

A.I.D. EVALUATION SUMMARY - PART I

PD ABT-935

1. BEFORE FILLING OUT THIS FORM, READ THE ATTACHED INSTRUCTIONS. 89013  
 2. USE LETTER QUALITY TYPE, NOT DOT MATRIX TYPE.

IDENTIFICATION DATA

A. Reporting A.I.D. Unit: Mission or AID/W Office <u>AID/BRAZIL</u> (ES# _____)	B. Was Evaluation Scheduled in Current FY Annual Evaluation Plan? Yes <input type="checkbox"/> Slipped <input checked="" type="checkbox"/> Ad Hoc <input type="checkbox"/> Evaluation Plan Submission Date: FY <u>93</u> Q <u>2nd</u>	C. Evaluation Timing Interim <input checked="" type="checkbox"/> Final <input type="checkbox"/> Ex Post <input type="checkbox"/> Other <input type="checkbox"/>
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D. Activity or Activities Evaluated (List the following information for project(s) or program(s) evaluated; if not applicable, list title and date of the evaluation report.)

Project No.	Project / Program	First PROAG or Equivalent (FY)	Most Recent PACD (Mo/Yr)	Planned LOP Cost (000)	Amount Obligated to Date (000)
598-0784 Grant no. 512-G-00-1043 512-G-00-1042	Grant to World Wildlife Fund (an element of AID/Brazil Global Climate Change Program - GCC)	8/31/90	9/30/95	4,592,545	3,380,658

ACTIONS

E. Action Decisions Approved By Mission or AID/W Office Director	Name of Officer Responsible for Action	Date Action to be Completed
Action(s) Required  - WWF should develop an Action Plan for the forest policy activities for the next 12-24 months. - Following meetings to determine Environmental Ministry interest in participation, WWF should prepare an Action Plan for NRE activities for the next 12-24 months. - WWF and the other members of the GCC/EIA working group should prepare a joint action plan for the next 12-24 months, which should include: 1) clear role of each organization; 2) steps to identify other important factors that affect the EIA process; and 3) steps to address those factors. - WWF should use the results of its upcoming Environmental Education survey to revise the plan for its EE interventions under the upcoming USAID/WWF cooperative agreement. Two months after completion of the survey, WWF should present to USAID/Brazil a work plan to implement the revised plan. The plan should detail at whom WWF will target its limited resources under this component for maximum impact. - Regarding WWF coordination responsibilities, the first workshop on a theme of agroforestry systems for altered land areas should be targeted for early 1994 with a second workshop scheduled for early 1995. - WWF consultation with FVA, should develop work plans with target dates for completing the following issues should be emphasized: 1) agreement on a park resident neighbor policy; and 2) management plan with operational timetable noting key milestones. - WWF will report semi-annually to USAID/Brazil on February 15 and August 15 of each year.	WWF (Garo Batmanian) WWF (Garo Batmanian) WWF (Garo Batmanian) WWF (Garo Batmanian) WWF (Garo Batmanian) WWF (Garo Batmanian) WWF (Garo Batmanian)	Nov. 1993 Nov. 1993 Nov. 1993 Jan. 1994 Jul. 1994 Jul. 1994 Feb. 1994

APPROVALS

F. Date of Mission Or AID/W Office Review Of Evaluation: (Month) (Day) (Year)  
 March 31 1994

G. Approvals of Evaluation Summary And Action Decisions:

Name (Typed)	Project/Program Officer	Representative of Borrower/Grantee	Evaluation Officer	Mission of AID/W Office Director
Signature	Eric Stoner	Garo Batmanian	Ricardo Falcao	John Pielemeier
Date	June 22, 1994	JUNE 30, 1994	JUNE 22, 1994	JUNE 22, 1994

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## ABSTRACT

### H. Evaluation Abstract (Do not exceed the space provided)

The purpose of the WWF is to carry out a comprehensive and integrated program aimed at reducing Amazon deforestation. The two goals of the program are:

- To promote sustainable land management system (timber management, integrated forest resources management, protected area management) that provide an economically viable alternative to pastures and slash-and-burn agriculture, maintain forest cover, and decrease pressure for continued forest clearing. Specific interventions include development of on-the-ground integrated pilot activities which demonstrate the social, economic, and environmental viability of these land uses. WWF will also work to disseminate resulting information to communities and researchers in the region.
- To analyze current government policies for the Amazon region, supplying decision makers with the basic resources (e.g., training, information) needed to develop integrated policies that encourage sustainable land use in the region.

The WWF program has eight integrated components targeted to address these two goals: 1) Community Forest Management; 2) Commercial Forest Management; 3) Protected Areas; 4) Forest Policy; 5) Natural Resource Economics; 6) Environmental Impact Assessment; 7) Environmental Education; and 8) Institutional Strengthening.

Two components, Forest Management and Community Forest Management, targeting forest management and forestry policy, are being supported through a buy-in to the Biodiversity Support Program from the USAID Bureau of Science and Technology. The other components, are being funded by two complementary grants from the USAID/LAC Bureau (512-0784-G-00-0042 and 512-0784-G-00-1043), which require WWF to match. The natural Resource Economics component was supported by a BSP buy-in a first and later added to the USAID/LAC grant. The BSP grant will expire on December 1994. Grant No. 512-0784-G-00-0042 expired September 1993 and Grant No. 512-0784-G-00-1043 will expire September 1995. Implementation was undertaken with the assistance of Mark Renzi .

## COSTS

### I. Evaluation Costs

1. Evaluation Team		Contract Number OR TDY Person Days	Contract Cost OR TDY Cost (U.S. \$)	Source of Funds
Name	Affiliation			
Mark Renzi	MSI	16	9,250	LAC/DR/E PROJECT PROJECT PROJECT PROJECT
Margaret Harritt	USAID/Honduras	16		
Eric Stoner	USAID/Brazil	16		
Garo Batmanian	WWF	16		
Lisa Fernandez	Yale University			

### 2. Mission/Office Professional Staff

Person-Days (Estimate) 6 person days

### 3. Borrower/Grantee Professional

Staff Person-Days (Estimate) \*10 person days

## A.I.D. EVALUATION SUMMARY - PART II

### SUMMARY

J. Summary of Evaluation Findings - Conclusions and Recommendations (Try not to exceed the three (3) pages provided)

Address the following items:

- Purpose of evaluation and methodology used
- Purpose of activity(ies) evaluated
- Findings and conclusions (relate to questions)
- Principal recommendations
- Lessons learned

Mission or Office  
AID/Brazil

Date This Summary Prepared:  
March 1994

Title And Date Of Full Evaluation Report:  
Mid Term Evaluation of WWF Activities  
under the E/GCC Program-Brazil - March 94

### EXECUTIVE SUMMARY

The evaluation described in this report was conducted in Brasilia and at project sites throughout the Amazon region during a two-week period in July 1993. It was a cooperative evaluation, with the team including members from USAID/Brazil, WWF/USA, WWF/Brazil, and an external consultant. Adequately reviewing the project's 11 components and its overall management required an extraordinarily rigorous effort, but the team's high level of energy and commitment to developing a useful evaluation resulted in a product of greater utility than the limited time scope would suggest.

Thorough analyses of each of the 12 aspects reviewed is presented in the body of the report. The reader can easily scan the conclusions and recommendation of any section that is of interest. Accordingly, this section will not simply repeat those items. Rather it attempts to look at the project as a whole to communicate what can be learned from the more detailed analysis in the body of the report.

### GENERAL

WWF and USAID have set out to address an extraordinarily challenging -- and important -- set of issues in the E/GCC initiative. Resolution of the population, income and power distribution, and addressing migration, poverty, and economic policy issues that lead to the rapid deforestation that this program seeks to slow, are clearly far beyond the scope of the modest resources USAID and WWF have at their disposal. However, E/GCC can play an important role in developing alternative models for land use, natural resource management, and local NGO and community involvement in natural resource management issues that could prove invaluable if the societal pressures ever abate.

The WWF/USAID partnership has been both bold and creative in attacking these issues on a number of fronts simultaneously. In such a high-risk portfolio (including 10 separate interventions) initiated in an extremely short time-frame, however, it is to be expected that some aspects would be more successful than others. This was learned from the evaluation.

These first year of involvement have helped USAID and WWF form an unusually collegial and productive USAID/NGO relationship, and in this time both USAID and WWF have gained a better understanding of what the partnership can do in Brazil, of areas where the intervention needs strengthening, and of areas in which they have relatively little comparative advantage. We would expect the project to be entering a stage in the next few years of consolidation, of doing fewer things more deeply, and attaining significant impact.

### HUMAN RESOURCES

1- WWF has succeeded in assembling an extremely dedicated WWF/Washington staff that exhibit a commitment to the success of their activities.

2- The staff appear technically capable in a broad range of disciplines, including forestry, anthropology, institutional development, and environmental education. The same high level of training and experience is not apparent in economic analysis, policy formulation, or regulatory issues.

3- The staff possess a high degree of experience in Brazil, are generally excellent communicators, and appear to have forged productive and collegial relationships with the Brazilian organizations with which they work.

## SUMMARY (Continued)

4- WWF appears to have some difficulty, however, in applying the full range of these skills to each component in which they work. For example, the Araras component could have benefited from greater external assistance in technical forestry; management assistance could have been more appropriately tailored to local institutional needs at several sites; and environmental education could productively be integrated into virtually all field-based components.

### FIELD-BASED COMPONENTS

5- Given the amount of funding available, the few staff present at USAID/Brazil, and the skills of WWF, the E/GCC project appropriately targets development of replicable field models as the heart of project activity.

6- WWF/USAID selected a portfolio of problem areas that represent important and distinct pressures in the deforestation boundary, including working with households engaged in small-scale agricultural activities in forest frontier areas of relatively long settlement (Rio Capim) as well as those experiencing migration (Araras); targeting commercial forestry practices directly (through AMAZON); and work in the two key types of protected areas: national parks (Jau National Park) and extractive reserves (Cajuri and Maraca).

7- Given the wide range of areas in which they chose to work -- and the inherent challenges presented therein -- implementation has proceeded at a reasonable pace. An exception is in the extractive reserves where progress has been significantly slower than expected. However, legal, political, and organizational issues were reportedly particularly vexing there.

8- WWF's involvement in these activities coincided with a move by the organization to play a more actively "hands-on" role in its overseas work. In the case of E/GCC, it appears that greater in-country guidance would have been useful, either through short-term visits or in-country presence.

9- It appears that WWF has learned from this experience in that it plans to install a full-time regional field officer (formerly head of WWF's E/GCC work) in Belem and that it is increasing the role of WWF/Brazil in project implementation. From the above, it appears that participation in the E/GCC project may have helped increase WWF's capacity to implement field projects.

10- Problems related to insufficient field presence became evident in cases where the local implementing organization was being asked to enter into technical areas beyond their scope (such as with CEPASP entering into marketing and its difficulty providing appropriate agronomic assistance in Araras).

11- Insufficient in-country contact may also explain the difficulty WWF appears to have experienced in adjusting technical inputs to meet specific needs (such as a more appropriate level of agronomic and marketing assistance in Araras and financial and accounting assistance in the extractive reserves). There appears to be a need to have a greater presence in monitoring component needs and using WWF's considerable skills and network to program responses to them.

12- Not surprisingly, these issues do not appear to emerge where the local organizations are already fairly well-prepared for their tasks (such as FVA in Jau National Park and AMAZON in commercial forestry). Accordingly, a lesson to take from this experience is for WWF to try to avoid asking NGOs to work in areas beyond their experience and mission. When such adaptation is unavoidable, significant levels of assistance and training should be provided to help the NGO expand its capabilities.

13- WWF, and its local counterparts, performed extremely well in helping communities to band together to address natural resource issues. Efforts in Araras, the extractive reserves, and Rio Capim were particularly impressive.

14- WWF's work with AMAZON in commercial forestry represents a classic case where the model was clearly specified, baseline and control data were collected, objective means to test the merit of model are being undertaken, and a dissemination strategy (though imperfect) has been articulated. The other "model" interventions generally fall short in all but the first area. It is obvious that AMAZON's work is the

## SUMMARY (Continued)

most easily subjected to rigorous scientific scrutiny. However, if these models are to be replicated, WWF must devote increasing attention to these issues. Each component has made some progress in these areas and WWF has been an eager and early partner with GENESYS in attempting to understand the social impacts of its components.

15- WWF should consider ways to disseminate important findings from its work prior to completing the full long-term analysis.

### POLICY AND CROSS-CUTTING COMPONENTS

16- The hope of the project designers was that field- and policy-based components would be mutually reinforcing: better policy and regulation would improve the incentive structure for replication of field-tested models, and dissemination of improved natural resource management models would help inform policy decisions. Unfortunately little cross-fertilization between policy- and field-based components appears to have occurred.

17- WWF policy-based efforts (Forest Policy, Natural Resource Economics, and Environmental Impact Assessment) -- as currently structured -- appear unlikely to significantly improve the incentive structure facing natural resource managers. Two difficulties are hampering program success in the policy/regulatory field: (a) ineffective partner government institutions which experience constant turnover in personnel and mission; and (b) WWF is attacking relatively small parts of enormous and interrelated problems.

18- Implementation of all three policy-based components has been slow, both for the reasons cited immediately above and because of the difficulty in attempting to manage a policy process from Washington.

19- In general, the policy-based components were found to be overly-ambitious, and in need of focus.

20- In general, it was felt that the policy-based components would benefit from being more directly tied to the field-based components, such as using field sites as case studies for Natural Resource Economics to influence policy. Progress appears to have been made on this front with IMAZON becoming an advisor at the federal level.

21- The evaluation indicated that the institutional focus of WWF's policy work should shift away from IBAMA, in favor of working with CONAMA and non-governmental policy initiatives.

22- The environmental education (E/E) component is too new to evaluate its impact. However, it was felt that WWF possessed the capacity to provide quality E/E work and to influence other donors in the E/E field.

23- It was also felt WWF should apply its E/E expertise within E/GCC project sites, whether or not a wider scale of operations was adopted.

24- The scope of the institutional strengthening component included federal government, state government, E/GCC partner NGOs, and other NGOs active in the Amazon region. While institutional infrastructural weakness is a problem throughout the Amazon, the scope of the institutional strengthening component is too broad.

25- The evaluation team recommended that institutional strengthening assistance be targeted to E/GCC partners as a first priority. State and federal staff could be invited to general workshops, but should not be targeted by WWF.

26- While useful, it now appears that WWF's generic approach to institutional strengthening needs to be broadened and more specifically tailored to the needs of the project. This means that general works targeted at NGOs will be replaced with a broader range of training (including basic finance and accounting) at various levels (including NGO, community, and enterprise).

## SUMMARY (Continued)

27- Some misunderstanding has existed as to the appropriate role of WWF in coordinating E/GCC activities. Consensus now exists that WWF will be responsible for organizing workshops for E/GCC members around themes of common interest, helping implement an electronic mail network, among participating organizations, and coordinating efforts in which they team with other US E/GCC partners for implementation.

### MANAGEMENT

28- In general, management of activities appears sound, with relatively efficient communication occurring between USAID and WWF.

29- WWF needs to be more pro-active in its assistance to local partner institutions.

30- Current monitoring and evaluation systems are inadequate for USAID to monitor WWF or for WWF to monitor its sub-grantees. The commitments made to improve this situation are stated in the report. However, significant progress has been made in developing monitoring systems as WWF has worked to develop logical frameworks for its activities.

31- Both WWF and USAID/Brazil will strive to improve communication at the program officer level.

32- WWF will strive to give WWF/Brazil a more active role in project implementation.

33- USAID/WWF must find a replacement for the NTFP marketing assistance and finance that was to be provided by Cultural Survival prior to its departure from the E/GCC program.

34- The project will avoid over-reliance on IBAMA as a partner, targeting more strategically its assistance at other federal organs, state governments, municipalities, and the NGO sector as outlined in this report.

35- WWF should maintain its efforts to leverage the large volume of donor funds targeted for the Amazon in ways that are supportive of E/GCC components and objectives.

