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TROPICAL FORESTRY AND BIODIVERSITY (FAA 118 AND 119) ANALYSES: LESSONS LEARNED AND BEST PRACTICES FROM RECENT USAID EXPERIENCE



SEPTEMBER 2005

This publication was produced for review by the United States Agency for International Development. It was prepared by ARD, Inc.



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This report was produced by ARD, Inc. for the United States Agency for International Development under the Biodiversity and Forestry (BIOFOR) IQC, Contract No. LAG-I-00-99-00013-00, Task Order No. 2.

COVER PHOTO:

Maasai herders in the Ngorongoro Conservation Area, a multiple-use protected area in northern Tanzania. Credit: Bruce A. Byers, ARD, Inc.

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DISCLAIMER

The author's views expressed in this publication do not necessarily reflect the views of the United States Agency for International Development or the United States Government.

CONTENTS

- Abbreviations and Acronyms iii**
- 1.0 Introduction 1**
 - 1.1 Purpose of this Review of USAID’s Recent FAA 118 and 119 Experience 1
 - 1.2 Methods..... 2
- 2.0 Importance of FAA 118 and 119 for USAID 3**
 - 2.1 Benefits to USAID Missions 3
 - 2.2 Legal Requirements 3
 - 2.3 Using FAA 118/119 Analyses in Strategy Design..... 4
- 3.0 Elements of Best Practices 5**
 - 3.1 Types and Objectives 5
 - 3.2 Timing..... 6
 - 3.3 Scope of Work (SOW)..... 7
 - 3.4 Level of Effort (LOE) 7
 - 3.5 Forming Analysis Teams 7
 - 3.6 USAID Staff Involvement 8
 - 3.7 Stakeholder Consultation..... 9
 - 3.8 Report Contents 9
 - 3.9 Report Length..... 10
- 4.0 Report Content Details..... 11**
 - 4.1 Executive Summary..... 11
 - 4.2 Introduction..... 11
 - 4.2.1 Purpose 11
 - 4.2.2 Methods 12
 - 4.3 Status of Biodiversity 12
 - 4.3.1 Definition and Elements of Biological Diversity..... 12
 - 4.3.2 Values and Economics of Biodiversity and Forests..... 17
 - 4.3.3 Sources of Biodiversity Information..... 18
 - 4.3.4 Maps..... 18
 - 4.4 Status of Tropical Forests 21
 - 4.5 Social, Economic, and Political Context 21
 - 4.5.1 Social and Economic Environment 21
 - 4.5.2 Institutions, Policies, and Laws Affecting Conservation..... 22
 - 4.6 Government, NGO, and Donor Programs and Activities..... 24
 - 4.6.1 Government Programs and Activities 24
 - 4.6.2 NGO Programs and Activities 25
 - 4.6.3 Donor Programs and Activities 26
 - 4.7 Threats to Biodiversity..... 27
 - 4.7.1 Direct Threats 27
 - 4.7.2 Indirect Threats and Root Causes 27
 - 4.8 Actions Needed to Conserve Biodiversity and Forests 31
 - 4.9 Links to USAID Strategy and Program 32
 - 4.9.1 Extent to Which Proposed USAID Actions Meet Needs..... 32
 - 4.9.2 Threats from Proposed USAID Activities 33
 - 4.9.3 Opportunities for Linkages with Proposed USAID Activities 33
 - 4.10 References Cited..... 34
 - 4.11. Abbreviations and Acronyms 35
 - 4.12. Appendices 35

Appendices	37
Appendix 1. Working Group Members & Contact Information	39
Appendix 2. Country Examples Reviewed	40
Appendix 3. Analytical Questions	41
Appendix 4. Model SOW for Biological Diversity (FAA 119) Analysis or Tropical Forestry and Biodiversity (FAA 118 and 119) Analysis	44
Appendix 5. Model SOW for ETOA or Strategic Environmental Analysis ...	48
Appendix 6. Model Table of Contents Outline for Reports	53
Appendix 7. Issues Regarding the Use of Maps in Reports	55
Appendix 8. Best Practice Example from Mexico FAA 118/119 Report	58
Appendix 9. References Cited in This Report	61
Appendix 10. References for Best Practices Examples (by country)	62

ABBREVIATIONS AND ACRONYMS

ADS	Automated Directives System of USAID
AWF	African Wildlife Foundation
CBD	Convention on Biological Diversity
CI	Conservation International
CIFOR	Center for International Forestry Research
CITES	Convention on International Trade in Endangered Species
DG	Democracy and Governance
EGAT	Economic Growth, Agriculture, and Technology Bureau of USAID
ETOA	Environmental Threats and Opportunities Assessment
FAA	Foreign Assistance Act
FAO	Food and Agriculture Organization of the UN
GEF	Global Environment Facility
IR	Intermediate Result
IUCN	International Union for the Conservation of Nature/World Conservation Union
LOE	Level of Effort
MA	Millennium Ecosystem Assessment
NBSAP	National Biodiversity Strategy and Action Plan
NRM	Natural Resources Management
SO	Strategic Objective
SOW	Scope of Work, Statement of Work
TNC	The Nature Conservancy
USAID	US Agency for International Development
UNCCD	UN Convention to Combat Desertification
WCS	Wildlife Conservation Society
WWF	World Wildlife Fund

Note: this list contains only abbreviations and acronyms used in the text; numerous abbreviations and acronyms are used in the “Best Practice Examples,” but not all of these are listed here.

I.0 INTRODUCTION

I.1 PURPOSE OF THIS REVIEW OF USAID'S RECENT FAA 118 AND 119 EXPERIENCE

This review of USAID's recent experience in conducting and using Tropical Forestry and Biodiversity analyses was designed to identify the lessons learned from that experience, and to develop updated recommendations and practical, "how to" advice for Missions or Regional Bureaus based on the best practices that could be found.

In amendments to the Foreign Assistance Act of 1961, Sections 118 and 119, enacted in 1987, Congress imposed mandatory "Country Analysis Requirements" related to the conservation and sustainable use of tropical forests and biological diversity on the U.S. Agency for International Development.

Since 1987, several generations of tropical forestry and biodiversity analysis analyses have been completed. In 1994 the Africa Bureau reviewed the first generation of experience in that region in the paper "Consideration of Biological Diversity and Tropical Forestry in the Context of Country Program Strategy Planning in the Bureau for Africa: Review and Guidelines." http://www.dec.org/pdf_docs/PNABX169.pdf

The current ADS information (see ADS 200: 201.3.8.2 Environmental Analysis, Effective Date: 01/31/2003, 03/19/2004 Revision) refers missions to ADS 200-203 for additional help, in a document called "Summary Description of FAA sections 118 (e) and 119 (d) Requirements for Preparing Strategic Plans" (<http://www.usaid.gov/policy/ads/200/200saj.pdf>). That document states that "We have not been able to locate much Agency guidance on the subject." It is basically a restatement of FAA Sections 118 and 119, and further refers missions seeking help to a guidance cable of February, 1988, "Guidance for Preparation of Background Assessments on Biological Diversity and Tropical Forests for Use in CDSS or Other Country Plans" (<http://www.usaid.gov/policy/ads/200/200sbh.pdf>). The current ADS information also suggests that missions should contact the EGAT/NRM Office Forestry Team for additional information on FAA 118 analyses, and the EGAT/NRM Biodiversity Team for information on FAA 119.

In practice, each regional bureau has been responsible for supporting missions in its region. No regional bureau has reviewed its experience with FAA 118/119 analyses since the Africa Bureau study of 1994, and USAID as a whole has never done so. Current guidance does not reflect valuable recent experience or changing needs and practices within the Agency.

Some of the issues with the current process of conducting FAA 118/119 analyses include:

- The approach and content of these analyses, even those done within the past five years has been highly variable between, and even within, regions;
- Missions are often unclear about the purpose and intent of these analyses. This is especially true for missions not planning environmental or natural resources Strategic Objectives (SOs). Those missions often do not have a clear idea of how to make use of information from the required FAA 118/119 analyses to inform their strategic planning process;
- In some cases it has been difficult for regional bureau environmental staff and legal counsel to assess even whether the legal requirements of the FAA Sections 118 and 119 are met by the country analysis reports submitted by missions;

- Some of the guidance being used, such as the 1988 guidance cable, is old, and both knowledge and practice of biodiversity and tropical forest conservation, and USAID experience and practice, have changed since then; and
- FAA 119 analyses may be using a narrow definition of biodiversity (often focusing at the species level, rather than taking a genetic-level or ecosystem-level focus, or rather than including ecological services or other valuable elements of biodiversity), and limiting opportunities for integration across development sectors when there is no environmental, forestry, or biodiversity SO in a Country Strategic Plan.

The lessons learned and best practices described in the main body of this report are intended to provide *more standardized*, but still flexible ways of conducting these required analyses that can be tailored to mission needs. To use an analogy, we don't intend for these recommendations to be a *rigid recipe*, but Missions should all know that they are required to cook "*pancakes*," and not fish soup, spaghetti, *or* pancakes. While these can be "pancakes" of various kinds – buttermilk, blueberry, banana, blini, blintzes, or crepes – they still must follow the basic recipe for "pancakes" <http://www.cooks.com/rec/story/163>.

Illustrative Scopes of Work (SOWs) for conducting these analyses in a spectrum of situations are provided in Appendices 4 and 5. Missions with planned environmental or natural resources SOs could undertake more comprehensive assessments to best identify key areas for intervention. Other missions could undertake less detailed assessments, which would nevertheless meet the legal requirement, and offer targeted, easily-applied recommendations for both: 1) ways to avoid negative program impacts, and, 2) opportunities to generate positive environmental impacts through the SOs and IRs of other sectors and programs. An illustrative outline and Table of Contents for an analysis report is provided in Appendix 6.

1.2 METHODS

The lessons learned, best practices, and recommendations given in this report are the result of a process of critical review and analysis that began in December, 2004. The process was launched at a meeting of Bureau Environmental Officers and other environmental staff from the Regional Bureaus, the Agency Environmental Coordinator, and representatives from the EGAT NRM Office. A Working Group, consisting of representatives from the four Regional Bureaus and the Agency Environmental Coordinator, was formed at that meeting to coordinate input to the review (see Appendix 1 for a list of Working Group Members and their Contact Information).

Working Group representatives recommended examples of recent FAA 119 or 118/119 analyses from their region that they felt would provide useful lessons, examples of best practices, models, or other insights about the FAA 118/119 analysis process. They also provided representative SOWs used in their region, other materials, or suggestions for further contacts in Missions. A list of approximately 30 FAA 119 or combined 118 and 119 analyses, done within approximately the last five years, were proposed for review. A list of analytical themes and questions, to be used in a comparative review of the recommended examples of 118/119 analyses, was developed based on the discussion at the initial meeting in December, input from the Working Group, and a review of selected 118/119 analyses. A request for comments on this analytical instrument was sent to the working group and all others on the contact list in February, 2005. These themes and questions were revised based on input received, and were then used as a tool for comparative review of the cases (see Appendix 2 for a list of the Country Examples Reviewed, and Appendix 3 for the Analytical Questions that were used). Initially, several country analyses were reviewed independently both two ARD consultants in order to cross-check and validate the analytical questions. During the review of cases, communication with selected Working Group members, consultants, and mission staff helped to answer questions that arose and provided additional insights about the cases.

A draft of this report, containing the findings of the review and analysis, was circulated for comment in March, 2005, and discussed in detail at a meeting of the Working Group and other interested persons in April, 2005. Suggestions and comments from that meeting and from further discussions with Working Group members have been incorporated into this final version.

2.0 IMPORTANCE OF FAA 118 AND 119 FOR USAID

2.1 BENEFITS TO USAID MISSIONS

The main reason that USAID Missions should take FAA 118 and 119 analyses seriously is that biological diversity is a necessary foundation of *all* sustainable development. In mandating these analyses, the intent of Congress clearly was to support sustainable development, not to add an unnecessary burden to USAID's work. These analyses have a number of benefits to Missions, and are valuable not only in strategy design but throughout the implementation of a country strategy.

The benefits of taking biodiversity or tropical forestry analyses seriously include the following tactical and strategic considerations:

- A well done FAA 118 or 119 analysis can save time and money by giving Missions a “heads up” about possible environmental compliance problems that they would face later under Regulation 22 CFR 216, USAID's environmental assessment and compliance regulation, if they develop a strategy that involves activities that might either directly or indirectly threaten biodiversity or tropical forests;
- These analyses help Missions identify opportunities for using funds earmarked by Congress for biodiversity or tropical forest conservation in their programs;
- FAA 118 and 119 assessments can identify opportunities for increasing the sustainability of SOs in other development sectors (such as democracy and governance, economic growth, health, disaster preparedness, and conflict mitigation and management); and,
- These analyses are legal requirements, and USAID must abide by the law.

The second to last point on the list is closely related to the main reason why biodiversity conservation is fundamental to USAID's success. Put simply, biodiversity conservation is synergistic with all other development activities. Without conserving the variety and variability of life, and the irreplaceable environmental services it provides to humans, there can be no long-term, sustainable development. An excellent source of ideas and information about biodiversity for USAID Mission staff is *Biodiversity Conservation: A Guide for USAID Staff and Partners* (USAID, 2005).

2.2 LEGAL REQUIREMENTS

In the amendments to the Foreign Assistance Act of 1961, Sections 118 and 119, the legislation states:

“FAA Sec 118 (e) Country Analysis Requirements. Each country development strategy statement or other country plan prepared by the Agency for International Development shall include an analysis of

- (1) the actions necessary in that country to achieve conservation and sustainable management of tropical forests, and
- (2) the extent to which the actions proposed for support by the Agency meet the needs thus identified.”

and:

“FAA Sec 119 (d) Country Analysis Requirements.--Each country development strategy statement or other country plan prepared by the Agency for International Development shall include an analysis of-

- (1) the actions necessary in that country to conserve biological diversity, and
- (2) the extent to which the actions proposed for support by the Agency meet the needs thus identified.”

This *congressionally mandated legal requirement* distinguishes the FAA 118 and 119 analysis requirements from the more recently developed Agency guidelines for Conflict Assessments http://www.usaid.gov/our_work/cross-cutting_programs/conflict/publications/docs/CMM_ConflAssessFrmwrk_8-17-04.pdf and Gender Analyses http://www.usaid.gov/our_work/cross-cutting_programs/wid/pubs/brochure_gender_matters.pdf.

If a Mission chose to do the *bare minimum* it could do and still meet these legal requirements, it would first have to conduct an analysis to identify “actions necessary....” To meet the second part of the legal requirement, the Mission essentially has *only three options*. It can:

- Explain why the Mission is not doing anything to meet the “needs thus identified;”
- Explain how Intermediate Results (IRs) under other SOs in the Mission’s strategy will help to meet some of the “needs thus identified;” or
- Propose an environmental Strategic Objective (SO) that would address some of the “needs thus identified” through USAID-supported activities

If the Mission chooses the first option – not to do anything through its strategy to meet the biodiversity or tropical forest conservation needs identified in the first part of the analysis – the analysis report should explain why. In some cases other donors may be meeting the needs; the needs may be impossible to address given other higher or more urgent priorities; or the linkages and synergies between conservation needs and other high-priority development objectives may not be strong enough to justify major programmatic efforts to meet them.

2.3 USING FAA 118/119 ANALYSES IN STRATEGY DESIGN

If the Mission is in a country in which there are areas of global, national, and local priority for the conservation of biodiversity or tropical forests, it may make sense to address, through its strategy, some of the needs identified in the first stage of an FAA 118/119 analysis. If so, the Mission could choose either the second or third options identified above.

If the country has biological diversity or tropical forests of value or priority at the global level, it may be advantageous to develop a separate SO in the Mission’s strategy focusing on biodiversity or tropical forest conservation. The Agency’s coding for attributing spending to biodiversity conservation suggests that, for primary attribution to biodiversity conservation, the activity should have indicators at the SO level if possible, according to *Biodiversity Conservation: A Guide for USAID Staff and Partners* (USAID, 2005).

If the Mission is not planning a Strategic Objective that helps meet the needs identified for biodiversity or tropical forest conservation, there are usually many opportunities available for helping to meet those needs through IRs that support other SOs in the Mission’s strategy.

This USAID Biodiversity Guide just mentioned gives abundant examples of ways that biodiversity conservation objectives can be linked with development objectives in other sectors.

3.0 ELEMENTS OF BEST PRACTICES

In the review process described above, **elements of best practices** were identified. This section describes the elements that should be considered by Mission or Regional Bureau staff who are planning a Biodiversity, Tropical Forestry, or Environmental Threats and Opportunities analysis. Section IV focuses on the contents of the Country Analysis Reports required by FAA Sections 118 and 119, and gives practical recommendations for the contents of these reports.

