic objective performance indicator either. It is an indirect indicator that relies on attribution, not measuring any direct change in the environment nor actual progress toward the strategic objective. This indicator may be an outcome or output of an activity or an intermediate result since it is a resource that, if used properly, may lead to progress in achieving the strategic objective.

Performance Indicators at All Framework Levels

Six indicators were not precisely defined and explicit enough to measure performance and success in an objectively verifiable manner. For the qualitative indicator, *Biodiversity research utilized*, the units of measure consist of design, dissemination, and utilization. However, the indicator lacks clarity in the meaning of dissemination and utilization, and how the change in the value of these units is to be measured.

A similar condition exists with four indicators related to the implementation of legal or regulatory procedures. *Completion, approval, publication and implementation of a national environmental action plan (NEAP)*; *Unique biodiverse status of the Galápagos Islands protected*; *Completion, approval, publication and implementation of environmental law*; and *Environmental impact assessment strategy and regulations adopted* are indicators that have a unit of measure defined as the percentage of implementation or utilization. The methodology of measuring implementation and utilization, however, has not been defined, which results in an indicator that is imprecise, inexplicit, and subjective. An additional problem that further reduces their usefulness is that these indicators are multi-dimensional. The NEAP, for example, contains five distinct components which add to the difficulty of measuring the change in value and objectively verifying the results as defined by the unit of measure.

The qualitative indicator, *Community participation in management of selected protected areas*, has two problems. First, the units of measure do not directly relate to the indicator title. The title implies that there will be some type of actual community participation in management. However, the units of measure are descriptions of necessary accomplishments to promote community participation, and not measurements of participation itself. The second problem is the description of the units of measure. The units of measure "Legal framework" and "Regulatory framework" are not defined, are imprecise, and are not measurable.



Playa de Oro community--site of several USAID-financed activities whose purpose is to protect the neighboring ecological reserve (March 1997)

We also found one indicator that measured performance from other than Mission-financed activities. For the indicator, *Selected national parks, reserves and adjacent buffer zones under effective sustainable land use/natural resource management plans*, the Mission's unit of measure was cumulative thousands of hectares under management plans. Under the planned period of performance, the indicator was designed to measure the amount of land under plans in or around four national parks and one marine reserve. For three of these parks, USAID has financed activities that are directly related to the preparation and implementation of the plans. However, for the national park and the marine reserve in the Galápagos Islands, which comprise two thirds of the total land claimed under this indicator, there have been no USAID-financed activities associated with the writing or implementation of these plans. Consequently, the majority of the results reported under this indicator are not related to USAID-financed activities. Performance data from activities not funded by USAID should not be reported.

A final example concerns the indicator, *Andean condor preserved and protected*. The unit of measure, the percentage increase in the bird population, is a direct and quantitative measure of the ultimate impact on the environment and therefore, should be at the strategic objective level. It is not a measure of activity inputs, outputs or processes. From this indicator, it is not possible to determine what is being accomplished at the activity level. At this level, the indicator should be a measure of the activity's inputs, outputs or processes, with the measure of the ultimate impact on the environment placed at the strategic objective level.

As with the previous findings, these conditions occurred because the Mission had an existing portfolio of projects, not originally designed to produce the required performance data of the new strategic framework, which they attempted to fit into the new reengineered management system. In addition, the Agency's reengineering guidance and requirements were relatively new and, when designing its strategic framework, the Mission did not fully understand the guidelines for establishing performance indicators for its strategic objective. Since the implementation of reengineering principles is a learning process that takes some time to complete, Mission officials were not able to fully incorporate all of the required principles and procedures for developing new performance indicators for their first strategic framework. Because USAID/Ecuador's strategic framework was reviewed and approved by LAC Bureau, a contributory cause can also be attributed to the need for improved review procedures within the Bureau.

Similar to the previous findings, the Mission cannot effectively and strategically manage its portfolio of environmental activities for results, nor report its actual results without adequate performance indicators. In addition, the Mission is not able to evaluate the impact and relative value of its intermediate results and development hypothesis. Therefore, they will not be able to review, evaluate, and revise as necessary, the activities in the strategic framework, deciding whether to abandon current strategies that are not achieving intended results, and documenting the impact of development assistance.

**USAID/Ecuador Needs to Develop Performance
Targets and Baselines That Are Documented,
Realistic and Consistent with Reengineering Guidance**

Although USAID/Ecuador designed a strategic framework with interim and final performance targets and baselines for its indicators, these targets and baselines were not consistent with Agency guidance. Specifically, six baselines were not documented and did not consider prior indicator values and trends; and all interim and final targets lacked documented analysis supporting the intended performance. This occurred because the Mission had an existing portfolio of projects which did not meet the performance target and baseline requirements of the new reengineering guidance. Also, Mission officials did not fully understand reengineering guidance and, since the implementation of reengineering is a learning process that takes some time to complete, were not able to fully comply with all of its requirements for their first strategic framework. Poorly

designed targets adversely affect the Mission's ability to use performance information to improve activities, to decide whether to revise strategies or abandon strategies; and to document findings on the impact of development assistance.

Recommendation No. 4: We recommend that USAID/Ecuador revise the strategic plan for its environmental strategic objective to include interim and final performance targets that:

4.1 have documented baselines derived from the original values and trends of the respective performance indicators; and

4.2 are supported by adequate analysis consistent with the Agency's Center for Developmental Information and Evaluation guidance.