36- In some cases, WWF planned to work together with other E/GCC grantees, such as with GENESYS providing socio-economic research and marketing analysis, and with Cultural Survival providing marketing assistance. In some cases, these inputs were not provided, leaving a gap in WWF's programmatic needs. WWF is to be commended for encouraging such coordination, and should now be supported in planning to fill those gaps.

XD-ABI-935-A  
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## **MID-TERM COOPERATIVE EVALUATION:**

### **World Wildlife Fund Activities Under the E/GCC Program -- Brazil**

**March 1994**

**Presented to:**

**John Pielemeier, USAID Representative, Brazil  
Garo Batmanian, Director of Brazil Program, WWF**



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## ACRONYMS USED

ASKARJ	Associação Seringueiros Kaxinawa do Rio Jordão
CAAR	Caixa Agrícola Araras
CEPASP	Centro de Educação, Pesquisa e Assessoria Sindical e Popular
CNS	Conselho Nacional dos Seringueiros
CONAMA	Conselho Nacional de Meio Ambiente
E/GCC	Environment/Global Climate Change Project of USAID's LAC Bureau
EE	Environmental Education
EIA	Environmental Impact Assessment
ELI	Environmental Law Institute
EMBRAPA	Empresa Brasileira de Pesquisa Agropecuária
EPA	US Environmental Protection Agency
FNS	Fundação Nacional de Saúde
FUNATURA	Fundação Pro-Natureza
FVA	Fundação Vitória Amazonica
GENESYS	Gender in Economic and Social Systems
GO	Governmental organization
GTA	Grupo de Trabalho Amazonico
IBAMA	Instituto Brasileiro de Meio Ambiente e Recursos Naturais Renováveis
IEA	Instituto de Estudos Amazonicos e Ambientais
IMA	Instituto do Meio Ambiente
IMAZON	Instituto do Homem e Meio Ambiente da Amazonia
INCRA	Instituto Nacional de Colonização e Reforma Agrária
INEA	Instituto Etnobotânico da Amazonia
INPA	Instituto Nacional de Pesquisas da Amazonia
ISPN	Instituto Sociedade População e Natureza
JNP	Jau National Park
LAC	Latin American and Caribbean (Bureau of USAID)
MIS	Management information system
NEA	National Environmental Accounting
NGO	Non-governmental organization
NRE	Natural resource economics
NTFP	Non-timber forest products
ODA	Overseas Development Assistance
PESACRE	Grupo de Pesquisa e Extensão em Sistemas Agroflorestais do Acre
REBRAP	Rede Brasileira Agroflorestal
SEMAM	Secretaria do Meio Ambiente
STRP	Sindicato do Trabalhadores Rurais de Paragominas
SUDAM	Superintendência do Desenvolvimento da Amazonia
SUNY	State University of New York
TNC	The Nature Conservancy
UNDP	United Nations Development Program
USAID	U.S. Agency for International Development
USDA/FS	U.S. Department of Agriculture/Forest Service

**TPM**  
**WWF**

**Team planning meeting**  
**World Wildlife Fund (also Worldwide Fund for Nature)**

## **EXECUTIVE SUMMARY**

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### **Human Resources**

1. WWF has succeeded in assembling an extremely dedicated WWF/Washington staff that exhibit a commitment to the success of their activities.
2. The staff appear technically capable in a broad range of disciplines, including forestry, anthropology, institutional development, and environmental education. The same high

level of training and experience is not apparent in economic analysis, policy formulation, or regulatory issues.

3. The staff possess a high degree of experience in Brazil, are generally excellent communicators, and appear to have forged productive and collegial relationships with the Brazilian organizations with which they work.
4. WWF appears to have some difficulty, however, in applying the full range of these skills to each component in which they work. For example, the Araras component could have benefited from greater external assistance in technical forestry; management assistance could have been more appropriately tailored to local institutional needs at several sites; and environmental education could productively be integrated into virtually all field-based components.

### **Field-Based Components**

5. Given the amount of funding available, the few staff present at USAID/Brazil, and the skills of WWF, the E/GCC project appropriately targets development of replicable field models as the heart of project activity.
6. WWF/USAID selected a portfolio of problem areas that represent important and distinct pressures in the deforestation boundary, including working with households engaged in small-scale agricultural activities in forest frontier areas of relatively long settlement (Rio Capim) as well as those experiencing migration (Araras); targeting commercial forestry practices directly (through IMAZON); and work in the two key types of protected areas: national parks (Jau National Park) and extractive reserves (Cajuri and Maraca).
7. Given the wide range of areas in which they chose to work -- and the inherent challenges presented therein -- implementation has proceeded at a reasonable pace. An exception is in the extractive reserves where progress has been significantly slower than expected. However, legal, political, and organizational issues were reportedly particularly vexing there.
8. WWF's involvement in these activities coincided with a move by the organization to play a more actively "hands-on" role in its overseas work. In the case of E/GCC, it appears that greater in-country guidance would have been useful, either through short-term visits or in-country presence.
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scope (such as with CEPASP entering into marketing and its difficulty providing appropriate agronomic assistance in Araras).

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12. Not surprisingly, these issues do not appear to emerge where the local organizations are already fairly well-prepared for their tasks (such as FVA in Jau National Park and AMAZON in commercial forestry). Accordingly, a lesson to take from this experience is for WWF to try to avoid asking NGOs to work in areas beyond their experience and mission. When such adaptation is unavoidable, significant levels of assistance and training should be provided to help the NGO expand its capabilities.
13. WWF, and its local counterparts, performed extremely well in helping communities to band together to address natural resource issues. Efforts in Araras, the extractive reserves, and Rio Capim were particularly impressive.
14. WWF's work with AMAZON in commercial forestry represents a classic case where the model was clearly specified, baseline and control data were collected, objective means to test the merit of model are being undertaken, and a dissemination strategy (though imperfect) has been articulated. The other "model" interventions generally fall short in all but the first area. It is obvious that AMAZON's work is the most easily subjected to rigorous scientific scrutiny. However, if these models are to be replicated, WWF must devote increasing attention to these issues. Each component has made some progress in these areas and WWF has been an eager and early partner with GENESYS in attempting to understand the social impacts of its components.
15. WWF should consider ways to disseminate important findings from its work prior to completing the full long-term analysis.

### **Policy and Cross-Cutting Components**

16. The hope of the project designers was that field- and policy-based components would be mutually reinforcing: better policy and regulation would improve the incentive structure for replication of field-tested models, and dissemination of improved natural resource management models would help inform policy decisions. Unfortunately little cross-fertilization between policy- and field-based components appears to have occurred.
17. WWF policy-based efforts (Forest Policy, Natural Resource Economics, and Environmental Impact Assessment) -- as currently structured -- appear unlikely to significantly improve the incentive structure facing natural resource managers. Two difficulties are hampering program success in the policy/regulatory field: (a) ineffective

partner government institutions which experience constant turnover in personnel and mission; and (b) WWF is attacking relatively small parts of enormous and interrelated problems.

18. Implementation of all three policy-based components has been slow, both for the reasons cited immediately above and because of the difficulty in attempting to manage a policy process from Washington.
19. In general, the policy-based components were found to be overly-ambitious, and in need of focus.
20. In general, it was felt that the policy-based components would benefit from being more directly tied to the field-based components, such as using field sites as case studies for Natural Resource Economics to influence policy. Progress appears to have been made on this front with IMAZON becoming an advisor at the federal level.
21. The evaluation indicated that the institutional focus of WWF's policy work should shift away from IBAMA, in favor of working with CONAMA and non-governmental policy initiatives.
22. The environmental education (E/E) component is too new to evaluate its impact. However, it was felt that WWF possessed the capacity to provide quality E/E work and to influence other donors in the E/E field.
23. It was also felt WWF should apply its E/E expertise within E/GCC project sites, whether or not a wider scale of operations was adopted.
24. The scope of the Institutional Strengthening component included federal government, state government, E/GCC partner NGOs, and other NGOs active in the Amazon region. While institutional infrastructural weakness is a problem throughout the Amazon, the scope of the institutional strengthening component is too broad.
25. The evaluation team recommended that institutional strengthening assistance be targeted to E/GCC partners as a first priority. State and federal staff could be invited to general workshops, but should not be targeted by WWF.
26. While useful, it now appears that WWF's generic approach to institutional strengthening needs to be broadened and more specifically tailored to the needs of the project. This means that general works targeted at NGOs will be replaced with a broader range of training (including basic finance and accounting) at various levels (including NGO, community, and enterprise).
27. Some misunderstanding has existed as to the appropriate role of WWF in coordinating E/GCC activities. Consensus now exists that WWF will be responsible for organizing workshops for E/GCC members around themes of common interest, helping implement

an electronic mail network, among participating organizations, and coordinating efforts in which they team with other IIS E/GCC partners for implementation

### **Management**

28. In general, management of activities appears sound, with relatively efficient communication occurring between USAID and WWF.
29. WWF needs to be more pro-active in its assistance to local partner institutions.
30. Current monitoring and evaluation systems are inadequate for USAID to monitor WWF or for WWF to monitor its sub-grantees. The commitments made to improve this situation are stated in the report. However, significant progress has been made in developing monitoring systems as WWF has worked to develop logical frameworks for its activities.
31. Both WWF and USAID/Brazil will strive to improve communication at the program officer level.
32. WWF will strive to give WWF/Brazil a more active role in project implementation.
33. USAID/WWF must find a replacement for the NTFP marketing assistance and finance that was to be provided by Cultural Survival prior to its departure from the E/GCC program.
34. The project will avoid over-reliance on IBAMA as a partner, targeting more strategically its assistance at other federal organs, state governments, municipalities, and the NGO sector as outlined in this report.
35. WWF should maintain its efforts to leverage the large volume of donor funds targeted for the Amazon in ways that are supportive of E/GCC components and objectives.
36. In some cases, WWF planned to work together with other E/GCC grantees, such as with GENESYS providing socio-economic research and marketing analysis, and with Cultural Survival providing marketing assistance. In some cases, these inputs were not provided, leaving a gap in WWF's programmatic needs. WWF is to be commended for encouraging such coordination, and should now be supported in planning to fill those gaps.

## **I. INTRODUCTION**

### **USAID Global Climate Change Initiative (E/GCC)**

In 1990, the U.S. Agency for International Development (USAID) initiated a five-year program to address the problem of increasing emissions of greenhouse gases in developing countries, especially those originating from deforestation and energy consumption. The overall goal of the USAID Global Climate Change Program is to reduce the net flux of greenhouse gases from terrestrial to atmospheric systems.

The focus of the program is to support management technologies and practices as well as policy reforms that will promote the sustainable use of forest and energy resources in selected countries and regions of the world. These countries and regions were selected based on their current and potential levels of greenhouse gas emissions. In Latin America, the program focuses on Brazil, Mexico and Central America.

All proposed projects are subject to the dual criteria of having the potential for positive effects on economic development and conservation in addition to controlling the emissions of greenhouse gases.

### **Global Climate Change Initiative in Brazil**

Deforestation in Brazilian Amazônia is a main source of greenhouse gases from Brazil, and most emissions come from burning biomass. The two most common land-use systems in the region, pasture and subsistence agriculture, use periodic burning as their primary agricultural treatment. Logging is also associated with these land use systems. In most areas of the Amazon, land owners or tenants raise cash to invest on their farms or pastures by selling their standing trees to loggers.

These processes are further aggravated by conflicting government policies for the region. Brazil's environmental protection policy is strong on paper, but often difficult to apply on the ground. Complications arise from contradictory policies set by various government agencies. For example, government policies relating to colonization of Amazonia provide incentives for thousands of people to migrate to the region each day. These new populations are most likely to use slash-and-burn agriculture as their primary land use system. Land tenure policy also provides incentives for deforestation. To claim rights over land in the Amazon, one must prove that "improvement" and "investments" were made on the site. The simplest way to comply with this policy is to cut the forest, burn large areas, and start either a pasture or a farm. Conversely, rubber-tappers and other forest dwellers who have traditionally used the forest more sustainably do not have land rights because they can claim no "improvements" to their land. Finally, deforestation is further increased by a policy that grants long-term subsidies to any agricultural or forestry project in the Amazon region.

## **World Wildlife Fund Program**

Since October 1990, World Wildlife Fund (WWF) has been carrying out a comprehensive and integrated program aimed at reducing Amazon deforestation. The two goals of the program are:

- To promote sustainable land management systems (timber management, integrated forest resources management, protected area management) that provide an economically viable alternative to pastures and slash-and-burn agriculture, maintain forest cover, and decrease pressure for continued forest clearing. Specific interventions include development of on-the-ground integrated pilot activities which demonstrate the social, economic, and environmental viability of these land uses. WWF will also work to disseminate resulting information to communities and researchers in the region.
- To analyze current government policies for the Amazon region, supplying decision makers with the basic resources (e.g., training, information) needed to develop integrated policies that encourage sustainable land use in the region.

The WWF program has eight integrated components targeted to address these two goals: 1.) Community Forest management; 2.) Commercial Forest Management; 3.) Protected Areas; 4.) Forest Policy; 5.) Natural Resource Economics; 6.) Environmental Impact Assessment; 7.) Environmental Education; and 8.) Institutional Strengthening.

Two components, Forest Management and Community Forest Management, targeting forest management and forestry policy, are being supported through a buy-in to the Biodiversity Support Program from the USAID Bureau of Science and Technology. The other components, are being funded by two complementary grants from the USAID/LAC Bureau (512-0784-G-00-0042 and 512-0784-G-00-1043), which require WWF to match. The Natural Resource Economics component was supported by a BSP buy-in at first and later added to the USAID/LAC grant. The BSP grant will expire on December 1994. Grant No. 512-0784-G-00-0042 expired September 1993 and Grant No. 512-0784-G-00-1043 will expire August 1995.

## **II. METHODOLOGY**

The evaluation of progress under the E/GCC cooperative agreement between USAID and WWF was conducted from July 19 to July 31, 1993 in various parts of Brazil. It was a cooperative effort in that the team included members from both WWF and USAID/B, supplemented by an environmental advisor to USAID/Honduras and an external consultant who served as team leader and facilitator.<sup>1</sup> Timed as a mid-term evaluation, it was a formative evaluation, intended to provide guidance in how project implementation could be improved over the remaining life of the project.

After some preparatory meetings between the consultant and USAID/B and WWF, the team gathered in the offices of WWF/Brazil to hold a team planning meeting (TPM). The team reviewed the questions presented in the original scope of work for the evaluation and revised them based on the requirements of the participants and the feasibility of data collection. The unit of analysis was to be the projects' components. It was agreed that, wherever possible, the following procedure would be followed in analyzing component parts:

1. sub-teams (comprised of USAID/B and WWF members) would be assigned primary responsibility for particular components;
2. the entire team would participate in interviewing, debriefing, reviewing of drafts, and final discussion of the findings, conclusions and recommendations for each component;
3. each sub-team would have responsibility for reviewing available documentation and drafting its respective section;
4. the final product would be a consensus piece that reflected collective sentiment; and
5. the consultant would have responsibility for consolidating the first draft of the evaluation document.

Since no logical frameworks had been drafted at the outset of the project and little impact data was available in a readily reviewable format, the team was not able to use quantifiable measures to estimate progress based on agreed upon metrics. Accordingly, data gathering consisted chiefly of reviewing existing records (quarterly reports, WWF proposals, project records) and interviews with USAID/B, WWF, and implementing organization staff as well as beneficiaries. In cases where output or impact data were presented for specific components they were incorporated into the analysis. One of the early recommendations emerging from the evaluation was that WWF integrate logical framework systems into project implementation so that future evaluations will be better prepared to measure progress.

The evaluation was conducted under extremely tight time constraints, having just two weeks to investigate and develop consensus on findings, conclusions, and recommendations on ten different

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<sup>1</sup> USAID/B members included John Pielemeier, Eric Stoner, and Lisa Fernandez; WWF/US members included Garo Batmanian, Sharon Walters, John Butler, and Bob Bushbacher; WWF/Brazil was represented by Eduardo Martins; Margaret Herrit visited from USAID/Honduras, and Mark Renzi was the external consultant.

components and the overall project. The effort included visits and travel between five remote sights in the Amazon and initial meetings in Brasilia. The team was exhausted at the end of the evaluation, but agreement existed that the product would contribute to improved project management.