In order to avoid giving only abstract recommendations, many of the elements of best practices are illustrated with one or more **BEST PRACTICE EXAMPLES**. Each is given in a grey text box in order to make it stand apart from the general text.

Each of USAID's four regions provides examples of best practices; no region has a monopoly. Likewise, almost every FAA 119, 118-119, or ETOA report that was reviewed contains one or more examples of best practices. That said, none of the reports reviewed are perfect—each could have been improved.

Nothing here is meant to suggest that there is only one correct way to structure the assessment process or write an effective report. To use again the recipe analogy used earlier, as long as we have a recipe for “pancakes,” we can adapt it in order to make pancakes of any “flavor” we want.

3.1 TYPES AND OBJECTIVES

Four general types of these analyses are possible; the choice of which to use is determined by the location of the country (tropical or non-tropical), the preference of the mission, and history of previous analyses.

Tropical Forestry (FAA 118) Analysis: In any *tropical country* in which a new USAID strategy is being developed, USAID must meet the Country Analysis Requirements of FAA Sec 118 (e). Tropical countries are those countries found between the Tropic of Cancer, approximately 23 degrees north latitude, and the Tropic of Capricorn, approximately 23 degrees south latitude. For text, see: http://www.usaid.gov/our_work/environment/compliance/faa_section_118.htm All such countries **must also conduct a Biodiversity (FAA 119) Analysis**, so in practice both must be done in all tropical countries.

Biodiversity (FAA 119) Analysis: In all countries, both tropical and non-tropical, in which a new USAID strategy is being developed, USAID must meet the Country Analysis Requirements of FAA Sec 119 (d). For text, see: http://www.usaid.gov/our_work/environment/compliance/faa_section_119.htm In non-tropical countries, only this analysis is required.

Environmental Threats and Opportunities Assessment (ETOA) or Strategic Environmental Assessment: ADS 201.3.8.2 describes the mandatory FAA Sec 118 and 119 “Environmental Analysis,” and also states: “Note: The Environmental Analysis described above is not the same as the Environmental Review described in 201.3.12.2 section b. (The latter is a federal requirement for the obligation of funds.) Given the interrelated character of environmental issues, Operating Units may wish to save time by conducting the Environmental Analysis and Environmental Review during the development of the

Strategic Plan. Given, however, that Environmental Reviews often require relatively detailed knowledge about planned activities, it may not always be possible to conduct the Environmental Review while developing the Strategic Plan.” The Environmental Review spoken of in this section of the ADS is the Environmental Impact Assessment requirement described by 22 CFR 216, or “Reg 216,” which implements FAA Section 117, “Environment and Natural Resources.”

This text of ADS 201.3.8.2 Environmental Analysis, can be found at:
<http://www.usaid.gov/policy/ads/200/201.pdf>

For text of FAA Sec 117, see:
http://www.usaid.gov/our_work/environment/compliance/faa_section_117.htm

Text of ADS 201.3.12.2 also can be found at: <http://www.usaid.gov/policy/ads/200/201.pdf>

Based on this ADS Guidance, some Bureaus have chosen to essentially combine the mandatory FAA 118/119 analyses with an early, strategy-level “preview” environmental assessment related to FAA 117. The Africa Bureau has developed this approach most fully in its Environmental Threats and Opportunities Assessments (ETOAs), the first of which was conducted for USAID Namibia in 1996. However, Missions in other regions have taken this approach in some cases as well, notably

- Cambodia in the ANE Region in 2001, titled “Environmental Review: Status and Trends in Environmental Management and Options for Future Actions;” and
- Bulgaria in the EE Region in 2002, titled “Assessment of Natural Resources and the Environment: Issues and Opportunities for USAID/Sofia”.

Update Assessment: In countries in where USAID is developing a new strategy but where a complete FAA 119 or 118/119 analysis or ETOA was done within roughly the previous five years, it may be possible to meet the legal requirement by updating the previous analysis. The status of biodiversity and tropical forests, if relevant, can be reviewed, trends observed, and a new list of actions needed prepared, without all of the extensive analysis that may have been required for the initial analysis. The extent to which the actions proposed in USAID’s new strategy meet the current needs can be assessed.

BEST PRACTICE EXAMPLE

A recent example of an update assessment was that done for USAID/Namibia in early 2003. The analysis, “Environmental Threats and Opportunities in Namibia and Their Implications for USAID/Namibia’s Country Strategic Plan 2004-2010,” reviewed the status and trends in natural resources and the environment (FAA 117), tropical forests (FAA 118), and biological diversity (FAA 119) in the seven years since the 1996 ETOA, and implications of those findings for continuing USAID actions. The SOW for this activity stated: “The objective of this work is to deliver to USAID/Namibia an update of the 1999 Country Strategic Planning (CSP) Environmental Report and update of a synthesis of the 1996 Environmental Threats and Opportunities Assessment (ETOA). This update will be included in USAID/Namibia’s CSP 2004-2010. It will also fulfill USAID requirements for Sections 117-119 of the Foreign Assistance Act of 1961.” Environmental Threats and Opportunities in Namibia, April 2003.

3.2 TIMING

In order to meet the legal requirements, the “actions necessary” for conserving tropical forests and biodiversity must be compared with “the actions proposed for support by the Agency.” Determining “actions necessary” can be done at almost any time, so appropriate timing for these analyses is determined instead by the timing of USAID strategy development. The menu of “actions proposed for support” in the strategy, the SOs and IRs, must be somewhat developed, so that they can be evaluated by

the FAA 118/119 analysis team, but should not be completely fixed and “set in concrete” so that it is too late for the FAA 118/119 analysis to influence the strategy. The most effective timing seems to be during the year before the new strategy will take effect, part way through the development of the new strategy. The Mission program office is mainly responsible for ensuring that these analyses are conducted at the appropriate time, not too early and not too late. Conducting them too late, as an afterthought, merely to meet the legal requirement, is a more common fault than conducting them too early in strategy development.

The timing of the FAA 118/119 analysis in relation to the timing of strategy development should be explained in the Methods section of the analysis report.

3.3 SCOPE OF WORK (SOW)

Depending on type and objectives of the analysis being conducted (119, 118/119, ETOA, or Update), SOWs will differ, of course. Generic, “model” SOWs that can be adapted for each of these cases are given in Appendices 4 and 5.

Reasons for adapting these SOWs could include:

- Whether the USAID Mission previously has had, or is now proposing, an environmental or natural resources SO or SPO;
- If the Mission has a special interest in linking an SO or SPO other than an environmental or natural resources SO—such as democracy and governance, or economic growth—with Tropical Forests or Biodiversity because of special circumstances in that country;
- If the country is just emerging from a recent conflict; and,
- If the country is a likely candidate for USAID expenditures for biodiversity or tropical forest conservation.

In terms of the SOW, there is no necessary need to adapt the SOW for countries with more or less biodiversity at the species level. For example, the same SOW could be used for a 118/119 analysis in Indonesia (a “megadiversity” country because of its location in the tropics and its species diversity) or Namibia (a country with very low species diversity because of its aridity).

3.4 LEVEL OF EFFORT (LOE)

An adequate LOE for a 119, 118/119, or ETOA is probably around 75 days, with a reasonable range from perhaps 60 to 90 days depending on the size of the country, the complexity of USAID’s program there, and availability of information about biodiversity and/or tropical forests. This average total LOE includes both international and local technical assistance.

Level of effort in a sample of 13 recent cases ranged from 5 days to 198 days, with an average of 75 days. This sample included a 5-day LOE desk study done in Washington, DC, for USAID/Morocco to a 191-day LOE Environmental Analysis done for USAID/Nigeria. Only 8 of these 13 cases represented true 118/119 analyses, those being done for the first time, or those that were more than desk studies or updates. Among this smaller sample the average LOE was 74 days, with a range from 42 to 95 days.

3.5 FORMING ANALYSIS TEAMS

Because of the variety of issues that must be addressed in FAA 118/119 analyses, they are most effectively done by multidisciplinary teams of two or more persons. A team with the diversity of

experience and skills to readily handle the required biological, economic, institutional, legal, policy, and USAID programming dimensions of the task is needed. It is important to consider that:

- An institutional specialist is needed on the team to analyze the institutional, policy, and legal context affecting conservation of biodiversity and forests in that country. It has often been effective to have one local team member with recent experience working with, or in, government agencies involved in biodiversity and forest management to fill this role;
- Biological information must be related to management, policy, laws, institutions, economics, and USAID programming, and natural resources management generalists with USAID or NGO experience can often do this better than biologists or other conservation scientists;
- At least one team member with experience in natural resources economics and/or natural resources governance often improves the effectiveness of the analysis;
- Writing experience and skill is needed on the team so that the analysis report is as brief and effective as possible.

“Required Expertise,” or team composition, is an issue that should be spelled out carefully in the SOW for any FAA 118/119 analyses, ETOA, or update.

BEST PRACTICE EXAMPLE

Possible team composition, generalist team of mixed international and local experts, with at least one team member with personal knowledge of the institutional, legal, policy in the country (adapted from USAID/Mozambique 2002 ETOA SOW). http://pdf.dec.org/pdf_docs/PNACWI34.pdf

3. Expertise Required

International Technical Assistance (1 or 2). Senior Level Natural Resource Management Specialists with post-graduate qualifications in biology, zoology, forestry or closely related field in natural resource management. Background in tropical biodiversity and natural resource conservation. Knowledge of USAID Strategic Planning process related to Environmental Threats and Opportunities Assessment. Knowledge of 22 CFR 216 and of FAA Sections 117, 118 and 119. Demonstrated expertise in assessing development programs for impacts on environment and tropical ecosystems and of environmental impact assessments. Experience in Sub-Saharan Africa and experience in Southern Africa and Mozambique preferred.

Local Technical Assistance (1 or 2). Senior Level Natural Resource Management Specialists with demonstrated experience in Mozambican environmental law, the policy and legal frameworks governing environmental management in Mozambique and the analysis of relevant policies. Good contacts with Mozambican government agencies, NGOs, international donors, and private sector preferred.

3.6 USAID STAFF INVOLVEMENT

FAA 118/119 analyses are not effective without good cooperation and communication between the analysis team and Mission staff, particularly staff in the program office, all SO Team Leaders, and the Mission Environmental Officer. The need for full cooperation and communication between the analysis team and Mission staff is an absolute necessity for conducting any FAA 118/119 analysis, ETOA, our update, and this should be stated explicitly in the SOW.

BEST PRACTICE EXAMPLE

One example of best practice in this regard comes from the SOW for the Bulgaria analysis (Assessment of Natural Resources and the Environment: Issues and Opportunities for USAID/Sofia, Feb. 2002), which states:

“The USAID Environment Officer will facilitate meetings with other S.O. Teams at USAID to allow the team to gain a full understanding of the country program and strategy. USAID/Sofia will be conducting other assessments, including one on agriculture. Coordination/communication between the assessment teams, as possible, would benefit the overall strategic planning process. The USAID Environmental Officer will help facilitate interaction and information exchange as necessary.”

BEST PRACTICE EXAMPLE

Here is a description from the team leader of a FAA 119 analysis team that worked in a fully-cooperative Mission in the E&E Region:

“The Mission did a great job on background documentation, making the SO Teams readily and repeatedly available and involved, and staying open to ideas. If we measure the success of this assessment by how quickly some of its content affected Mission decision-making as referenced in RFP’s and changes in annual work plans it was probably a success.”

3.7 STAKEHOLDER CONSULTATION

“Best practice” requires that the analysis team is able to conduct an independent consultation with stakeholders other than USAID – with, for example, government agency staff, local and international NGOs, other international donors, indigenous communities, and the private sector. The diversity and extent of this consultation should be described in the “Methods” section of the analysis report, and reflected in the “Persons Contacted” section of that report. USAID Mission staff should help the team arrange such meetings by providing contact information and introductions, as appropriate.

Because USAID must work with stakeholders and partners, it is important also, however, that the analysis team does not conduct the analysis in a way that would jeopardize those relationships.

BEST PRACTICE EXAMPLE

A SOW which clearly treats this issue is that for the ETOA for Uganda conducted in 2001:

http://pdf.dec.org/pdf_docs/PNACL744.pdf

“Upon arrival in-country, meet with USAID/Uganda to get a solid understanding of Mission program goals and objectives under its ISP; perspectives of this assignment and specific interests for the team, including advice and protocol on approaching USAID partners and host country organizations with respect to this assignment. The team will discuss organizations to be contacted and any planned site visits with the Mission and coordinate as required.”

3.8 REPORT CONTENTS

Reports on the required analyses must clearly meet the legal requirements of FAA 119, and FAA 118 where relevant, in describing “actions needed” and “extent to which actions proposed for support... meet the needs thus identified.”

To be effective, they also should:

- Give the Mission advance warning of any actions proposed that may have adverse affects on tropical forests or biodiversity.
- Recommend opportunities for improving biodiversity and tropical forest (where relevant) management and conservation through linkages with proposed activities being proposed through other SOs.

More detailed recommendations about report contents are given in Section 4.0.

3.9 REPORT LENGTH

If the organization is careful and tight, and the writing is succinct, highly effective 118/119 or ETOA reports can be between 30 and 60 pages long, excluding appendices. If they are too long they are likely to be less effective than more straightforward and succinct reports. Those reviewed during this process ranged from the succinct 32-page Morocco Biodiversity and Tropical Forestry Analysis, with no appendices but abundant website references, to the voluminous report for Indonesia, which was 232 pages of text, plus additional appendices.

Absolute length can be specified in the SOW, if desired, but depending on the country situation, a Mission should probably not set such a limit at fewer than 50 pages.

4.0 REPORT CONTENT DETAILS

4.1 EXECUTIVE SUMMARY

Every analysis report should contain an Executive Summary of approximately five pages that briefly summarizes the contents of the analysis report. In particular, this Executive Summary should contain a summary of the two-part legal requirements of FAA 118 (if applicable) and FAA 119, that is:

- (1) the actions necessary in that country to achieve conservation and sustainable management of tropical forests and/or biodiversity, and
- (2) the extent to which the actions proposed for support by the Agency meet the needs thus identified.

4.2 INTRODUCTION

4.2.1 Purpose

Every analysis report should begin with a section that describes the purpose and objectives of the analysis. This should summarize, paraphrase, or reproduce the purpose and objectives as described in the SOW. This section should:

- Identify the type of analysis being conducted (Biological Diversity/FAA 119; Tropical Forests & Biodiversity/FAA 118-119; ETOA/FAA 117-119; or update of any of the previous three types);
- Describe objectives, including the importance of this analysis in USAID strategic planning;
- Briefly quote legal language (include FAA Sections 119, 118 and 119 if a tropical country, and 117 if an ETOA type analysis); and
- Discuss timing and give dates of this analysis and its relationship to the timeline for strategy development in the Mission.

BEST PRACTICE EXAMPLE

Mozambique, 2002, Introduction, pp. 1-3 http://pdf.dec.org/pdf_docs/PNACWI34.pdf

BEST PRACTICE EXAMPLE

Conveying a “mainstreaming environmental & biodiversity conservation” perspective is best practice— that is, viewing the environment and its biodiversity as the source of natural resources, and fundamental to sustainable development in any country. An actual example comes from USAID/Mozambique, whose 2002 ETOA (http://pdf.dec.org/pdf_docs/PNACW134.pdf) includes a paraphrase from the Deputy Mission Director in the introductory section:

“USAID/Mozambique recognizes that protection of the environment and wise management of the natural resource base are absolute requirements of any successful development program, and seeks to make environmental conservation a fundamental, crosscutting theme in its proposed program.”

4.2.2 Methods

The Introduction to the analysis report should contain a brief section describing the methods used to carry out the analysis. It should describe, at a minimum:

- The composition of the analysis team (“best practice” may be to include biographical sketches of team members in an appendix to allow an independent evaluation of the diversity and biases of the team). See: ****BEST PRACTICE EXAMPLE**** from Bosnia and Herzegovina, 2003, http://pdf.dec.org/pdf_docs/PNACW775.pdf, and from Guyana, 2003;
- The process of information gathering, including meetings with USAID staff in Washington and the Mission; and consultation with stakeholders and other actors. Names and institutional affiliations of all contacts and sources should be given as an appendix. See: ****BEST PRACTICE EXAMPLE**** from Guyana, 2003, p. 27, Appendices section;
- Documents reviewed (listed in a References section or an appendix); and
- Field trips or site visits.