At the Mission level, strategic objective teams are to establish monitoring systems to regularly collect and analyze data which will enable them to track performance and objectively report on their progress in achieving strategic objectives and intermediate results. Strategic objective teams and activity managers are to regularly collect data on inputs, outputs and processes to ensure that activities are proceeding as expected and are contributing to relevant intermediate results and strategic objectives as anticipated.

A performance monitoring system is described as a process for systematically monitoring the performance of a program, process or activity towards its objectives over time. Performance monitoring systems at USAID include indicators, baselines and targets. A target and baseline are to be defined for each indicator. A performance target is defined as the specific and intended result to be achieved within an explicit time frame and against which actual results are compared and assessed. Performance baselines should reflect, as near as possible, the value of each indicator at the commencement of USAID-supported activities that contribute to the achievement of the relevant strategic element.

CDIE Tips No. 8 provides useful information on establishing performance targets and baselines. For example, a baseline is the value of the indicator at the beginning of the planning period, ideally just prior to the implementation of the USAID program activities. In establishing a baseline, an understanding of the underlying historical trend, or pattern of change that has been evident, in the indicator value over time should be considered.

Although USAID/Ecuador designed a strategic framework with eleven performance indicators, the Mission did not develop targets and baselines for these indicators consistent with Agency general guidance or goals. Specifically, we found that six performance target baselines were not documented and all interim and final targets were unsupported by analysis documenting the intended performance.

Regarding baseline data for six indicators, the Mission did not take into consideration the level of current activity, value or trend of the indicator at the beginning of the activity.

For the indicator, *Andean condor preserved and protected*, the unit of measure is the percent increase in condor population over base year 1995. However, the data for the condor population was not yet available. The birds need to be identified to clearly record their number and movements, which has not been done. Therefore, without the baseline population figure, the percentage increases cannot be computed. As a result, the interim and final targets for this indicator are meaningless.

Concerning the indicator, *Selected areas under management plans*, the management plan for the Galápagos national park was officially passed in June 1996. However, the baseline for this indicator, which is 1996, shows only 33,000 hectares out of a total of 733,000 hectares for the park. Since the plan was actually passed and implemented during the baseline year, the entire park should have been recorded in the baseline year instead of only a fraction of the total.

For the indicator, *Biodiversity research*, the Mission did not identify the biodiversity research already in progress by its principal development partner CARE in the baseline year. Although not clear, the framework appears to state that the research would be "designed" in 1995, however, it does not discuss the research already in progress at that time. The same situation is true for the indicator, *community based income*. The framework states that this indicator was added in 1996, however, it does not address community-based income that was already being generated at that time.

Under the indicator *Community participation*, the unit of measure for participation was never defined to explain what actual participation consisted of; therefore, the baseline remains undefined.

The final baseline example concerns *User fees disbursed*. Although the baseline year of 1995 contains planned and actual figures representing values at the beginning of the measurement period, Mission officials were not sure what these figures were in reference to. The reported figures could have been fees collected from the parks, actual fees disbursed back to the parks after collection, or possibly government budget figures.

With respect to documentation, we found that none of the indicators was supported by analysis explaining how the out-year targets were estimated and the performance related to Mission activities. For example, under the indicator, *Community-based income (gender desegregated) generated by sustainable income-generating options adopted in/around selected protected areas*, the unit of measure is cumulative thousands of U.S. dollars. The final target for this indicator is \$155,000, desegregated by gender with \$70,000 for men and \$85,000 for women for year 2001. The Mission, however, could not provide any analysis to demonstrate how these figures were derived.

An additional example is the out-year targets for the indicator *Completion, approval, publication and implementation of environmental law*. From 1998 to 2001 the target increases from 20 percent to 80 percent with the unit of measure being compliance with

law and/or enforcement achieved among increasing percentage of citizenry. As with community-based income, the Mission did not have an analysis to explain how these targets were estimated.

In addition to being undocumented, the out-year targets were not always realistic. For example, the indicator *Andean condor preserved and protected* has a target of 100 percent increase in the population in the year 1999. Mission officials stated, however, that due to the relatively slow reproductive cycle, a pair of condors usually can produce only one offspring once about every two years. Consequently, if it takes two years for the reproduction of one offspring, the population increase would only be fifty percent in the two years between 1997 and 1999. Therefore, the performance targets are double the realistic maximum value.



Taking latitude and longitude using satellite communications as part of a USAID-financed activity to provide legal title to ancestral lands (March 1997)

As with other findings in this report, the cause for the above conditions can be partially attributed to the fact that the Mission had an existing portfolio of projects when the requirement to reengineer became effective which did not meet the performance target and baseline requirements of the new strategic framework. The existing portfolio was not originally designed in the context of performance targets and baselines for the new strategic framework performance indicators. The cause is also partially attributed to the fact that the reengineering guidance and requirements were new and not fully understood by Mission officials. Since the implementation of reengineering is a learning process that takes some time to complete, Mission officials had not been able to fully comply with all

of the requirements for developing performance targets and associated baselines for their first strategic framework.

Similar to the previous findings, poorly defined targets may adversely affect the Mission's performance monitoring and evaluation system. In contrast, targets that are well-defined bring the purpose for undertaking a program into clear view. They help to justify a program by describing in concrete terms what USAID's investment will produce. Targets also help to establish a clear management contract between a USAID operating unit and the managers to whom that unit reports. When performance data is collected, performance targets affect the way in which the data is analyzed, reported, reviewed, and used as a basis for decision making. The ultimate aim of performance monitoring systems is to promote performance-based decision making. If poorly defined targets are set and program results do not meet these targets, this could adversely affect the Mission's ability to use the information to improve performance, effectiveness and design of activities; decide whether to revise strategies, plan new ones, or abandon existing strategies; and document findings on the impact of development assistance.