### **III. FIELD-BASED COMPONENTS**

#### **A. Community Forest Management**

For all Community Forest Management activities:

Funds expended \$90,000. Funds committed \$88,000.

##### **1. Araras Community**

Location: Araras community, Maraba, Para

Project

Objective: 1) Systems of sustainable management of cleared forest margins identified, adopted, and promoted in Araras Community

##### **a. Background**

The colonization process of Amazonia provides incentives for thousands of people to migrate to that region each month. These migrants bring their own agricultural techniques which most often were developed in different ecological conditions and are not adequate for the Amazon region. Thus, a farmer is able to exploit his land for up to six years, but by then the decline in productivity is dramatic. The farmers move on to another colonization area where the cycle of deforestation through slash and burn agriculture is repeated. This process increases deforestation and land degradation in the region without improving the conditions of the farmers.

An alternative is to stabilize the farms by supporting integrated sustainable resource management practices. Farmers are encouraged to manage their existing forest resources to increase their income, while increasing the use of tree crops in cleared areas. These methods, coupled with sustainable agriculture methods, help the farmers to avoid the shifting agriculture cycle and settle in one area.

The Brazilian NGO CEPASP has been working with the Araras community near Maraba since 1989. The community was given title to the land and officially resettled there. With the help of CEPASP, the community formed an agricultural cooperative, Caixa Agricola, to help market their products and manage community needs. In 1990, the community began work with marketing of the native cupuassu palm. Most members of the community are originally from the northeast of Brazil and are rice cultivators.

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<sup>2</sup> Financial figures for each activity are from WWF. All figures are for the period 09/90 through 07/93, and include all WWF contracts with USAID (including the Biodiversity Support Project). "Expended" refers to sums spent by WWF and for which financial reports have been sent to USAID. "Committed" refers to sums contracted to sub-grantees of WWF, but for which amounts financial reports have not yet been sent to USAID. WWF salary figures are NOT included in either "expended" or "committed". WWF has matched USAID funding at almost a 1:1 ratio, contributing \$1.25 million during the life of the project to date.

The community was already organized around the issue of getting title to the land, not with respect to resource management. A strength of the project is the fact that the community itself requested the project activities, not CEPASP or WWF.

Some of the area was already degraded and cleared when they moved there, and some extraction of mahogany had taken place. The area today has forest cover of about 60% and 25% in secondary forest. The average plot size is 50 hectares.

There is a substantial amount of naturally occurring cupuassu and Brazil nuts in the forests of the Araras community. Currently about 30% of the cooperative members' plots have these cash crops on them. There are other plots with babassu palm which can be used to substitute for expensive imported goods such as oil and soap.

The model involves the stabilization of existing farms and local extractive activities, improvement of the standard of living of local communities, and promotion of a more efficient use of the natural resources in the area. This is expected to decrease pressure on the remaining undisturbed forests. This model will be applicable to colonist communities of eastern Amazonia which have marketable forest products.

This approach calls for the maintenance of existing forest cover, and increasing forest cover in cleared areas, while benefitting local communities. The strategy for implementation of the model is to increase economic returns from (1) standing forest, and (2) cleared areas planted in tree crops. This is done through technical assistance and training in agroforestry, sustainable agriculture, and marketing of forest products.

## **b. Findings**

1. There is a clear shift in attitude from clearing forest for traditional annual crops, in favor of maintaining the primary forest cover and as well as planting perennial crops (agroforestry) in cleared areas and secondary forests.
2. Under project activities, the community has increased cash income from non-timber forest products, such as cupuassu and Brazil nuts.
3. Under project activities, the diversity of tree crops planted in the area has increased significantly. Data from CEPASP show that in two years, the number of different tree species planted has doubled.
4. The community favors the forest management model partly due to their perception that extractive activities require less labor than traditional agricultural activities.
5. Community members of Araras understand the management concept of rotation (the amount of land needed in fallow and in annual crops that they need to maintain the needs of their families). The range of the fallow period is from 3-6 years, with a family using 3-5 hectares to plant annual crops. This means that a family will need at least 9 ha and as much as 30 ha to maintain an area in rotation. Data from a CEPASP survey confirms

this observation, showing from 15-25% of a typical family plot under fallow or annual crops (8-12 hectares).

6. Although not acknowledged by CEPASP, adequate or correct technical advice was either not provided for basic agronomic and agroforestry activities or the advice was not pursued, including:
  - the planting of cupuassu seedlings by one farmer three times in open areas with near 100% mortality each time, no guidance suggesting underplanting in forest;
  - a grafting workshop -- carried out by extensionists from EMATUR, the state extension service -- was done during dry season with no shade protection and apparent lack of plant sanitation methods;
  - the location selected for the nursery during the first year of the project did not anticipate the excess of water in the area during the peak of the rainy season. This nursery's seedlings were subsequently divided up among the community. Following that experience, most seedlings and seeds were distributed directly to farmers. Many farmers began making their own seedlings directly on their own lots;
  - lack of follow-up after training workshops and exchange visits to correct misinformation (comment from community member that legume cover could not be done since Araras has no plow); and
  - from the first year's nursery, there was a low seedling survival rate estimated at (40%) after outplanting. CEPASP feels that after the first year's nursery, seedling survival rates improved but presented no data during the evaluation to back this up.
7. Adequate baseline data was not collected on agronomic inputs.
8. One strategy that the community has adopted for economic growth includes product diversification through expanding the range of tree crops for both local use and cash crops (babassu palm, etc.).
9. The community is also interested in moving into increasing degrees of and greater involvement in the processing of tree crops, such as turning fruit into pulp, the storage of pulp during the off-season in freezers, and increasing their ability to transport products to the market. To this end the community is working toward the purchase of a walk-in freezer.
10. The present freezer capacity is exceeded by the potential supply of frozen cupuassu pulp (from trees in the forest). Although it appears that there is insufficient volume of product for the full utilization of a walk-in freezer at this time, when the planted cupuassu comes into production it will likely fill this capacity.

11. The community has expressed willingness to share the freezer with other communities in order for it to expand.
12. Available marketing information does not provide adequate information for future growth. The marketing information on hand was produced under a contract funded and supervised by another E/GCC partner, GENESYS.
13. The institutional mission and culture of CEPASP is in the organization and advocacy of under-represented populations, not in private sector enterprise.
14. CEPASP staff do not appear to have learned to use appropriately the fundamental concepts of inflation, the importance of marketing studies and how to use them, marketing plans, or basic financial management.
15. As a result of CEPASP's inability to handle marketing aspects of project activities or maintain inflation-adjusted figures, it is not clear whether or not the Caixa Agricola Araras lost money producing and marketing cupuassu.
16. The community appears to have a very strong commitment to each other and the project activities. An example of this is that they bought a truck with their own funds in order to facilitate the marketing of forest products.
17. The community has demonstrated that adding value to their non-timber and tree crops is a priority to not only increase their income and decrease dependence on imported goods, but also to involve and benefit the women of the community through their involvement in the primary processing steps.
18. The strength of the community may be attributed in part to the community's own history and development, and in part to the efforts by CEPASP in organizational and advocacy work. Membership in both the Caixa Agricola Araras (CAAR) and the Movimento de Mulheres has grown significantly as a result of these organizations' involvement in cupuassu commercialization.
19. The nature of the project activities require a high degree of coordination and participation at the community level. If the project moves to a higher level of marketing cupuassu, it will require continuing coordination and participation among communities.
20. Caixa members have shown strong interest in dissemination of project activities. There is a strong willingness within the community to share benefits with their own community members who do not benefit directly from project activities, and also with neighboring communities. For example, they are advocating the production of babassu oil especially to benefit those members who do not have the current cash crops (cupuassu, Brazil nut) naturally occurring on their plots.

21. CEPASP can be valuable in dissemination issues: (1) they are linked to a substantial network; (2) they are already using Caixa Agricola members on exchange visits; and (3) they have public relations programs in place.
22. External pressures do not appear to be an issue for the community. There is no indication of an external event/force that would make or break the effect of the model; it may change the activities and scale, but not the model.
23. Assistance from another GCC grantee, Cultural Survival, on marketing issues was never provided.
24. CEPASP has shown initiative in the collection of socio-economic data in Araras. Two surveys were conducted.

**c. Conclusions**

1. The project has succeeded in increasing the Araras community's awareness of the economic value of the standing forest, as well as the value of the agroforestry activities in cleared areas (Findings 1, 2, 3, 5).
2. Important to the success of the project and the model is the opportunity to earn money early on in the project, due to the presence of naturally-occurring tree crops in their forests. A secondary increase in income will enter when planted trees begin to produce (Findings 2, 17).
3. The technical success of the project has been hampered by inadequate technical assistance for agronomic and agroforestry activities, as provided by CEPASP ( Findings 6, 7).
4. The project has created a long-term investment horizon for the Araras community, creating a stabilizing influence for permanent residence in the community (Finding 1, 3, 5).
5. CEPASP does not appear to know how to collect, analyze, or utilize data related to agronomic, financial, or marketing activities, and is not currently capable of efficiently handling the marketing aspects of this project (Findings 12, 14, 15).
6. WWF does not currently have sufficient financial and marketing data to draw clear conclusions to assess the progress of the project, with the result that it is not possible to determine the financial losses or gains of individual farmers and the CAAR over the last two years (Finding 15).
7. The fact that sufficient data for marketing activities have not been collected in two years indicates that WWF may need to change its level of project monitoring (Finding 15).

8. The same group that has been successful on organization issues (CEPASP) is not necessarily the one that should carry on into the level of marketing sophistication required in the future (Conclusions 4, 13).
9. Institutional strength is a critical link for marketing (Findings 16, 17, 18, 19).
10. This project has succeeded largely due to the collective effort by the community (economies of scale) (Findings 16, 17, 18, 19).
11. CEPASP and CAAR can both be valuable in the dissemination phase of the project (Findings 20, 21).
12. The project appears to have suffered from the less-than-adequate support from its E/GCC partners, GENESYS and Cultural Survival (Findings 12, 23).

**d. Recommendations**

1. WWF must come up with pro-active solutions for improving the quality of CEPASP's technical assistance for agronomic and agroforestry activities. Possibilities include full-time technical assistance, bringing in competent outside technical assistance through visits and workshops (possibly REBRAAF), more on-site monitoring by WWF, increased planning on the part of the technical assistance, increased training for technical assistance, and presence of outside technical assistance closer to the project site (Conclusion 3).
2. WWF should analyze the expansion of the market to the next level, consider whether that scale must include other communities, look at the feasibility of the community diversifying into babassu and brazil nuts, and through what mechanisms (Findings 10, 11, 12, 20, 22; Conclusions 5, 6).
3. WWF must come up with a strategy for addressing the financial and marketing needs of the project with their marketing specialist. This may require a full-time technical consultant to CEPASP, or direct assistance from WWF (Conclusions 5, 6, 7, 8; Recommendation 2).
4. WWF must do marketing studies to accommodate increased volume from planted cupuassu (Recommendation 4).
5. WWF should consider giving support to CEPASP for the local dissemination of the project, possibly including specialized technical assistance in extension (Conclusion 11).
6. WWF should create a dissemination strategy for this project at the community level, and at the regional level. They should bring in other projects in the GCC program, and do this within a defined limited period (Conclusion 9, 11).
7. WWF should examine a revised project model that clarifies the strong and weak links, and the effects they have on the success of the project. Examples of strong components

are the provision of cash income early on in project activities, and the role of community organization; weak elements are technical, marketing, and institutional issues.

8. WWF should improve its management information systems (Conclusion 6).
9. USAID and WWF should develop an approach to improving and increasing technical assistance in the area of socio-economic data gathering and analysis and complete the marketing plan for cupuassu (Recommendations 2, 3, 4).
10. USAID should find an alternative to the previously-anticipated contribution of Cultural Survival (Finding 12).

## 2. Rio Capim

Location: Rio Capim communities, Paragominas, Para

Project

Objective: Systems for sustainable management of cleared areas identified, promoted and adopted in target areas

### a. **Background and Model**

Farmers in the Amazon practice slash and burn agriculture to produce annual crops such as maize, rice, and yucca. This activity is not ecologically sustainable when the size of the farm is limited, which forces very short fallow periods. On the other hand, the value of their unprocessed main cash crops is very low. Loggers tend to benefit from this situation by offering sums several times their annual income for the right to log their remaining forest. This further accelerates the land degradation, ultimately, forcing the framers to move to new forest areas where the cycle of deforestation and land degradation will continue.

An alternative is to stabilize the farms by supporting integrated sustainable resource management practices. Farmers are encouraged to manage their existing forest resources to increase their income, while increasing the use of tree crops in cleared areas. These methods, coupled with sustainable agriculture methods, help the farmers to avoid the shifting agriculture cycle and settle in one area.

This approach is being introduced by WWF in four communities of farmers along the Capim River in Paragominas. Much of the region has been cleared by loggers and turned into pastures. These four communities own the last tracts of forest between the pastures and the margins of the river. Since the communities have been in the area for a relatively long period of time, they have a well developed knowledge of how to sustainably harvest forest resources.

Although the communities have been in the area for over 50 years, the sense of community was not strong for much of that time. This has been changing over the last 15 years, when the church

moved into the area. This, coupled with activities by the local labor union, STRP, is creating a stronger sense of community within the region.

Land tenure is relatively secure, so although the area does not have legal title, they have had a document of permission since 1987. This is recognized by local loggers and ranchers. Families have areas from 50-100 ha; overall, about 60% of the area is covered in dense forest, 30% is secondary and fallow areas, and 10% is in open fields for agriculture. One community, Quinandeua, has a large area of community-held forest being mapped out now; the rest have individual plots.

The model involves the stabilization of existing communities, improvement of the standard of living of local communities, and promotion of a more efficient use of the natural resources in the area. This is to be accomplished through diversification of production systems to increase the mix of perennial crops vs. annual crops.

## **b. Findings**

1. The model strives to increase the incentives for communities to remain in their current sites by:
  - a. encouraging them to shift from annual to perennial (especially tree) crops; and
  - b. increasing the economic value of their activities.
2. The model for this project focuses on agroforestry and agricultural plots.
3. An important basic assumption of the model is that if agricultural production is stabilized, farmers won't be as likely to cut forests.
4. Primary forests in Rio Capim do not have marketable amounts of non-timber forest products, but they are relatively extensive (60% of the total project area is in primary forest).
5. Some families have been in the area for almost 50 years. The communities of Rio Capim have long valued forests for personal consumption, especially for hunting, food and medicinal plants. Normally they only cut wood to sell when they need extra money or to use locally for construction, so the forest serves as a kind of savings account.
6. The community members appear to have a clear concept of rotation management, and the amount of land needed for crops. A short fallow period is 4 years, a long one is 10 years. The farmers use about 3-4 ha. to produce food (varies with family size and labor constraints), and have planted an average of 4 ha. per family this year. Families also cut wood on their sites for their own use.
7. STRP, has had a long-term presence with the Rio Capim communities, establishing their relationship through organizing and advocacy activities. Their successes include gaining security of land rights (although not yet legal), institutional support of technical assistance

and training, and the attraction of financing from organizations to support community activities.