4.3 STATUS OF BIODIVERSITY

The analysis report should summarize the status of biological diversity in the country, guided by the best practices described below:

4.3.1 Definition and Elements of Biological Diversity

A modern, comprehensive definition of biological diversity, such as the following, from “Biodiversity Conservation: A Guide for USAID Staff and Partners” (USAID, 2005), should form the basis for the summary of the status of biodiversity in the analysis report:

Biological diversity, or biodiversity, is the variety and variability of living organisms... The Earth’s biodiversity consists of genes, species, and ecological processes making up terrestrial, marine and other aquatic ecosystems that both support and result from this diversity. All of these elements of living systems interact with each other to produce the web of life on Earth—the biosphere—a whole much greater than the sum of its parts.

Within this section of the analysis report, the key **elements of biological diversity** in the country – including the diversity of ecosystems, species, ecological processes, and genetic diversity should be treated:

Ecosystem Diversity

Brief descriptions characterizing the country's significant ecosystems (including freshwater, coastal, and marine ecosystems) should be given. A map of potential natural vegetation is a best-practice technique for showing the locations of major ecosystems. Potential natural vegetation is the natural "climax" vegetation that will be found at a given location without disturbance or human conversion of the natural ecosystem at that site. Forests ecosystems, including all types of **tropical forests**, are a component of biological diversity at the ecosystem level. However, because of the Congressional requirement contained in FAA Sec. 118, tropical forests have been singled out for special consideration by the legislation.

BEST PRACTICE EXAMPLE: Peru

TABLE I. SUMMARY DESCRIPTION OF PERU'S GEOGRAPHIC REGIONS, ECOREGIONS, ECOSYSTEMS¹

Geographic Region	Ecoregion	Ecosystems	Summary Description
Marine	Peruvian Current	Various currents	Cold, nutrient rich, high populations, less diversity
	Tropical Current	Various currents	Warm, nutrient poor, lower populations, high diversity
Coastal Plain	Pacific Desert/ Hills	Coastal Hills	On hills up to 700 masl. Very low rainfall/Moisture from mists supports desert vegetation.
		Tillandsia Form.	On extremely dry flat desert but moisture from mists supports growth of bromeliads.
	Dry Equatorial Forest ²	"Algarrobos"	<i>Prosopis pallida</i> forest
		"Hualtaco" Forest	Forests dominated by "hualtaco", <i>Lonopterygium huasango</i> , a commercial timber tree.
		Mangrove Forests	In the estuaries of the Tumbes and Zarumilla Rivers on the northern coast
		Scrub Forests	In the northern foothills/ 200-1000 masl/300-650mm/yr rainfall/Canopy 4-5 m.
	Low Deciduous Forests.	In the central/southern foothills/400-1,000mm/yr rainfall/many epiphytes	
Pacific Tropical Forest	Pacific Tropical	Northern Peru. 1,200 mm/yr. rainfall/20-25m canopy height	
Highlands	Puna	Andean Pastures	Above 3,800 masl/ 150-600 mm/yr rainfall. 19,000,000 has. Severe degradation.
		Tolares.	Southern regions/Temperatures 3-6°C/200-500 mm/yr rainfall. Thorny bushes predominate.
	Andean Steppe	Brushlands	Western Andes/1,500-3,800 masl/125-1500mm/yr rainfall/8 million has./many cacti.
		Quinuales	3,000-4,500 masl/main plant is "quinual" (<i>Polylepsis</i> , sp)/43,000 has in southern departments.
	Paramo.	Paramo	Small area at 3,500 and 4,500 masl in northern Peru. Up to 600 mm/yr of precipitation.
Amazon Basin	"Selva Alta"	Upper Montane	
		Podocarpus Forest	Moister locations in Selva Alta 1,800-3,500 masl/153,000 has mostly in Cajamarca.
		Lower Montane	600-1,400 masl. Temperatures 17-25°C. 1,600-4,000 mm/yr.
	"Selva Baja".	Riverain Forest	Beside rivers/20-25 m. canopy height/3,250,000 has/higher sites cultivated by local people.
		Swamp Forests/ Aguajales"	Near confluence of Tigre & Pastaza rivers and many smaller areas. 6,300,000 has.
		Terrace Forest	Alluvial terraces/8,000,000 has./Fertile soils for agriculture/canopy height 30-45 m.
		Upland Forest	On old terraces/26,000,000 has./35-40 m canopy height. Many tree species.
		Bamboo Forest	1,500,000 ha of <i>Merostachis</i> and <i>Guadua</i> bamboo genera.
Chaco savanna	Chaco savanna	In Pampas del Rio Health in Madere de Dios Department. <i>Mauritia flexuosa</i> palm.	

1. Based on Low, 1993, pp.3-15 and Cuanto Institute, 2000, pp. 48-9.

2. Some of the ecosystems of the Coastal Geographic Region also cross into the Highland Geographic Region.

Species Diversity

Biodiversity in general should not be equated with or confused with species diversity. However, species are the fundamental components of ecosystems, and their diversity is one key element of biodiversity. A summary of the species diversity in the country should be given. One way of summarizing this is given below.

BEST PRACTICE EXAMPLE

Peru, summary table of species diversity by ecoregion

TABLE 2. NUMBER, ORDERS, FAMILIES, GENERA AND SPECIES OF BIRDS BY ECOREGION

Ecoregion*	Order	Family	Genera	Species	Restrict.
Peru	20	88	587	1705	959
Marine and Shore	10	39	98	175	91
Arid Tropical	17	48	190	245	64
Arid Subtropics	14	40	117	151	22
Arid Temperate	11	30	85	133	2
Humid Subtropical Temperate	11	32	101	143	8
Puna	13	34	82	128	39
Humid Temperate	13	39	144	250	94
Humid Subtropical	14	44	189	292	74
High Humid Tropical	13	43	214	305	55
Humid Tropical	17	65	435	895	510

Source: INRENA, 1997, p. 101, Table 4.3.1

Species that are endangered or threatened with extinction should be identified. One way to do so is to append a list of threatened and endangered species, such as the IUCN Red List for that country, or give the URL for a web site where such a list can be found (see: <http://www.iucn.org/themes/ssc/red-lists.htm> or <http://www.redlist.org/search/search-basic.html>)

BEST PRACTICE EXAMPLE

Uganda ETOA, April 2001, p. 11-12: http://pdf.dec.org/pdf_docs/PNACL744.pdf

Globally rare and endangered species. Globally recognized rare and threatened plant and animal species are listed in the IUCN/ Conservation Monitoring System Red Data Book, which has been updated in 2001 and resides on the Internet. Upwards of 200 species of plants and animals are Red-listed for Uganda. These species are of global importance for conservation efforts and deserve special attention in this country. The reasons for the rarity of each species are different. A number of these species have specialized habitat requirements and are associated primarily with particular vegetation categories that are undergoing conversion or degradation. Others are largely threatened by direct human persecution or other anthropogenic factors. For the purposes of this report, Gerald Eilu at MUIENR has analyzed the distribution and threats associated with Red Listed plants and birds (see tables in Annex B). The remaining Red Listed species are also listed in Annex B. Scanning these charts gives a clear indication of some of the biodiversity conservation issues of top priority in Uganda.

BEST PRACTICE EXAMPLE

East Timor http://pdf.dec.org/pdf_docs/PDACA921.pdf

TABLE 3. ENDANGERED MARINE SPECIES

Taxonomic Name	English Name	IUCN/ CITES
<u>Chelonia mydas</u>	Green turtle	EN, CITES
<u>Eretmochelys</u>		
<u>Imbricata</u>	Hawksbill turtle	CR
<i>Dermochelys</i>		
<i>Coriacea</i>	Leatherback turtle	CR
<i>Caretta caretta</i>	Loggerhead turtle	EN
<i>Lepidochelys</i>		
<i>Olivacea</i>	Olive turtle	EN, CITES
Dugong dugon	Dugong	VU
<i>Physeter catodon</i>	Sperm whale	VU
<i>Orcinus orca</i>	Killer whale	LR/cd, CITES
<i>Stenella longirostris</i>	Spinner dolphin	LR/cd, CITES
<i>Tursiops truncatus</i>	Bottlenose dolphin	DD
Rhincodon typus	Basking shark	VU
<i>Tridacna derasa</i>	Southern Giant Clam	VU
<i>Tridacna gigas</i>	Giant Clam	VU
<i>Tridacna maxima</i>	Small Giant Clam	LR/cd

Endemic or threatened species of particular social, economic, scientific, or environmental importance should be highlighted and their habitat needs described. Wild relatives of domesticated crops are an example of species of special importance. The status of endemic and rare species should also be briefly discussed.

BEST PRACTICE EXAMPLE

Serbia and Montenegro, May 2002 – boxes with information about species of special interest, economic value, etc.:

Box 1: The Serbian Spruce, *Picea omorika*, is found only in a small area in western Serbia and eastern Bosnia, in mountains above the Drina River such as Tara Mountain in Tara National Park. It is usually found on calcareous soils at elevations between 400 and 1,700 meters, usually on steep, north-facing slopes. Fossil remains show that during the Tertiary era millions of years ago it was widespread in Europe, but after the Pleistocene Ice Ages it survived only on Tara and a few other mountain ranges. Some call it a “living fossil.”

This species was first identified by the famous Serbian botanist Pancic in 1876, at locality now in Tara National Park. The spruce trees at this original location were destroyed by the construction of the dam for a pumped-hydropower facility built after WWII. It is obvious that at that time adequate environmental impact assessment methods for safeguarding biodiversity during infrastructure development projects were not being used – an important lesson for today. The few remaining stands of this unique, narrowly-endemic species are now protected, such as in Tara National Park. This is a beautiful spruce, with a narrow shape and growing up to 50 meters tall. It is now widely used as an ornamental tree in central and northern Europe and in North America. It is of exceptional value in landscaping and horticultural applications because it is fast-growing, tolerant of poor soils, insect and disease resistant, and able to tolerate air pollution in cities.

For more information: <http://www.botanik.uni-bonn.de/conifers/pi/pic/omorika.htm>.

Genetic Diversity

The genetic diversity that exists within each species is an important aspect of biodiversity, and should be discussed where appropriate. The Agency’s 1988 guidance cable on these analyses states that they should consider “conservation of economically important species and germplasm (including land races and wild relatives of agriculturally important crops and livestock).”

(<http://www.usaid.gov/policy/ads/200/200sbh.pdf>)

Populations of wild species of economic or ecological importance (such as trees used for timber) found in a particular country may contain unique and valuable genetic diversity, and this issue should be discussed as appropriate.

BEST PRACTICE EXAMPLE

Serbia and Montenegro, 2002, for genetic diversity within widespread European species, and its possible economic value, p. 9:

4. Genetic Diversity

Except for the narrowly-endemic species found only in the FRY, most species here are more widely distributed. Some may be found throughout Europe, for example. However, even these more widely distributed species found in the FRY contain within them genetic diversity that makes them able to tolerate the unique habitats and conditions found in the FRY. Populations of some important tree species, such as English oak (*Quercus robur*), Norway spruce (*Picea abies*), black pine (*Pinus nigra*), Scotch pine (*Pinus sylvestris*), and European beech (*Fagus sylvatica*) undoubtedly have unique genotypes in the FRY that control such things as tolerance of climatic and soil conditions and resistance to pests and diseases.

Ecosystem Services

The ecological processes and **ecosystem services** resulting from ecosystem, species, and genetic biological diversity—such as pollination of plants by insects, control of pest species by their predators,

cycling of nutrients and soil fertility, and the cycling of water in watershed ecosystems—should also be described when possible.

BEST PRACTICE EXAMPLE

Bulgaria, 2002, p. 8:

“Bulgaria’s ecosystems provide important ecological functions such as nutrient and water cycling and soil conservation. For example, most forests in Bulgaria are found on steeply sloping lands in upper watershed areas. These forests directly protect 3.4 billion cubic meters of water in more than 2000 reservoirs used for irrigation, hydroelectric power, and municipal water (Dieterle and Kehr, 2000).”

4.3.2 Values and Economics of Biodiversity and Forests

Because one purpose of FAA 118/119 analyses and ETOAs is to “mainstream” the conservation of biological diversity and forests in all of USAID’s development assistance, these analyses are most effective when they directly address issues of values and economics. A section of the analysis report should clearly do this, providing points of linkage with SOs and IRs related to economic growth and development that will be discussed elsewhere in these reports.

BEST PRACTICE EXAMPLE

Mozambique, 2002, p. 25: http://pdf.dec.org/pdf_docs/PNACW134.pdf

“One example of an economically important ecological service is provided by the annual cycle of freshwater flows in the Zambezi, Pungue, Buzi, Save and other transnational rivers that enter the Indian Ocean along the “swamp coast” subregion of Mozambique. In this cycle, a certain quantity and flow (as well as quantity) of water is required annually, to flush shrimp larvae from the mangrove ecosystems lining this low-lying coast into the open ocean where they feed and develop to harvestable size (Helena Motta, personal communication). Shrimp harvested in these fisheries are vital to the Mozambican economy: throughout the late 1990s, shrimp contributed between 50 and 75% of the total value of agricultural export products (INE, 2002a).”

BEST PRACTICE EXAMPLE

Bulgaria, 2002, pp. 7-8:

B. Economic Significance

“Bulgaria’s rich biodiversity has high economic value and is important to Bulgaria’s sustainable economic growth and preservation of its heritage. In addition to valuable timber trees, game and food fish, non-timber forest products include 200 species of edible fungi and 750 traditional medicinal plants, 250 of which are considered of high economic importance....

Forests cover one third of Bulgaria’s land area. Furniture and wood products constitute approximately 2.2% of Bulgaria’s GDP. However, the environmental, recreational and biodiversity benefits are equally important for the future of Bulgaria’s economy. About 1 million or 12% of Bulgaria’s population are socially and economically dependent on the forests which form the basis of forestry and woodworking industry, hunting, eco-tourism, some livestock and other activities. Considering the multiple benefits of forest, the value of Bulgaria’s forested ecosystems alone is estimated by economists to be worth several billion dollars a year (Dieterle and Kehr, 2000).”

4.3.3 Sources of Biodiversity Information

The analysis should describe the extent to which information about the biodiversity of the country is available. The best and most current national or regional studies should be used in assessing the status and trends. National Biodiversity Reports or National Biodiversity Strategies and Action Plans (NBSAPs) prepared by parties to the Convention on Biological Diversity (CBD) should always be used if available. These reflect the country's own conservation priorities, developed through a participatory process with national stakeholders. A list of such reports can be found on the CBD website at:

<http://www.biodiv.org/world/reports.aspx?type=nbsap>

The recently completed Millennium Ecosystem Assessment and the reports coming out of that process are an excellent source of information, especially regarding the ecosystem services aspect of biodiversity.

<http://www.millenniumassessment.org/en/index.aspx> If a previous FAA 118/119 or ETOA analysis is available, it should be cited and used as a basis for the information in the analysis, which could then be of the Update Assessment type. Other sources of information on biodiversity and forests can include national government agencies, other donors (such as the GEF), national and international NGOs (such as AWF, WWF, CI, TNC, WCS), and international organizations (such as CIFOR, FAO, IUCN, and UNESCO).

The analysis team should have the technical skills to independently evaluate the quality of any source of information used and identify their biases if such exist. FAA 118/119 analyses and ETOAs can serve as a succinct reference document for USAID staff and its partners regarding the status of the environment, biodiversity, and tropical forests, and the actions needed to conserve them. As such, they should cite the references to the information used to prepare them. Reports and other documents should be cited in the text in author and year format, and full references given in a Bibliography or "References" section, which may be an appendix to the main report.

References to web-based information are becoming more and more common and useful. URL references should be given to this kind of information as much as possible, recognizing that some web resources may not remain permanently available.

BEST PRACTICE EXAMPLE

Morocco, 2003, http://pdf.dec.org/pdf_docs/PNACU857.pdf

Biological Diversity and Tropical Forestry Analysis for Strategic Plan FY 2004-2008. Succinct format and annotated list of references with many web links.