Did USAID/Ecuador, for its natural resources management and biodiversity activities, in accordance with Agency directives and in support of USAID's actions to comply with the Government Performance and Results Act, develop a system for collecting and reporting accurate performance data?

USAID/Ecuador developed and implemented a system for collecting and reporting accurate performance data from its development partners; however, this system was limited to various data elements at the activity and sub-activity levels, and did not support the performance indicators in the Mission's strategic framework.

USAID/Ecuador's performance monitoring system of its seven development partners required quarterly performance reports from six and monthly reports from the seventh. For example, CARE's report contained sixteen activity data elements under the various project sub-components; for The Nature Conservancy's report, there were 35 activity data elements. These elements, which reported on activity inputs, outputs, and processes, are the type of data used by activity managers. For example, partners reported on such elements as short term technical assistance to local environmental organizations, demarcation of ecological reserve boundaries, mapping and feasibility studies, community agreements for provision of park guards, community workshops, and promotion of policies.

The Mission, nevertheless, did not integrate this existing data collection and reporting system with the new strategic framework and associated performance indicators. The new performance monitoring plan did not integrate all of the existing data that was collected,

nor did it provide for additional data necessary to support the new strategic framework performance indicators, thereby resulting in data collection and reporting errors.

USAID/Ecuador Needs to Revise its Performance Monitoring Plan to Establish Procedures to Ensure That Accurate Data is Collected and Reported

Agency guidance states that operating units should establish and maintain performance monitoring systems that regularly collect data which enable the assessment of progress towards achieving results. Although prior to reengineering USAID/Ecuador had such a system in place for collecting and reporting accurate performance data against the cooperative agreements of each partner, it did not revise this system to incorporate the collection of data for the performance indicators of the new strategic framework. As a result, it experienced data collection and reporting errors. These problems can be partially attributed to the fact that the Mission had an existing portfolio of projects when the requirement to reengineer became effective, which was not originally designed to produce the required performance data of the reengineered results framework. Because the Mission did not consolidate the two systems and continued to primarily manage its portfolio by partner-reported activity data, it did not have an effective performance monitoring system, allowing it to determine how to improve and revise the design of existing strategies or plan new ones; decide whether to abandon current strategies that are not achieving intended results; and document the results of its development activities.

Recommendation No. 5: We recommend that USAID/Ecuador, in conjunction with its development partners:

5.1 revise the performance monitoring plan for its environmental strategic objective to include procedures consistent with the Automated Directives System guidance and the Agency's Center for Development Information and Evaluation *Tips No. 7, Part II*, to ensure that performance data is complete, accurate, and timely in addition to being analyzed, reviewed and used; and

5.2 revise its reporting procedures, and as necessary, amend the grants and cooperative agreements with its development partners to incorporate the new performance monitoring plan and procedures.

The ADS states that performance monitoring should focus on whether and to what extent objectives are being achieved. Operating units are to establish and maintain performance monitoring systems that regularly collect data which enable the assessment of progress towards achieving results. Strategic objective teams and activity managers are to regularly collect data on inputs, outputs, and processes to insure that activities are proceeding as expected, and are contributing to intermediate results and strategic objectives as anticipated.

In order to assess performance, operating units are to establish performance monitoring systems which meet Agency standards for developing performance indicators and baselines. Information included in a performance monitoring plan should enable comparable performance data to be collected over time, even in the event of staff turnover. Specifically, performance monitoring plans are to define in detail the performance indicators; specify their source, method and schedule of data collection; and assign responsibility for collection to a specific office, team or individual.

CDIE Tips No. 7 expands on these requirements and provides guidance regarding recommended plans for data analysis, reporting, review and use. In addition, it describes various aspects of analysis for use in comparing disaggregated data; comparing current performance against multiple criteria such as past performance, targeted performance, or other bench mark; analyzing relationships among performance indicators; and analyzing cost-effectiveness. Performance monitoring plans promote the collection of comparable data by sufficiently documenting indicator definitions, sources, and methods of data collection, and are a critical tool for planning, managing, and documenting data collection. These plans are essential to the operation of a credible and useful performance-based management approach.

Although USAID/Ecuador had a system in place for collecting and reporting accurate performance data, it did not revise this system to incorporate the collection of performance data for the indicators included in the new reengineered strategic framework. For its strategic framework, the Mission developed a separate and distinct monitoring plan; however, this monitoring plan was not integrated with the existing data collection system. As a result, for the year 1996, we found three types of data collection or reporting errors. Specifically, the Mission reported results that had not occurred, did not collect results that had occurred, and reported quantifiable results that were either unsupported or inaccurate.

Even though the Mission included the requirements of a performance monitoring plan in its results framework, two aspects of the plan did not function as designed, resulting in the collection and reporting of inaccurate performance data. First, the Mission's performance monitoring plan listed numerous incorrect data sources. Second, the system for actual data collection was never implemented and coordinated with the various partners from which the data was to be received.

In documenting the sources from which performance data was to be collected, the Mission's results framework contained errors for four performance indicators. For example, under the indicator *User fees disbursed* the strategic framework provided for four data sources that were incorrect and omitted one source. For *Environmental law implemented*, two sources were omitted. Under *Community based income*, one source was incorrect, and one source omitted. For *Community participation*, two sources were omitted.

