

**CONSERVATION OF BIOLOGICAL DIVERSITY PROJECT
(BIODIVERSITY SUPPORT PROGRAM)**

SIXTH SEMI-ANNUAL REPORT OF PROGRESS

April 1, 1991 to September 30, 1991

BSP Staff

Dr. Gary S. Hartshorn, Director to August 18, 1991
Dr. Kathryn A. Saterson, Director Beginning August 19, 1991
Mr. Bruce Leighty, Program Officer
Ms. Kate Newman, Program Officer
Dr. Meg Symington, Program Officer
Dr. Janis Alcorn, Program Officer
Dr. Jacob (Les) Whitmore, Program Officer
Ms. Norah Heckman, Program Assistant
Ms. Satta Nallo, Program Secretary

Mr. Jim Webster, Research Fellow
Ms. Ilana Locker, Research Fellow

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Dr. Seymour Sohmer, Project Manager

World Wildlife Fund, Inc.

**The Nature Conservancy
and World Resources Institute**

A.I.D. Project No. 936-5554

A.I.D. Cooperative Agreement No. DHR-5554-A-00-8044-00

THE BIOLOGICAL DIVERSITY SUPPORT PROGRAM

6TH SEMI-ANNUAL REPORT

INTRODUCTION

The Conservation of Biological Diversity Project (No. 936-5554) is funded by the A.I.D. Science & Technology Bureau's Office of Forestry, Environment and Natural Resources (S&T/FENR). As of this reporting period, this office has been renamed the A.I.D. Bureau of Research and Development's Office of Environment and Natural Resources (R&D/ENR). A Cooperative Agreement (No. DHR-5554-A-00-8044-00) was signed September 30, 1988 between A.I.D. and World Wildlife Fund, Inc. (WWF), awarding WWF \$12,844,931 for an initial period of five years. Due to expanded programming efforts, and strong interest in the program by Missions and Bureaus, that funding limit has now been increased to \$17,500,000. During the first five-year phase of the project, funding will come from two sources: CORE funding from R&D/ENR; and add-ons from Missions and Regional Bureaus interested in participating in the project. The project has a ten-year Life of Project (LOP) authorization.

The project adopted the name "Biodiversity Support Program" (BSP) for public use. BSP is being implemented as a consortium effort with the formal collaboration of The Nature Conservancy (TNC), and the World Resources Institute (WRI). Beyond the three member consortium of WWF, TNC, and WRI, the Biodiversity Support Program collaborates with a wide range of other U.S. scientific and educational institutions involved in international conservation, including the Consultative Group on Biological Diversity (CGBD) and the Peace Corps.

The goal of the Biodiversity Support Program is to conserve biological diversity and promote sustainable economic growth in selected developing countries through improved conservation and use of biological resources. Functionally, BSP works to facilitate conservation activities in A.I.D.-assisted countries by working in collaboration with A.I.D. Missions and Bureaus, government institutions, and nongovernmental organizations.

The project has five major components: (1) technical assistance for A.I.D. missions, host country institutions, local PVOs and the Peace corps; (2) a small research grants program for specific issues relevant to A.I.D.'s conservation activities worldwide; (3) training focusing on the capacity of host-country scientists and institutions to conserve biological diversity, particularly with respect to fund-raising and preparation of competitive grant proposals; (4) an information and evaluation network that compiles information on the conservation activities of A.I.D. and other U.S. institutions, and carries out information dissemination; and (5) pilot demonstration projects in the field funded largely by A.I.D. Mission or Regional Bureau add-ons (via contract amendments) to the program.

ADMINISTRATION

On August 19, 1991, Dr. Kathryn A. Saterson assumed directorship of the Biodiversity Support Program. Dr. Saterson brings to BSP expertise in international development, biological conservation action, environmental management and impact evaluations, tropical forest management and ecosystem function.

Prior to joining WWF, Dr. Saterson spent five years with A.I.D. as a natural resources officer. After one year as a Science and Diplomacy Fellow in A.I.D.'s Office of Forestry, Environment and Natural Resources, she joined the Asia/Near East Bureau and was responsible for managing the Bureau's biological resource conservation program. She conducted assessments of biological diversity conservation needs in numerous countries in Asia and the Near East. Most recently, Dr. Saterson spent 2.5 years in Thailand managing USAID/Bangkok's \$44 million, multi-sectoral Management of Natural Resources and Environment for sustainable Development (MANRES) project, which included a biological resources conservation program.

Dr. Saterson's other professional experience included one year as a Congressional Science Fellow with the House Interior Committee, subcommittee on Public Lands and three years as an environmental consultant with Arthur D. Little, Inc.

BSP added a new program assistant and two research fellows to its technical staff during this reporting period. Norah Heckman came to BSP in May, 1991 having worked for eleven years for the Ralph M. Parsons Company, a large consulting firm specializing in construction and program management. During her tenure with Parsons, Ms. Heckman was assigned in different capacities to a number of projects which were based domestically and overseas. These projects ranged in scope from building cities to designing oil refineries and mass transportation systems. Ms. Heckman comes to BSP with multi-faceted experience in program planning and management, contract monitoring, budget and finance administration and computer systems administration. Ms. Heckman holds an undergraduate degree in Foreign Affairs, and is currently completing a Master of Liberal Arts degree at Johns Hopkins University.

BSP's two research fellows include Jim Webster who joined the staff in May, 1991, and Ilana Locker who joined in July, 1991. Jim received a Master's degree in Environmental Management from Duke University's School of Forestry and Environmental Studies. At Duke, he studied resource economics and policy with an emphasis in conservation and sustainable development. He received the Soil and Water Conservation Society's national research scholarship to write an article on the economics of the Conservation Reserve Program. Jim coordinated the student international study group and helped teach a graduate-level

environmental policy course. Jim currently serves on the alumni council for Duke's newly formed School of the Environment. Jim's responsibilities include working on activities in Africa under the supervision of the Senior Program Officer for Africa, Kate Newman.

Ilana Locker, BSP's second fellow, received her Masters in Public Policy, with a concentration in Environmental Policy, from the Kennedy School at Harvard University in June, 1991. Ilana managed the Kennedy School recycling program, and coordinated over 60 volunteers. In the summer between her first and second years of graduate school, Ilana worked on solid waste issues at the Environmental Defense Fund in New York. Prior to attending the Kennedy School, Ilana spent two years in Israel where part of her activities included working on a nature reserve where she assisted in a play to reintroduce the white oryx into the wild. Ilana's responsibilities include assisting Senior Program Officer, Meg Symington with the Research Component of BSP.