4.3.4 Maps

Maps are the most succinct and clear way to communicate some kind of information about biodiversity and forests that is needed to determine what is required for their conservation and sustainable management. In addition to being directly useful for communicating information relevant to the 118/119 analysis, overlaying maps can facilitate visualization of integration across thematic areas—allowing USAID to more easily take advantage of opportunities for integration of activities across development sectors. By clearly labeling the date or period of the collection of data underlying the map, such maps can also be used as a baseline for future monitoring. Therefore, including maps in FAA 118/119 and ETOA reports is a best practice, and some even consider maps to be an absolute necessity in FAA 118/119 reports. Whenever they are available, maps of three themes should be included, either in the text or as appendices:

- Potential natural vegetation, which reflects the natural diversity of ecosystems, the land cover that would exist if human land uses had not converted natural ecosystems to other types, such as agricultural fields or pastures;
- Forest cover and/or land use, which summarizes human conversion of natural ecosystems to other types;
- Protected areas (all six IUCN categories should be represented if they exist in that country)

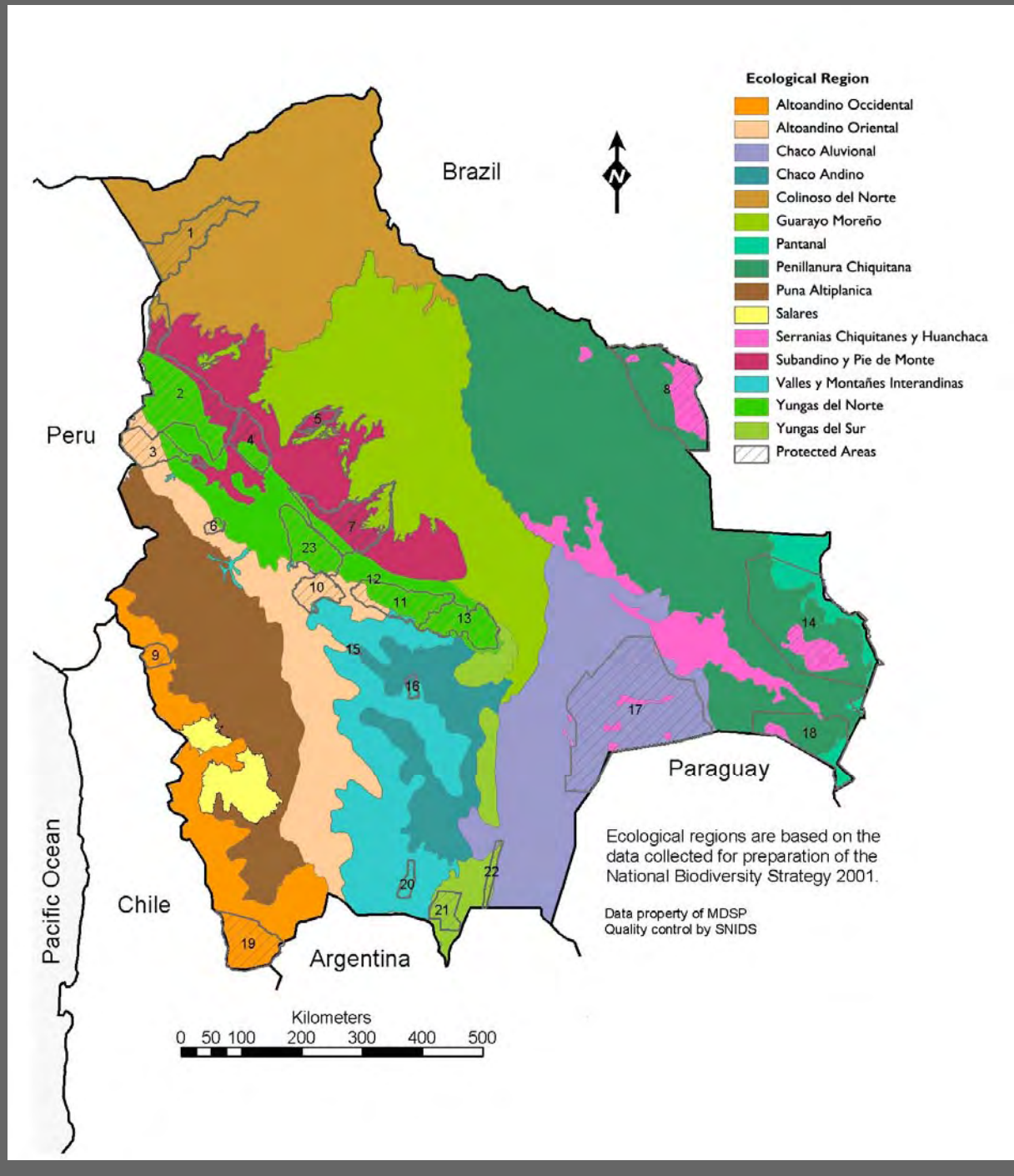
Maps showing human population density, transportation systems, mining, or other social and economic information can also be very useful in communicating information about threats to biodiversity and forests (see Best Practice Example, map of Threats to Protected Areas in Bolivia, in Section 4.7 of this report). Some additional issues to be aware of regarding the use of maps in FAA 118/119 reports are discussed in Appendix 8.

(See Best Practice Example on following page.)

BEST PRACTICE EXAMPLE

Bolivia, 2002, Map I, p. 35, http://pdf.dec.org/pdf_docs/PNACR631.pdf

Map I. Ecological Regions in Bolivia



4.4 STATUS OF TROPICAL FORESTS

All types of **tropical forests** are a component of biological diversity at the ecosystem level. Tropical forests ecosystems are characterized by high species diversity, and they provide globally-valuable ecosystem services. Congress singled out these ecosystems for special consideration when it passed FAA Section 118 in 1987, stating that “The Congress is particularly concerned about the continuing and accelerating alteration, destruction, and loss of tropical forests in developing countries, which pose a serious threat to development and the environment.” That amendment to the Foreign Assistance Act requires that all tropical countries meet Country Analysis Requirements regarding the status and conservation needs of tropical forests, similar to those for biodiversity in general that are mandated by FAA Sec 119. Although tropical forests are an element of biodiversity in tropical countries, sections of the analysis report dealing with the “actions necessary” and “extent to which actions proposed for support by the Agency meet the needs identified” should distinguish, as much as possible, between those actions aimed at tropical forest conservation and those aimed at conserving biodiversity in non-forest ecosystems in the country.

BEST PRACTICE EXAMPLE

Nigeria Environmental Analysis Final Report, April 2002, p. 71: http://pdf.dec.org/pdf_docs/PNACP627.pdf

7.9.2 Natural Forest Types

Nigeria has six main types of natural forestland: lowland rainforest, freshwater swamp forest, savanna woodlands, riparian forests, mangrove forests and montane forests. The savanna woodlands mentioned in the previous section and riparian forests occurring in watercourses in the central and northern parts of the country also contribute to the nation’s natural forest resource base. In addition, there are increasing areas under oil palm and rubber plantations. Planted agroforestry species also contribute to the resource, but not significantly. Table 7.11 presents one recent estimate of the natural forest area in the south of Nigeria.

Forest type	Estimated Area (ha)	% in Forest Reserves
Lowland forest	1,700,147	20.7
Freshwater swamp forest	1,611,360	4.9
Savanna woodland	392,321	2.3
Riparian woodland	84,355	0.1
Mangrove forest	5,314	--
Montane forest	3,847	--
Total	3,797,344	28.0

Adapted from: Beak Consultants et .al., 1999.

4.5 SOCIAL, ECONOMIC, AND POLITICAL CONTEXT

4.5.1 Social and Economic Environment

Relevant facts about the country context should be summarized. The USAID Mission itself can often provide this kind of background information. National government summaries of the social and economic context of the country are often available also. Another source of background information is The World Factbook: <http://www.cia.gov/cia/publications/factbook/>

4.5.2 Institutions, Policies, and Laws Affecting Conservation

This section should discuss the governmental institutions, policies, and laws affecting the sustainable management and conservation of biodiversity and forests, and their enforcement and effectiveness. This context, the institutional environment, is often complex, so reflecting it in a succinct way in the analysis report can be a challenge.

BEST PRACTICE EXAMPLE

Mexico, 2003. Appendix 7 of this report gives a table from the Mexico FAA 118-119 analysis. “Relevant Environmental Legislation and International Agreements,” which illustrates a thorough and succinct way of presenting this information.

Protected Area System

A country’s protected area system represents the legal institutionalization of protection of habitats and ecosystem diversity, and it should be described in this section on the institutional and legal context of conservation in the country. It is important to include all categories of protected areas as described by IUCN, not just strict nature reserves or national parks (http://www.unep-wcmc.org/index.html?http://www.unep-wcmc.org/protected_areas/categories/~main). A map of the protected areas system (again, all categories, including national forests, for example) should be included in the report.

BEST PRACTICE EXAMPLE

Morocco Biological Diversity and Tropical Forestry analysis for Strategic Plan FY 2004-2008. Succinct, format is an annotated list with many web links, can be found at: http://wee.dec.org/pdf_docs/PNACU857.pdf

Endangered Species Protection

A discussion of laws protecting endangered species should be given in this section, and their effectiveness and enforcement evaluated. Where trade of threatened species is a concern, the report should discuss the country's capacity and effectiveness with regard to implementation of the Convention on International Trade in Endangered Species (CITES).

BEST PRACTICE EXAMPLE

Mozambique, 2002, p. 36, http://pdf.dec.org/pdf_docs/PNACW134.pdf

6.3.3 Convention on International Trade in Endangered Species (CITES)

Mozambique is a party to the CITES Convention. Participation in this and other international conventions is coordinated by MICOA. Nineteen species found within Mozambique are listed on Appendix I of CITES, and 142 species are listed on Appendix II
<<http://darwin.bio.uci.edu/~sustain/h90/Mozambique.htm>>.

BEST PRACTICE EXAMPLE

Mexico, 2002, p. 26:

4.6.2 Threatened and Endangered Species (TES) Responsibilities

DGVS AND PROFEPA are mandated with the protection of endangered species. The administrative authority and the representative of CITES is the Directorate General of Wildlife (DGVS). The DGVS still lacks a work plan two years after the current administration has taken over; in addition, nearly 30% of its budget has been cut, and public perception is of widespread corruption within the DGVS. The monitoring and surveillance branch of SEMARNAT, PROFEPA, enforces compliance with CITES. PROFEPA has approximately 500 field inspectors, and must police compliance and management of almost 5,000 UMAs; nationwide logging and extraction of non-wood products; fisheries; and the traffic of wildlife through ports, airports, and borders.

Marine life falls under the control of SAGARPA, which has the mandates for production. Protection of endangered species in the coastal zone is covered by ZOFEMAT.

Mexico (CONABIO) has been a leader in the CITES committees for flora and fauna since 1998: the chair for the Fauna Committee of CITES went to Mexico in November 2002; and Mexico will continue to be the alternate chair for the Flora Committee.

Participation in International Treaties

A number of international treaties support the conservation of biodiversity and tropical forests, notably the Convention on Biological Diversity (CBD), the Convention on International Trade in Endangered Species (CITES), the Ramsar Convention on Wetlands, and the UN Convention to Combat Desertification (UNCCD). FAA 118/119 analyses should discuss the country's participation in each relevant convention and its capacity to implement its obligations. Some of these treaties require national action plans, and these can be useful sources of information as well as helpful in identifying sites and actions of national priority for biodiversity and forest conservation activities.

BEST PRACTICE EXAMPLE

Bosnia and Herzegovina, 2003, p. 14, http://pdf.dec.org/pdf_docs/PNACW775.pdf

International Conventions and Agreements. After the war the state gave authority to the Ministry for Foreign Trade and Economic Relations to negotiate and sign international conventions and agreements. BiH has since ratified a number of new international conventions and has also ratified others to which the former Yugoslavia was a cosignatory when BiH seceded from it. BiH is now signatory to the following important conventions and agreements:

- Convention on Biodiversity (1992)
- Ramsar Convention on Wetlands of International Importance (1971)
- Convention to Combat Desertification (1994)
- Protocol on Specially Protected Areas and Biological Diversity in the Mediterranean (1996)
- Aarhus Convention on Access to Information, Public Participation in Decision Making and Access to Justice in Environmental Matters (1998)
- UN Framework Convention on Climate Change (1992)
- Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and Their Disposal (1989)
- Convention on Long Range Transboundary Air Pollution (1979)
- Montreal Protocol on Substances that Deplete the Ozone Layer (1987)
- Convention for the Protection of the Mediterranean Sea Against Pollution
- Protocol for the Protection of the Mediterranean Sea Against Pollution from Land Based Sources (1980).

BiH has not yet signed several other conventions and protocols that promote biological diversity conservation, among them:

- Bern Convention on the Conservation of European Wildlife and Natural Habitats (1982)
- Convention on the International Trade in Endangered Species (1973)
- Protocol on Biological Safety (within the Convention of the United Nations on Biological Diversity (2000)
- Convention on the Conservation of Migratory Species of Wild Animals (1979)

4.6 GOVERNMENT, NGO, AND DONOR PROGRAMS AND ACTIVITIES

4.6.1 Government Programs and Activities

A thorough review of government programs and activities relevant to biodiversity and tropical forest conservation should be part of an FAA 118/119 analyses. Communicating the results of such an analysis can be difficult because of the variety of activities that are relevant – the table below, which provides a summary of such information for Mexico, is one good method for communicating this information in a report. Some government actions are policies, laws, and would have been treated in the section above. Where possible, an assessment of the effectiveness of these programs, and their potential links with USAID programs activities may be useful in identifying gaps and unmet needs.

BEST PRACTICE EXAMPLE

Mexico, 2002, Table 4.2, p. 15, Government of Mexico Activities

Activity	Agency	Donor
Protection		
1.1. Bio-safety	CONABIO/Cibiogem	UCAI
1.2. Invading species	SAGARPA	CONANP/ PROFEPA
1.3. Prevention and control of illicit activities	PROFEPA	Sedena/PGR/ Sedemar
1.4. Emergency response	SG/DGDSFS	
Management		
2.1. Sustain large scale ecological processes	CONANP/ CONAFOR	UCAI/CNA
2.2. Ecosystem, species, and processed management	CONANP/ COANFOR	
2.3. Sustainable Use	CONANP/SEDESOL/SAG ARPA/INAH	DGVS/ SECTUR
2.4. Preservation of germplasm and genetic diversity	CONABIO/Cibogem	SAGARPA/ Conacyt
Restoration		
3.1. Recovery of species and their habitat	CONANP	DGVS
3.2. Restoration of priority conservation areas	CONANP/ CONAFOR	CNA
3.3. Restoration of environmental services for watershed and forests	CNA/CONAFOR	SSNFA
Knowledge		
4.1. Research of biological, social and economic topics	INE/CONABIO	Conacyt
4.2. Inventory and scientific collections	CONABIO	
4.3. Rescue and systematization of	CONABIO/INE/ INI	
4.4. Information management and administration	CONABIO/INE/ SSPPA	
4.5. Criteria, indicators and follow up	CONABIO/INE	SSPPA
Culture		
5.1. Value	CONANP/Cecadesu	
5.2. Public relations	DGCS	CONANP/INE
5.3. Environmental Education	Cecadesu	SEP
5.4. Participation	CONANP	UCPAST/ DGVS
5.5. Training and education	INE/Cecadesu	SEP/Conacyt
Gestión		
6.1. Planning and Policy	SSPPA	
6.2. Modernizing	Legislativo	SSPPA
6.3. Development and legislation	SSFNA	SSGPA
6.4. Promotion and market development	SSGPA (DGVS-DGDSFS)/ CONAFOR	SE
6.5. Incentives	SSPPA/SHCP	Legislative/SRA

4.6.2 NGO Programs and Activities

Local and international NGO programs and activities should be summarized and their effectiveness assessed. As with government programs and activities discussed above, communicating the results of such an analysis can be difficult because of the variety of activities that are relevant. Tables, as above and in the section on donor programs and activities below, are a good method for communicating this information in a report.

4.6.3 Donor Programs and Activities

The programs of major donors that relate to the conservation of tropical forests and biodiversity should be summarized. For donor programs, as with the programs of the national government and NGOs, an assessment of their effectiveness and their potential links with USAID activities may be useful in identifying gaps and unmet needs. USAID actions could be summarized in the section on donors, but a more detailed analysis of proposed USAID activities under the new strategy being developed should be treated in a separate section.

BEST PRACTICE EXAMPLE

Bosnia and Herzegovina, 2003, Table 6, p. 27, http://pdf.dec.org/pdf_docs/PNACW775.pdf

TABLE 6- MAJOR CURRENT DONORS TO ENVIRONMENTAL PROGRAMS

	World Bank	European Union	REReP*	Italy	USAID	Swiss Devel. Agency	GEF
Institution-building	X	X	X		X		X
Agriculture					X		
Forestry	X	X					X
Water management	X	X	X	X	X	X	X
Solid waste	X	X	X	X	X		
Protected Areas	X						X
Biodiversity	X						X
Spatial Planning							
Information/monitoring		X	X			X	
Policy/legislation	X	X	X				X
NGOs		X	X		X		X

*REReP donors include the Netherlands, Germany, EC, Norway and the U.S.