8. Thanks to the efforts of STRP, the level of organization in the community is adequate for introduction of the techniques contemplated in the project.
9. There are a large number of organizations working in Rio Capim communities, including: Ford Foundation, Woods Hole Research Center, GENESYS, REBRAAF, and University of Para. This is evidence of the ability of STRP to attract TA and funding.
10. Land security is based on a license for occupation of the area, which is not legal but entitles the licensee to gain title after 2 years from INCRA. This has not happened yet although the contract was up in 1992. The local population (loggers, ranchers, etc.) recognizes the rights of the community. INCRA is committed to resolving these issues by September 1993.
11. The communities have demonstrated strong interest in planting tree crops provided by the project, evidenced by their participation in the production of 20,000 seedlings in 1991-92 and 36,000 in 1992-93. Also, the communities, on their own initiative, requested and received project assistance in planting 20,000 cashews.
12. The community believes that planting trees creates more security of land tenure.
13. There is a constant presence of WWF-funded technical assistance involved on a full-time basis in the project through STRP.
14. The technical assistance seems to be of high quality, as evidenced by good planning, appropriate nursery technology (adequate shade, soil, and water conditions), the amount and timing of training of community members, and progress in areas of processing basic crops.
15. The technology transfer and integration of the project of the community appears to be very successful. Outputs accomplished in a timely manner include:
  - nurseries established (one for each community);
  - number of seedlings produced annually (56,00 in two years);
  - seedlings out-planted from nurseries (80%);
  - number of hectares planted with tree crops (1 ha. in fallow and 1 ha. in cultivated areas/family for at least 30 families); and
  - high survival rates in 1991 for out-planted seedlings of cupuassu and cafe was 90% (cacao was only about 50%).
16. In 1992, there were 18 local meetings, 35 community visits, numerous farmer exchange visits, 4 courses in agronomy and agroforestry for monitors and 4 training courses for community teams.

17. The agronomist has had some problems with the procurement of certified seeds of desired species at the time needed, and of sufficient quality. One limiting factor is that the amount of seed needed exceeds known supplies (EMBRAPA only works with experimental amounts of seed).
18. Eligibility for benefits from project activities is directly related to voluntary participation: if a member works, he or she can receive seedlings. If a family does not contribute through working, it is not eligible for full benefits from the program.
19. For community nurseries, Nazare, has 21% participation by community families (out of 102 families), there is 49% in Sao Sebastiao (45 families), 60% in Quinandeua (out of 45 families), and 40% in Retem (out of 25 families).
20. Project provision of a boat to assist in community communication and transport of material and personnel among communities appeared to greatly facilitate project success.
21. Since women are involved in the agricultural systems affected by WWF activities, the project could have a differential gender impact and the project could benefit from paying close attention to gender issues in implementation activities.
22. A GENESYS-funded research activity will obtain data on the gender dynamics in these systems.
23. The management of fire is a new concept to the communities, but they have already begun to incorporate the idea.
24. The communities have been working with the system of a community cantina for several years, avoiding the costs associated with using intermediaries to buy goods.
25. The distance of the communities from the markets is one of the main limiting factors to their economic growth.
26. The Nazare community cantina has kept basic financial records since its founding, regularly rotating the responsibility for its management.
27. The community is participating in an inventory of the uses of forest products under Woods Hole.
28. The community has invested in processing equipment for their annual crops, and will realize an increase in cash income as well as additional products for on-farm use that were formerly lost to intermediaries. With the value added to their cash crops, it is hoped that farmers will be able to plant less area to earn the same income.
29. There is a perception that fish and wildlife resources have been diminished in the last two decades due to over-exploitation by outsiders.

30. Community members participating in the program have agreed to donate 20% of their first crop to STRP to finance other community efforts nearby.
31. STRP served an essential role as "advocate in the city" for the community.
32. The full-time technical advisor worked on tasks that provided immediate benefits to community members but were funded by other organizations (rice processing and the cantina).
33. Thus, the project was perceived as providing benefits before the first tree crop harvest.
34. Although participants have already benefited from the project, the newly-planted trees will only produce marketable fruit in two to three years.

**c. Conclusions**

1. The project has had impressive success in achieving its outputs (Findings 8, 9, 10, 11, 12, 14, 15, 16, 23, 24, 28, 30).
2. STRP has played a key role in organizing the communities, providing continuity in technical assistance, and attracting other organizations (Findings 7, 8, 9, 10, 33).
3. The presence of constant, and capable technical assistance, appears to have been essential to the achievement of a high level of technical success in crop introduction (Findings 13, 14; Conclusion 1) and provided an excellent opportunity to test the models specified for the activity.
4. This project will provide an excellent opportunity to test the model specified for this activity (Findings 1 and 2; Conclusions 1, 2, 3).
5. The project is creating a long-term investment horizon for the community. This should increase the likelihood of landowners remaining on current sites (Findings 6, 10, 11, 12, 15, 32).
6. Land ownership does not yet appear to have adequate legal security in this community. This must be resolved for the complete success of the activity (Finding 10).
7. The role of fire management is an important technical component (Finding 23).
8. The high degree of community commitment to the project appears to have been an essential ingredient in project success to date.
9. For people to shift to long-term investment, it seems to be helpful to demonstrate some kind of economic return quickly via processing or other means (Findings 32 and 33).

10. The model requires that communities have an advocate in the city to facilitate political, technical and marketing needs (Findings 7, 9, 10, 31).
11. There must be an institution for the dissemination of the results of the model. STRP appears on-track to serve this role for the subject communities (Finding 30).
12. Fine-tuning project implementation could benefit from a thorough review of the upcoming GENESYS survey work to ensure that gender considerations are adequately integrated into implementation efforts (Findings 21, 22, 27).
13. Community members believe in the value of the system and are willing to sacrifice to encourage its wider adoption. This is evidence of their commitment to the system (Findings 15, 30; Conclusion 1).
14. This presents a source of financing for diffusion activities (Finding 30; Conclusion 15).
15. A number of explicit subsidies have been provided -- directly by the project and by other organizations -- that have helped the project to advance (Findings 7, 9, 13, 20).
16. A large stream of benefits from the project will begin to flow in two years, as the first trees planted begin to produce marketable fruit (Finding 34).

**d. Recommendations**

1. The constant presence of technical assistance is necessary for the model to succeed, and should be maintained (Conclusion 3).
2. Future activities will have to follow marketing and processing closely in order for this model to work. This will become an issue when the tree crops begin to bear fruit (See Araras experience, previous section).
3. In so doing, the project must ensure that the institution assigned to provide technical and marketing assistance has the appropriate experience and organizational mission to be capable of performing the task (See Araras experience).
4. Diffusion of the model should recognize that ensuring realization of benefits early in the life of the activity greatly increases the likelihood of success of the project (Conclusion 9).
5. Further study of fire management should be made, and a strategy developed for incorporating it into project activities (Conclusion 7).
6. WWF should consider plans to continue the project until two years after the trees begin to bear fruit, with project termination occurring soon thereafter (Conclusion 16).
7. WWF should develop a strategy for the dissemination of the project results and model.

8. WWF should ensure that, in utilizing the Rio Capim experience as a replicable model, it incorporates adequate economic analysis to understand the degree of subsidy -- if any required to replicate the success of Rio Capim elsewhere (Conclusion 15).
9. WWF should work with the GENESYS survey team to assure that results from their survey will help inform WWF interventions. WWF should report to USAID/Brazil in which ways, if any, the results of the study will be incorporated into their work (Conclusion 12).
10. Eventually the project may want to address extractive activities or other ways to make the forest a sustainable source of income (Finding 2).

## **B. Commercial Forest Management**

### **1. Paragominas**

Location: Paragominas, Para

Funds expended:<sup>3</sup> \$180,000. Funds committed: \$133,000.

#### Project

Objective: To develop an economically and ecologically sound forest management alternative to be promoted to private logging companies.

#### **a. Background and Model**

Timber extraction and processing in the eastern Amazon are widespread economic activities which generate very high returns on investment for a range of actors, including landowners, loggers, and sawmill operators. There are enormous timber resources in Brazilian Amazonia, and thus great political and economic pressures causing continued harvesting.

The goal of the project is to promote methods of forest management which are both ecologically and economically attractive. The project attempts to evaluate the economic viability of different management approaches and communicate these results to government resource managers and the timber industry.

The model assumes that land owners will employ good management practices as long as they can make a profit using them, and does not assume a land ethic on the part of the logger. There are few examples of ecologically sound and economically viable logging in tropical forests. Most existing models are at the research level and are not practical for application by loggers.

The project is being executed through a Brazilian NGO, IMAZON, which is a relatively new but accomplished environmental organization. It carries out research, training, and information dissemination on sustainable resource management alternatives.

Research by IMAZON has shown that existing logging practices are extremely destructive and wasteful. Twenty-seven trees greater than or equal to 10 cm in diameter are severely damaged for each tree harvested. Sustainable forest management has been shown, however, to be technically feasible, with abundant natural regeneration and adequate stocking of larger trees of economic species with good form.

Economically, forest management appears feasible because the profit margins from current practices are so high that they would remain above 20% even if some costly management practices were utilized. However, under current conditions there is no economic or legal incentive for improved management: the projected returns on management are low, and the

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<sup>3</sup> See Footnote 2.

government is lacking either the will or the capacity to require and enforce less wasteful and damaging management practices.

The project seeks to address this situation by testing various measures that could reduce logging waste and increase productivity while reducing ecological impacts. In each case, the costs and benefits of each possible improvement to forest management practice will be measured in economic terms and in terms of maintaining the forest more intact. The project will identify a set of activities that cause less environmental impact while demonstrably being in the economic interest of the landowner or the forest harvester.

The project site is a 205 hectare tract of mature forest owned by a local landowner who plans to log the site this year. The site has been divided into three parts: the model forest management system will be applied on one portion, traditional methods will be employed on the second, and the third area will be used as a control.

#### **b. Findings**

1. **IMAZON is technically of high-quality, being composed of competent Brazilian research professionals. Each step has been well-thought out, and the project manager is full-time.**
2. **IMAZON is building the local capacity to design, implement and analyze high quality research in natural resource management.**
3. **IMAZON is not interested in further technical training, and prefers minimal interaction with donors. They have been creative in obtaining collaborators to leverage their project funding (Caterpillar equipment for logging).**
4. **Numerous and rigorous preliminary studies (100% inventory, variation within the site, costs of practices, etc.) were conducted to develop a very complete baseline data set on the project area.**
5. **As a conscious decision by WWF and IMAZON, due to the nature of the model and test area, certain considerations were not included when setting up the model: nutrient cycling, wildlife, and genetic and biological diversity.**
6. **The project includes a computer model for simulation of various changes during the project, and software is being developed for application of the results to other forest areas.**
7. **Preferred species are very volatile on the national market, with price fluctuations frequent during one year. The model addresses a mixed species forest (which does not include mahogany or virola since they don't occur in the project site). It also accounts for actual and potential value of the mixed species.**
8. **Brazil's timber market is 80% domestic and 20% export, but the project is not directed at either of these exclusively.**

9. Some technical aspects of the model are well-known best management practices (location of roads, selection of mother trees, chain saw cutting practices, etc.), and others are new and untested (cutting of vines, application with loggers, etc.).
10. Factors which are important for the success of the model include market rate of return, available capital, knowledge of the forest, and land ownership.
11. The concept of timber management will not likely be accepted by loggers until it shows that there is a profit to be made. However, one local logger noted a change in attitude toward more interest in improved management.
12. This project is not itself set up to be used to certify appropriately logged wood, but will contribute to setting certification standards for eastern Amazon forests.
13. The dissemination of the model will be through the local loggers union, using field days and educational materials. IMAZON has made several contacts that may be useful for dissemination of the model as well.
14. How this activity will affect policy is not clear at this stage, although its results will likely be reviewed by the forestry working group of which IMAZON is a member. Certification could play a role in promotion of policy based on sound criteria.
15. An Environmental Assessment was prepared by WWF and approved by USAID. The EA satisfies the requirements under the 1991 Foreign Assistance Act, Section (c) (3), as amended, regarding timber extraction in primary tropical forests.
16. The project has an unusual approach: the entire operation in both areas will be carried out by a respected local landowner and logger. IMAZON and WWF will only monitor the extraction and collect data.

**c. Conclusions**

1. This should work well as a model as it has a sound strategy, and contains elements of good management practice, and appears to be technically excellent (Findings 1, 4, 6, 7, 9).
2. The level of preliminary work, such as 100% inventory, may prove to be high for practical application (sampling may be sufficient) with regard to trade-offs for economic gains (Finding 4).
3. The model is flexible, since the computer model can simulate various combinations of change available through software currently being developed (Findings 4, 5, 6).
4. As a conscious decision, the model is weak on certain important ecological inputs and impacts, and strong on economic considerations. The evaluators concur that these priorities were the correct ones (Finding 5).

5. The project is weak on the link with policy adoption and implementation of results (Finding 14).
6. The project already has some elements which can be disseminated early on, and will have some intermediate ones, and does not have to wait for the results of the harvest (Findings 9, 10, 12).
7. IMAZON can play an important role in dissemination, especially through their existing project sites, and contacts made with other donors and companies (Findings 1, 2, 3, 12, 13).
8. As contemplated at the time of the evaluation, IMAZON's dissemination strategy appeared overly academic and insufficiently aggressive in its outreach efforts (Finding 13).

**d. Recommendations**

1. WWF and IMAZON should consider ways to monitor environmental and ecological impacts, both positive and negative, and develop ways to increase positive and minimize negative impacts (Conclusion 4).
2. WWF and IMAZON should be pro-active in dissemination through certain channels (courses, guides, video) early on in the project and should develop a dissemination strategy (Conclusion 8).
3. WWF and IMAZON should fully develop their dissemination strategy, especially regarding a mechanism for follow-on training to the materials produced and the possible need for a full-time extensionist. They should also look at what will be required to implement these standards if they are adopted on a wide scale (availability of trained technical people, monitoring, role of NGOs, etc.) (Recommendation 2).
4. WWF should establish policy links, especially to identify key political players (IBAMA, CONAMA, etc.), and the development of a pro-active strategy to work with those players. They may consider linking the adoption of minimum standards (as defined by the project) to land tenure in certain situations (Conclusion 5).

**C. Protected Areas**

For all protected area activities<sup>4</sup>:

Funds expended: \$218,000. Funds committed: \$300,000.

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<sup>4</sup> See footnote 2.

## **1. Extractive Reserves**

**Location:** Cajari and Maraca Reserves, Amapa State

**Project**

**Objective:** Systems for sustainable forest management identified, adopted, and promoted in target areas.

### **a. Background and Model**

Extractive reserves of natural forest products have been held up as hopeful routes to achieving socially and environmentally sound development in the Amazon. Several large extractive reserves have been established in Brazil, and multilateral development banks have endorsed the concept of reserves. Most effort has concentrated on reserves in the state of Acre. The E/GCC component has chosen to work on pilot extractive reserve activities in the state of Amapa to test the economic and social viability of reserves there as a second case study. The hypothesis being tested by WWF is described below.

WWF posits that it is possible to develop a productive and viable extractive reserve which economically benefits local residents by increasing returns from sustainable management of timber and non-timber forest products and protects the reserve area from predatory destruction of forest cover. If extractive reserves can be proven viable, this will further justify a legally sanctioned form of land ownership which provides an alternative to ranching, mining, and colonization where forest dwellers are present.

Specifically, through this project component WWF hopes to:

- a. develop, with local reserve residents, a use plan for how key natural resources will be used by reserve residents;
- b. train teams of extractive reserve managers (comprised largely of local residents) to manage the reserve's key natural resources according to an agreed-upon use plan;
- c. develop one pilot effort in the processing and marketing of one non-timber forest product (NTFP) to test the assumption that these activities can bring economic benefits to local residents involved in these activities; and
- d. work with CNS (Rubber Tappers Union) to be able to manage projects in the reserve and to better manage bookkeeping (accounting and personnel management), marketing of reserve resources, and coordination of reserve implementation.