With respect to data collection procedures, the Mission already had a system for collecting and reporting accurate performance data from its seven development partners at the time that the new strategic framework was implemented. This performance monitoring plan required quarterly performance reports from six partners and monthly reports from the seventh partner. For example, CARE's report contained sixteen activity data elements under the various project sub-components. For The Nature Conservancy, there were 35 activity data elements. These elements, which reported activity inputs, outputs, and processes, were not integrated with the new strategic framework performance indicators.

The lack of integration between these two performance monitoring systems resulted in three types of collection or reporting errors as listed above. In its reporting of 1996 performance data, the Mission reported 157,500 hectares under the indicator *Selected national parks, reserves and adjacent buffer zones under effective sustainable land use/natural resource management plans*. This figure was reported to include a regional plan near the Cotacachi-Cayapas Ecological Reserve that CARE was implementing. However, in discussion with CARE, we learned that this plan had not been completed or implemented, and therefore, the results for this indicator were overstated. Mission officials were not in agreement as to whether the reported figure included the regional plan or not, nor were they sure exactly what sources comprised the figure.

Under the indicator *Community based income (gender disaggregated) generated by sustainable income-generating options adopted in/around selected protected areas*, the Mission collected and planned to report an annual fiscal year 1996 income figure. However, this figure was derived from The Nature Conservancy's activities around the Cayambe-Coca Ecological Reserve, but did not include the community income generated from the activities of CARE near the Cotacachi-Cayapas Ecological Reserve. CARE officials stated that they were not required under their agreement to collect and report community based income, and therefore, the results for this indicator were significantly understated.

For the indicator *User fees disbursed for protected area management*, the Mission reported \$2.6 million for 1996. Mission officials stated that this figure was incorrect and unsupported and they were uncertain as to the basis for computation. The correct amount needed to be obtained from the Government of Ecuador. As a result, the accuracy of the reported results of this indicator could not be determined.

Similar to the previous findings, the above problems with the performance monitoring plan can be partially attributed to the fact that the Mission had an existing portfolio of projects when the requirement to reengineer became effective. Since the existing portfolio was not originally designed to produce the required data of the reengineered results framework, the Mission's development partners were permitted to continue to report under the original requirements without establishing new procedures to capture and report the additionally required performance data. Although the Mission had designed a new

strategic and results framework, it did not implement the procedures necessary for a functioning performance monitoring plan to support that framework. Instead, the Mission continued to primarily manage its portfolio on the basis of reported activity inputs, outputs, and processes. The cause can also be attributed to the fact that reengineering guidance and requirements were new and probably not fully understood by Mission officials. The implementation of reengineering is a learning process which takes time and involves complex relationships between the various component parts.

The effects of the above problems are similar to previous findings. A monitoring plan with inaccurate performance data will adversely affect the Mission's ability to evaluate the impact and relative value of its activities, intermediate results, and development hypothesis. Inaccurate data will also impair the Mission's ability to review, evaluate, and revise as necessary, the components of its development hypothesis; plan new strategic objectives, results packages and activities; decide whether to abandon current strategies that are not achieving intended results; and document the impact of development activities. Without accurate performance indicators in the Mission's plan, the Mission will not be able to effectively and strategically manage its environmental portfolio for results.

Did USAID/Ecuador, for its natural resources management and biodiversity activities, in accordance with Agency directives and in support of USAID's actions to comply with the Government Performance and Results Act, use performance information to enhance program effectiveness?

We were unable to determine whether USAID/Ecuador used performance information generated for its current strategic framework to enhance program effectiveness. This was due to the fact that the framework was in its first full year of implementation and the annual performance data was not yet complete at the time of our audit.

Were USAID/Ecuador's natural resources management and biodiversity activities making satisfactory progress toward achieving the intended benefits?

For the items tested, USAID/Ecuador's natural resources management and biodiversity activities were making satisfactory progress toward achieving the intended benefits. At the two principal nongovernmental development partners, CARE and the Nature Conservancy, there were no discrepancies with the accomplishments reported. Although the partners' agreements did not contain interim milestones, verified accomplishments compared satisfactorily with final planned accomplishments as set forth in the partners' respective agreements; therefore, indicating that both development partners tested were making satisfactory progress toward achieving the intended benefits.

We are unable, however, to express an opinion concerning whether these activities represented satisfactory progress toward achieving the strategic objective as set forth in the Mission's strategic framework. Due to the problems we found with the Mission's performance monitoring system as reported under the first audit objective, we were unable to use the performance indicators in the Mission's strategic framework to answer this audit objective. Instead, we employed alternative auditing procedures and used performance data reported through the Mission's already existing monitoring system under which its development partners had been reporting activity progress prior to reengineering. Therefore our opinion is limited to progress as measured by the final planned progress as stated in the partners' respective agreements.



Inspecting a native softwood tree in a USAID-financed forestry unit, bordering an ecological reserve, that promotes sustainable forestry practices (March 1997)

For its major environmental activity, USAID/Ecuador's development hypothesis states that by developing ecologically, economically and socially sustainable incentives for resource management in and around critical ecological reserves, the pressure will be reduced to

exploit local natural resources and biodiversity. By developing sustainable resource management policies and models to improve the economic well-being of local communities through their participation in the management of natural resources, communities will not need to pursue nonsustainable and exploitative practices which would further degrade critical ecological areas. Mission officials stated that this type of active participatory management offers significant advantages because human activities in the buffer zones of ecological reserves have direct consequences and impact on biodiversity conservation both within the reserves and around them.