The six-person Executive Committee for BSP (comprised of one representative and one alternate from each of the three collaborating organizations) meets on a regular monthly basis. Alan Randall from TNC chairs the BSP Executive Committee for the calendar year 1991. Staff totals are one director, five program officers, one program assistant, two research fellows, and one program secretary.

MID-TERM EVALUATION

Extensive preparations were made during this reporting period for the mid-term evaluation report on the Biodiversity Support Program (BSP) which was completed in October, 1991. The overall conclusion of the evaluation was that BSP has been extraordinarily successful. BSP has given A.I.D. access to the broader conservation and development community with more than 50 separate institutions being involved in over 100 activities in more than 60 countries.

The major recommendations of the mid-term evaluation are that BSP should: 1) develop a strategic plan in order to make its contributions to resource and biodiversity conservation more deliberate and focused, and 2) strengthen its efforts in monitoring and evaluating current biodiversity interventions and in disseminating such information and "lessons learned" to A.I.D. and other institutions.

PROGRAM BUDGET

A summary of expenditures for this reporting period, April 1, 1991 to September 30, 1991, is attached as Exhibit 1. It summarizes expenditures in this period and for life of project according to the categories in the Cooperative Agreement budget with additional detail given for the five major components:

technical assistance; small research grants; training; information and evaluation networking; and pilot demonstrations (funded by add-ons).

PROGRAM ACTIVITIES

In Appendix 1, specific project activity summaries are presented that detail BSP activities during this reporting period. It is organized by the five major components: technical assistance; small research grants; training; information and evaluation networking; and pilot demonstrations (funded by add-ons). Activities covered under these summaries were either started or in progress during this reporting period.

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EXHIBIT 1

Six Month Progress Report

April 1, 1991 to September 30, 1991

Expenditures for Reporting Period and Life of Project

<u>Cost Element</u>	<u>Expenditures This period (Apr. to Sep.)</u>	<u>Expenditures Life of Project as of 9/30/91</u>
Salaries	\$159,789.08	\$473,028.63
WWF Indirect Costs	142,957.41	377,522.10
Travel & Per Diem	66,809.64	98,481.51
Other Direct Costs	33,756.52	124,994.38
Grants and Subcontracts*	1,371,633.29	3,159,530.21
	=====	=====
	\$1,774,945.94	\$4,233,556.83

*Breakdown of Grants and Subcontracts:

	<u>Expenditures This Period</u>	<u>Expenditures Life of Project</u>
Technical Assistance	\$97,858.28	\$144,778.05
Research	649,378.09	655,795.41
Training	-1467.65	69,425.00
Information Networking	103,603.79	192,870.18
Pilot ^d Demonstrations**	522,260.78	2,096,661.57
	=====	=====
	\$1,371,633.29	\$3,159,530.21

**Breakdown of Pilot Demonstrations (add-ons):

	<u>Expenditures This Period</u>	<u>Expenditures Life of Project</u>
Thailand Buy-in	\$34,018.59	\$168,846.61
LAC Buy-in	45,758.56	246,934.83
ANE Buy-in	31,361.89	210,121.62

**Breakdown of Pilot Demonstrations con't:

	<u>Expenditures</u> <u>This Period</u>	<u>Expenditures</u> <u>Life of Project</u>
Madagascar Buy-in	58.68	3,978.75
Nepal Buy-in	24.28	1,261.04
S&T/FENR I	13,578.25	58,855.12
Gambia I Buy-in	1,776.74	101,279.93
S&T GCC	37,238.08	226,329.28
LAC GCC	1,855.43	2,234.07
Mexico GCC	6,669.17	12,215.59
R&D/ENR II	6,530.50	6,530.50
APRE Buy-in	14,386.61	14,386.61
Africa	5,526.94	5,526.94
E. Europe Buy-in	540.00	540.00
Training Workshop Brazil	9,049.97	26,846.81
Training Workshop Indonesia	39,528.96	39,528.96
LAC Central America	0.00	95,000.00
Les Arcadins	31,266.29	71,469.85
Beza Mahafaly Nat. Res.	8,629.02	92,896.00
NECTARI	0.00	46,450.00
Annapurna	0.00	92,896.00
Mexico Ecodevel.Prog.	148,885.22	373,056.22
AID Resource Seminars	23,146.24	34,862.85
AID Para Forestry	62,431.36	164,613.99
	=====	=====
	\$522,260.78	\$2,096.661.57

TA907

TITLE: AID Biodiversity Portfolio for Africa

COMPONENT: Technical Assistance

FUNDING: \$10,000

DURATION: Initiated May 91; ends May 92

IMPLEMENTOR: BSP

CONTACT: BSP: Kate Newman 202-778-9524; fax 202-293-9211
Jim Webster 202-778-9786
AID/Africa: Tim Resch 703-235-3786;
fax 703-235-3805

LOCATION: Africa

PURPOSE: This technical assistance activity will strengthen the Africa Bureau's efforts to conserve biological diversity by examining past projects and studying how future A.I.D. efforts should be targeted. These activities will provide basic information on what the Bureau has done to conserve biodiversity, highlight lessons learned from past activities, and provide an analytical basis for future Bureau efforts in this area.

DESCRIPTION: BSP is conducting a technical review of the Africa Bureau's biodiversity project portfolio, consisting of 35 grants that have been initiated since 1987. The Bureau requires this information to revise and update their biodiversity strategy. The knowledge gained from the review will also aid the pilot demonstration project component of the Africa Bureau buy-in (PD912) to BSP.

PRODUCTS/OUTPUT:

- A. The technical review will result in a database of past and current biodiversity projects.
- B. A report summarizing the Africa Bureau's biodiversity activities since 1987, highlighting lessons learned from these efforts.
- C. A comprehensive review of several of the Bureau's biodiversity grants conducted through site visits, interviews, and review of past reports and evaluations in report format.