**b. Findings**

1. WWF assistance has supported the following: a basic system of river transport; training sessions for reserve resource management, forest product marketing studies, an evaluation of the land tenure situation, a study of options for sustainable community forest resource management; and a public hearing to discuss the impact of a road bisecting the reserve area.
2. Implementation has been slower than expected: reserve plans have not been prepared, reserve managers have not been trained, no pilot efforts in decentralized processing of NTFPs have been launched to demonstrate the economic viability of reserves in Amapa. However, this is partly the result of having to organize management teams as an essential foundation. Significant accomplishments include WWF/REBRAAF training for agroforestry trainers, WWF/GENESYS training for reserve managers in NTFP marketing and rural extension, research completed in the Maraca Reserve on NTFP potential, and community organization around buying and selling of Brazil nuts.
3. Progress has been made in resolving legal issues, but insecurity still exists with respect to a large unresolved claim on the reserves by a powerful private sector interest. This is a land tenure dispute and does not directly threaten the reserves' legal status.
4. The first two years of implementation have been occupied with shifting from IEA to CNS as chief implementer, establishing reserve teams, establishing reserve organizations, and resolving legal issues.
5. CNS was able to achieve a strong level of organization among the communities due to its insightful management of a complex political situation both within the reserves and between the reserves and the outside governments and economic interests.
6. CNS is highly skilled and very experienced in organizing individuals to work collectively and has been very successful at this in the reserves. But it is less experienced in project management and in the specific areas of financial and personnel management likely to be necessary as the reserve begins to receive funding from other agencies.
7. A political base now exists in support of the reserves (the reserve organizations), a mechanism for working with the reserves is present (the reserve teams), and an organization capable of representing the reserves' interests to the municipal, state and federal governments is also present (CNS).
8. Donors (the World Bank and Germany) are now prepared to invest large sums of money into the reserves.
9. WWF staff, through its work within the groups mentioned in Finding 6 above, and on World Bank pre-project teams, is in a good position to help shape how those investments will be formed.

10. Testing of the validity of the model may require considerable capital investment, such as for a Brazil nut processing plant.
11. WWF and CNS have already learned valuable lessons about the legal, political, and organizational practicalities of working with extractive reserves that may be of use to other groups considering operating in similar areas.
12. Selection of one pilot activity (for example Brazil nut processing) over another (palm heart production) may upset the delicate internal political balance achieved through years of consensus building (by favoring those who live near Brazil nuts over those near potentially productive palms, for example). These considerations will be important as WWF plans its second activity in palm heart production.
13. WWF had planned to rely on Cultural Survival to provide technical assistance in marketing the NTFPs to export markets. However, Cultural Survival is no longer participating in E/GCC, and no organization capable of providing that service has yet been identified.
14. CNS will soon be entering a new phase of activity that may press it to its institutional limits. It's clients (the reserve organizations and teams) will be entering areas of economic production (Brazil nut, palm hearts, etc.), and marketing with which it has little experience and no comparative advantage. However, CNS in Amapa has closely followed a Brazil nut processing effort being developed by CNS in an extractive reserve in Acre with the assistance of WWF, among others. The objective is to transfer the model developed in Acre to Amapa.
15. CNS may also be expected to play a primary role in helping the groups manage large sums of financial resources and complex development projects that are likely to be beyond the scope of their current capacity.

**c. Conclusions**

1. WWF has adjusted its assistance strategy to focus on institutional development and resolution of outstanding political issues over testing socio-economic models. This appears to have been a necessary and useful decision (Findings 1, 2, 3, 4).
2. The political base for the survival of the extractive reserves is at least established, although it is far from secure (Findings 5, 7).
3. If CNS is to expand its support beyond the organizational role it has played to date to include assistance in project management activities within the reserve, it will require significant assistance in institutional development (finance, personnel, management systems) (Findings 6, 14, 15).

4. Capacity to plan for economic processing and marketing of NTFP is not currently sufficient in WWF, CNS, or the reserve groups. This will soon become a very important issue (Findings 13, 14).
5. Although WWF has not yet been successful in testing the economic feasibility of reserves, it has played a key role in supporting CNS and reserve groups' efforts to hold on to the reserves. Their security would be in far greater jeopardy today without that assistance (Findings 1, 2, 3, 4, 5, 7, 8).
6. WWF's work with the reserves has helped attract donor financing and may help improve the way in which it is invested in the area, both by helping develop the institutions with which the donors can work and by informing donor investment strategies. These resources can help provide the capital investment for testing the hypothesis (Findings 8, 9).
7. The possibility exists that economic development activities, if not crafted with internal political considerations may erode political cohesion within the reserves. (However, it is important to note that decisions as to which products to pursue are made by the communities, with CNS coordinating the decision-making process; WWF does not determine which products will be commercialized.) (Finding 12).
8. WWF should soon be able to disseminate some of what it has learned in working with the reserves.

**d. Recommendations**

1. WWF should develop a strategy, and implement it, to disseminate what it has learned about the legal, political, and institutional development issues in working with reserves (Conclusion 8).
2. WWF and USAID should develop strategies to fill the gap left by the departure of Cultural Survival from E/GCC. It must either acquire the expertise within WWF or contract out for it. Negotiation with USAID and Cultural Survival may help access the capital originally contemplated for this activity (Finding 13; Conclusion 4).
3. WWF should try to encourage the World Bank and German investors to select investments that would be complementary to E/GCC efforts to date. Other donors should finance the capital portion of the demonstration project and not jeopardize the political balance so difficultly achieved (Conclusion 6).
4. WWF should develop a strategy for developing skills within the reserve, with CNS, or accessing them through WWF or other donor resources to ensure that the administrative, financial, and management capacity exists to handle the large influx of resources anticipated for the reserve from other donors (Conclusions 3, 4, 7, 8).

5. WWF should consider whether a full time Brazilian staff member is warranted to handle the rapid and extensive challenges on the immediate horizon for CNS and the reserve committees. The planned posting of former Brazil Program Director Bob Bushbacher may help in this regard (Recommendation 4).
6. USAID should ensure that the ELI work on extractive reserves is coordinated with the needs and findings of this field project (from evaluation team discussions).
7. USAID should ensure that the GENESYS program is collaborating with assistance on marketing and socio-economic analysis of gender issues and training (from evaluation team discussions).

## 2. National Parks

Location: Jau National Park, Amazonas

### Project

Objective: Systems for sustainable forest management identified, adopted, and promoted in target areas.

### a. **Background and Model**

The Rio Negro Basin, located in the Brazilian Amazon, contains the largest conservation complex of protected areas of any river basin on Earth, including the two largest conservation units in Brazil (the Jau and Pico da Neblina National Parks) and the world's largest freshwater archipelago (the Anavilhanas Ecological Station). Unfortunately, like all the conservation units of the Amazon Basin, these exist only on paper as little has been done to build the infrastructure necessary to make them operable. The consolidation of this complex, the establishment of an infrastructure which will adequately protect its ecosystems, and the formulation of ecologically responsible economic alternatives is the long term goal of the Fundação Vitória Amazonica (FVA).

The focus of the FVA Rio Negro Program is to consolidate the Jau National Park (JNP) as a viable conservation unit and foster scientific research to build on what little knowledge exists of the ecosystems within its boundaries. The JNP covers an area of 2,272,000 hectares (23,353 km<sup>2</sup>), making it the largest national park in Brazil, the second largest in Latin America, and the largest reserve of tropical rainforest in the world. The park encompasses the entire basin of the blackwater Jau River, a right bank affluent of the Rio Negro.

Traditional strategies in consolidating conservation units have excluded the surrounding populations while abruptly relocating individuals living within the protected areas. These actions have often created tensions between the reserves and local communities which can undermine the effectiveness of conservation efforts. FVA seeks an alternative route which attempts to unite the goals of conservation and development by incorporating local populations throughout the planning process, thus defusing people/park tensions. FVA hopes the resultant plan will ensure

that neighboring communities share in the benefits of the park, thus building local consistency for the park's long-term survival. Developing a workable model for consolidating protected areas in the Brazilian Amazonia is critical to transforming the Brazil's paper parks into a viable protected area system.

The principal objective of the project is to develop an action plan (including a management plan) to ensure the long-term conservation of Jau's forests and other natural ecosystems while taking into consideration the needs of local communities inside and outside the park. It is hoped that both the action plan and the management plan will become models for use in other parks in Brazil (particularly in the Amazon).

**b. Findings**

1. FVA has a very clear sense of its mission and appears committed to its execution.
2. FVA has carried out and continues to be involved in various strategic planning (with the German development agency, ODA, WWF) and evaluation efforts and has included local and state agencies in these efforts.
3. An action plan to coordinate the roles and responsibilities of the multi-institutional team working in JNP has been developed.
4. FVA has established agreements with such agencies as IBAMA and FNS.
5. Although FVA completed its promised activities under the agreements on time, other institutions did not (IBAMA, IMA, INCRA).
6. A land tenure study remains of great importance for developing a plan with park residents and INCRA/IBAMA have not done their promised review of this issue.
7. Actual work in the Park only began in January 1992. Four expeditions of several weeks to a month each took place over the course of 1992 and the first semester of 1993. A permanent research base was established in the park in June 1993.
8. A comprehensive population census has been carried out and baseline socio-economic data have been collected on park residents. This has been used to guide applied scientific studies.
9. A threat exists that more people may immigrate to JNP in hopes of indemnification.
10. No clear plan has emerged yet as to how to use buffer areas or to cope with people living within JNP's borders.
11. The level of priority assigned to scientific research in Park planning seems considerable. This appears to be in response to IBAMA's requirements that the key ecosystems and areas of important biodiversity and endemism be identified in the management plan.

12. However, less progress seems to have been made on the more intractable socio-economic issues related to neighboring communities and JNP's human populations.
13. A competent research team has been assembled and a suitable boat and a research base in the park have been established.
14. The FVA team and INPA researchers are tasked with developing a management plan according to IBAMA specification and developing a plan for other actions that will address socio-economic and community development aspects of park management that IBAMA generally ignores.
15. FVA has been active in environmental education activities in the Manaus area. As an organization, FVA has decided to focus its efforts on its urban constituency.
16. Little environmental education activity has not yet been initiated in the area of the park.
17. Although essential and timely, current levels of USAID assistance do not appear to be sufficient to provide FVA with all the funding it will need to complete the task at hand.
18. "FVA is one of the few NGOs in the state of Amazonas with a focus on conservation. JNP is the largest (2.2 million hectares) park in the Amazon. It is also important in both biodiversity and endemism, being the only park that includes the ecosystems of the blackwater watersheds.
19. FVA appears to have difficulty raising its sights above the enormous detail required in its work. In particular, it appears to have had difficulty coming to closure on the various park development processes it has undertaken. We recognize that the Jau effort needs to be programmed for several years, however, intermediate outputs can, and should be, programmed for completion at intervals leading up to the project completion date.
20. FVA appreciates the assistance provided by WWF and recognizes the role WWF (US and Brazil) could play in helping FVA shape its own course.

**c. Conclusions**

1. FVA appears to be on track in its efforts, despite considerable challenges (Findings 1, 2, 3, 4, 5, 7, 8, 11, 13, 14).
2. FVA has done an impressive job thus far in building a multi-institutional base with which to work in JNP (Findings 2, 3, 4, 14).
3. The land tenure issue is of such central importance to project success, that FVA should consider alternative ways to move ahead on the land tenure review despite delays by INCRA/IBAMA (Findings 6, 8, 10, 12).

4. Development of a concrete plan for coping with the human population within the park and buffer zones outside JNP needs to be developed without delay (Findings 6, 9, 10, 12).
5. The physical and personnel infrastructure for developing and implementing plans seems to be on track (Finding 13).
6. The bureaucratic and political support for the park appears to be less solid (Findings 5, 6, 10).
7. While it is laudable that FVA has decided to focus its environmental education efforts where it thinks it can have the most impact, a potential gap exists in park development without an environmental education component for park residents and neighbors (Findings 15, 16).
8. FVA needs to secure additional financing, using its experience with USAID/WWF resources as leverage (Findings 7, 8).
9. USAID/WWF support to FVA in support of its Jau efforts are extremely well-placed, both to conserve the valuable resources within Jau and to develop and disseminate an improved model for park management (Findings 1, 8, 18; Conclusion 1).
10. While well established, and making considerable progress, it appears that FVA would benefit from external advice and leadership from an organization such as WWF. Without such leadership, it is possible that the enormous task could overwhelm FVA, and make it difficult for FVA to incorporate all aspects of a good JNP plan (Findings 4, 6, 7; Conclusions 1, 2, 3, 4, 6, 7, 8).
11. As a small, isolated NGO, it is possible that FVA may require a fresh infusion of ideas, both from WWF and the broader protected area community (Finding 18).

**d. Recommendations**

1. WWF should supplement its current assistance with greater hands-on mentoring. In particular, FVA's progress could be catalyzed if WWF would play an active role in encouraging FVA to keep its eye on the larger issues. More specifically, the following issues should be emphasized:
  - a. FVA should develop work plans for target dates for completing such actions as
    - reaching agreement on a park resident neighbor policy; and
    - when will the management plan become operational, noting key milestones on route.
  - b. WWF should prod FVA to consider ideas outside FVA's experience, such as private sector park management or a park community outreach division, from WWF's (or other group's) activities in other parts of the world.

**(Conclusions 3, 4, 6, 8, 10)**

- 2 WWF needs to strive to avoid being smothered in the details of FVA's concerns while still providing useful leadership (Conclusions 10, 11; Recommendation 1).**
- 3 WWF should consider the utility of having its environmental education specialist work with FVA to design a well-targeted environmental education program for park and buffer zone residents (Conclusion 7).**
- 4 WWF should continue to work with FVA to gather other sources of funds to support the project over the short and long term (Conclusions 8, 9).**
- 5 WWF should bring in more of its Brasilia-based expertise (in policy and applied conservation biology) to backstop FVA in its efforts to influence policy-makers in Brasilia (Conclusions 3, 6).**

## **IV POLICY AND CROSS-CUTTING COMPONENTS**

### **A. Forest Policy**

#### **1. Amazon Region and Brasilia**

Funds expended:<sup>5</sup> \$12,000. Funds committed \$0.

Location: Amazon region and Brasilia

Project

Objective: Targeted policies reviewed from environmental perspective, and recommendations made for their improvement and acceptance.

#### **a. Background**

In order to maximize the impact of the GCC program in Brazil it is necessary to develop policy related activities that target basic institutional and structural components that lead to unsustainable use of natural resources and loss of biodiversity.

Current forest policies have several bottlenecks that affect their application in practice. Many government policies are well-intentioned but are not effective or cannot be applied on the field. The reforestation regulation is one example of such regulations. Sawmill owners are obligated to plant six seedlings for every cubic meter of tree sawed. Some sawmills follow the regulation but without technical criteria. They do not have any management plan and do not expect to harvest those trees later. Thus, the spirit of the regulation is never fulfilled, as the trees planted will never replace those being harvested.

WWF's goal is to develop feasible policy recommendations that should be adopted by the government. These would be reached through a consensus building process, with the establishment of a working group on Amazon forest policy composed of researchers, government officials and industry. This working group would be responsible for identifying the major issues, and leading the process of preparing the final recommendations.

#### **b. Findings**

1. The implementation of the component was affected by constant changes in the Environmental Ministry.
2. WWF's strategy of involving mid-level technical staff of the environmental agency is good because it maintains a minimum level of continuity of the process. As a result, the approach and processes proposed in this component are being used by the government in its new initiatives such as the new environmental bill.

<sup>5</sup> See footnote 2.

3. The temporary stop of the government work "Consolidation of the Environmental Legislation" forced the halt of the review of the existing legal rules and procedures.
4. The current situation in the executive and legislative branches indicates that there is little perspective of changing this scenario in the near future.
5. The pilot effort on sustainable logging developed by WWF, through IMAZON, is a very powerful tool to establish a model that can be applied in a large area of the Amazon region.
6. The linkages between the WWF forestry field and policy projects is relatively weak.
7. Regarding forest policy, WWF is capable of working on three areas: 1.) consumption of tropical timber in the northern hemisphere and the certification/labeling process; 2.) dispute resolution between the public, government and industry and; 3.) development of sustainable forest management pilot projects.
8. WWF project management from Washington has limited opportunities to provide rapid response to opportunities/challenges created by the constant changes of Brazilian politics.
9. Other Brazilian NGOs -- in particular, FUNATURA -- are also developing comprehensive work on forest policy.
10. In response to the difficulties of maintaining a regular working process with the government, WWF established a forest policy working group with 10 leading Brazilian NGOs, in order to define a common alternative strategy.