4.7 THREATS TO BIODIVERSITY

USAID programs employ a threats-based approach to designing biodiversity conservation activities. Threats to a particular element of biodiversity—whether it is a species, ecosystem, or ecological process—must be addressed in order to conserve that component of biodiversity. A threats-based approach to conservation first identifies the direct and indirect threats to the element of biodiversity to be conserved, and then lays out a logical plan for supporting actions that will reduce the threats. Sections 118 and 119 of the FAA require analyses to identify the “actions necessary” to conserve forests or biodiversity. Such necessary actions are the actions that mitigate the direct and indirect threats identified in a threats-based approach to conservation.

4.7.1 Direct Threats

Five main kinds of threats to biological diversity (including tropical forests) are generally recognized, according to *Biodiversity Conservation: A Guide for USAID Staff and Partners* (USAID, 2005):

- **Conversion** of natural habitat to cropland, urban areas, or other human-dominated ecosystems;
- **Overexploitation** or overharvesting of valuable species;
- **Introduction of non-native species**, including invasive species and introduced pests and diseases;
- **Pollution** of land, water, or air; and
- **Macro-environmental change**, such as climate change, desertification, or disruption of natural disturbance regimes (such as floods or fires).

4.7.2 Indirect Threats and Root Causes

A number of factors cause, or contribute to, the direct threats listed above. These can be thought of as “indirect threats,” “root causes,” or “drivers” of the direct threats. These root causes include:

- Demographic change, including rapid population growth, migration, and flows of refugees;
- Poverty, lack of access to resources necessary for subsistence;
- Economic policies and structures;
- Global market forces;
- Insecure land and natural resource tenure;
- Conflict, corruption and illegal harvesting of natural resources; and
- Rapid social and cultural change.

Often, the most effective—and sometimes the only—way to reduce a direct threat to biodiversity is to carry out actions that address its root causes. Such actions may break or weaken the causal linkage between a root cause and a direct threat. For example, if insecure land or natural resource tenure is contributing to the overexploitation of forests or wildlife, tenure reform may break that causal linkage (see Best Practice Example from Namibia). Or, if poverty and lack of access to resources needed for subsistence are causing habitat conversion, the development of natural resource-based enterprises may supplement rural incomes and raise the value of natural ecosystems, providing incentives for habitat

conservation rather than conversion. Thus, the “actions necessary” to conserve biodiversity or tropical forests usually involve a diverse mix of “cross-sectoral” actions, including equitable economic development, land or resource tenure reform, and support for more democratic governance.

A threats-based approach is a proactive, positive approach to conservation, despite the negative connotation of the word “threats” in its name. It seeks positive opportunities to link biodiversity conservation with objectives in other sectors such as economic growth, democracy and governance, and conflict mitigation, thereby addressing the root causes of some of the direct threats to biodiversity.

Using a *checklist* of both direct and indirect threats is a tool to avoid overlooking any that might be important. Such a list can be included in the SOW for the activity to guide the analysis team. While useful, a checklist alone is not a sufficient threats analysis.

BEST PRACTICE EXAMPLE

Rwanda, 2003, p. 71, http://pdf.dec.org/pdf_docs/PNACW373.pdf

This example shows the use of a “checklist” of direct threats applied to five different sites (lakes); it communicates a large amount of information relevant to assessing the “actions needed” for biodiversity conservation in a succinct format.

EXHIBIT 7.1 THREATS TO LAKES					
THREAT	LAKE				
	Muhazi	Mugesera	Sake	Nasho	Rwampanga
Coastal habitat destruction	X	X	X		X
Eutrophication					
Water extraction	X	X			
Introduction of exotic species	X	X	X	X	
Artisanal fishing (perhaps harmful)	X	X	X		X
Commercial fishing	X	X			X
Fishing in breeding grounds	X	X	X		X
Intermittent fishing	X	X	X		X
Household pollution	X	X			
Industrial pollution					
Sedimentation	X	X	X		

BEST PRACTICE EXAMPLE

Namibia, 1996 and 2003. Adapted from: Environmental Threats and Opportunities in Namibia: A Comprehensive Assessment for USAID/Namibia – Synthesis Report. 1996. and Environmental Threats and Opportunities in Namibia and Their Implications for USAID/Namibia’s Country Strategic Plan 2004-2010. 2003.

Comparing the “threats” and “actions needed” sections of USAID/Namibia’s 1996 Environmental Threats and Opportunities Assessment (ETOA) with those same sections from an ETOA update conducted for the mission in 2003 provides a positive case study of how activities undertaken to address both direct threats and their root causes were successful, in some cases, in addressing and mitigating the original threats.

For example, the “overexploitation of marine fish stocks” was identified as one of four key **direct threats** to Namibia’s biodiversity in the 1996 ETOA. The main “actions necessary” to mitigate this direct threat were research to develop a better understanding of the ecology of the Benguela Current Large Marine Ecosystem and its fish stocks, and international agreements to regulate fishing off of the coast of Namibia. The 2003 ETOA update reported that:

“A positive development aimed at addressing threats to living marine resources is the Benguela Current Large Marine Ecosystem (BCLME) programme. This program is developing increased regional cooperation between Namibia, Angola and South Africa in research on, and management of, fish and other marine resources within the Benguela Ecosystem.” The 2003 assessment also states that “Because of careful management, in which total allowable catch limits have been set conservatively to allow stocks to rebuild, populations of many important fish species are increasing. For hake, the most important species, there has been a turnaround in the catch.” The Norwegian aid agency, NORAD, provided support to the Government of Namibia for these actions to address overfishing.

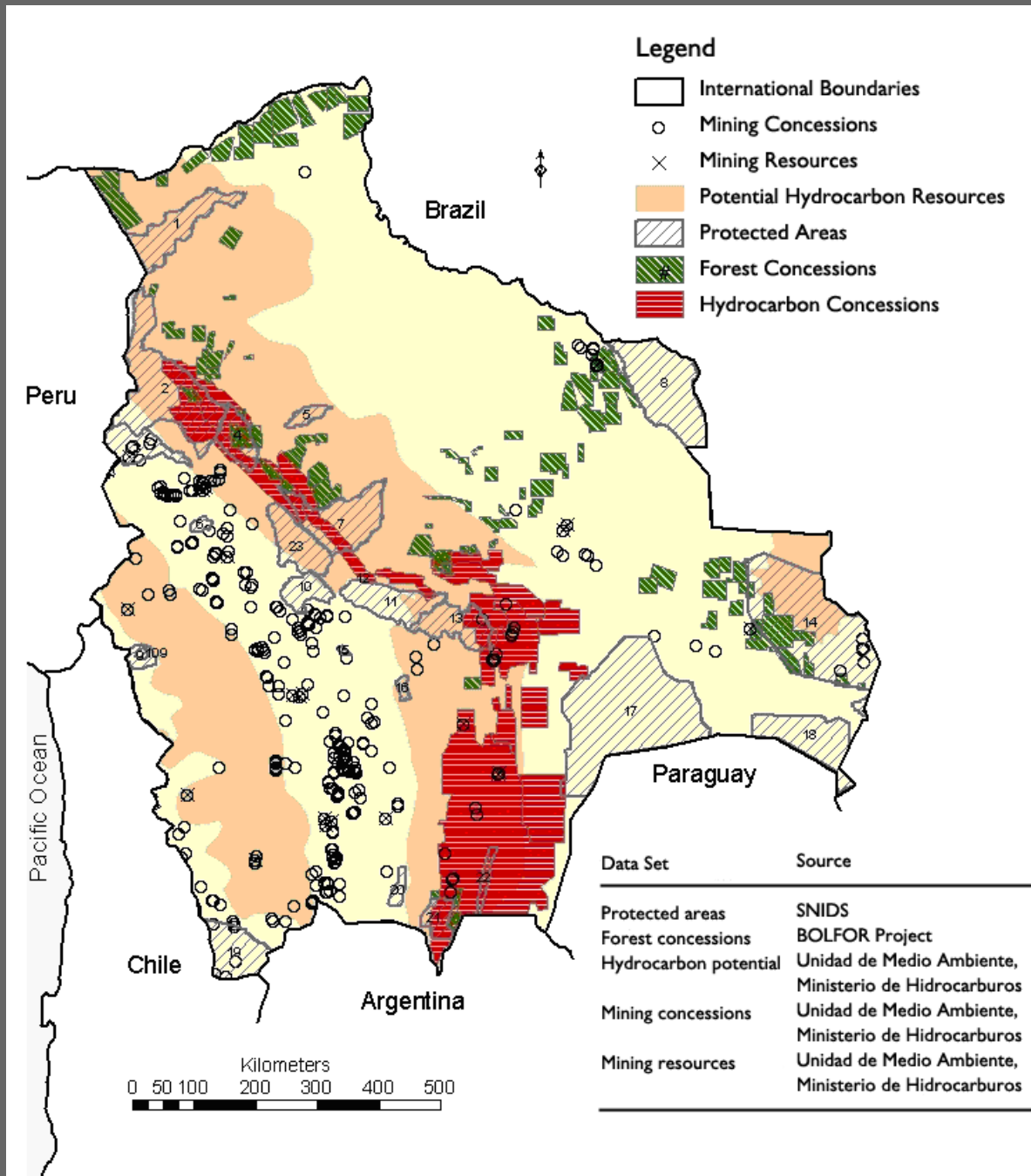
A key **indirect threat** or **root cause** of direct threats to biodiversity in Namibia was “lack of secure and exclusive [land and resource] tenure,” according to the 1996 ETOA. This tenure insecurity contributed to a lack of incentives for the long-term, sustainable management of wildlife, grazing lands, and other natural resources—leading to the direct threats of overexploitation and habitat conversion. The “actions necessary” to address this indirect threat, according to the 1996 ETOA, were land and resource tenure reform: “Policies and legislation to bring about secure and exclusive land and resource tenure throughout Namibia are needed, in order to enable sustainable natural resources management on the ground.”

The 2003 ETOA update reported that “Some significant and positive developments have occurred since the 1996 ETOA. The 1996 communal areas conservancy legislation... and amended regulations to accompany it... give tenure over wildlife to local communities which organize into conservancies. In 2001 the national Forest Policy and Forest Law were approved and passed, in principle giving tenure over forest resources to local communities who organize and apply to manage community forests.” USAID, through its Namibia LIFE program, supported Namibia’s Ministry of Environment and Tourism in bringing about this legislation, and in building the capacity of selected rural communities to sustainably manage their wildlife and other natural resources, thus benefiting economically from this tenure reform legislation. “The number of gazetted communal area conservancies has grown from zero in 1996 to 19 today [2003], with approximately 35 more at various stages in the process of organizing and registering.” There is evidence to suggest that by addressing the root causes of overexploitation of wildlife, The USAID/Namibia LIFE program has helped to reduce the direct threat of overexploitation of some wildlife species: “Data on wildlife populations in the communal lands of North-West Namibia, compiled since 1996, show significant increases in several species.”

BEST PRACTICE EXAMPLE

Bolivia, 2002, Map 4, p. 35, http://pdf.dec.org/pdf_docs/PNACR631.pdf

Map of potential activities that may pose threats to protected areas in Bolivia, mainly from direct threats of habitat conversion and pollution, and which could be prevented or mitigated by appropriate policies and actions.



4.8 ACTIONS NEEDED TO CONSERVE BIODIVERSITY AND FORESTS

The first part of the **legal requirement** for FAA 118 or 119 is a list of “actions necessary.” These should logically follow from the direct and indirect threats identified in a “threats based” analysis (USAID, 2005). Most actions will probably be general; although some may be fairly specific, becoming too specific would make the report unwieldy. Two “Best Practice Examples” are given below, in order to show that there are various ways to succinctly describe the “actions necessary.”

If a national list of actions needed exists, such as that found in a National Biodiversity Strategy and Action Plan (NBSAP) produced under the CBD (see <http://www.biodiv.org/world/reports.aspx?type=nbsap> for a list of national reports and NBSAPs available), it should be used as a starting point in the FAA 118/119 analysis. That is because, as mentioned earlier, these reflect the country’s own conservation priorities, developed through a participatory process with national stakeholders.

BEST PRACTICE EXAMPLE

Albania, 2003, p. 27, http://pdf.dec.org/pdf_docs/PNACY056.pdf

Albania articulated its national strategy for biodiversity conservation in the Biodiversity Strategy and Action Plan (1999). This strategy is built on the following major pillars:

- Protecting a representative sample of ecosystems and habitats within a protected area system (PAS). This system currently covers 5.8% of the nation’s land area and is to be increased to 14% within five years of adoption of the BSAP. The expansion will be accomplished through enlarging and consolidating units in the current system as well as adding new areas, including marine protected areas (see Annex E for a list and maps of the protected areas);
- Protecting species and habitats within landscapes and seascapes, including those designated for agriculture and natural resource extraction;
- Maintaining species and genetic material ex situ in the botanical garden, gene banks, and the zoological park;
- Protecting biodiversity by reducing the negative environmental effects of urban, industrial, and agricultural development;
- Reducing pollution to rivers, lakes, and marine waters from sewage and solid waste;
- Raising the awareness of the Albanian people about the need to need to conserve biodiversity; and
- Improving the legal framework as discussed in Section 5.3.

Very little has been done in the four years since the BSAP was completed to accomplish the biodiversity conservation strategy other than identifying areas to be included in the expanded PAS. Individual units of the PAS are managed by district forest departments who lack the training, manpower, and financial resources to effectively protect these areas. Furthermore, none of the protected areas have management plans nor does the DGFP have experts to provide scientific backstopping. The following actions are still needed to conserve biodiversity in Albania:

- Adopt the expanded protected area system and provide the human and financial resources to effectively manage the system.
- Develop a strategy for biodiversity protection within the various types of working landscapes.
- Provide more resources to the botanical garden including funds to establish a seed bank.
- A massive effort is needed to bring rampant development under control through appropriate planning and industrial design.
- Develop a means to manage biological natural resources on a sustainable basis.
- Build sewage treatment plants and sanitary landfills for all urban areas.
- Strengthen current efforts by NGOs at environmental education and raising awareness (e.g., CITES: Trade in Animals).

BEST PRACTICE EXAMPLE

Ethiopia, 2004.

A. ACTIONS NEEDED TO CONSERVE ETHIOPIA'S TROPICAL FORESTS AND BIODIVERSITY

Improve Protected Area Management

- Build the capacity of institutions now responsible for the management of protected areas. The capacity of the Ethiopian Wildlife and Conservation Organization's (EWCO) management skills and capacity are weak at both the central and regional levels. The EWCO staff needs training in planning, protected area management and tourism development.

Provide Assistance to Communities Living Adjacent to Protected Areas

- Increase access to family planning services to limit expansion into protected and forested areas
- intensify agricultural production for communities living adjacent to protected areas.
- Increase off-farm income generating activities for communities living adjacent to protected areas.

Improved Resource Management at the Community Level throughout Ethiopia

- Use of wood for cooking and heating fuel and for timber is happening at an unsustainable rate throughout much of Ethiopia. Efforts must be made to improve local management of forests and to increase the planting of woodlots;
- Increased investments in improving soil fertility and agricultural production on existing farms is needed to prevent further encroachment on forested and uncultivated areas;
- Non-farm economic opportunities should be created to draw people into urban areas and away from a complete reliance on the natural environment for their livelihoods.

Implement Institutional and Policy Reforms

- Land Tenure. The land tenure system needs to be reformed to provide incentives for resource users to invest in their land over the long term.
- Forest Policy. There is not a clear forest policy. A new forest policy is needed in order to clarify issues regarding:
 - Legal status of National Forest Priority Areas.
 - Community participatory management and benefit sharing; and
 - Identification and establishment of production and protection forests.
- Ineffective Institutional Framework. An effective institution has not been established for the management of forest resources.
- Institutional Coordination. There is poor coordination among various organizations (government, NGOs, and international organizations) involved in forest resource conservation and development programs. There is also a need for better inter-sectoral cooperation.
- Monitoring and Evaluation. Monitoring and evaluation systems need to be improved and coordinated.

4.9 LINKS TO USAID STRATEGY AND PROGRAM

4.9.1 Extent to Which Proposed USAID Actions Meet Needs

Describing this is the second part of the **legal requirement** under FAA 118 or 119. A table showing “actions necessary” on one axis and activities proposed by USAID on the other may be a succinct way to communicate this information.

If the Mission proposes *no actions* supporting conservation, even through cross-sectoral linkages with other proposed SOs, the rationale and justification for this should be given in the report (e.g., other priorities, limited funds, not in manageable interest, other donors will be doing, etc.).

BEST PRACTICE EXAMPLE

Peru, 2001, Section 5, pp. 28-37, titled “Comparison of actions needed to achieve conservation and sustainable management of Peru’s forests and biodiversity with USAID/Peru proposed actions.” This section presents a list of actions needed that flow directly from list of threats (see “best practice” example above), and links each action needed with one or more specific proposed SOs.