STATUS: Active

SIGNIFICANCE: The portfolio and strategy reviews will enable the Africa Bureau to assess its first four years of effort in this sector, refine its funding priorities, and improve the quality of its future biodiversity initiatives. Because this is a relatively new area of involvement, many people are not aware of what the Bureau has done to conserve biodiversity and what

TA908

TITLE: Lake Tanganyika Conference on Conservation and Biodiversity (LT/CCB)

COMPONENT: Technical Assistance

FUNDING: \$50,000

DURATION: Initiated 9 March 1990; ends 31 December 1991

IMPLEMENTOR: University of Arizona (UA), Dept. of Geophysics

CONTACT: BSP: Kate Newman 202-787-9524; fax 202-293-9211
Bruce Leighty 202-778-9685
UA: Andrew Cohen 602-621-6024

LOCATION: Burundi/Participants included government and NGO officials from the riparian nations--Burundi, Tanzania, Zaire, Zambia, as well as scientists, conservationists, and resource managers

PURPOSE: The First International Conference on the Conservation and Biodiversity of Lake Tanganyika was designed to bring together key individuals in the fields of conservation, lake resource management (water and fisheries) and watershed management who are specifically concerned with the future of the Lake Tanganyika Basin, to discuss both immediate and long range conservation, planning, and research goals for the Basin. The conference participants: 1) reviewed existing environmental problems and legislation relevant to the Lake Tanganyika Basin in the four countries; 2) made immediate, specific recommendations for the establishment and maintenance of underwater reserves within the context of existing on-land national parks; 3) identified specific actions that might be taken immediately to mitigate the most serious environmental impacts now facing the entire lake; 4) designed a holistic proposal for long-term research and monitoring of the Lake Tanganyika Basin ecosystem; and 5) considered establishing a program of cooperative research among aquatic conservation biologists and fisheries biologists from the four nations bordering the lake.

DESCRIPTION: Cohen requested assistance from BSP to hold the LT/CCB on 11 to 13 March 1991, to provide a forum for participants to share in a dialogue on the conservation issues affecting the lake. Sixty-five participants from 12 countries attended the three-day conference. The participants proposed a number of specific measures to address the environmental threats to the Lake and called for international cooperation to solve these problems, both among the four nations bordering the lake and between these riparian states and the international community at large. The governments of Burundi, Tanzania, Zaire and Zambia enthusiastically supported the conference and directed follow-up activities.

TA911

TITLE: NGO Element of PNG's Conservation Needs Assessment (CNA)

COMPONENT: Technical Assistance

FUNDING: \$15,000

DURATION: Initiated May 1990; concurrence pending

IMPLEMENTOR: WWF; BSP; Greenpeace; National Alliance of Non-governmental Organizations (NANGO)

CONTACT: BSP: Janis Alcorn 202-778-9697; fax 202-293-9211
Greenpeace: Lafcadio Cortesi 415-512-9025;
fax 415-512-8699
NANGO: Vincent Manukayasi fax 675-254-309

LOCATION: Papua New Guinea (PNG)

PURPOSE: Consultants will assist in developing NGO and landowner perspectives on conservation needs in PNG with the aim of integrating their perspectives into the process of BSP's conservation needs assessment and planning for a PNG Global Environment Facility (GEF) proposal to the World Bank.

DESCRIPTION: The implementors will provide technical assistance to local NGOs and landowners in formulating their concerns and recommendations. The results of BSP's CNA for PNG will be discussed during the PNG's Department of Environment and Conservation's planning workshop.

PRODUCTS/OUTPUTS: CNA report expected at end of activity.

STATUS: Preparations are underway for designing the elements of the project.

SIGNIFICANCE: The project brings grassroots organizations and landowners into the planning process for conserving biodiversity. It helps strengthen NGOs institutionally and creates a commitment among landowners to conservation of resources.

RELEVANCE: In responding to BSP's mandate, this project helps establish national and local conservation priorities, assists policy development and dialogue to increase the national commitment to conservation, builds the capacity of host-country institutions to design proposals for funding from other sources, and expands outreach to grassroots organizations and landowners.

COMMENTS:

TA912

TITLE: Mafia Island Marine Park/Reserve

COMPONENT: Technical Assistance

FUNDING: \$25,000

DURATION: Initiated January 1991; ends December 1991

IMPLEMENTOR: World Wide Fund for Nature/Tanzania

CONTACT: BSP: Kate Newman 202-778-9524; 202-293-9211
Bruce Leighty 202-778-9685; 202-293-9211
WWF/Tanzania: John Boshe 255-51-28485;
fax 255-51-28486
WWF/US: Ted Dardani 202-778-9771

LOCATION: Tanzania/Mafia Island

PURPOSE: A workshop to be held on Mafia Island in late October 1991 will: 1) provide a forum for residents and resource users to share their views on the concept of a Mafia Island Marine Park/Reserve; 2) present the management proposal of the Steering Committee (made up of representatives from national and local governments, national and international NGOs and the University of Dar Es Salaam) and develop and approve an outline of the management structure and strategy; 3) forge agreement on the precise area and approve a plan for legal creation of the Park/Reserve; and 4) produce a timetable for implementing the actions identified.

DESCRIPTION: The marine resources in the waters around Mafia Island/Tanzania are among the richest on the East African Coast. Coral reefs are fast being destroyed or degraded in many locations, but those of southern Mafia Island are still in excellent condition. This situation is nevertheless threatened by the recent rise in dynamite fishing and other pressures such as the overuse of seine nets.

Discussions on a Marine Park in the Mafia Island area have been held at various levels of government for some years. The first formal initiatives to create marine and coastal protected areas in Tanzania came in 1975. Two areas off Mafia Island--Chole Bay and Tutia Reef--were declared Marine Reserves for total protection, but lack of personnel and funding slowed implementation. Suggestions from various quarters urged the creation of a larger, multiple-use area combining conservation of reefs and other key coastal and marine environments in the Mafia area with a coherent management strategy for sustainable resource use, including ecotourism. In February 1991, a well-attended meeting was held in Dar es Salaam where the concept of a marine park/reserve in the Mafia Island area was discussed, resulting in the formation of a Steering Committee to further develop planning

TITLE: South Pacific Short-term Assistance

COMPONENT: Technical Assistance

FUNDING: \$9,000

DURATION: Initiated 18 April 1991; ended 7 May 1991

IMPLEMENTOR: BSP

CONTACT: BSP: Janis Alcorn 202-778-9697; fax 202-293-9211

LOCATION: South Pacific Region/Fiji and Vanuatu, Papua New Guinea (PNG), Indonesia

PURPOSE: To provide technical assistance to the South Pacific Regional Office with background analysis for designing the South Pacific Profitable Environmental Protection (PEP) Project as well as to negotiate the PNG Conservation Needs Assessment with the Government of Papua New Guinea (TA911).

DESCRIPTION: Dr. Alcorn assisted the Mission with background analysis in preparation for the South Pacific PEP (PD906), to ensure that the USAID-assisted Foundation for the Peoples of the South Pacific can meet its conservation objectives under the new PEP. While in Papua New Guinea, Dr. Alcorn negotiated and revised the CNA proposal with the GOPNG. She stopped in Jakarta to begin negotiations for a buy-in related to the new USAID Natural Resources Management (NRM) project in Indonesia (PD914).