**c. Conclusions**

1. This component should modify its current approach from expecting that the environmental agency will lead the process, to one that includes the agency as another key player that should be consulted/informed (Findings 1, 3, 4).
2. Better linkages are necessary between the three WWF working areas and also between field and policy efforts (Findings 6, 7).
3. The oncoming general elections (1994) and the mandatory constitutional review (Oct. 1993) are excellent opportunities to provide input/recommendations on forest policy.
4. WWF's Brasilia office may have an advantage in leading the coordination of this component over staff located in Washington (Finding 8).
5. The newly created working group can be used as a solid base to coordinate the work of identifying and proposing alternatives for the major existing policy bottlenecks (Finding 10).

6. WWF must try to collaborate with FUNATURA to avoid duplications (Finding 9).

**d. Recommendations**

1. WWF should organize the existing technical information on forest management, including the pilot effort in Paragominas and other WWF filed projects, to guide policy adaptations (Findings 5, 7; Conclusion 2).
2. WWF should support training, studies and information exchange aimed at strengthening the ongoing labeling/certification efforts for upland tropical rain forests (Finding 7).
3. WWF should continue support for the existing working group. This working group should maintain good reporting/consultation mechanisms with other interest groups, such as industry and government (Conclusion 5).
4. WWF should develop a strategy targeting other alternatives to review forest policy at the government level, such as CONAMA (Findings 1, 3, 4; Conclusions 1, 4).
5. WWF/Brasilia should take the lead in implementing this project component (Conclusion 4).
6. WWF should develop an Action Plan for the forest policy activities for the next 12-24 months, by November 1993.

## **B. Natural Resource Economics**

### **1. Amazon Region and Brasilia**

Funds expended:<sup>6</sup> \$113,000. Funds committed: \$0.

Location: Targeted to Amazon region; activities in Brasilia and Amazon region.

#### Project

Objective: Targeted policies to support environmentally sound land use adopted and/or implemented.

#### **a. Background and Design**

Brazilian National and regional development plans, as well as Brazilian project analysis, has traditionally considered environmental aspects as externalities. Natural resources are hence undervalued or not valued at their replacement cost. While the field of ecological or natural resource economics is relatively new, WWF and USAID program designers felt that the rapid introduction and acceptance of this methodology would be critical to GOB decisions concerning protected areas (national parks, extractive reserves), development project approval and region wide development planning.

The creation of a SEMAM/Ministry of Finance Task Force in 1991, responsible for including ecological economics in national accounting, demonstrated GOB interest. However, the task force did not have the experience and expertise to complete their task successfully.

Although no single methodology has been wholly accepted for use in the US (or elsewhere) it was felt that the basic concepts should be introduced in Brazil immediately, with flexibility for Brazilians to choose methodology for their own use. The original design of this component envisioned a combination of training and workshops which could lead to eventual acceptance of a natural resource economics (NRE) methodology in national accounting and project analysis.

Since national accounting and project analysis are normally government functions, project activities would be conducted largely with and through the federal government (introducing the methodologies via Brazilian universities would have been another, more long term option). A joint effort with UNDP working through the Secretariat of the Environment (now the Ministry of Environment and Amazon) was envisaged.

#### Progress to Date

Very little progress has been achieved in this component of the project. One of three proposed case studies has been initiated. Eight Brazilian academics have collaborated to develop a resource model for a large region of Acre state. The first stage of developing the model has been

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<sup>6</sup> See footnote 2.

completed. The second, more difficult stage, of valuing the resources in the model, has not been attempted by the Brazilian team. Valuation of model resources was to be the subject of a workshop in Brazil at which eight international specialists, would present their valuation methodologies as applied to this model.

Preparation of the model took longer than expected, in part due to frequent changes of leadership and technical personnel at IBAMA. Hence, this component is at least one year behind schedule. The Brazilian team's study of Acre has resulted in interesting empirical findings. Both design of the model and scheduling of the workshop are far behind schedule. It is not clear whether more frequent WWF visits and pressure in Brasilia would have reduced these delays.

In a related activity, WWF, Partners, and USAID/Brazil chose 12 Brazilians for a 3-week training program in the US on natural resource economics. The technical qualifications and experience of the 12 Brazilians varied significantly and some felt the training was geared to a much too basic level for their needs. The impact of the training, according to WWF, was marginal, since they believe only 2 of the 12 participants are still in positions where natural resource economics could be introduced.

#### **b. Findings**

- (1) The project has been delayed for over a year by changes in GOB leadership.
- (2) One of three case studies (for a region in Acre) has been developed to the point of applying values to resources; the case study will be the subject of a major workshop.
- (3) The workshop with UNDP and USAID/WWF funding has been delayed, but may soon be re-scheduled if approved by the new Director of Planning.
- (4) The workshop plan to invite eight major exponents on various natural resource (or ecological) economics methodologies appears overly complex and probably unworkable.
- (5) Possible uses for NRE include national income accounting methodology. Target date for any changes in these accounts is 1995. Legislation supported by Rep. Fabio Feldman may lead to such changes.
- (6) Other possible users are state governments responsible for zoning.
- (7) NRE methodology, specifically focused on project cost-benefit analysis, would be especially useful for timber/wood and fazenda/cattle projects which may be prepared for tax exemptions which must be approved by SUDAM or state governments.
- (8) NRE may be useful in judicial decision-making in land use/project disputes.
- (9) The NRE model used in the case study is very technical and may not be easily understood by non-technicians.

- (10) WWF project management from Washington has limited opportunities to push the project within the GOB.
- (11) ODA-funded activities led by Peter May, Univ. of Fluminense, are the only other donor NRE activities identified.
- (12) A "Guide to Natural Resource Economics" was prepared with project funds. The Guide has been popular and all copies have been exhausted.

**c. Conclusions .**

- (1) Introduction and use of NRE is still important to overall GCC project success.
- (2) The project is behind schedule and needs a new push from WWF (and perhaps USAID).
- (3) If Ministry of Environment does not agree to participate, a non-government strategy needs to be adopted quickly.
- (4) A plan is needed for moving from general agreement on NRE methodology to the development of specific products for users in national income accounts and project analysis.
- (5) Any NRE methodology needs to be communicated in a more "user-friendly" fashion to be broadly accepted and applied.

**d. Recommendations**

- (1) Following meetings to determine Ministry interest in participation, WWF should prepare an Action Plan for NRE activities for the next 12 - 24 months within these months.
- (2) The NRE workshop is more likely to result in a consensus on a preferred methodology to be used in Brazil if the number of presenters invited is limited to four rather than eight and more time is given to study each of the four approaches.
- (3) This plan should go beyond the proposed NRE workshop and focus on how an NRE methodology can be translated into forms that can be used by specialists (e.g. project analysts, zoning specialists) and non-specialists (e.g. judicial system, legislators).
- (4) In developing the plan, WWF should consider the need for other case studies, which might be carried out for other GCC projects which are designed to serve as models (e.g. Cajari Extractive Reserve, Jau National Park).
- (5) The plan should also include recommendations for GCC funded training on the uses of NRE methodology.

- (6) Project management should shift to WWF/Brasilia.**
- (7) WWF should attempt to coordinate (at the minimum not duplicate) ODA-funded, and other donor, NRE activities.**

## C. Environmental Impact Assessment

### 1. Amazon Region

Funds expended:<sup>7</sup> \$46,000. Funds committed: \$0.

Location: Amazon region

Project

Objective: To improve the EIA process for pasture, ranching, and forestry in the Amazon region.

#### a. Background

In 1981, the Brazilian government established a policy that obligates any major economic enterprise, such as cattle ranching, farms, and industries, to have an approved environmental impact assessment (EIA) before the enterprise is established.

The government, however, never produced follow-up regulations defining the scope and criteria of such EIAs and methods for their evaluation. Therefore, the legislation has been ineffective in controlling the establishment of enterprises that cause adverse environmental impacts.

An improved EIA process can become a powerful force against unnecessary degradation. This grant component targets three major areas, identified by WWF, that need to be improved:

1. *EIA criteria.* Under the existing EIA policy, state environmental agencies are allowed to establish their own EIA criteria. These criteria are still very vague. To increase EIA effectiveness it was thought to be necessary to define specific criteria for investment activities with potential negative impact. For example, EIA reports for ranching investments should include an assessment of the effects of fertilizers and pesticides used.

WWF proposed to develop EIA criteria for pasture and forestry in the states of Para and Acre.

2. *Technical capacity of government officials.* Another problem with the EIA process in Brazil is the lack of resources and technical capacity to prepare and evaluate EIA reports. Those reports are prepared by technicians with no specific training and evaluated by equally poorly trained state officials.

WWF proposed to support short-term training activities to improve the technical skills of officials from Amazonian states' environmental agencies.

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<sup>7</sup> See footnote 2.

3. ***Increase local participation.*** Political circumstances, especially in the Amazon region, are often extremely unstable, with each successive government trying to redefine activities developed by the previous government. The negative effects of these constant changes can be decreased substantially by increasing local participation and monitoring of government actions.

WWF proposed to provide training opportunities to regional NGOs to increase their capacity to act as watchdogs regarding the EIA process.

**b. Findings**

1. The original strategy of this component of enhancing the EIA process was to strengthen EIA criteria for forestry and pasture for states in the Amazon region (focusing on Acre and Para), improve the technical capacity of state agency officials responsible for reviewing EIAs, and to train NGOs on how to represent the society on this issues.
2. Other GCC grantees involved in this component (EPA, USDA/FS, and ELI) adopted this strategy as well.
3. One workshop to establish EIA criteria for pastures and forest management for the state of Acre was successfully completed by WWF with matching funds.
4. Criteria were promptly adopted by the state and sent to CONAMA to be established as a resolution for the entire Amazon region.
5. CONAMA is a stable council and includes several representatives of NGOs. CONAMA is an appropriate body to approve new EIA criteria, replacing the need to develop criteria for every state of the Amazon region.
6. The use of the criteria was virtually stopped by the new governor of Acre, who also stopped working with CONAMA on this issue.
7. A one-week workshop on EIA process for 24 state officials from all Amazonian states was successfully completed. The technical content of the workshop was organized by ELI.
8. A six-month evaluation with workshop participants indicates that trainees found it valuable and are using the new skills and information almost everyday. Most of the trainees also disseminated the information within their own agencies. The degree and effectiveness of such dissemination was not assessed by the evaluation.
9. WWF officers participated as trainers in a workshop on environmental law organized by ELI in Washington for Brazilian lawyers.
10. Training to NGOs was not provided

11. Following the first E/GCC coordination meeting (December 1991), WWF, ELI, EPA, and USDA/FS agreed to form a working group to coordinate EIA activities.
12. The need to integrate with other GCC grantees working on EIA slowed down WWF training activities initially, as a new strategy needed to be designed and the role of the different organizations redefined. An E/GCC/EIA working group was formed and WWF, ELI and EPA had, at least, monthly meetings in Washington D.C. to plan joint activities and exchange information. The one-week workshop (Finding 7) and the new workshop for trainers to be offered in August 1993 were a result of those meetings.
13. The constant changes on USDA/FS managers affected the activities of the E/GCC/EIA working group as the USDA/FS was not able to attend many of those meetings. Over the last six months the USDA/FS has been more involved with the appointment of a active project manager.
14. Despite the above efforts, no E/GCC EIA working group joint work plan was produced.
15. A 3-week workshop for 18 Brazilian professionals is scheduled for August 1993. It will focus on training of trainers on EIA methodology. Each participant has agreed to conduct at least two training programs (to be coordinated by E/GCC) over the following two months.
16. State agency officials suggested that more training activities are needed. However, those should focus on providing more in-depth skills, information activities, and longer courses rather than repeating the same basic one-week workshop many times.
17. The state agencies do not have the capacity to identify which economic activities need to prepare EIAs but are not complying.
18. Many economic activities may be operating without complying with the EIA process because the state agencies do not have financial resources to perform systematic field visits related to reviewing EIAs. Thus, the state agencies have to frequently rely on whistle-blowers to identify those enterprises working illegally in the region.
19. The strategy may be insufficient to achieve the proposed objectives. For example, the judicial system is a key player in the overall EIA process and is not included in the strategy yet. Judges normally do not have in-depth knowledge about environmental law, and the public attorney's offices are not prepared to build cases around EIAs. This is a bottleneck as several cases have reached the courts during the past few years and were dismissed.

### **c. Conclusions**

1. Efficient application of EIA criteria adopted by states is essential to project success.

2. The original concept for WWF's EIA program was overly ambitious given the magnitude of the problem and the resources provided to WWF to cope with it.
3. The implementation of this component has been slow.
4. Constant changes in the government (state and federal) slowed down the process of improving EIA criteria.
5. The E/GCC team did not plan alternative implementation strategies to be used in case of changes in the political scenario.
6. The overall strategy needs to be modified to identify other critical factors that affect the EIA process and to propose solutions to those factors.
7. The development of the EIA criteria in the state of Acre was not sufficient to improve the EIA process.
8. All GCC grantees involved in the EIA component have good interactions. However, joint strategy and clear roles for each organization have yet to be defined. Teaming of four organizations in the EIA activity makes it difficult to hold any one group (such as WWF) responsible for overall outcomes.
9. The one-week workshop on the EIA process was a useful activity that contributed to the EIA process. However, follow-up activities need to be designed to ensure continued progress in enhancing local capacity.
10. WWF could have taken a more active role in influencing the approval of the EIA criteria by working with CONAMA and its members.
11. It is important to train NGOs in how they can best participate in the EIA process, which could alert the state agencies about economic activities that are not complying with the environmental law.

**d. Recommendations**

1. WWF should consider the appropriate scale for its EIA program. It should be determined as a result of a joint programming exercise with ELI, EPA and USDA/FS.
2. WWF and the other members of the GCC/EIA working group should prepare (by November 1, 1993) a joint action plan for the next 12-24 months, which should include: 1) clear role of each organization, 2) steps to identify other important factors that affect the EIA process; and 3) steps to address those factors.
3. WWF should concentrate its efforts on: 1) working with CONAMA regarding EIA criteria; 2) training NGOs in how they can participate in the EIA process; 3) identifying

and supporting medium to long training courses in Brazil that could be used to build local capacity.

4. **ELI should take the lead on training in the judicial area.**
5. **WWF Brasilia office should take the lead on coordinating the policy aspects of this grant component, such as working with CONAMA.**

## **D. Environmental Education**

### **1. Amazon Region and Brasilia**

Funds expended:<sup>8</sup> Funds expended: \$20,000. Funds committed: \$0.

Location: Targeted to Amazon region; activities in Brasilia and the region.

#### Project

Objective: Build local capacity and expertise in environmental education at both the institutional and field levels.

#### **a. Background**

WWF activities under this portion of its cooperative agreement with USAID began in October 1992. As the newest component of the WWF program, its precise activities are still being planned, and at the time of this evaluation a WWF proposal with greater specificity was being reviewed by USAID/Brazil.

#### **b. Findings**

1. While WWF has just begun to work in environmental education in Brazil under the E/GCC program (since October 1992), the WWF Brazil program has been involved in environmental education for over twenty years.
2. The WWF-sponsored and IBAMA-organized November 1992 Workshop on environmental education for members of state-level environmental education nuclei (NEAs) was well received by participants.
3. The state-level NEA, located in the Pará State Superintendent's office of IBAMA, has developed a wide range of community-level environmental education programs throughout the state modeled after early success in fisheries extension activities.
4. WWF was asked by the World Bank (Forest Pilot Program) to conduct the survey and have collaborated with IBAMA to make it a joint IBAMA/WWF effort.
5. Remarkable unanimity was expressed on the part of rural community leaders of the importance of environmental education programs tuned to their forest surroundings, exemplified by the brochure used in the Rio Capim communities to teach land owners the value of standing timber.
6. The proposal to USAID for ongoing EE work contains three lines of attack. These include:

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<sup>8</sup> See footnote 2.