To achieve this participation, the Mission's activities are organized under five components entitled: (1) *institutional strengthening and organizational development*; (2) *policy and legal issues*; (3) *commercialization and marketing*; (4) *improved land use management*; and (5) *biodiversity research*. Implementation of these components is carried out by two nongovernmental development partners--CARE and The Nature Conservancy. Mission accounting records show \$3.5 million in obligations for these two partners, comprising about 70 percent of the obligations for USAID's natural resources management and biodiversity activities in Ecuador for fiscal years 1994, 1995 and 1996.

The world's most biologically diverse, unique and threatened natural areas have the most urgent priorities for biological conservation efforts. The top ten of these areas contain more than a quarter of all plant species found in tropical forests, although they only occupy 0.2 percent of the Earth's surface. Two of the top ten of these areas are located in Ecuador. The lowland wet forests of western Ecuador rank in the top three of the most critical areas on earth. It is in this area that USAID/Ecuador's natural resources management and biodiversity activities were primarily located--the buffer zone adjacent to the Cotacachi-Cayapas Ecological Reserve.

For those managed by CARE, we tested various aspects of eight activities out of a total sixteen activities under the above components. Under *policy and legal issues*, CARE-trained community-based paralegals are responding to land tenure and resource rights issues. USAID/Ecuador officials noted that land titling for the local communities is essential because land ownership is the basis for implementing land management plans for long-term sustainable usage and resource conservation. The land in one community has been surveyed and titled and CARE personnel are currently working in nine other communities to survey and title those lands, through organizing community meetings regarding land titling, and through satellite mapping as part of the land surveying and titling effort.

Under the component, *commercialization and marketing*, the main purposes of the activities are to assist the local communities in managing their lands in a sustainable fashion in order to generate additional income, as well as conserve their lands, and also to reduce pressure to exploit the resources in the adjacent reserve. CARE assisted in marketing studies and negotiations among producers and purchasers in such initiatives as sustainable timber harvesting and sales, in addition to ecotourism. Through CARE

subrecipients, the activities also provide micro-enterprise development assistance in both traditional and non-traditional products.

Under *improved land use management*, the USAID-financed activities facilitated the development and realization of an environmentally sustainable community natural resource management plan by training forestry para-technicians and local extensionists in natural forest management and sustainable agriculture. A community natural resource management plan for one community has been completed with a regional plan currently in the concept stage.

For *institutional strengthening and organizational development*, CARE is providing technical assistance, training, equipment, budget support for administrative staff, and planning assistance to three national partner organizations, 20 communities, and three local community organizations to enable them to independently design, implement, and evaluate conservation and organizational initiatives. Through community agreements, CARE is providing other technical assistance in such areas as timber price negotiation, agroforestry management, and handicraft manufacturing. Full-time organizational strengthening personnel are also being provided to communities. CARE has also provided additional assistance such as office space and equipment at various field sites.

Through the last component, *biodiversity research*, the goal of USAID-financed activities is to measure biodiversity changes, to better understand biodiversity in the area around the ecological reserve, and to disseminate the results of the studies to enable local residents to apply sustainable land use practices. For example, there were ongoing studies involving the economic use of the rampira palm, and research into various local species such as spiny rats, bats and parrots. These activities are also sponsoring ongoing biological research to assess the impact of project activities, including, for example, technical reports on vertebrates and forestry activities, as well as finalization of satellite imagery studies of the area to measure biodiversity changes.

At The Nature Conservancy, we tested various aspects of eight reported USAID-financed activities out of a total of 35 activities in and around the Cayambe-Coca Ecological Reserve, which have the same purpose as the CARE activities discussed above--to promote sustainable uses of natural resources to preserve biodiversity and improve the economic well-being of the local communities. These activities included: (1) institutional strengthening to a local nongovernmental organization which works for the continued preservation of the reserve; (2) ecological studies such as analyzing current biological resources and use of soils; (3) a community workshop on the sustainable use of natural resources; (4) the employment of community guards for the neighboring reserve; and (5) the establishment of reserve boundaries.

Management Comments and Our Evaluation

USAID/Ecuador generally agreed with the findings and recommendations in this audit

report. The Mission revised its strategic plan to include an environmental strategic objective that is more focused geographically and programatically such that the Mission's environmental program will be able to materially affect the objective. The revised plan also contains revised intermediate objectives which are causally linked to the strategic objective. The revised performance indicators in the plan also comply with Agency directives. In addition, the plan provides for established baselines and documented interim performance targets for the performance indicators. The Mission has also prepared a revised performance monitoring plan and procedures, establishing the necessary controls to ensure that performance data conforms to Agency guidance and is analyzed and used as intended.

As a result of the above, we consider USAID/Ecuador's revised strategic plan and performance monitoring plan fully responsive to the recommendations in this report. Consequently, we consider USAID/Ecuador as having reached a management decision with the publication of this report.

USAID/Ecuador's complete comments are included in Appendix II of this report.

SCOPE AND METHODOLOGY

Scope

The Office of the Regional Inspector General/San Salvador audited USAID/Ecuador's environmental activities to determine whether the Mission had developed strategic and annual plans and performance indicators, collected and reported accurate data, and used performance information to effectively manage its activities for natural resources management and biodiversity. We conducted the audit in accordance with generally accepted government auditing standards.