PRODUCTS/OUTPUTS: Final PEP design includes environmental impact monitoring and evaluation elements to be implemented by BSP (PD906). BSP has received the buy-in to implement the Environmental Assessment (EA) of the Natural Resources Management (NRM) Project in Indonesia (PD914). The PNG CNA proposal was revised and received approval in September 1991 (PD894D).

STATUS: Completed

SIGNIFICANCE: The monitoring and evaluation elements of the BSP mandate require that BSP program managers assist USAID Missions and Bureaus not only through correspondence long-distance, but also through visits to the regional offices to help the Missions in meeting their goals to provide a sound basis for their conservation objectives and procedures.

RELEVANCE: Providing technical assistance is a BSP mandate in that it includes establishing national conservation priorities; defining programmatic priorities and helping to formulate Mission proposals for the conservation of biodiversity.

COMMENTS:

IN891

TITLE: Biodiversity Seminar Series
COMPONENT: Information Networking
FUNDING: Core funds (approx. \$5,000/yr)
DURATION: Initiated October 1989; continues indefinitely
IMPLEMENTOR: BSP/Gary Hartshorn, Chadwick Kumpe 202-778-9600
CONTACT: BSP: Janis Alcorn 202-778-9697; fax 202-293-9211
LOCATION: Washington, DC/WWF

PURPOSE: To provide a forum for Washington-based conservationists and visitors to participate in monthly seminars on topics relevant to the conservation of biological diversity. These seminars offer informal gatherings where individuals from NGOs, AID/W and other development agencies can come together to learn about various biodiversity activities as well as get to know one another.

DESCRIPTION: In the fall of 1989, a mailing list was compiled that included A.I.D. personnel from different regional bureaus and program staff from conservation organizations in DC. It was later expanded to include other interested citizens. Approximately 300 announcements are sent before each seminar. Speakers include scientists from academia, representatives from projects/organizations and an A.I.D. Mission officer. Participants can partake of hors d'ouvres, beer and wine before or after the formal lecture. The seminar presentation is usually 45 minutes in length, illustrated with slides, and followed by a question-and-answer session.

PRODUCTS/OUTPUTS: A regular forum to hear interesting approaches to conserving biodiversity and a popular networking opportunity. See current listings for Biodiversity Seminars.

STATUS: The Biodiversity Seminar Series continues to grow in popularity and attendance. The average attendance is 75 people.

SIGNIFICANCE: The seminars have been a very effective tool for educating the public and key players in the conservation community. They are also a vehicle of publicity for BSP, as they are known throughout the area for the interesting presentations and delicious food.

RELEVANCE: The Biodiversity Seminar Series directly addresses a mandate under the information networking component to sponsor periodic technical seminars.

COMMENTS:

IN893

TITLE: Publication of Flora of Thailand (3 volumes)
COMPONENT: Information Networking
FUNDING: \$12,000
DURATION: Initiated February 1989; ended June 1991
IMPLEMENTOR: Royal Forest Department (RFD) Herbarium
CONTACTS: BSP: Gary Hartshorn 202-778-9600; fax 202-293-9211
AID/W: Sy Sohmer 703-857-4669; fax 703-875-4394
RFD: Thawatchai Santisuk 662-579-1534;
fax 662-579-8611

LOCATION: Thailand/Bangkok

PURPOSE: To assist with the publication of three volumes of the Flora of Thailand.

DESCRIPTION: Since the 1970 publication of the first volume of the Flora of Thailand, nine volumes have been published covering approximately 10% of the total flora of the country. The Editorial Board of the Flora of Thailand had some approved manuscripts in hand, but no funds to publish these installments as volumes. BSP funds were granted to publish 1,000 copies each of three volumes of the Flora of Thailand.

PRODUCTS/OUTPUTS: 1,000 copies each of three volumes of the Flora of Thailand. The inside cover carries the following acknowledgement "Published with financial assistance of the Conservation of Biological Diversity Program, a USAID-funded joint venture of the World Wildlife Fund, The Nature Conservancy, and the WRI Center for International Development and Environment."

STATUS: Completed

SIGNIFICANCE: The opportune funding of the publication of three volumes of the Flora of Thailand stimulated renewed interest and effort in promoting completion of the Flora of Thailand.

RELEVANCE: Publication of taxonomic treatments of the national flora contributes to a better understanding of biodiversity and is part of BSP's information networking component.

COMMENTS:

IN905

TITLE: Setting Priorities for Biodiversity

COMPONENT: Information Networking

FUNDING: \$49,754; Attachment 3 to WRI Umbrella Contract

DURATION: Initiated June 1990; ends December 1991

IMPLEMENTOR: World Resources Institute (WRI)

CONTACT: BSP: Bruce Leighty 202-778-9685; fax 202-293-9211
WRI: Nels Johnson 202-662-2529; fax 202-638-0036

LOCATION: Washington, DC

PURPOSE: To review existing methodologies and criteria used to establish priorities for the conservation of biodiversity.

DESCRIPTION: This study is an attempt by BSP to undertake special studies on behalf of the consortium to further the goals of conserving biodiversity. In order to proactively strengthen the collaborative efforts of the consortium, the BSP Executive Committee asked their members to submit one-page suggestions for a joint activity of potential significance to the conservation community. Nels Johnson's prospectus Filling the Ark: Systematic Approaches to Setting Priorities for the Conservation of Biodiversity was selected by the Executive Committee for funding. The project examines three major aspects of establishing biodiversity conservation priorities in developing countries: (1) What theories, concepts, processes, and tools are available to help institutions at national and local levels to set conservation priorities for a range of biodiversity conservation objectives? (2) What strengths, weaknesses, and applications do these methodologies bring to bear on an overall goal of conserving the widest range of biodiversity resources? and (3) What indicators are available, and which need to be developed, to monitor changes in biodiversity and conservation progress once priorities are established?

PRODUCTS/OUTPUTS: One planning workshop in D.C. to discuss the proposed activities and work plan. A technical report for publication.

STATUS: Active; completion delayed due to other time demands.