- (a) Providing impetus, technical assistance, and small grants for participatory evaluation and dissemination of results of ongoing environmental education projects in the Amazon (maximum 3 projects);
  - (b) Providing training, technical assistance, and start-up funds for the development of environmental education components of 5 field projects (especially E/GCC projects) needing community environmental education components to achieve their conservation objectives; and
  - (c) Providing TA and training to IBAMA at the federal and state level to coordinate among all institutions active in EE, the process of development of statewide strategies for environmental education.
7. Federal agencies responsible for environmental issues have experienced large turnover and large budget cuts during the life of the E/GCC program.

**c. Conclusions**

- 1. WWF possesses sufficient experience executing environmental education programs in Brazil to provide an extremely strong base for environmental education activity under the E/GCC program (Findings 1, 4).
- 2. Experience to date in EE under the E/GCC program is too brief to provide an opportunity to measure impact in this evaluation (Finding 1).
- 3. Environmental education activities to date under the EE component have been restricted to the government sector (Finding 2).
- 4. The official agreement established between IBAMA and WWF to conduct a survey of environmental education in the Brazilian Amazon recognizes WWF leadership in the field of environmental education in Brazil (Finding 4).
- 5. Opportunities for application of creative environmental education programs exist in several communities targeted by the GCC Program (Finding 6).
- 6. WWF may be able to achieve greater impact if it focuses its EE efforts in fewer areas than planned in the proposal currently before USAID.
- 7. Shrinking funding limits the potential impact of interventions with federal environmental offices (Finding 8).
- 8. Based on the wide scope of current WWF activities, and the difficulty of implementing such an ambitious program, WWF may have difficulty achieving impact in all programmed areas.

**d. Recommendations**

1. Plans for development of truly innovative environmental education programs should expand their focus beyond official government channels (Conclusions 2, 3, 7).
2. Opportunities for integration of environmental education into existing E/GCC Program community agroforestry and extractive reserve projects should be carefully considered (Conclusions 1, 3, 5).
3. WWF should use the results of its upcoming EE survey to revise the plan for its EE interventions under the upcoming USAID/WWF cooperative agreement. Two months after completion of the survey, WWF should present to USAID/Brazil a work plan to implement the revised plan. The plan should detail at whom WWF will target its limited resources under this component for maximum impact (Recommendation 3).
4. WWF's ongoing EE activities should try to focus in only two of the lines of attack, depending on which areas the survey indicates would be most beneficial. Perhaps one of these should be EE support for E/GCC field projects (Conclusion 6, Recommendation 1, 2, 3, 4).

## **E. Institutional Strengthening**

### **1. Amazon Region and Brasilia**

Funds expended:<sup>9</sup> \$93,000. Funds committed: \$2,000.

Location: Throughout Amazon and Brasilia

Project  
Objective:

#### **a. Background**

The institutional strengthening component of the USAID E/GCC Program focuses on advancing the organizational capabilities and sustainability of Brazilian environmental NGOs and GOs. WWF provides support to nine Amazon NGOs, Amazon NGOs in general, IBAMA/SEMAM, and Amazon state GOs. These organizations have been identified as essential to E/GCC project implementation and WWF is in the process of helping them to gain basic organizational stability and self-reliance.

WWF has developed training methodologies and publications, implemented training workshops, conducted organizational diagnostics, helped organizations conduct and implement strategic planning, provided infrastructure grants, and identified Brazilian organizational development and training consultants. These activities are intended to provide the foundation needed to implement the remaining portion of the institutional strengthening component, which focuses on accounting and financial management, human resources, and technical assistance focused on sustainability.

#### **b. Findings**

1. WWF agreed to target nine key NGOs in the Amazon region. Seven of these have been identified: CNS-Amapa, FVA, SOS Amazonia, PESACRE, GTA, INEA and CEPASP. WWF and USAID/Brazil are considering reducing the number of NGOs targeted to the existing seven groups. WWF proposes replacing technical assistance targeted for INEA to ASKARJ.
2. INEA, which received full first-phase treatment of organizational development, two strategic planning sessions, and grants, no longer has a critical mass of human resources working for the organization. WWF has re-directed the technical assistance component of institution strengthening to ASKARJ, since the latter has links with indigenous Amazonian populations, much as INEA had.
3. Organizational Diagnostics sessions have been conducted for five groups: CNS-Amapa, FVA, SOS Amazonia, PESACRE, and INEA. Four sessions consisted of individual

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<sup>9</sup> See footnote 2.

interviews with heads of the groups. CNS-Amapa received a formal group diagnostics session that will be the basis for generating a plan of activities on the types of grants and consultants CNS should seek. The type of diagnostic session and follow-up CNS received is the approach WWF will follow in the future.

4. Strategic Planning workshops, both Phase I and Phase II, have been completed for four groups: FVA, SOS Amazonia, PESACRE, and INEA. In general, groups who received training in strategic planning were very positive in their evaluations. Groups judged that they realized 70 to 90 percent of the Phase I three-month plans written at the end of the first workshop, and 60 to 95 percent of the nine-month plans written at the end of the second workshop. Some participants complained that the information was too generic to be useful.
5. Two proposal design workshops were conducted in 1991. Each workshop drew 18 representatives from NGOs and GOs, including targeted priority groups. Follow-up for this activity, which was conducted a year later than planned, included distributing a published guidebook to the participants and exploring with them the need for individualized technical assistance.
6. In general, groups who received training in proposal writing gave the workshop high marks. Some trainees commented that the most important points should have been highlighted by the facilitator. In the opinion of the groups trained, they realized an increase of about 80 percent in their funding base because of their improved ability to write proposals.
7. In a few strategic planning sessions conducted with both WWF and outside consultants before diagnostics sessions were held, the latter attempted to direct their recommendations into areas where they have expertise. In these cases, WWF was present to establish objective organizational development plans with the groups.
8. The Proposal Design Guidebook was published in Portuguese and distributed to targeted priority NGO groups in July of 1993. The Financial Resource Development Guide has been translated into Portuguese and will undergo several edits and adaptations before publication and distribution in November. The Human Resource Development Guide will be translated into Portuguese and published in the first quarter of 1994. USAID funds currently pay for the translation and publication of the generic guides developed by WWF but not the original development.
9. Some groups have replicated training received. PESACRE trained five groups on strategic planning and one group paid them for this service. Other groups have implemented the training internally but have not attempted to train outside their organizations.
10. One of the seven groups with which WWF has provided institution-strengthening training has increased its financial independence. SOS Amazonia received \$30,000 to purchase

their headquarters and TNC is considering making SOS a partner organization in the Amazon.

11. WWF has found six Brazilian consultants it judges capable of conducting various types of workshops and training. These consultants have many commitments and are not always available. OD consultants have been brought up to speed to provide immediate assistance and ISPN is under contract to put together a consultant data base that WWF will make available and distribute to all E/GCC recipients for the remainder of the GCC grant term. WWF has funds available in some cases for these groups to hire outside consultants.
12. Several NGOs have highly competent and effective leadership. The organizations have become very dependent upon them for decision making and general programmatic knowledge.
13. WWF's sub-grantees are not always capable of providing the kind of technical assistance in, for example, accounting or finance that is clearly needed at the community level. The caixa agricola in Araras and the cantina in Santa Clara (Cajari Extractive Reserve in Amapa) both are very deficient in basic accounting and finance which are needed in order to become stable and possibly independent financially.
14. A general need for accounting and financial systems was discovered through the diagnostics which WWF conducted.
15. Government instability and high staff turnover at IBAMA has created serious difficulties in implementing institution-strengthening activities with that institution.
16. State-level government has staff stability, but the large number of people involved has made it difficult for WWF to be effective in overall institution strengthening with this sector. State-level people that attended proposal design workshops appeared incapable of taking the information back to their institutions and disseminating it further (i.e., they resisted the "train the trainer" concept behind much of WWF's training).
17. WWF has determined that the guidebooks, while useful, need to include Brazilian-specific information for NGO and GO representatives to allow them to maximize the use of the information.
18. Institution-strengthening activities until now have been completed by WWF staff based in Washington. In the future, a larger portion of TA will be provided by trained Brazilian consultants with quality control and new workshop training provided by WWF.
19. WWF plans on providing grants or contracting consultants to enable these groups to obtain technical assistance in these areas.

20. An accounting firm will be contracted to provide up-front TA and auditing services, initially to FVA and CNS/Amapa. WWF is also investigating other accounting firms that could provide similar services to broaden the base of consultants available to provide TA.
21. Follow-up to the Proposal Design Workshop was limited because of the urgent need to implement Diagnostics and Strategic Planning activities combined with a need to recruit and train a sufficient pool of consultants.
22. Visits to project sites for other components of this evaluation revealed a number of cases where organizational and management assistance (in the areas of accounting and financial management) was urgently needed to achieve activity objectives. Araras, Rio Capim, and the Cajari reserve all appeared to, currently or presently, need such assistance.
23. WWF does not maintain data indicating the institutional sustainability of the organizations it targets under this component.

### **c. Conclusions**

1. Of the seven NGOs with which WWF has worked, only four have been direct participants in the E/GCC program, aside from this component (NOTE: such participation was never required to receive this assistance) (Finding 1).
2. USAID/B and WWF must agree on whether to support ASKARJ (Finding 2).
3. The organizational diagnostics activity appears to be most useful when it is fully pursued as a group intervention and appears to be an essential first intervention under this component (Findings 3, 7).
4. Strategic planning is working well for three out of the four groups who have received this type of assistance (Findings 4, 9).
5. Overall progress on providing institutional strengthening support appears to have been slow although it may now be picking up momentum (Findings 1, 5, 8).
6. Although course evaluations by participants are generally favorable, data do not exist to prove whether inputs in this area have strengthened groups to a level which has allowed them to increase their own sustainability. To test this assertion, WWF would need to develop systems to measure any changes in institutional sustainability and prove the relationship to institution-strengthening activities it provides (Findings 4, 5, 6, 9, 23).
7. WWF is beginning a process of shifting the provision of TA and training from US-based consultants to Brazilian residents. In so doing it has experienced difficulty with quality control, developing a useful roster of consultants and locating the appropriate range of skills. However, it is now focusing on these issues (Findings 7, 11, 18, 19, 20).

8. The generic types of training WWF provides needs to be more fully tailored to match local needs (Findings 4, 6, 8, 13, 17, 21, 22).
9. Experience has shown that other types of training than what were originally planned will be essential for E/GCC program success (such as in accounting and finance) (Findings 13, 14).
10. The overall E/GCC program would benefit from the tools available under this component if they were more specifically targeted to projects funded under E/GCC and at applied strategically at whatever level they were most needed (eg, community, NGO, or GO) (Findings 1, 2, 13, 20, 22).
11. The amount of resources, human and financial, needed to make an impact at IBAMA is beyond the scope of the GO institution-strengthening component. Moreover, since IBAMA is getting large-scale assistance from Price Waterhouse and the World Bank, such aid would be redundant (Finding 15).
12. WWF should limit the resources spent on institution strengthening for state environmental agencies (Finding 16).
13. It appears that the originally planned set of OD interventions did not adequately match the needs of E/GCC grantees. This was the result of (1) over emphasizing the needs of target NGOs instead of the communities they serve; (2) over reliance on generic solutions; and (3) casting the net too widely for NGOs and GOs to assist. (NOTE: Many of these shortcomings are not the fault of current WWF staff. They represent inherited E/GCC design decisions and therefore do not reflect the current USAID/B staff's commitment to coordinating impact) (Conclusions 1, 2, 8, 9, 10, 11, 12).

**d. Recommendations**

1. WWF should, as a first priority, refocus its TA to provide assistance strategically, where needed to support E/GCC activities. This would include providing assistance at the community level, where appropriate. It should make sure there is a clear relationship between institution strengthening for sub-grantees and project impact (Conclusion 13).
2. WWF must be able to provide a broader range of skills (such as accounting and finance) to groups working with E/GCC to meet needs identified (Conclusions 9, 12).
3. NGOs yet to receive training should always have a formal group diagnostics session conducted first to identify what kinds of assistance can be most usefully be provided (Conclusion 3).
4. WWF's decision to increasingly rely on local consulting services and its efforts to control the quality of these efforts are sound interventions. WWF should continue this thrust, which should also assist them in providing a wider range of TA (Conclusion 7; Recommendations 1, 2).

5. **WWF should collect data to determine the level of economic and institutional sustainability created by WWF institution-strengthening activities (Conclusion 6).**
6. **WWF should continue strategic planning with priority groups and train key NGO leaders in the methodology employed in order to increase their independence and decrease their reliance on outside assistance (Conclusion 4).**
7. **Through the Human Resource Development Workshop WWF should emphasize the need to overcome dependence on charismatic leaders, in addition to WWF providing technical assistance to groups where this is clearly a concern (Finding 12).**
8. **IBAMA should cease to be a specific target for institution strengthening although it could still be encouraged to attend workshops targeted to other groups where space is available (Conclusion 11).**
9. **State-level staff should be encouraged to come to the general institution-strengthening workshops to promote integration between GOs and NGOs, but should not be a specific target for institution strengthening (Conclusion 12).**

## **F. Coordination Activities**

### **1. Amazon Region and U.S.**

Funds expended:<sup>10</sup> \$13,000. Funds committed: \$0.

Location: Amazon region and US.

#### Project

Objective: Maximize the impact of efforts in the region by reducing duplication of activities, building mutual awareness and communication among different projects, and promoting interactions and joint efforts among E/GCC Program components whenever deemed appropriate by USAID/Brazil and individual institutions working in the region.

#### **a. Background**

The WWF approach to project implementation under the GCC Program features field-based partnerships with NGOs dealing with local land-use issues that have broad policy implications in the Brazilian Amazon. Since the beginning of the E/GCC Program, WWF has been in a unique position to contribute to coordinated efforts leading to policy reform. In 1991, WWF was asked by USAID/Brazil to consider an additional program component that would strengthen communication and coordination among E/GCC Program grantees and with executing NGOs in Brazil. An additional rationale behind this task was the desire to consolidate scattered individual program actions into a cohesive E/GCC Program.

Early in the E/GCC Program, USAID/Brazil considered establishing WWF as an overall grant-making body for all other E/GCC Program grantees. However, the scope of the WWF coordination role was later refocused as a technical coordination function featuring improved communication among E/GCC Program participants and helping establish an electronic network to facilitate this communication.

#### **b. Findings**

1. The original plan was for WWF to be responsible for program-wide coordinating/monitoring of fellow grantees and implementing organizations.
2. That role has proved to be inappropriate, from both WWF and USAID/Brazil perspectives. This is now considered the responsibility of USAID/Brazil.
3. Coordination of individual WWF activities with those of other E/GCC partners remains important. This is the responsibility of individual project officers.

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<sup>10</sup> See footnote 2.

4. Past WWF leadership in convening and leading annual meetings was viewed as a valuable contribution.
5. The choice of ALTERNEX, an electronic network operated in Brazil by IBASE, with access to BITNET and EICONET, was found to be appropriate to local network needs. Cost analysis by WWF found that use of ALTERNEX was more cost effective than the use of facsimile machines.
6. PESACRE (supported by an E/GCC grant to the University of Florida), FVA, Woods Hole (US and Brazil), WWF (Brazil and USA), and Smithsonian, have all been linked to ALTERNEX.
7. Another local NGO, STRP (The Rural Worker's Syndicate of Paragominas) has been supplied by WWF with a facsimile machine, which was evaluated to be most suitable to the communication needs of this organization.
8. UNDP declined to fund an application for purchase of computers (for networking use, report preparation and bookkeeping needs) for local NGOs and the purchase is not being further pursued by WWF.
9. USAID perceives that coordination activities in Brazil have been hampered by the lack of a Brazil-based WWF coordinator and WWF has experienced difficulty sorting out mixed signals from USAID/Brazil as to an appropriate role for WWF in overall E/GCC Program coordination.
10. Funds budgeted for the coordination activity have been spent more slowly than planned due to a reduced level of link ups to the electronic network and the lack of a specific coordination event that would require expenditure of funds for outside participation.
11. WWF has been instrumental in taking the lead in candidate screening for several major training courses involving multiple E/GCC participants, including the Partners of the Americas seminar on natural resource economics and the joint (WWF, ELI, EPA, USDA/FS) training course on environmental impact assessment.
12. WWF is interested in holding coordination meetings that gather implementing organizations to discuss themes of common interest. Meetings may be organized around objectives stated as program outcomes in USAID/Brazil's program objective tree -- possibly sharing experience on using agroforestry systems in altered areas.