4.9.2 Threats from Proposed USAID Activities

Possible threats created by development activities proposed for support in new strategy should be discussed in this section.

BEST PRACTICE EXAMPLE

Albania, 2003. http://pdf.dec.org/pdf_docs/PNACY056.pdf

The SOW for this analysis states: “USAID has found that a table summarizing threats to biodiversity, actions being taken by donor projects, the GoA and NGOs, and outstanding needs to be helpful. This table can also

4.9.3 Opportunities for Linkages with Proposed USAID Activities

To identify opportunities and points-of-entry for USAID to contribute to meeting needs and filling gaps in the conservation of tropical forests and biodiversity, it is essential that an FAA 118 or 119 analysis be done early enough so that it can feed ideas into the strategy development process, and not after the strategy is fully developed and “set in concrete.” The analysis team should work with USAID staff, preferably the proposed SO team leaders, to analyze the Mission’s proposed new strategy SO by SO, and IR by IR, looking for cross-sectoral linkages. The USAID Biodiversity Guide (USAID, 2005) provides many ideas about, and examples of, such cross-sectoral linkages.

(See Best Practice Example on following page.)

BEST PRACTICE EXAMPLE

Mozambique, 2002, pp. 12-13, http://pdf.dec.org/pdf_docs/PNACWI34.pdf

4.2.1 IR 1.1: Transport infrastructure in areas of high agricultural potential improved

Threats:

1. Direct negative impacts possible to species or ecosystems of special concern, wetlands, waters, and soils.

Mitigating actions: develop national environmental guidelines and standards for roads, linking the National Roads Authority (ANE) with technical coordination by MICOA; build EIA capacity within the ANE; improve capacity for transportation-related EIAs at the provincial and district levels through training workshops, site visits, and on-the-job training; carry out EIAs for all road building, road rehabilitation, and other transportation infrastructure changes. (USAID has supported capacity building related to EIA for the National Roads Authority (ANE) through training and through the preparation of environmental guidelines for roads. This latter activity involved collaboration between ANE and MICOA.

2. Indirect negative impacts possible due to significant land-use changes or population migrations caused by improved access, especially to previously less accessible areas.

Mitigating actions: environmentally sensitive planning—for example, keep new roads and road improvements away from protected areas (PAs) and their buffer zones, in general, *unless* those roads will allow more financial benefits to flow from the PAs or buffer zones (such as increased ecotourism, CBNRM in buffer zones, etc.); concentrate support for road improvements in areas of truly high agricultural potential, or areas with the potential to substantially improve rural incomes from natural resource enterprises, such as forestry or nature tourism.

IR 1.3: Land tenure security and other agricultural policies promote investment in agricultural production

Opportunities:

1. Support communities to obtain rights to land (land titles) and natural resources (community forest concessions, for example).
2. Support policy reform and capacity building within appropriate government agencies at national, provincial, and district levels in order to promote CBNRM.
3. Support capacity building within DINAGECA to work with communities in land demarcation and titling and intercommunity dispute resolution (not only technical survey work); train survey agents in new skills at national training institution.
4. Support communities in obtaining certificates of land occupation on a demand-driven basis (small grants program, government facilitation at all levels, NGO assistance).
5. Support capacity building within MADER, especially DNFFB, to work with communities in forest inventory, sustainable natural forest management, management plans, and CBNRM; improve extension skills at mid-technical level through curriculum changes at national training institutions.

4.10 REFERENCES CITED

Any documents or web-based sources of information that were cited, paraphrased, or used in the analysis should be given in a References section of the report.

4.11. ABBREVIATIONS AND ACRONYMS

All abbreviations (shortened forms of words or phrases, usually not pronounced as words, such as FAA, UN, US, WWF, SO, or IR) and acronyms (abbreviations created from the first letters of an organization name or a phrase, and usually pronounced as words, such as UNESCO or UNEP) should be listed.

4.12. APPENDICES

Appendices should include:

- The SOW for the Analysis
- Biographical Sketches of Team Members
- Persons Contacted, Their Institutional Affiliation, and Contact Information
- Other Relevant Supporting Material (such as additional maps, lists of threatened species, and any other supporting material not needed in text)

(See Best Practice Example on following page.)

BEST PRACTICE EXAMPLE

Guyana, 2003, showing one way to summarize information about persons and organizations contacted:

APPENDIX II. INTERVIEW SCHEDULE AND CONTRACT	
Organization	(Team/Date*) Interviewed: Contact Number
ENVIRONMENTAL NGOs	
▪ Conservation International	(2) Joe Singh, Executive Director (and team): 225-2978 (3) Clayton Hall, Sp. Projects Officer and Eustance Alexander, RAP Coordinator: 227-8171
▪ World Wildlife Fund-US	(1) Darron Collins and Stephan Kelleher: 202-778-9511
▪ World Wildlife Fund Guyana	(2) (3) Patrick Williams, Director: 223-7802
▪ Guyana Marine Turtle Conservation Society	(2) Annette Arjoon, Secretary: 225-4483/4
▪ Iwokrama	(2) (3) Dr. Kathryn Monk, Director-General: 225-7503 (3) Professor Ian Richard Swingland, Dir. Exec. Board (3) Dr. Graham Watkins, Acting Director-General: 225-1504
USAID MISSION/US EMBASSY	
▪ U.S. Embassy Georgetown	(2) (3) Ambassador Godard
▪ USAID Mission	(2) (3) Dr. Mike Sarhan, Director USAID/Guyana; (2) (3) Dr. Charles Cutshall, Sr., DG Advisor; (3) Dhanmattie Sohai, DG Advisor; (2) Daniel Wallace, EG Advisor; (3) Winston Harlequin, EG Advisor; (3) Chloe Noble, Program Asst. (EG); (3) William Slater, HIV/AIDS Advisor; 225-7315
USAID/Gy CONTRACTORS	
▪ Chemonics-Washington, DC	(1) Dave Gibson and Guyana team: 202-955-7457
▪ Chemonics/GEO Project	(2) Tom Whitney, Chief of Party: 223-7144
▪ Carter Center, Gy	(3) Melanie Reimer: 225-5852
GoGy AGENCIES, COMMISSION, MINISTRIES	
▪ Environmental Protection Agency	(2) Bal Persaud, Executive Director (and team): 222-4224 (3) Indarjit Ramdass, Dir, NRM Div. and Dr. David Singh, Dir. Env. Mngmt.: 222-2277
▪ Guyana Forestry Commission	(2) (3) James Singh, Commissioner: 226-7271
▪ Guyana Geology and Mines Commission (GGMC)	(2) Robeson Benn, Commissioner: 225-3047
▪ Environment Division, GGMC	(2) Karen Liven, Director: 227-1232
▪ Ministry of Amerindian Affairs	(2) Minister Carolyn Rodrigues: 227-5067
▪ Ministry of Tourism, Industry, and Commerce	(2) Minister M. Nadir (and asst.): 225-6710
RESEARCH/ACADEMIC INSTITUTIONS	
▪ Biological Diversity of the Guianas Program, Smithsonian Institute	(1) Carol Kelloff: 202-786-2518
▪ Centre for the Study of Biological Diversity	(2) (3) Philip Da Silva, Manager (and team): 222-6004
PRIVATE INDUSTRY ASSOCIATION	
▪ Forest Products Assn, of Guyana	(2) Exec. Comm. – John Willems, Toni Williams, and others: 226-9848
▪ Guyana Gold and Diamond Miners Association	(2) Edward Shields and others: 225-2217
▪ Tourism and Hospitality Association of Guyana	(2) (Exec. Committee): 225-0807
INDIGENOUS PEOPLES ASSOCIATION	
▪ Amerindian Peoples Association	(2) Staff: 227-0275
▪ Guyana Organization of Indigenous Peoples	(2) Christine Lowe, President (and team): 225-4347
OTHER US GOVERNMENT AGENCIES	
▪ U.S. Peace Corps	(3) Earl M. Brown, Jr., Country Director: 225-5072

Interview Team/Dates:

(1) DC: C. Johnson and T. Allendorf – June/July 2002

(2) Guyana: C. Johnson and T. Allendorf – July 29th – Aug 9th 2002

- Trip to Lethem, Nappi, and Moco Moco – C.I.'s Community Resource Eval. and balata projects
- Meeting with Vincent Henry, Regional Director, Region 9
- Informal meeting with Shirley Melville, Member of Parliament

(3) Guyana: J. Brennan and S. Aggarwal – Mar 9th – March 24th 2003

APPENDICES

APPENDIX I. WORKING GROUP MEMBERS & CONTACT INFORMATION

Ken Baum	Kbaum@usaid.gov	202-712-0532
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Walter Knausenberger	waknausenberger@usaid.gov	(+254-20) 86 24 00/02
Mary Melnyk	MMelnyk@usaid.gov	202-712-4906
Tim Resch	TResch@usaid.gov	202-712-4453
Mary Rowen	MRowen@usaid.gov	202-712-4466

APPENDIX 2. COUNTRY EXAMPLES REVIEWED

**Region, Country, Type of Analysis, and Date are given for each

AFR Bureau

- Ethiopia – ETOA, (FAA 117, 118 & 119), Feb 2004
- Mozambique – ETOA, (FAA 117, 118 & 119), Dec 2002
- Namibia – ETOA (FAA 117, 118 & 119), Apr 2003 update to 1996 ETOA
- Nigeria – ETOA (FAA 117, 118 & 119), Apr 2002
- Uganda – ETOA, (FAA 117, 118 & 119), Apr 2001
- Sudan – ETOA, (FAA 117, 118 & 119), Mar 2003

ANE Bureau

- Cambodia – Strategic Environmental Analysis (FAA 117, 118 & 119), Sep 2001
- East Timor – FAA 118 & 119, June 2004
- Morocco – FAA 118 & 119, 2003
- Indonesia – FAA 118 & 119, Feb 2004

E&E Bureau

- Albania – FAA 119, Nov 2003
- Bosnia & Herzegovina – FAA 119, Dec. 2003
- Bulgaria – FAA 119, Feb 2002
- Russia – FAA 119, Mar 2002
- Serbia & Montenegro – FAA 119, May 2002

LAC Bureau

- Bolivia – FAA 118 & 119, Jan 2003
- Dominican Republic – FAA 118 & 119, Feb 2002
- Guyana – FAA 118 & 119, Jul 2003
- Jamaica – FAA 118 & 119, Jun 2003
- Mexico – FAA 118 & 119, Nov 2002
- Peru – FAA 118 & 119, 2002

APPENDIX 3. ANALYTICAL QUESTIONS

Country:

Date of 118/119 report:

118/119 analysis done by (firm and team leader if known)

General Notes & Comments:

1) *Prior information base available?*

- Earlier 118/119?
- Reports and studies cited?
- Maps used?

2) *CBD National Biodiversity Strategy Available?*

- Available? Done when? <http://www.biodiv.org/world/reports.aspx?type=nbsap>
Some PDF versions at: <http://www.strategyguide.org/bioserve/implemen/natrepbs.html>
- Independently evaluated by team?
- Used as starting point?

3) *Comprehensive definition of biodiversity used?*

- Ecosystem diversity?
- Species diversity?
- Genetic diversity (incl. ag/crops/crop relatives)?
- Ecological processes/ecosystem services?
- Freshwater diversity covered?
- Coastal and marine covered if relevant?
- Values/economics discussed?

4) *Analysis of the social, economic, and political context?*

- Institutions, policies, laws?
- What government, NGOs, and donors are doing?
- Balance in amount of info with biological info?

5) *Threats analyzed to identify “actions needed”?*

- Checklist or other systematic evaluation?
- Threats from development in all sectors?

- Threats created by USAID activities considered?

6) *Systematic analysis of “actions needed”?*

- Checklist or other systematic evaluation?
- List from a participatory process?
- List from stakeholder consultation by analysis team?

7) *Opportunities for USAID identified?*

- Opportunities for positive contribution by USAID identified?
- Programmatic analysis of extent to which USAID strategy meets needs?
- Reason that USAID strategy does not address some needs justified?
- Overall view of “mainstreaming biodiversity conservation”

8) *Balance between “actions needed” and USAID actions?*

- Reasonable balance between actions needed and programmatic analysis?

9) *Recommendations integrated into USAID strategy?*

- Conclusions in the context of, and integrated with, the USAID strategy?
- “Actions needed” tailored to USAID programming?

10) *Clearly addresses legal requirements?*

- Language of FAA 118/119 reflected?
- Section called “Actions Needed”?
- Section called “Extent to Which USAID Proposed Actions Meet Needs”?

11) *Timing appropriate?*

- Date of FAA 118/119 analyses compared to date of strategy completion?
- Not too early or too late?
- Evidence that FAA 118/119 analyses influenced strategy?

12) *Clear SOW?*

- SOW included as appendix in report?
- Does SOW spell out the legal and USAID policy requirements?
- Field work listed in SOW
- Report outline suggested by SOW?
- Involvement of USAID staff called for in SOW?

13) *Appropriate team composition & technical skills?*

- Team skills and experience described in SOW?
- Skills and experience diverse and effective?

14) Consultation with stakeholders?

- Range of stakeholders consulted (who)?
- Contacts and meetings list given in report?

15) Adequate LOE?

- Days LOE:
- Sufficient for analysis?

APPENDIX 4. MODEL SOW FOR BIOLOGICAL DIVERSITY (FAA 119) ANALYSIS OR TROPICAL FORESTRY AND BIODIVERSITY (FAA 118 AND 119) ANALYSIS

I. Purpose and Objective

The purpose of this task is to conduct an assessment of biodiversity conservation needs for the purposes of complying with sections 117 and 119 of the Foreign Assistance Act of 1961, as amended, and country strategy guidelines under ADS 201.3.4.11 and ADS 204.5. Based on this assessment, assist the Mission to define how its new five-year country program strategy contributes to conservation needs, as required by agency regulations. This assessment could also serve as a planning tool to assist USAID/Serbia & Montenegro in better integrating environment concerns into their overall program.

II. Background

USAID/_____ is currently in the process of developing a new country strategic plan for_____.

The U. S. Foreign Assistance Act of 1961 Section 119 requires USAID to analyze national needs for conserving biological diversity and potential USAID contributions to these needs in all country strategy plans. Specifically, FAA Section 119(d), Country Analysis Requirements requires that:

“Each country development strategy statement or other country plan prepared by the Agency for International Development shall include an analysis of: (1) the actions necessary in that country to conserve biological diversity, and (2) the extent to which the actions proposed for support by the Agency meet the needs thus identified. (FAA, Sec. 119(d).”

III. Statement of Work

Under the direction of a team leader, the assessment team shall evaluate biodiversity concerns in_____. The focus of all activities taken under this assignment is two fold: 1) to identify actions necessary to conserve biodiversity, and 2) to describe how and to what extent actions proposed in the country strategic plans meet, or could meet, the biodiversity needs thus identified.

The assessment team shall perform the following activities:

A) Data Collection:

1. Prior to departure, hold meetings with the Bureau Environmental Officer and _____ Bureau technical staff, and any other Washington, DC, based organizations (such as conservation NGOs with active programs in _____) to gather relevant information on regional programs and agency environmental regulations.
2. After arrival in the field, meet with USAID/_____ to get an understanding of the Mission’s ongoing sectoral assessments, program goals and objectives under its proposed strategy. The Mission also may provide the team with advice and protocol on approaching USAID partners and host country organizations with respect to this assignment. The team shall be aware of sensitivities related to an assessment exercise (e.g., the potential for raising expectations, and the need to be clear as to the purpose of the assessment) and respect Mission guidance. The team will discuss organizations to be contacted and any planned site visits with the Mission and coordinate as required.

3. The Mission Environment Officer will facilitate meetings with other SO Teams at USAID to allow the team to gain a full understanding of the country program and strategy. The Mission Environmental Officer will help facilitate interaction and information exchange with any other assessment teams in the field as necessary.

4. Obtain, review and analyze existing documentation on biodiversity conservation (and tropical forest conservation) in _____, such as that prepared by government agencies, bilateral donors, and national and international NGOs. Examples of such documentation may include the National Biodiversity Conservation Strategies and Action Plan (NBSAP), National Environmental Action Plan (NEAP); Global Environment Fund (GEF) project reports; reports by FAO, UNESCO, UNEP, or UNDP; reports by conservation NGOs, etc.

5. Hold meetings with relevant ministries and agencies, donor organizations, NGOs, and other organizations which are involved in forest and biodiversity conservation, cross-cutting issues, or which are implementing noteworthy projects, and gather relevant information.

6. Conduct one to three priority site visits, if necessary to supplement the understanding gained from interviews, literature, and other second-hand sources.