SIGNIFICANCE: Considerable attention has been given recently to setting international priorities for the conservation of biodiversity. Less consideration, however, has been given to how such priorities are set, or could be set, at national and local levels in tropical countries. Coherent priorities are necessary to the efficient use of limited funds. Developing priorities focuses efforts on information needs, conservation objectives, and assessing institutional capacity. Well-rationalized and

IN907

TITLE: Publication of the Gnusletter

COMPONENT: Information Networking

FUNDING: \$1,000

DURATION: Initiated 22 November 1990; ends December 1991

IMPLEMENTOR: Richard Estes, Chairman, Antelope Specialist Group, Species Survival Commission, International Union For Conservation of Nature and Natural Resources (IUCN)

CONTACT: BSP: Kate Newman 202-778-9524; fax 202-293-9211
IUCN: Richard Estes 603-924-9804

LOCATION: Regional

PURPOSE: To support the production and distribution of the newsletter of the Antelope Specialist Group of the IUCN Species Survival Commission. Gnusletter provides a comprehensive source of current information on antelope conservation, facilitates communication among those involved with antelope conservation worldwide, and raises awareness of antelope conservation issues in general.

DESCRIPTION: Due to their large habitat requirements and extreme visibility to hunters, large mammals are especially threatened by human activities and are often the first species to suffer local extinctions in areas of human habitation. The antelopes, while not as much in the spotlight as elephants and rhinos, nonetheless require special conservation attention to ensure their survival. Many of the 86 species of antelope found throughout Africa and Asia are endangered and threatened. Antelopes are among the only remaining examples of long-distance, migratory large mammals on earth and they are a major ecological and aesthetic component of the African continent. This newsletter addresses the needs of those persons who are working especially with antelopes.

PRODUCTS/OUTPUTS: Three issues of the Gnusletter (approximately 15 pages each).

STATUS: Active; one issue received: Volume 10 #1.

SIGNIFICANCE: The Gnusletter is the only comprehensive source of current information on antelope conservation, reporting on developments in both ex situ and in situ activities. It is the primary means of communication for those working with antelope conservation worldwide. In its 10th volume, the Gnusletter is recognized as a high-quality, effective information networking initiative.

IN908

TITLE: WRI Investment Survey for 1989

COMPONENT: Information Networking

FUNDING: \$35,000

DURATION: Initiated 1 April 1990; ends 31 December 1991

IMPLEMENTOR: World Resources Institute (WRI)

CONTACTS: BSP: Bruce Leighty 202-778-9685; fax 202-293-9211
WRI: Janet Abramovitz 202-662-2528
Nels Johnson 202-662-2529; fax 202-638-0036

LOCATION: Washington, DC

PURPOSE: To support the research and publication of WRI's investment survey for 1989.

DESCRIPTION: This activity supports WRI in a follow-up of their 1987 survey of investments made by U.S. institutions in research and conservation efforts in developing countries. Specific support was provided for data collection and updating, processing, analysis, and publication of the 1989 Investment Survey, by Janet Abramovitz. The 1987 survey was well received, forming an excellent base for an enhanced 1989 survey.

PRODUCTS/OUTPUTS: Investing in Biological Diversity: U.S. Research and Conservation Efforts in Developing Countries by J. Abramovitz, 1991. Washington: WRI, 94 p.

STATUS: Completed

SIGNIFICANCE: This kind of publication provides important, but difficult to acquire, documentation on the background, planning, and activities of U.S. organizations investing funds and human resources in the conservation of biodiversity. It helps governments and NGOs to make better decisions as they plan future activities that relate to biodiversity, and provides for the first time an overall picture of the levels of support going to conservation. As the survey is repeated, it provides trend data, an important monitoring tool to assist in the evaluation of the pattern and effectiveness of conservation investments. For the two years that WRI has analyzed investments in biodiversity, the contribution to developing countries has gone from \$37.5 million to \$62.9 million--a trend that while positive, should be more rapid and aggressive.

RELEVANCE: BSP directly addresses its mandate to carry on the maintenance and collection of information on conservation activities of U.S. institutions.

COMMENTS:

IN9010

TITLE: Women and Biodiversity Conference

COMPONENT: Information Networking

FUNDING: \$2,500

DURATION: Initiated 21 November 1990; ends 31 December 1991

IMPLEMENTOR: Committee on Women and Biodiversity (CWB), Harvard University

CONTACT: BSP: Kate Newman 202-778-9524; fax 202-293-9211
CWB: Lea Borkenhagen 617-493-2307

LOCATION: Massachusetts/Cambridge/Harvard University

PURPOSE: To support the participation of two women from Ghana to the Conference on Biodiversity: Rainforest and Women, at Harvard University, 4 to 6 October 1991. The conference was designed to generate new approaches aimed at engaging women in the management of biodiversity. After the conference, multilateral funding agencies, non-governmental organizations (NGOs), and governmental agencies of developing countries will receive the conference's recommendations. Participants addressed the relation of women to tropical forests, constraints and problems for women, and implementation of the conference's recommendations.

DESCRIPTION: Rural women in tropical forest regions have a profound effect on their environment through such actions as collecting fuelwood, clearing forest for agriculture, and gathering non-timber forest products. Over time, women develop extensive knowledge of forest composition, extraction potential, and management. However, funding agencies traditionally bypass women in development efforts and instead approach men, the customary owners of land. Because women are principle holders of knowledge and agents of transformation, they are an important resource for the conservation of biodiversity. It is critical that the often silent part women play in the conservation and use of biological diversity be recognized and acted upon. This topic has been broached before, yet results of discussion have had little effect on large-scale development plans pursued by multilateral funding agencies, less still on rural projects.

BSP supported two participants from Ghana to provide the conference with vital, personal insights on how African women think about and affect the conservation of biodiversity. Amowi Phillips is adjunct professor in Comparative Law at Gonzaga University in Spokane, Washington, and a former member of the legal committee of the Ghana National Commission on Children. Ama Buabeng is a small-scale farmer from the eastern region of Ghana and a member of a traditional theater group that performs for grassroots communities throughout Ghana.

IN912

TITLE: Forests & People Conference/NYBG

COMPONENT: Information Networking

FUNDING: \$25,000

DURATION: Initiated 11 March 1991; ended 1 July 1991 (may be extended)

IMPLEMENTOR: New York Botanical Garden (NYBG)

CONTACT: BSP: Janis Alcorn 202-778-9697; fax 202-293-9211
AID/Jakarta: Jerry Bisson 62-21-360-360
fax 62-21-380-6694
NYBG: Christine Padoch 212-220-8700

LOCATION: New York City/NYBG

PURPOSE: To provide a forum for international scholars, resource managers and the public to discuss Indonesia's Kalimantan forest ecology, human use and management of the forests, and the local and global effects of development in those forests.

DESCRIPTION: BSP supported 14 scholars and government representatives, including six officials from Indonesia, to attend the conference on Indonesia's Kalimantan forest. The support funds also provided conference and lodging expenses for selected participants from USAID-assisted countries. BSP Program Officer, Janis Alcorn, attended the conference.

PRODUCTS/OUTPUTS: A publication is expected in 1993.