Audit field work was performed from October 31, 1996, through March 19, 1997, at the offices of USAID/Ecuador and two development partners, CARE and The Nature Conservancy in Quito. We also inspected USAID-financed activities at three ecological reserves and associated buffer zones. In addition, we obtained written management representations as they pertained to the activities under audit. As of September 30, 1996, USAID had obligated a total of \$10.7 million and expended \$8.1 million in support of the Mission's strategic objective.

Methodology

Our audit objective was to determine if USAID/Ecuador developed a strategic plan and an annual plan which were consistent with the Agency's strategic framework, developed performance indicators which were consistent with Agency goals, developed a system for collecting and reporting accurate performance data, and used performance information to enhance program effectiveness for natural resources management and biodiversity activities. An additional objective was to determine if these activities were making satisfactory progress toward achieving the intended benefits. In answering these objectives, we interviewed officials from USAID/Ecuador's strategic objective 4 team, as well as the officials from offices and project sites for selected development partners; examined appropriate records and documentation at these locations; and assessed management controls over the development of a strategic and annual plan, including the development of a system for collecting, reporting, and using performance information. As part of a centrally coordinated world-wide audit, we used standardized auditing procedures for our work in Ecuador and in planning the audit. We assessed the Mission's

risk exposure to be moderate.

For the first audit objective, we began by reviewing Agency, Latin America and Caribbean Bureau, and Mission reengineering guidance. We then analyzed the Mission's R4, strategic framework, progress reports and reviews thereof, and other associated documents to determine compliance with appropriate guidance in implementing USAID's reengineered management system.

Since the Mission had, in effect, a distinct reporting system using activity inputs, outputs and processes reported by its partners to measure progress against the planned accomplishments in the cooperative agreements for each partner, we examined performance data from this distinct reporting system to assess whether activities were making satisfactory progress toward achieving the intended benefits. In order to make this assessment, we judgmentally selected certain aspects of eight reported activities out of a total of sixteen at CARE and certain aspects of eight reported activities out of a total of 35 activities at The Nature Conservancy for testing and verification. We selected those activities that were similar to indicators within the Mission's environmental framework.

At CARE, the Mission's principal partner, and at The Nature Conservancy, we tested reported activity accomplishments through a documentation review at the partners' offices and inspections of activities at field locations to answer the second audit objective. Due to the problems we found with the Mission's performance monitoring system as reported under the first audit objective, we were unable to use the performance indicators in the Mission's strategic framework to answer this audit objective. Instead, we employed alternative auditing procedures and used performance data reported through the Mission's already existing monitoring system under which its development partners had been reporting activity progress prior to reengineering.

United States Agency for
International Development (USAID)
Quito, Ecuador



Agencia de los Estados Unidos para
el Desarrollo Internacional (USAID)
Quito, Ecuador

APPENDIX II
Page 1 of 4

July 2, 1997

Mr. Craig Nordby
RIG/San Salvador
Unit 3110
APO AA 34023-3110
San Salvador, El Salvador

Dear Mr. Nordby:

Thank you for sending the draft report on the Audit of USAID/Ecuador's Implementation of the Government Performance and Results Act for Environment, Natural Resources Management and Biodiversity Activities which your audit team presented to the Mission. We have reviewed the report within the Mission with respect to the specific recommendations and have the following comments:

Recommendation No. 1: We recommend that USAID/Ecuador revise its strategic objective for the environment to reflect the development approaches and geographical scope of its environmental activities so that the intended results of these activities will be able to materially and measurably affect the strategic objective.

USAID/Ecuador has revised its environmental/natural resources strategic objective, following this recommendation. (See Attachment A). Our new strategic objective, "Conserve Biodiversity in Selected Protected Areas," is more focussed both geographically (specific areas) and thematically (oriented to biodiversity only). At the same time, the intermediate result dealing with urban environment has been dropped from this objective and integrated into a special objective: "Improved sustainable capacity of selected private and public institutions to prevent/control pollution." The new environmental/natural resources objective is directly linked to the Agency's Objectives 4.1 and 4.3, "Biological Diversity Conserved," and Sustainable Natural Resources Management," respectively.

Recommendation No. 2: We recommend that USAID/Ecuador revise its strategic objective for the environment to:

2.1 identify the key intermediate results for its environmental program that have causal relationships to the strategic objectives and represent the development hypothesis of the Mission; and

2.2 establish appropriate results packages for the new intermediate results.

As per attachment A, ANRO has identified two intermediate results for this strategic objective, which represent the development hypothesis of the Mission, i.e., that the objective of biodiversity conservation can best be achieved through improved management of specific protected areas and their buffer zones. The first IR refers to the strengthened capacity of NGOs/CSOs (Civil Society Organizations) active in biodiversity conservation; it considers their active and consistent participation, as well as their administrative or financial strengthening.

For the second intermediate result, cause/effect linkages are even clearer, since it includes practical work conducive to biodiversity protection in the selected protected areas of the Cotacachi-Cayapas and Cayambe-Coca Ecological Reserves.

Likewise, the four results packages are better focussed in relation to the intermediate results. Three of them are directly related to protected areas and the fourth to the protection of an endangered species. Policy result packages will not be mixed with biodiversity results and indicators will reflect what RP teams (including our partners) are achieving, and not simply adding information to be obtained from other sources.