B) Analysis:

Summarize the status of biodiversity (and tropical forests) in _____, Summarize the social, economic, institutional, legal, and policy context for their use and conservation, including actions currently being taken by government, other donors, NGOs, and the private sector. Identify the key direct and indirect threats to biodiversity (and tropical forests). Identify the actions necessary to conserve and sustainably manage natural resources and biodiversity (and tropical forests) in _____ in the current context, based on analysis of country donor and NGO responses to meet these needs. Prepare a report on the status of biodiversity conservation efforts in Serbia and Montenegro and implications for USAID or other donor programming and environmental monitoring which shall define the actions necessary for conservation.

C) Report:

Prepare a report describing the analysis and conclusions. This report shall clearly meet the legal requirement of FAA Sec 119 (and Sec 118) by:

1) clearly articulating the actions necessary to conserve biodiversity (and tropical forests) in _____, and 2) clearly describing the extent to which actions proposed in new the USAID/_____ strategic plan meet the needs identified. FAA Sections 119 (and 118) do not require USAID to invest in conserving biological diversity (or tropical forests), although it is encouraged more broadly to do so under these sections of the FAA.

The report, of between 30 and 60 pages in length (excluding appendices), shall include sections covering the following topics:

Title Page, including the date of completion of the analysis report

Table of Contents

A. Introduction, describing the purpose of the analysis and methods used in conducting it, including the timing of the analysis in relation to the timing of USAID strategy development.

B. An overview of the status of biodiversity in _____, including ecosystem diversity, species diversity, threatened & endangered species, genetic diversity, agricultural biodiversity, ecological processes and ecosystem services, and values and economics of biodiversity and forests. A map of potential natural vegetation and of land use or land/forest cover should be provided if available.

C. An overview of the social, economic, and political context for sustainable natural resources management and the conservation of biodiversity and forests in _____, including the social and economic environment; institutions, policies, and laws affecting conservation; the national protected area system including all IUCN categories of protected areas; laws affecting the protection of endangered species; and participation in international treaties. A map of the protected areas system should be provided if available.

D. A review and summary of government, NGO, and donor programs and activities that contribute to conservation and sustainable natural resources management, and an assessment of their effectiveness, strengths, and weaknesses.

E. An assessment of the threats to biodiversity, including direct threats and indirect threats or root causes of the direct threats.

F. A list or description of the actions necessary to conserve biodiversity and forests in _____, logically flowing from the review of the threats, and what is currently being done by government, NGO, and donor programs that address those threats.

G. A review of the proposed USAID/_____ strategy and program, including all SOs and SPOs, followed by an analysis of the extent to which actions proposed for support by USAID help meet the needs identified in F. This section should also point out any threats to biodiversity and forests from activities proposed for USAID support, and suggest mitigating actions. It should also identify opportunities for cross-cutting, cross-sectoral linkages with proposed activities (for all proposed SOs and SPOs) especially those that would be low cost and/or would enhance the effectiveness of the proposed activities.

H. All references used and cited in the report should be listed; web URLs for information resources should also be provided.

I. Appendices to the report should contain, at minimum the SOW for the analysis, biographical sketches of analysis team members, a list of persons contacted and their institutional affiliation, and other background or supporting material as needed.

** Further notes or requests for information to be included in analysis report may be added as desired by the Mission.

IV. Methodology

A three-person team with the following composition and expertise is required to conduct this analysis:

International Technical Assistance (1 or 2 persons). Senior Level Natural Resource Management Specialists with post-graduate qualifications in biology, zoology, forestry or closely related field in natural resource management or natural resource economics. Background in tropical biodiversity and natural resource conservation. Knowledge of USAID Strategic Planning process related to Tropical Forestry and Biodiversity (FAA Sections 118 and 119). Knowledge of 22 CFR 216 and of FAA 117 is also desirable. Demonstrated expertise in assessing development programs for impacts on environment and tropical ecosystems and of environmental impact assessments. Experience in the _____ region and in _____ (country) desirable.

Local Technical Assistance (1 or 2 persons). Senior Level Natural Resource Management Specialists with demonstrated experience in _____ (country) environmental law, the policy and legal frameworks governing environmental management in Mozambique and the analysis of relevant policies. Good contacts within _____ government agencies, NGOs, international donors, and private sector preferred.

V. Deliverables:

The primary deliverable under this task order is an Analysis Report for USAID/_____ that examines the biodiversity, natural resource management, (tropical forestry) and other related environmental issues and identifies contributions and/or potential contributions to meeting identified conservation needs by the Mission's proposed strategy.

VI. Anticipated Level of Effort

The LOE for this assignment is a total of 75 person-days, to be allocated as follows:

VII. Schedule and Logistics

Meetings in Washington, DC, will take place between _____ and _____ (dates).

The team will coordinate logistical arrangements with the USAID/_____ Mission Environment Officer. The Mission will assist the team by providing key references and contacts as well as logistical support where necessary. USAID/_____ 's Program Office will also help facilitate meetings with other Mission SO Team Leaders or their staff to fully brief the team on USAID's program and future vision for their strategy.

APPENDIX 5. MODEL SOW FOR ETOA OR STRATEGIC ENVIRONMENTAL ANALYSIS

USAID/_____ Integrated Strategic Plan (ISP) Environmental Threats and Opportunities Assessment with Special Focus on Biological Diversity and Tropical Forestry

Scope of Work

The objective of this work is to deliver to USAID/_____ (Mission) and USAID/_____ (Bureau) a countrywide Environmental Threats and Opportunities Assessment (ETOA) that will inform the Environmental Annex of the USAID/_____ Integrated Strategic Planning (ISP) process. This coordination effort will be carried out by the Contractor's short-term consultant(s) with experience in forestry, ecology, hydrology, and/or natural resource management assessment and analysis. Also, the consultant(s) will be familiar with the impacts of government policy on biodiversity conservation and natural resource conditions. This ETOA will address the requirements of sec. 118(e) and 119(d) of the Foreign Assistance Act of 1961, as amended (FAA) and ADS 201.3.8.2 regarding tropical forestry and biodiversity analyses for country strategic plans. Additionally, it will inform USAID's selection and design of Strategic Objectives (SOs) under the ISP, and provide the first level of analysis on the environmental impact of activities proposed for support under the ISP, in light of other applicable legislation and Agency regulations.

This assessment will also identify important issues with respect to environmental conditions and threats which USAID/_____ must be aware of as it drafts its Integrated Strategic Plan.

1. Background and Purpose

Strategic Planning Process. USAID/_____ is currently in the process of developing a _____-year country Integrated Strategic Plan. Incorporation of environmental threats and opportunities into USAID/_____ 's strategic planning process will help to ensure that activities are conducted in an environmentally sustainable manner, while at the same time identifying opportunities for enhancing the quality of the natural resource base. An area of focus of this assessment contract will be the review of previously generated relevant reports and documents and the identification of gaps in that data.

Environmental Requirements. The statutory and regulatory requirements for environmental review of USAID's economic assistance program are contained in several sources and provide for various types of environmental review at different stages. Broadly, sections 117, 118 and 119 of the FAA require that the environmental effect of development assistance activities be fully considered, and sec. 118 and 119 provide more specific direction regarding the nature of biodiversity and tropical forestry considerations.

- **Country Strategic Plans – FAA sec. 118(e)/119(d) mandatory analysis.** FAA sec. 118(e) and 119(d) contain specific requirements for country strategic plans. Specifically, they require that each country strategic plan contains an analysis of (1) the actions in that country necessary to achieve

conservation and sustainable management of tropical forests and biodiversity, respectively, and (2) the extent to which the actions proposed for support by the Agency [proposed for support in this ISP] meet the needs thus identified. One section of the ETOA will describe/summarize the actions necessary to achieve conservation and sustainable management of tropical forests and biodiversity in _____. Another section of the ETOA will describe the extent to which the actions proposed for support under the ISP address those needs. ADS 201.3.8.2 notes that this is a mandatory analysis for country (although not for regional or pillar bureau) strategic plans.

- **Country Strategic Plans – additional environmental assessments.** In addition to the sec. 118(e)/119(d) analysis mandatory for country strategic plans, ADS 201.3.9.5 encourages preparation of sector analyses, including environmental sector analyses, as appropriate, to help define the sectors in which USAID should work and to help design specific Strategic Objectives and activities, with regard to both environmental and non-environmental SOs. Accomplishment of these objectives is another purpose of the ETOA.

SO-specific environmental review. 22 CFR Part 216 (Regulation 16) establishes detailed procedures for environmental review of specific USAID-financed activities, and ADS chapter 204 contains policy and essential procedures for application of Regulation 16 to the USAID assistance process. ADS 201.3.12.2 (pre-obligation requirements) requires that the environmental review procedures of Regulation 16 be completed prior to the obligation of funds. That provision notes that including some or all of the Regulation 16 environmental review in ISPs may save time, although sufficient detail is not always known and that review differs from the mandatory sec. 118(e) and 119(d) tropical forestry and biodiversity analyses. The purpose of this ETOA is NOT to provide Regulation 16 review, and once a new ISP is approved every SO under the new ISP will have individual Initial Environmental Examinations prepared and approved prior to obligation of funds. The issues of environmental quality and management will be reinforced and mainstreamed through the IEE process. However, this ETOA will provide a first level of analysis on which USAID/_____’s compliance with the Regulation 16 requirements can be subsequently satisfied. This section will be focused around each proposed Strategic or Special Objective.

The tasks embodied in this SOW will advance USAID/_____’s ISP by providing and ensuring:

- an overall assessment of the status and trends in key components of _____’s biodiversity and tropical forest resources;
- an overall understanding of developmental threats (including existing and proposed policy initiatives as well as the legal and regulatory framework) to environment, biodiversity and tropical forests, and
- an understanding of actions that must be taken to maintain biodiversity, tropical forests and ensure sustainable environmental management given the documentation and analysis of threats.

The result of this consultancy will be used by the USAID/_____ (Mission), USAID/_____ (Bureau), Bureau Environmental Officer (BEO), the Regional Environmental Officer (REO) as well as the Agency’s reviewers of ISPs as the basis for the following analyses:

- Identification of the actions needed to achieve conservation of biodiversity and tropical forestry in _____, and a description of the extent to which the actions proposed for support under the new ISP meet (or do not meet) those needs (sec. 118(e)/119(d) mandatory analysis);
- The positive and negative impacts on FAA 117, 118 and 119 issues of each of these activities/laws/policies/initiatives as proposed for support under the ISP;
- Plans and outcomes of efforts to mitigate the impacts of the foregoing;

- The effectiveness of relevant public institutions that supervise and govern the utilization, development and/or monitoring of environmental resources in terms of how they achieve environmental sustainability and mitigate negative development impacts, prevent degradation and/or achieve restoration of tropical forests and biodiversity.

2. USAID's Program in _____(Country)

Brief summary of the program as it has been conducted and view toward the future ISP should be included here

3. Scope of Work

A team of ___consultants will be hired to conduct this analysis.

3.1 Specific Tasks

The consultant(s) will:

1. Document the state of key natural resources by quantifying trends in their management, biophysical condition, productivity, abundance and distribution and identifying the threats (e.g., degradation, depletion, pollution) to which they are subjected. For the purpose of this analysis, the key natural resources to be assessed include forests and woodlands, wildlife, natural water bodies (including wetlands, rivers and lakes), and soils (fertility and stability) as related to agricultural systems and other forms of land clearing.
2. Conduct an analysis of how past events and current initiatives have shaped the country's development trajectory. The concern is how _____'s responses to the global economy, its geo-political position, and its internal development agenda will affect environmental sustainability (Section 117), tropical forest conservation (118) and biodiversity (119).
3. Analyze existing and proposed laws, policies, and initiatives that have implications for the environment. Of particular relevance are: 1) policies, codes, protocols and regulations (both draft and in force) related to natural resources, e.g. Forest Codes and wildlife conservation; 2) water resources management legislation and wetlands law; 3) land tenure legislation and/or initiatives; agribusiness and private sector promotion provisions; and 4) draft laws on fishing and aquaculture.
4. Identify and analyze gaps in the existing knowledge base, both within and outside the purview of existing agencies. Collect available data, conduct interviews, and recommend needed follow up work.
5. Sec. 118(e)/119(d) analysis. A specific section will (a) describe the actions necessary to conserve tropical forests (if any) and biodiversity in _____, and (b) describe the extent to which the actions proposed for support in the ISP meet those needs. This latter section will be organized around the needs identified for _____, and relate the proposed activities to those needs. Where identified needs are not being addressed by the ISP, this should be expressly stated. Where appropriate, it would be useful to note other donors or partners who are addressing the needs not proposed for support under the ISP and/or describe the reason for the ISP's not proposing support for those needs (the strategy focuses on the highest-priority needs, other partners are addressing certain high-priority needs, conflict prevents access to high-priority needs, other needs are higher priority in the development context, etc.).
6. Conduct an environmental review of proposed USAID/_____ strategy components. This will be a preliminary analysis of potentially negative environmental impacts, as well as opportunities for incorporating sound environmental management principles into proposed activities. The intent is to identify and/or emphasize environmental threats and opportunities relevant to the Mission's SO

programs, and the potential impacts with respect to broad FAA Section 117, 118 and 119 issues. The identification of opportunities and entry-points for USAID/_____ efforts under the new ISP to positively influence the conservation of tropical forests and biodiversity and improve environmental management will be particularly relevant. This section will be organized around the proposed SOs, and will make suggestions regarding those SOs.

3.2 SOW Approach:

The following activities are considered necessary for the Contractor to deliver a timely and high quality ETOA for incorporation in the USAID/_____ ISP:

**describe briefly relevant activities as needed, including:

- meetings with USAID/Washington staff
- document review
- meetings with USAID/_____ mission staff
- stakeholder meetings and interviews
- field trips or site visits

4. Expertise Required

International Technical Assistance (1 or 2 persons). Senior Natural Resources Team Leader (should be international), and Senior Natural Resources & Environmental Management Specialist (local or international) with post-graduate qualifications in biology, zoology, forestry, natural resources economics, or closely related field in natural resource management. Background in tropical biodiversity, water resources management, and/or natural resource conservation. Knowledge of _____ (country and/or region) and of USAID Strategic Planning process related to Environmental Threats and Opportunities Assessment. Knowledge of 22 CFR 216 and of FAA Sections 117, 118 and 119, and related USAID and USG directives. Demonstrated expertise in assessing development programs for impacts on environment and tropical ecosystems. Expertise in environmental impact assessments (EIA).

Local Technical Assistance (1 person). Environmental Policy Analyst with demonstrated experience in _____ environmental law, the policy and legal frameworks governing natural resources, environmental management and agriculture in _____ and the analysis of relevant policies.

5. Period, Level of Effort and Supervision

- A. **Team Leader:** A maximum of ___ working days based on a six-day work week is authorized. The team leader consultancy will be carried out within the period o/a _____ (dates). About ___ days will be spent for pre-departure document review and planning, _____ days of field work, ___ days of writing and wrap-up, and ___ days travel. The Team Leader will work under the technical direction of the USAID/_____ (staff member title). The Senior Regional Environmental Officer based at USAID/_____ will also have an advisory role.
- B. **Senior Natural Resource Specialist:** A maximum of ___ working days based on a six-day work week is authorized. **breakdown of LOE, dates and supervision**
- C. **Local Natural Resource Technical Assistant:** A maximum of ___ days based on a six-day work week is authorized. **breakdown of LOE, dates and supervision**

6. Deliverables (The Team Leader will have primary responsibility for all work products/deliverables)

- Work plan/schedule within three working days of start date.
- Oral debriefing within five days before ending date (Team Leader and Sr. Specialist).
- One report containing the information described in 3.1, items.1 to 5 above (Team Leader).
- A copy of the draft report will be delivered to USAID/_____ by _____(date) in electronic (saved to MS Word) as well as hard copy.
- Following a two week comment and review period, a revised final report incorporating all comments will be submitted within three weeks of the end date.
- _____ copies of the bound final draft will be made available when the final is approved by the Mission.
- A short (10-15 p.) ISP Environmental Annex, which consists of a summary and syntheses of the findings and recommendations of the full ETOA. The complete parent document, “_____ Environmental Threats and Opportunities Assessment” will be in the master Mission ISP files and available on request. The introduction to the Summary will include this statement: "The Environmental Annex is an ISP-specific analysis that examines environmental threats and opportunities inherent to the Mission’s strategy and assesses the extent to which the Mission’s strategy incorporates or addresses tropical forests and biodiversity concerns. This assessment does not substitute for the Initial Environmental Examination (IEE). Each SO Team is responsible for ensuring that an IEE or a Request for a Categorical Exclusion is conducted at the SO level for all activities funded by USAID."