**c. Conclusions**

1. Shifting responsibility for monitoring implementing organization activity from WWF to USAID was appropriate and should be maintained (Findings 1, 2, 3).
2. WWF is capable of organizing useful annual meetings for implementing organizations (Finding 4).

3. Funding exists to pay for such events (Finding 10).
4. Linking of local NGOs to the ALTERNEX electronic network has lagged although considerable progress has been made (Findings 6, 7, 8).
5. WWF is well placed to lead thematic workshops on sub-grantee level activities, and could productively make this the focus of their coordination activities in Brazil (Finding 12; Conclusion 2, 3).

**d. Recommendations**

1. WWF should plan to convene meetings to share experiences along the lines of the program outcomes from the objective tree (Conclusions 2, 3, 12).
2. A time-frame should be prepared for these WWF-led workshops and should be submitted to USAID/Brazil (Recommendation 1).
3. The first workshop on a theme of agroforestry systems for altered land areas should be targeted for early 1994 with a second workshop scheduled for early 1995 (Finding 12; Conclusion 5; Recommendation 2).
4. A plan for linking additional NGOs to the ALTERNEX electronic network should be developed. Emphasis should shift from assistance in acquisition of hardware to assistance in helping local NGOs adopt the use of e-mail communication as part of their organizational culture/routine (Findings 6, 7, 8; Conclusion 4).

## V. MANAGEMENT ISSUES

This section of the evaluation is cross-cutting; it explores management issues as they relate to all aspects of USAID/WWF activities. It examines key points of contact between USAID and WWF and between WWF and the implementing organizations with which it works. Its goal is to identify areas in which actions could be taken to improve implementation.

To accomplish this, one-on-one interviews were first held with key managers at WWF (US and Brazil) and USAID/Brazil. Informants were asked to identify issues that they felt needed attention. A group problem-solving session was then held on the last field day among most of the same individuals to reach consensus on the issues raised, based on their experience in implementing the activities and also upon what had been learned during the field work.

Since the methodology for data gathering and analysis was different in examining management issues than for the individual activities, the reader will note that -- unlike the rest of the report -- this section is not organized by Findings, Conclusions, and Recommendations. Rather, each issue is identified, with the consensus recommendations for resolution following.

### Consensus Reached on Management Issues

#### A. Overall

In general, the following describes the nature of the management of WWF E/GCC work:

1. Since its conception, the E/GCC project has been a joint WWF/USAID effort;
2. USAID/B has exhibited extraordinary flexibility in delegating to WWF tactical decisions while providing increasing leadership at the strategic program level;
3. The "rolling design" approach that has been applied has worked, but the time has come to increase the precision of workplans, performance setting, and implementation monitoring;
4. WWF/USAID interactions are generally collegial and mutually supportive;
5. Both USAID/B and WWF appear to have the capacity for self-evaluation and shared criticism to improve project impact;
6. Very strong relationships appear to exist between WWF and the implementing organizations and communities with which they work;
7. Extremely strong personal commitment to achieving program success exists among all parties; and
8. The above characteristics have been essential to achieving the progress that has been made to date.

#### B. Communication

##### *Issue 1: Communication Between USAID/B and WWF*

It was agreed that, in general, communication between WWF and USAID/B was open and efficient, with both sides feeling comfortable using informal channels, such as telephone calls.

faxes, and visits to the USAID/B office when in town, as well as more regular reporting formats. However, the following issues were identified:

- Communication is more frequent at the USAID Representative/WWF Director of Brazil Program level than at lower levels;
- Not all WWF visitors report to the Mission during their visits, partly because their itineraries do not always route them through Brasilia; and
- Occasionally, the need for WWF to centrally coordinate communication can impede communication between WWF project officers and USAID/B.

### **Resolutions**

It was decided to build on the strengths of the informal communication networks to encourage project officers to communicate directly with USAID/B staff and keep the Brazil Program Manager informed of all progress. In addition, it will become standard procedure for all WWF technical assistance teams to pay a courtesy call to USAID/B. This can be planned with USAID/B through the six-month travel clearance arrangements made to clear all WWF travel in Brazil.

#### *Issue 2: Communication among E/GCC grantees*

Coordination among grantees is impeded by the fact that some of the grantees (EPA and USDA/FS) do not prepare quarterly progress reports for E/GCC. Further, USAID/B often is unaware of the agreements among grantees on collective work (such as in EIA) and, therefore, is unable to apply leverage to assure that each partner hold up its end of the bargain.

### **Resolutions**

1. WWF will communicate to USAID/B, in writing, all agreements reached among the grantees working with it on collective activities to keep the office abreast of progress and bottlenecks.
2. By moving to semi-annual reports (see section F), perhaps EPA and USDA/FS can be encouraged to report regularly to grantees on their progress.

### **C. USAID Field Visits**

*Issue 1: Some confusion and awkwardness exists as to appropriate protocols for USAID/B visits to implementing organizations with which WWF works.*

### **Resolutions**

1. USAID/B staff will attempt to provide as much notice to implementing organizations (and WWF) as possible prior to visiting them and to describe the purpose of their visit.

2. Where possible, USAID/B will attempt to coordinate their visits with those already planned by WWF staff. The six-month travel plans of WWF will be useful to coordinate such visits.

#### D. Financial, Contractual, and Substantive Reports

*Issue 1: Confusion exists at WWF over who should receive financial reports.*

##### Resolution

All financial reports should be sent to USAID/B, USAID Regional Contracts office in La Paz, and USAID's LAC Bureau. In addition, all lengthy Scopes of Work sent to USAID/B should be conveyed both in hard copy and on a diskette in WordPerfect 5.1.

*Issue 2: USAID/B does not have copies of sub-agreements between WWF and its sub-grantees.*

##### Resolution

The administrative staff of WWF will sort these issues out with USAID.

*Issue 3: USAID/B does not now have copies of all reports and products produced by WWF under the EIGCC project. USAID/B values these for monitoring, auditing, and because they are interested in these activities.*

##### Resolution

The administrative staff of WWF will sort these issues out with USAID.

#### E. WWF Sub-Grantee Management Oversight

*Issue 1: In some cases WWF has been too ready to allow NGOs to "learn by making mistakes" in cases where greater monitoring and proactive assistance would have been more appropriate.*

This issue has been most apparent in cases where NGOs are asked to work in areas beyond their technical expertise, such as asking a labor union to assist in marketing produce in the private sector. This often occurs when early stages of intervention (such as TA related to increasing sustainable harvest) are successful. In such cases, the local NGOs were incapable of providing appropriate assistance and WWF monitoring systems were unable to provide early warning of problems.

##### Resolutions

1. WWF will explore ways to be more proactive in either upgrading the skills of local organizations, or bringing in other groups to provide the essential services.

2. WWF will consider ways to provide greater in-country oversight through the expanding WWF/Brazil office or through the Field Representative soon to be established in Belem.

#### F. WWF/USAID Management Information Systems

*Issue 1: Reporting systems are currently inadequate for appropriate USAID/B or WWF project monitoring.*

In the past, USAID was unclear as to precisely what data it required from WWF. Reports were informative and of increasingly improving quality, but, overall, were not in a consistent format that adequately reported on progress at the output and purpose levels. Recently, the LAC Bureau has provided funding (through a buy-in to the PRISM project) to assist WWF to develop logical frameworks for all of its activities. This should provide an opportunity for WWF and USAID/B to bolster its MIS system.

However, at the time of the evaluation, the systems were found to be deficient in the following respects:

- Insufficient consistent, quantitative data is provided on program impact;
- Insufficient data is provided to permit WWF or USAID to monitor implementation and recognize problems as they emerge; and
- USAID/B requires more detailed work plans for each of WWF's activities.

#### Resolutions

WWF will build on the TA received through the PRISM buy-in to finalize their logical frameworks. They will identify indicators and collect sufficient data to report on program progress. The following timetable will be used for providing appropriate data to USAID/B on all activities.

- |           |  |
|-----------|--|
| 9/15/93:  | Revised, final logframes on all activities submitted to USAID/B  |
| 10/15/93: | USAID/B approves all final logframes (9/15-10/15 is period for discussion over details of logframes)   |
| 2/15/94:  | Data on all indicators from final logical frameworks provided to USAID/B in standard format to be updated in subsequent reports. (10/15/93-1/31/94 is period for data collection and analysis). It is expected that some data will be provided by GENESYS. |

**Issue 2:** *WWF (and other E/GCC grantees as well) find the requirement to formally report to USAID/B on a quarterly burdensome and not useful. Semi-Annual reporting would be preferable.*

### **Resolution**

WWF will report semi-annually, beginning February 15, 1994. The following schedule will be employed:

Data as of	Report due at USAID/B	USAID/B report due to LAC Bureau
December 31	February 15	March 1
June 30	August 15	October 1

### **G. Management Roles at WWF and USAID/B**

**Issue 1:** *It was felt that USAID/B would benefit from increasing communication with WWF at levels below the Representative and from being more proactive in encouraging coordination among grantees.*

### **Resolution**

1. USAID/B will use the arrival of its new employee (to be in charge of managing WWF grant under E/GCC) to delegate increasing responsibility for direct contact with WWF.
2. USAID/B will play a more active role in encouraging coordination among grantees.

**Issue 2:** *WWF will soon have three senior managers operating in Brazil, the WWF/US Brazil Program Director, WWF/US Field Officer in Belem, and the WWF/Brazil Coordinator. How will management responsibilities be shared among them?*

### **Resolutions**

1. The WWF/US Brazil Program Director has overall responsibility for WWF's E/GCC activities in Brazil. He must coordinate all activity, lead program officers, interface with USAID, and manage finances.
2. WWF/Field Officer will have specific project management responsibilities (projects yet to be announced) and will try to achieve regional economies of scale by servicing WWF field projects as necessary.

The WWF/Brazil Coordinator, will serve as a key contributor to E/GCC policy-based activities from his office in Brasilia.

#### H. External Management Factors

A number of recent developments were identified that were considered external to management of WWF's work, but were directly associated with USAID or WWF organizational issues and were considered relevant to medium-term strategic decisions confronting the program. They are described below.

*Issue 1: E/GCC activities formerly funded through the Biodiversity Support Project (BSP), have been folded into WWF's E/GCC program -- with no increase in WWF funding levels.*

#### **Resolution**

USAID/B, WWF/US, and WWF/Brazil must work hard in the next year to convince USAID to increase funding for WWF activities to compensate for the loss of BSP funding.

*Issue 2: WWF/Brazil is currently receiving greater autonomy and developing into a larger, more capable entity.*

#### **Resolution**

A stronger WWF/Brazil will provide an opportunity for greater access to local resources (in the form of human resources, tactical expertise, Brasilia location, and a wider network) to the E/GCC program. WWF/US and USAID/B should consider ways to take advantage of this emerging activity in developing implementation and medium-term program plans.

*Issue 3: The US government recently elected a new President and Vice President (known for his concern with global environmental issues) and a new Administrator for USAID has been appointed who has identified Environment as one of his key areas of focus and appears committed to working with NGOs to implement programs.*

#### **Resolution**

Since the E/GCC program appears virtually congruent with Administration and USAID foreign policy goals, efforts should be made to communicate the value of the E/GCC program to them in the next several months.

*Issue 4: WWF/US will be placing a field officer in Belem this Fall.*

### **Resolution**

WWF will explore opportunities to use this presence to address concerns that the program could benefit from greater local assistance and to see if he could provide technical backstop to field projects in his region.

*Issue 5: WWF's field projects were designed with a heavy reliance on Cultural Survival to provide marketing services for non-timber forest products (NTFPs) under WWF projects. Cultural Survival is no longer participating in EIGCC activities.*

### **Resolution**

1. Having the capacity to bring NTFPs to market is essential to WWF field project success.
2. Jason Clay, the former Cultural Survival employee is now an intermittent employee of WWF. WWF will attempt to tap his expertise.
3. Funding to replace the TA formerly provided by Cultural Survival has not been secured yet.

*Issue 6. Funding that was to have been provided by Cultural Survival must still be located to finance project-related NTFP exports.*

### **Resolution**

No resolution has yet been determined for this issue. USAID/B and WWF must seek additional financing.

*Issue 7: WWF is highly dependent on GENESYS to provide TA to WWF grantees in its field projects. GENESYS project leadership in Washington is currently being changed and historically the field manager, located in Rio de Janeiro, has not been delegated sufficient autonomy. This appears to have resulted in a number of delays and sub-optimal assistance which could jeopardize WWF interventions.*

### **Resolution**

Given the key role GENESYS plays in WWF success, WWF must continue its efforts to coordinate fully with GENESYS efforts. Additionally, USAID/B will request that the Washington GENESYS manager devolve somewhat authority for project decision-making to its field representative.

**Issue 8:** *WWF's interventions in extractive reserves are dependent on a study being conducted by ELI. It appears that the study is behind schedule and it is difficult for WWF to apply leverage to ELI.*

## **Resolution**

WWF must immediately work with ELI to clarify the content of the study and the expected completion date to ensure that the product will be useful to WWF interventions. WWF must communicate to USAID/B the details of the agreement so that USAID/B can assist in ensuring that the report will be both timely and appropriate.

### **a. External Scan**

A number of issues were identified that were occurring in the Brazilian context that were important to consider in continuing to implement the project. They are described below.

**Issue 1:** *The ministries and agencies with which WWF has been working have experienced a tremendous degree of instability (especially the Ministry of Environment and Amazon). This has resulted in great turnover at senior levels, shifting in policy priorities, and difficulty in maintaining useful relationships. This has been identified as the root cause of slower than expected implementation of a number of project components.*

## **Resolutions**

1. WWF must increasingly explore alternatives to focusing its efforts at IBAMA:
  - a. CONAMA and Congress may be good alternatives;
  - b. Federal organs should only be targeted for policy initiatives;
  - c. State agencies, which are far more stable, should be targeted for implementation roles; and
  - d. Municipal entities should be targeted for support of field-based activity.
2. Training should be targeted as follows: (a) Federal: only at mid-level or to gain political support; (b) State: at all levels; (c) Municipal: at extension level.

**Issue 2:** *WWF must be strategic in considering how and when to work through NGOs vs. government partners.*

## **Resolutions**

1. WWF should use NGOs as a flexible and innovative leader in social change. NGOs can provide an external source of energy for change. Increased NGO involvement could eventually result in changes in the power structure that could lead to greater local control over natural resource use without government intervention or policy distortions.

2. WWF should try to help the government follow the NGO lead rather than expect the government itself to be an innovative agent for change.

Government can be targeted to influence policy, as a source of financing, and -- most importantly -- to replicate innovations initiated by NGOs.

*Issue 3: Enormous levels of World Bank, G-7, and other donor resources are currently targeted to the Amazon region, and considerable latitude continues to exist in how these resources are invested.*

## **Resolutions**

1. Fortunately, WWF program staff participate in many donor project identification teams. WWF staff will continue to use these pulpits as an opportunity to replicate the lessons learned in their efforts to a wider region through targeting "other peoples'" money in ways that are complementary to E/GCC activities.
2. WWF must remain flexible to adjust implementation plans as these donors decide to invest large sums in areas of current WWF activity -- such as in the extractive reserves.
3. WWF must use the leverage of the donor resources and their participation on donor teams to integrate lessons learned in E/GCC field work into policy initiatives pursued by these donors.

## **J. Field Project Duration**

### **Resolution**

The evaluation team agreed that, funding permitting, the field projects that attempt to introduce systems that require several years to generate economic returns, such as with fruit trees, should be continued until the the feasibility of the introductions can be evaluated.