STATUS: The NYBG Conference (June 21 to 23, 1991) attracted more than 70 participants, including Nelson P. Hutabarat, the Indonesian Embassy's Agricultural and Environmental Attache, and Graham Kerr, Chief, Regional and Resource Management Division, Office of Agriculture in the AID/Jakarta Mission. Christine Padoch, (co-convenor of the conference with Nancy Peluso of UC/Berkeley), requested that the BSP funds in excess of what was needed for participant support be used for publication of the papers presented. The request is being processed.

SIGNIFICANCE: The conference provided a unique opportunity for social and natural scientists to discuss conservation issues. Presentations were excellent and discussions were productive. The Indonesian delegation closed the conference with an invitation to continue the discussions next year at a follow-on conference in Indonesia.

RELEVANCE: AID/Jakarta concurred with BSP funding because the conference brought together Indonesian decision-makers and international scholars to discuss biodiversity issues related to Kalimantan forests. The conference promoted a direct exchange of

IN913

TITLE: WRI/WCMC Biodiversity '92/Expanded Investments Survey

COMPONENT: Information Networking

FUNDING: \$105,000

DURATION: Initiated April 1991; ends December 1992

IMPLEMENTOR: World Resources Institute (WRI)

CONTACT: BSP: Bruce Leighty 202-778-9685; fax 202-293-9211
WRI: Janet Abramovitz 202-662-2528

LOCATION: Washington, DC

PURPOSE: To continue to monitor, analyze and report on investments by USAID and other US institutions in biodiversity and conservation while enabling WRI to expand efforts by working with key biodiversity countries to collaboratively determine information needs, build local capacity and develop data sets on their internal investments. These data will help WRI compare US investments to internal investments for select countries.

DESCRIPTION: WRI's two previous publications on U.S. investments in biodiversity proved to be in great demand by government and non-government organizations, charitable organizations and the like. There is now a potential to see trends emerging in the economics of environmental investments in research, education, policy, planning, management, institution building, and other areas. WRI will continue to solicit information from previous and new contributors, but will also gather data on investments made internally by key countries around the world.

PRODUCTS/OUTPUTS: Publications expected

STATUS: Active

SIGNIFICANCE: The cataloguing and identification of investments in environmental and biodiversity activities is relatively new; however, the demand for the previous two publications (WRI investment surveys for 1987 and 1989; see Activity Summaries IN892 and IN908) has been great. The anticipated survey is expected to yield new trends in investment patterns. Like the previous publication, the forthcoming one will serve the broad public and government as a valuable resource.

RELEVANCE: BSP's mandate is to address maintenance and collection of information on conservation activities, including those of A.I.D. and other U.S. institutions.

COMMENTS:

IN914

TITLE: Conservation Education in Southwestern CAR

COMPONENT: Information and Evaluation Networking

FUNDING: \$19,000

DURATION: Initiated February 1991; ends December 1991

IMPLEMENTOR: WWF/US, Africa Program

CONTACT: BSP: Kate Newman 202-778-9524; fax 202-293-9211
WWF/Africa: Ned Seligman 202-778-9770

LOCATION: Central African Republic (CAR)

PURPOSE: To produce quality conservation education materials to be used by the Dzanga-Sangha Project which seeks to integrate wildlife protection, rural development, tourism, research and education, and preservation of the cultural integrity of the BaAka Pygmies. The conservation educational materials, printed in both English and French, will be used in the school system, nature clubs, and community groups. They are also the core materials for training programs for project staff and the community at large. These materials will help increase environmental awareness of target communities and teach them the value of conserving forest habitat and utilizing resources in a sustainable fashion.

DESCRIPTION: There exist only a few remaining areas of undisturbed lowland tropical forest in central Africa. These forest ecosystems are home to a variety of primates, including chimps and lowland gorillas. The forests also harbor elephants, bongo, a rich flora and indigenous hunter-gatherer people. In recent years, however, these forests have come under increasing pressure and are threatened by uncontrolled tourism, colonization and agriculture encroachment, poaching and uncontrolled mining. The tropical moist forests of southwestern CAR contain the country's last diverse habitats. In this region, the government of the CAR and WWF have come together to create a multiple-use reserve and national park to protect this unique ecosystem. The management is based on the Biosphere Model and allows for traditional hunting, agroforestry development and selective logging, while also providing areas of total preservation. As part of this larger Dzanga-Sangha Project, BSP has funded the printing of conservation education materials prepared by the current Dzanga-Sangha Conservation Education Coordinator, Denise Stromme, and Site Manager, Philip M. Hunsicker.

PRODUCTS/OUTPUTS: The conservation education materials include a detailed curriculum and activity package, extension booklets, slide presentations and a poster produced by the projects' Central African Co-Director. Printing includes 500 sets of the

IN915

TITLE: National Forum on Ocean Conservation
COMPONENT: Information Networking
FUNDING: \$10,000
DURATION: Initiated April 1991; ends December 1992
IMPLEMENTOR: Smithsonian Institution (SI) Office of Environmental Awareness
CONTACT: BSP: Bruce Leighty 202-778-9685; fax 202-293-9211
SI: Judith Gradwohl 202-357-4797; fax 202-786-2557
LOCATION: Washington, DC

PURPOSE: To provide funds to support the research and publication of a book resulting from the National Forum on Ocean Conservation, organized by the Smithsonian Institution (SI).

DESCRIPTION: The National Forum on Ocean Conservation, 19 to 21 November 1991, has a multidisciplinary overview of the status of marine conservation. It will focus the public, media, and policy-maker attention on the mounting problems associated with coastal and open-ocean ecosystems, and their implications for human society. Two full days of talks and panel discussions will highlight marine-based environmental issues and the interactions between land and sea. The program will frame the current critical issues, outline our state of knowledge, and present policy options and research needs.

PRODUCTS/OUTPUTS: A book will be researched and produced incorporating the above-mentioned environmental issues.

STATUS: Active

SIGNIFICANCE: The conservation of marine and aquatic ecosystems receives little support and attention when compared with terrestrial ecosystems. Members of the marine and aquatic sciences have less opportunity to get together and discuss status, problems, and solutions in their area of specialty. This meeting and forthcoming book have the potential to be seminal endeavors that should help to galvanize actions and provide a forward thrust to marine and aquatic conservation efforts.

RELEVANCE: This activity addresses BSP's mandate to expand outreach efforts, assemble information on the conservation activities of other major U.S. organizations, establish linkages and produce a text that should have impacts on economics, socio-political and ecological understandings about poorly understood effects of development on marine and aquatic ecosystems.