Recommendation No. 3: We recommend that USAID/Ecuador revise its strategic plan for environment so that:

3.1 the performance indicators at the strategic objective level are (a) direct and measure the intended impact on the environment, (b) adequate in number and scope to capture the results of all activity outcomes and outputs, either directly or through intermediate results, that are anticipated by the Mission's development hypothesis, and (c) consistent with Agency development goals; and

3.2 the performance indicators at all levels of the framework are unidimensional, precisely defined, objectively verifiable, and are a measure of the performance of USAID-financed activities.

The Mission development hypothesis is that the biodiversity conservation objective can best be achieved through improved management of specific protected areas and their buffer zones. Incursion into parks and reserves and their buffer zones occurs in response to perceived economic necessity. The greatest threats to biodiversity in Ecuador derive from demands on natural resources from land clearing by squatters, logging, oil exploration and other activities. Informed decisions by resource users must be based upon increased knowledge regarding economic as well as the social value of resources and the inter-relationships between community lands in the buffer zones and the lands within the ecological reserves. Access to resources is integral to the well-being of these communities and their active participation in decision-making is essential to the achievement of sustainable, environmentally sound, long-term results.

32

The proposed performance indicators of the revised strategic objective and those of the proposed intermediate results are direct and measure the intended impact on the environment of USAID activities. They fulfill the conditions indicated in the audit, as they are unidimensional, precisely defined, and objectively verifiable. They are also adequate and capture the results of all activities' outcomes and outputs.

Recommendation No.4: We recommend that USAID/Ecuador revise the Strategic Plan for its environmental strategic objective to include interim and final performance targets that:

4.1 have documented baselines derived from the original values and trends of the respective performance indicators; and

4.2 are supported by adequate analysis consistent with the Agency's Center for Developmental Information and Evaluation guidance.

USAID/Ecuador has revised the Strategic Plan for its environmental strategic objective as recommended. The new targets are based on more precise baselines and are supported by well documented facts. The new strategic plan (attached) satisfies this recommendation.

Recommendation No. 5: We recommend the USAID/Ecuador, in conjunction with its development partners:

5.1 revise the performance monitoring plan for its environmental strategic objective to include procedures consistent with the Automated Directives System guidance and the Agency's Center for Development Information and Evaluation, TIPS No. 7, part II, to ensure that performance data is complete, accurate, and timely in addition to being analyzed, reviewed and used;and

5.2 revise its reporting procedures, and as necessary, amend the grants and cooperative agreements with its development partners to incorporate the new performance monitoring plan and procedures.

Under the new Environmental Support Program, under design, section 5., Performance Monitoring and Evaluation, reflects ADS and CDIE guidance regarding performance monitoring plans. As stated therein, Cooperative Agreements with the main implementing partners (CARE, The Nature Conservancy, The Charles Darwin Foundation) include reporting requirements, and discussions with the partners who will ensure reporting on the respective intermediate results and corresponding indicators, as shown in the Biodiversity Indicator Tables. This will ensure that all concerned partners have common and clearly-defined targets to guide the implementation of activities. In turn, these NGOs will guarantee that the Ecuadorian and local NGOs have in place the necessary data collection and analysis systems needed for accurate, timely and pertinent information to measure the impact of the planned activities towards the attainment of the Biodiversity Strategic Objective. The Environmental Team will meet at least every three months to examine available information, review implementation progress and make any changes in implementation modes and

resources, as required. At least one USAID/Ecuador member of the Team will work with each of the specialized organizations (different members will monitor different target sites) on performance monitoring and implementation matters.

Once we are notified that the revised SO is approved by USAID/W, we will take steps to implement the improved performance monitoring and evaluation plans with our partners (see Attachment B). Based on the above, the Mission requests that these recommendations be closed.

I want to take this opportunity to thank you and your audit staff for their professionalism. The timing of their work was fortuitous and allowed us to redesign the SO and improve linkages with indicators. As noted above, currently USAID/W is reviewing the Strategic Plan and R4, and we hope to receive an approval cable shortly.

Cordially,



Marjorie A. Lewis
Acting Director

Attachments:

Attachment A SO4 Strategic Plan (in revision)
Attachment B Environment Support Program,
Activity Design Document (draft)

USAID/ECUADOR
STRATEGIC OBJECTIVE NO. 4 STRATEGIC FRAMEWORK

APPENDIX III

**STRATEGIC OBJECTIVE 4:
 THE ENVIRONMENT MANAGED FOR LONG-
 TERM SUSTAINABILITY**

(Strategic Objective Level)

Indicator: Completion, approval, publication and implementation of a National Environmental Action Plan (status of plan, degree of implementation)

**INTERMEDIATE RESULT 4-A
 IMPROVED CONSERVATION AND MANAGEMENT
 OF NATURAL RESOURCES**

Indicator: Selected national parks, reserves and adjacent buffer zones under effective sustainable land use/natural resource management plans (thousands of hectares)

Indicator: User fees disbursed for protected area management (millions of dollars)

**INTERMEDIATE RESULT 4-B
 IMPROVED MANAGEMENT OF URBAN
 ENVIRONMENT
 AND POLLUTION PREVENTION**

(Immediate Results Level)

Indicator: Municipalities with council-level approved tariff reforms to improve urban services cost recovery (number of municipalities)

Indicator: Pollution prevention/mitigation programs adopted by firms, municipalities and communities (number of entities that adopt model)

**RESULT PACKAGE
 4-A-1**

Adoption of improved practices to conserve biodiversity

- Unique biodiverse status of the Galapagos Islands protected
- Biodiversity research utilized for planning and decisions
- Andean condor preserved and protected
- Environmental law implemented *