APPENDIX 6. MODEL TABLE OF CONTENTS OUTLINE FOR REPORTS

Title Page (with date)

Table of Contents

List of Abbreviations and Acronyms

Executive Summary

I. Introduction

Purpose

Methods

II. Status of Biodiversity

Ecosystem Diversity

Species Diversity (including threatened & endangered species, & species of special economic or other importance)

Genetic Diversity

Ecosystem Services

Values and Economics of Biodiversity and Forests

III. Status of Tropical Forests (if a tropical country where FAA 118 analysis is required)

IV. Social, Economic, and Political Context

Social and Economic Environment

Institutions, Policies, Laws Affecting Conservation

V. Government, NGO, and Donor Programs and Activities

VI. Threats to Biodiversity (and to Forests if a FAA 118 analysis)

Direct Threats

Indirect Threats & Root Causes

VII. Actions Needed to Conserve Biodiversity

VIII. USAID Proposed Strategy & Program

Extent to Which Proposed Actions Meet Needs

Threats from Proposed Activities

Opportunities for Linkages with Proposed Activities

References Cited

Appendices

SOW for the Analysis

Biographical Sketches of Team Members

Persons Contacted, Their Institutional Affiliation, and Contact Information

Other Relevant Supporting Material (such as additional maps, lists of threatened species, and any other supporting material not needed in text)

APPENDIX 7. ISSUES REGARDING THE USE OF MAPS IN REPORTS

Issues to be aware of when using maps in FAA 118/119 reports include the following:

Issue 1. When Data Collected. It is vital that a map that was *printed* on a certain date not be represented as one that illustrates information about the *state of affairs* on that date. Check the date for which the data used to make the map were collected.

Most maps clearly state the date of publication somewhere in the border area that surrounds the map. Look for a “printing,” “edition,” or “copyright” date. This is the date that the map was printed. Maps may be re-printed many times; and because a map is labeled as “third edition” does not mean that the data used to create it has been updated twice. The only changes may have been to the description or other ancillary information, but not to the map itself.

The date that the data were collected will be some time before the publication date. It is often a number of years prior to the publication date and, in developing countries, it may be decades. The date (or period of time) of data collection, and the method of data collection (see Item 2), may be described in the border or near the legend. Oftentimes, the data collection date and method are not shown at all, because the map was derived from another map. You may need to acquire the original map to determine the data collection date, ask the map developers, or infer the date from other information. For example, many land cover maps are derived from Landsat satellite imagery. Landsat satellites have been operating since 1972, but Landsat-7 only since 1999. So if a map was created from Landsat-7 imagery, it cannot be older than 1999.

The date (or period of collection) of the data underlying the map is of critical importance, especially if it is to be used as a baseline or for monitoring change. It is easy to be misled into thinking that there has been much more change than there has if the data used to make the map were collected years before its publication date.

Issue 2. How Data Collected/Interpreted. Data used to make maps can come from a variety of sources. Data can be based on field surveys and specimen collections, aerial photography, or satellite imagery, or the map can be derived from other maps. Oftentimes, it will be some combination of these. Each method has its benefits and drawbacks. A map is an interpretation of the survey points, aerial photographs, or images that show “features” on the earth represented as points, lines, or polygons. Data from field surveys and/or specimen collections taken from specific areas may be extrapolated, using models, to “fill out” areas that were not covered in the survey. Alternatively, remotely sensed imagery may be interpolated to “fill in” gaps caused by cloud cover. In both cases, there will be some areas of the map that will be based on assumptions rather than on data. In all cases, the identification of data with features is based on an interpretation of some kind.

As a general rule, the more effort that has gone into data collection and analysis, the higher the degree of confidence one can have in the map. Field sampling strategies should be well designed to meet statistical sampling criteria, remotely sensed imagery and aerial photography should be extensively “ground truthed,” and other maps should be used as data sources only when there is a good understanding of the data collection strategies that were used to create the original map. Statistics can be made to lie; maps can, too. It is important to ask questions about how the data were collected and interpreted in order to gauge the level of confidence that you will entrust to the map.

Issue 3. Comparisons. Oftentimes, maps are used to detect changes over time, or to predict future trends. In order for comparisons to be made, the geographic reference frames, legends, and scales must be compatible. The geographic reference frame is the projection of the three-dimensional surface of the Earth onto a two-dimensional map. The projections must be the same in order for the ground features of

two maps to overlap. The features on a map projection designed to retain equal areas, for example, will not overlay with one designed to maintain equal distances. Features on one map will appear shifted or distorted relative to the other. The map projection is almost always specified as part of the map legend.

A map legend is developed to support a specific interpretation of reality. For example, the same area could be mapped as commercial forest under one legend designed to estimate its economic potential, or as degraded land under a legend designed to highlight wildlife habitat. The purpose of the map defines how the land is classified. If the legend defines classes that do not match the classes of interest, or do not match the classes used in the map to be compared, then comparison of maps will be of limited use in determining change.

The scale of the map is a statement of a measure on the map and its equivalent measure on the Earth's surface. Scale is usually expressed as a representative fraction of distance, such as 1:24,000 or 1/24,000 (one unit of distance on the map represents 24,000 of the same units of distance on the Earth). Maps are often known as “large scale” or “small scale.” A large scale map is one which shows greater detail because the representative fraction (e.g., 1:25,000) is a larger fraction than a small scale map of, say, 1:250,000. The larger the number, the smaller the scale. The scale sets limits on the precision of the information that can be extracted from the map. But recall that precision is not accuracy, and a larger scale (higher precision) map may be less accurate, depending on how the underlying data were collected and interpreted (as discussed in Item 2). Comparing maps at two different scales can be difficult, since direct overlays are not possible. But if the map projections and legends are the same, it is possible to make side-by-side comparisons even of maps at different scales.

Issue 4. Electronic Formats. Most people think of maps as paper products that are folded or rolled, or sometimes bound into an Atlas. And indeed this is usually the final form that they take. As we have discussed above, a map in an interpretation of a technician’s reality, which has been printed and disseminated. In order to re-interpret it to make a new map, with different assumptions, perhaps, or a different legend (e.g., different land classification), one needs to acquire the underlying data. It is important to know when one has actually acquired the data, or just an electronic version of the paper map. Any electronic file in one of the following file formats are GIS-compatible and can be used to generate new maps. Use of any of these files requires specialized software.

- Arc/Info interchange format: A single file with an extension **.eoo** (e.g., “filename.eoo”).
- Arc/Info coverage: A folder containing multiple files (usually nine files), including the files **bnd.adf**, **lab.dbf**, and **pat.adf**.
- ArcView shape coverages, usually in sets of six files with extensions **.shp**, **.shx**, and **.dbf**.
- ArcGIS geodatabase: A Microsoft Access database with file extension **.mdb** (e.g., “filename.mdb”).
- Files for use with other GIS software, such as MapInfo (**.tab**, **.map**, **.dat**) or CAD software such as AutoCAD (**.dwg**, **.dxf**)
- List of coordinate pairs in tabular format, commonly with extensions **.xls**, **.dbf**, **.emf**, or **.mdb**.

Any electronic file in one of the following file formats is *not* GIS-compatible, but is simply an electronic version of the paper map. Such files contain no data; they can only be viewed on the computer screen just as you would view the paper version. These usually do not require the use of specialized software; files with these formats can usually be viewed with standard office software.

- Any file with a graphics file format, such as those with file extensions **.jpg**, **.bmp**, **.tif**, **.gif**, **.wmf**,
- Any file created to be used with the Adobe Portable Document Viewer **.pdf**.

Many of these files—both the GIS-compatible and the non-GIS-compatible formats—tend to be very large. When sharing such files with others, the preferable means is to post them on an FTP or Web site from which others can download them. If that is not possible, and they must be sent as attachments to email messages, then split the files up into small groups and “zip” them first using Winzip or some other compression software. This is especially important when sending the files through firewalls or spam checking software, or to developing countries. Firewalls and spam checkers may reject large files, while the recipient in a development country may require several hours to download a message with a very large attachment.

Issue 5. Where to Get Maps/Map Data. There is a myriad of sources for map data, many available from the Internet and many that are relevant for 118/119 activities. The African Data Dissemination Service (ADDS) is a good source for all kinds of GIS data on Africa (<http://edcw2ks21.cr.usgs.gov/adds/data.php> and <http://edcw2ks21.cr.usgs.gov/adds/geolist.php>). DIVA-GIS offers species distribution data, as well as GIS data on altitude, land cover, population (<http://www.cipotato.org/DIVA/data/DataServer.htm>, <http://www.diva-gis.org/data/DataServer.htm>, and <http://www.cipotato.org/diva/data/DataServer.htm>). The International Water Management Institute (IWMI) provides detailed, downloadable data on specific watersheds and regions (<http://www.iwmidsp.org>). UNEP/GRID provides a number of data resources, including the Sioux Falls Clearinghouse (<http://grid2.cr.usgs.gov/datasets/datalist.php3>), Arendal, Norway (<http://www.grida.no/>) and Baltic Sea drainage basin datasets (<http://www.grida.no/baltic/htmls/arcinfo1.htm>). The UNDP’s Interactive Map Service (<http://www.unep-wcmc.org/index.html?http://www.unep-wcmc.org/cis/~main> and <http://stort.unep-wcmc.org/imaps/gb2002/book/viewer.htm>) provides a number of map images (but no GIS data) of protected areas. Many of these sites are constantly changing, with additional sites being added every day. The best strategy is to conduct an Internet search of the words “map” or “GIS data” with the attributes that you are seeking, and see what you find.

APPENDIX 8. BEST PRACTICE EXAMPLE FROM MEXICO FAA | 18/119 REPORT

Table 4.1: Relevant Environmental Legislation and International Agreements

Law or Regulation	Category/Translation	Content
<i>Constitución Política de los Estados Unidos Mexicanos</i>	Mexican Constitution	Defines environmental rights, ownership of natural resources, environmental protection, conservation, and energy.
<u>Acuerdo de Cooperación entre los Estados Unidos Mexicanos y los Estados Unidos de América sobre la Contaminación del Medio Marino por derrames de hidrocarburos y otras sustancias nocivas</u>	International Agreement / Agreement GOM/US to deal with oil spills in the sea	International agreements have the status of a General Law.
<i>Ley General de Equilibrio Ecológico y Protección al Ambiente</i>	Second tier law/ General Law of Environmental Equilibrium and Protection (LEGEEPA)	Regulates the conservation and restoration of environmental equilibrium; protection of the environment to foster sustainable development; defines federal, state, and local responsibilities, for planning, administration, management, and surveillance of matters related to the environment. Defines responsibilities of SEMARNAT
<i>Ley General de Vida Silvestre</i>	Third tier law/ General Wildlife Law LGVS	Regulates the use, protection, conservation, and exploitation of wildlife. Does not have rules and regulations. Defines responsibilities of DGVS/SEMARNAT
<i>Ley Forestal</i>	Third tier law/Forestry Law LF	Regulates forestry matters, includes rules and regulations and is affected by the creation decree of the Federal Forestry Commission (CONAFOR). Defines responsibilities for DGFDSFS
<i>Ley de Aguas Nacionales</i>	Third tier law/National Water Law LAN	Regulates use and administration of water, including water quality and waste waters. Defines the responsibilities of the National Water Commission (CNA)
<i>Ley General de Bienes Nacionales</i>	Second tier law/Public Property Law	Regulates the use, management, and administration of public property, such as surface and subsurface water, beaches, territorial water, and real estate.
<i>Ley Agraria</i>	Third tier law/National Water Law	Regulates the promotion of sustainable development of agricultural land
<i>Ley Federal de Turismo</i>	Third tier law/National Water Law	Regulates sustainable development of tourism sector
<i>Reglamento en Materia de Impacto Ambiental</i>	Fourth tier law/Environmental Impact	Defines and regulates environmental analysis
<i>Reglamento de la Ley Forestal</i>	Fourth tier law/Rules and Regulations of the Forestry Law	Defines and regulates forest and forest uses. Relevant norms are: NOM-015 fire use in rural areas; NOM to estimate deforestation (in progress);
<i>Reglamento de Áreas Naturales Protegidas</i>	Fourth tier law/Rules and Regulations of the National Protected Areas	Defines & regulates National Protected Areas. CONANP operates through this R&R.
<i>Acuerdo Presidencial de Creación de la Comisión Nacional para el Conocimiento y Uso de la Biodiversidad</i>	Presidential Decree to create CONABIO	Defines and regulates national biological inventories, data banks, project development, cooperation with other agencies, and education on biodiversity. The key document that guides the operation of CONABIO is the National

Law or Regulation	Category/Translation	Content
		Biodiversity Strategy. The current effort is towards developing biodiversity strategy at the state level, with success already for the State of Morelos
<i>Reglamento para el Uso y Aprovechamiento del Mar Territorial, Vías Navegables, Playas, Zona Federal Marítimo Terrestre y Terrenos Ganados al Mar</i>	Fourth tier law/Rules and Regulations of the National Coastal Zone	Defines coastal zone. Regulates the use, administration, and management of coastal resources within federal control.
Convention on International Trade of Endangered Species (CITES is implemented in Mexico through the NOM-059)	International Agreement /(CITES)	Key agreement on control of trade in threatened and endangered species. DGVS is the responsible authority in Mexico, supported by PROFEPA
Kyoto Protocol	International Agreement	Key agreement for the control of GHG, with INE as the responsible authority in Mexico
Montreal Process	International Agreement	Agreement for the conservation and sustainable development of temperate and boreal forest
Man and Biosphere Program	International Agreement	Implemented through CONANP for 13 Biosphere Reserves in Mexico.
<i>Convención sobre la Protección del Patrimonio Mundial, Cultural y Natural</i>	International Agreement	Key agreement for the protection of world heritage. Implemented through CONANP (in part) and SECTUR for the protection of Gray Whales at Lagunas de Vizcaino and the Biosphere Reserve of Sian Ka'an. Leader in the concept of biodiversity conservation through sustainable tourism.
<i>Iniciativa Internacional para la Conservación de los Arrecifes Coralinos (ICRI)</i>	International Agreement	Initiative to stop degradation and restore coral reefs, mangroves, and areas of sea grasses. CONANP as responsible Mexican Authority.
Ramsar Convention	International Agreement	Convention on wetlands of international importance for waterfowl. Includes 7 wetlands (1,157,121 ha) and 9 programs of the Wetlands Fund for the Future.
Trilateral Committee CANADA-US-Mexico for Wildlife and Ecosystem Conservation	International Agreement	Forum for the discussion of biodiversity conservation in NA. It participates in CITES. The main program is Wildlife Without Borders (USFWS), which has funded 167 projects.
<i>Iniciativa para la Conservación de Aves de Norte America (NABCI)</i>	International Agreement	Initiative to conserve native NA birds as an ecological, eco-touristic, and economic resource. Derived from the Commission for Environmental Conservation of NAFTA, 87 approved projects. The Mexican authorities are CONABIO, DGVS, CONANP, FMCN, UNAM, PRONATURA
<i>Acta de Conservación de Humedales de Norte America</i>	International Agreement	Declaration for the sustainable use of wetlands, implemented through DGVS and by the USFWS
<i>Corredor Biológico Mesoamericano</i>	International Agreement / between Mexico and Central American countries	A program that spans a mosaic of ecosystems linking ANPs. In Mexico the CBM aims for the sustainable conservation of five corridors linking 17 protected areas in the states of (Chiapas, Campeche, Yucatan, and Quintana Roo).
Sistema Arrecifal Mesoamericano	International Project/ Guatemala, Belize, Honduras, and Mexico	Agreement to coordinate policy and management of the Mesoamerican Reef. \$11 million in WB funds are approved, pending matching funds from recipient countries.
Agreement between CONANP and the US Park Service	Inter-institutional agreement	To cooperate in the management and protection of ANPs
NOM 007 RECNAT	Supplement to 4 th tier law	Regulates use and exploitation of non-wood products: twigs, leaves, and stems (cacti, opuntia, and agave), flowers, fruits, and seeds.
NOM 0015 SEMARNAT/SAGAR 1997	Supplement to 4 th tier law	Regulates use of fires in forest and agricultural lands

Law or Regulation	Category/Translation	Content
NOM EM 001 RECNAT	Supplement to 4 th tier law	Defines use, protection, and restoration of mangroves
NOM 131 ECOL 1988	Supplement to 4 th tier law	Regulates whale watching and whale habitat preservation
NOM 020 RECNAT 2001	Supplement to 4 th tier law	Regulates restoration and use of forest lands used as grasslands for domestic animals
NOM 023 RECNAT 2001	Supplement to 4 th tier law	Cartographic specifications for soil mapping for the purpose of soil inventories
NOM 059 ECOL 2001	Supplement to 4 th tier law	Native wildlife species under protection

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