COMMENTS:

IN916

TITLE: Publication of Montes Azules Research Volume

COMPONENT: Information Networking

FUNDING: \$15,000

DURATION: Initiated 1 June 1991; ends 30 April 1992

IMPLEMENTOR: Centro de Estudios para la Conservación de los Recursos Naturales, México (ECOSFERA, A.C.)

CONTACTS: BSP: Meg Symington 202-778-9727; fax 202-293-9211
ECOSFERA: Eduardo Inigo 904-334-5410 or 392-4851

LOCATION: Mexico/Chiapas

PURPOSE: To publish a volume of research papers on the biodiversity of the Montes Azules Biosphere Reserve.

DESCRIPTION: The Lacandon forest of extreme southeastern Mexico is the most biologically diverse forest system in the northern neotropics. It is Mexico's largest remaining tropical lowland forest, and the westernmost extension of Guatemala's vast Petén region. The forest also supports a small population of native Lacandon Indians, a semi-agricultural forest-dwelling group deriving from the ancient Maya. The 331,200 ha Montes Azules Biosphere Reserve, which was established by government decree in 1978, forms the core of this important conservation unit.

From 1983-1985, the Instituto Nacional de Investigaciones sobre Recursos Bióticos (INIREB) served as the institutional coordinator for all social and natural science research in the Montes Azules Biosphere Reserve. When the agreement ended in 1985, INIREB decided to publish the voluminous research results in a single volume that would be a valuable resource for those directly involved with the conservation and management of the Montes Azules Biosphere Reserve, as well as for those involved with conservation in Mexico more generally. Unfortunately, the project could not be brought to completion before INIREB was closed by presidential decree at the end of 1988.

The Centro de Estudios para la Conservación de los Recursos Naturales (ECOSFERA) was formed in 1989 by a group of former students from INIREB. In 1990, ECOSFERA decided to resume publication of the completed manuscript. An editorial committee was established that included members of ECOSFERA and Mario Ramos, WWF's Program Officer for Mexico. ECOSFERA has made a substantial in-kind contribution to the publication process by entering all of the manuscripts into computer files, and will also make a \$3,000 cash contribution to the project.

IN917

TITLE: Conservation Biology Subscriptions

COMPONENT: Information Networking

FUNDING: \$3,000 for the first year

DURATION: Initiated 30 October 1990; continues 2 to 3 years

IMPLEMENTOR: Society for Conservation Biology (SCB)

CONTACTS: BSP: Meg Symington 202-778-9727; fax 202-293-9211
SCB: Stephen R. Humphrey 904-392-6581;
fax 904-392-8783

LOCATION: Worldwide

PURPOSE: To sponsor 20 subscriptions a year to Conservation Biology for the next three years for Third-World conservationists.

DESCRIPTION: The Society for Conservation Biology requested financial assistance from BSP for its program of sponsored subscriptions to the journal Conservation Biology. This program was designed to promote the dissemination and discussion of critical ideas in conservation theory and management by providing the journal to countries where economic circumstances limit subscriptions.

BSP agreed to fund 20 new subscriptions to Conservation Biology for two to three years. A list of 20 individuals and institutions in Africa, Asia and Latin America was generated by staff at BSP, WWF and A.I.D., taking into account technical and financial need as well as the degree of exposure a recipient would be able to provide for others to use the journal. This list was forwarded to SCB and their publisher, Blackwell Scientific Publications.

PRODUCTS/OUTPUTS: The journal is mailed to 20 sponsored subscribers. Recipients also receive any available back issues of Conservation Biology.

STATUS: The activity is proceeding on schedule. SCB plans to take over all funding responsibility for sponsored subscriptions when it achieves financial independence, expected to occur in two to three years; hence the uncertain time frame of this project..

SIGNIFICANCE: This activity provides journal recipients with technical information and news contained in Conservation Biology and will, it is hoped, result in better management of natural resources.

RELEVANCE: This activity relates directly to the mandate set out for BSP under the Information Networking component by

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IN918

TITLE: Botanical Conference Support/Chile

COMPONENT: Information Networking

FUNDING: \$2,000

DURATION: Initiated 1 June 1991; ends 30 November 1991

IMPLEMENTOR: Botanical Society of Chile--Dra. Liliana Cardemil,
President

CONTACTS: BSP: Meg Symington 202-778-9727; fax 202-293-9211
AID/Santiago: Paul Fritz 562-381014;
fax 562-380931

LOCATION: Chile/Santiago

PURPOSE: To support the Botanical Society of Chile by providing funds for its Eighth National Meeting held in Santiago in the third week of October, 1991.

DESCRIPTION: BSP received a request from AID/Santiago to provide support to the Botanical Society of Chile by becoming a sponsor of its Eighth National Meeting. The meeting was attended by Chilean botanists and distinguished researchers from the United States, Australia, and Europe. Many of the symposia and talks were concerned with the conservation of Chile's native flora, and related environmental and ecological problems. The funds provided by BSP allowed Chilean Masters and Ph.D. students in botany to attend and participate in the meeting, thus exposing them to national and foreign colleagues in a productive and scholarly atmosphere.

PRODUCTS/OUTPUTS: BSP's sponsorship was publicized on posters, programs and other announcements of the meeting, and should be mentioned in the conference proceedings when they are published.

STATUS: Active

SIGNIFICANCE: Involving host-country scientists directly in the conservation of biodiversity through discussions of their flora and related environmental and ecological problems gives this conference a grassroots approach to problem identification and solutions. Publication of the Conference Proceedings will be a valuable addition to the knowledge gained by national as well as foreign researchers.

RELEVANCE: This activity addresses BSP's mandate to support the dissemination of information concerning biodiversity conservation to developing-country individuals and institutions.

COMMENTS:

PD891

TITLE: MANRES Biodiversity Research and Conservation

COMPONENT: Pilot Demonstration Project

FUNDING: \$449,993 (PIO/T #493-0345-3-80095)

DURATION: Initiated 29 August 1989; ends 30 September 1993

IMPLEMENTOR: Kasetsart University, Royal Forest Department Herbarium; Royal Forest Department Wildlife Conservation Division; Wildlife Fund Thailand; Zoological Parks Organization; Others

CONTACT: BSP: Kathy Saterson 202-861-8330; fax 202-293-9211
AID/Bangkok: Will Knowland 662-255-3661;
fax 662-253-6318
AID/W: Molly Kux 202-663-2639; fax 202-647-4958

LOCATION: Thailand

PURPOSE: In August 1988 AID/Bangkok initiated a \$44 million program with the Royal Thai Government (RTG) on the Management of Natural Resources and Environment (MANRES). The goal of the MANRES project is to promote the economic and social development of Thailand through improved management of the environment and natural resources. The purpose of the project is to develop the capacities of Thai governmental and non-governmental institutions to define, analyze and respond effectively to current and emerging natural resource and environmental problems. The objective of MANRES Element II is to support Thai organizations in developing increased scientific understanding of Thailand's biological resources, their potential, and effective management practices for conserving biological diversity.