**RESULT PACKAGE
 4-A-2**

Adoption of improved practices to manage natural resources

- Protected areas and adjacent buffer zones under sustainable land use/natural resource management plans
- User fees dedicated to protected area management
- Community based income generated by sustainable income generating options adopted in/around protected areas
- Community participation in management of protected areas
- Standard environmental impact assessment methodology adopted *
- National Environmental Fund (NEF) established and endowed *

**RESULT PACKAGE
 4-B-1**

Adoption of improved municipal environmental management practices

- Municipalities with council-level approved tariff reforms to improve urban services cost recovery
- Provision of joint public/private solid waste services increased
- Municipal solid waste management improved
- Curriculum for environmental education revised and expanded to vocational schools
- Management and finance of potable water systems decentralized

**RESULT PACKAGE
 4-B-2**

Adoption of improved practices for prevention and control of pollution

- Pollution prevention/mitigation programs adopted by firms and municipalities-communities
- Oil disaster clean-up fund established and endowed *
- Improved pesticide management policies and practices adopted *
- Cleaner industrial operations implemented

* Distributed across packages for administrative convenience

(Activity Level)

Glossary of Terms Used in Report

The following definitions of terms used in the report are to be found in USAID's Automated Directives System Number 203. These terms are listed in alphabetical order and not in the order they appear in the report.

Intermediate Result (IR): A key result which must occur in order to achieve a strategic objective.

Management Contract: The management contract consists of the strategic plan (including strategic objectives and supporting results frameworks) together with official record of the guidance emerging from the review of the plan. The management contract provides: a summary of agreements on a set of strategic and other objectives; confirmation of estimated resources over the strategy period; delegations of authority; and an overview of any special management concerns.

Partner (Development Partner): An organization or customer representative with which/whom USAID works cooperatively to achieve mutually agreed upon objectives and intermediate results, and to secure customer participation. Partners include: private voluntary organizations, indigenous and other international non-government organizations, universities, other USG agencies, U.N. and other multilateral organizations, professional and business associations, private businesses (as for example under the U.S.-Asia Environmental Partnership), and host country governments at all levels.

Performance Baseline: The value of a performance indicator at the beginning of a planning and/or performance period. A performance baseline is the point used for comparison when measuring progress toward a specific result or objective. Ideally, a performance baseline will be the value of a performance indicator just prior to the implementation of the activity or activities identified as supporting the objective which the indicator is meant to measure.

Performance Indicator: A particular characteristic or dimension used to measure intended changes defined by an organizational unit's results framework. Performance indicators are used to observe progress and to measure actual results compared to expected results. Performance indicators serve to answer "whether" a unit is progressing towards its objective, rather than "why/why not" such progress is being made. Performance indicators are usually expressed in quantifiable terms, and should be objective and measurable (numeric values, percentages, scores and indices). Quantitative indicators are preferred in most cases, although in certain circumstances qualitative indicators are appropriate.

Performance Monitoring System: An organized approach or process for systematically monitoring the performance of a program, process or activity towards its objectives over time. Performance monitoring systems at USAID consist of, inter alia: performance indicators, performance baselines and performance targets for all strategic objectives, strategic support objectives, special objectives and intermediate results presented in a results framework; means for tracking critical assumptions; performance monitoring plans to assist in managing the data collection process; and the regular collection of actual results data.

Performance Target: The specific and intended result to be achieved within an explicit timeframe and against which actual results are compared and assessed. A performance target is to be defined for each performance indicator. In addition to final targets, interim targets also may be defined.

Results Framework: The results framework represents the development hypothesis including those results necessary to achieve a strategic objective and their causal relationships and underlying assumptions. The framework also establishes an organizing basis for measuring, analyzing, and reporting results of the operating unit. It typically is presented both in narrative form and as a graphical representation.

Results Package: A results package (RP) consists of people, funding, authorities, activities and associated documentation required to achieve a specified result(s) within an established time frame. An RP is managed by a strategic objective team (or a results package team if established) which coordinates the development, negotiation, management, monitoring and evaluation of activities designed consistent with: (1) the principles for developing and managing activities; and (2) achievement of one or more results identified in the approved results framework. The purpose of a results package is to deliver a given result or set of results contributing to the achievement of the strategic objective.

Results Review and Resource Request (R4): The document which is reviewed internally and submitted to USAID/W by the operating unit on an annual basis. The R4 contains two components: the results review and the resource request. Judgement of progress will

be based on a combination of data and analysis and will be used to inform budget decision making.

Strategic Objective: The most ambitious result (intended measurable change) that a USAID operational unit, along with its partners, can materially affect and for which it is willing to be held responsible. The strategic objective forms the standard by which the operational unit is willing to be judged in terms of its performance. The time-frame of a strategic objective is typically 5-8 years for sustainable development programs, but may be shorter for programs operating under short term transitional circumstances or under conditions of uncertainty.

Strategic Objective Team: In general, a team is a group of people committed to a common performance goal for which they hold themselves individually and collectively accountable. Teams can include USAID employees exclusively or USAID, partner, stakeholder and customer representatives. An strategic objective team is a group of people who are committed to achieving a specific strategic objective and are willing to be held accountable for the results necessary to achieve that objective. The strategic objective team can establish subsidiary teams for a subset of results or to manage a results package.

Strategic Plan: A plan for providing development assistance; the strategic plan articulates the mission, goals, objectives, and program approaches.