DESCRIPTION: In November 1989 a detailed work plan (see Activity TA892) for this buy-in was prepared by BSP, submitted to AID/Bangkok and RTG agencies, and approved by the appropriate offices. Twelve specific activities (see following activity summaries) were agreed upon:

- A. Three U.S. Study Tours
- B. Information Transfer (books, journals, videos)
- C. National Botanical Assessment
- D. NGO Seminar on Conservation and the Environment
- E. WFT Small Grants Program and Institutional Strengthening
- F. Huay Kha Khaeng/Thung Yai Florula
- G. Vegetation Survey of Western Thailand
- H. Huay Kha Khaeng/Thung Yai Research and Facilities
- I. Field Ecology Course
- J. Sustainable Development in Buffer Zones
- K. Speaker for GCC Conferences
- L. Pilot Projects To Be Determined

PD891B

TITLE: Information Transfer

COMPONENT: Pilot Demonstration Project

FUNDING: \$25,000

DURATION: Initiated August 1989; ends 30 September 1993

IMPLEMENTOR: BSP; AID/Bangkok; Sandhill Crane Press

CONTACT: BSP: Kathy Saterson 202-861-8330; fax 202-293-9211
AID/W: Molly Kux 202-663-2365; fax 202-647-4958

LOCATION: Thailand

PURPOSE: To buy or facilitate publication of appropriate numbers of key scientific or technical publications and ship these to the AID/Bangkok Mission for distribution.

DESCRIPTION: The following requests have been completed: purchase and ship 450 copies of E.O. Wilson's Biodiversity book; arrange for publication and purchase of 200 copies of Endangered Animals of Thailand by Humphrey & Bain.

PRODUCTS/OUTPUTS: At the request of the Mission, 450 copies of Biodiversity were shipped to the AID/Bangkok Mission for distribution at the October 1989 workshop "Biodiversity in Thailand: Inventory and Values" organized by the Science Society of Thailand (Biology Section) and Scientific Research Society of Thailand; 175 copies of Endangered Animals of Thailand were shipped to the Mission for distribution to Thai scientists on the request of AID/W.

STATUS: Active

SIGNIFICANCE: Scientists, conservationists and managers involved with biological resources in developing countries often have limited access or means of obtaining critical scientific and technical literature. In order to improve the capability of these professionals to carry out their responsibilities, better access to the pertinent literature and other information is fundamental. The ability of BSP to expedite the publication, purchase and shipment of key scientific books has permitted the AID/Bangkok Mission to effectively meet Thai requirements for scientific literature.

RELEVANCE: The provision of key scientific and technical literature in an explicit mandate under this BSP component.

COMMENTS:

PD891C

TITLE: National Botanical Assessment
COMPONENT: Pilot Demonstration Project
FUNDING: \$40,268
DURATION: Initiated January 1990; ended July 1991
IMPLEMENTOR: Royal Forest Department (RFD) Herbarium
CONTACT: BSP: Kathy Saterson 202-861-8330; fax 202-293-9211
AID/Bangkok: Will Knowland 662-255-3661;
fax 662-253-6318
RFD: Thawatchai Santisuk 662-579-1534;
fax 662-579-8611

LOCATION: Thailand

PURPOSE: To prepare, publish and disseminate (in both English and Thai) a concise, popular and compelling statement of the current status, potential and priority needs for botanical research and conservation in Thailand. The goal is to increase awareness among both Thai decision-makers and the international research and donor communities of the needs, opportunities, priorities and general framework for supporting research and conservation of Thailand's botanical resources.

DESCRIPTION: The national assessment of botanical research and conservation needs focuses on the institutional, physical and professional staff needs for conducting field research (primarily in the specialities of ecology, systematics and economic botany) and the needs for botanical conservation activities, such as maintenance and improvement of arboreta and botanical gardens. BSP provided three internationally recognized experts to collaborate with Thai specialists on the assessment. The six-person team worked in Thailand for three weeks to review available documents, inspect herbaria, visit a few key protected areas, review appropriate national institutions, and synthesize their findings in a report.

PRODUCTS/OUTPUTS: (1) 500 copies of a comprehensive report, Plants for Our Future: Botanical Research and Conservation Needs in Thailand by T. Santisuk, T. Smitinand, W. Hoamuangkaew, P. Ashton, S.H. Sohmer, and J.R. Vincent, were published in May 1991. (2) A concise, clearly written synopsis of the assessment report was published in both Thai and English in the report.

STATUS: Completed

SIGNIFICANCE: Despite Thailand's botanical richness, strategic biogeographic location and relatively high level of advancement in the natural sciences, botanical research has been neglected by

PD891E

TITLE: WFT Small Grants Program and Institution Strengthening

COMPONENT: Pilot Demonstration Project

FUNDING: \$45,000 + \$2,000 Amendment

DURATION: Initiated 1 August 1990; ends 30 August 1992

IMPLEMENTOR: Wildlife Fund Thailand (WFT)

CONTACT: BSP: Janis Alcorn 202-778-9697; fax 202-293-9211
WFT: Pisit na Patalung 662-2583004; fax 662-2586003

LOCATION: Thailand/country-wide

PURPOSE: To provide strengthening of WFT for administration and support of a small grants program for research and conservation.

DESCRIPTION: This activity is designed to provide easier access to funding sources for non-English speaking individuals and organizations doing small-scale conservation work within Thailand. Through the buy-in, WFT administers funds for a small grants program allowing applications, proposals and reports to be completed in the Thai language and offers grants of \$1,000 to \$4,000. Of the \$45,000, \$35,040 or more must be used for grant awards during the two years.

PRODUCTS/OUTPUTS: As of July 1991, the first competition had been completed and five grants, ranging from \$800 to \$2,340, include: 1) Training tour guides; 2) Conserving Khao Banthad--a youth program; 3) Phu Khiew Alley Cropping and Integrated Agroforestry System; 4) Campaign for Coral Reefs Conservation; 5) Volunteer Teachers for Environmental Preservation.

STATUS: WFT submitted their first report in April, but the second tranche was not remitted until July after the Mission's wind-down plan was in place. In response to a request from WFT, the contract is being amended to add \$2,000 for travel by project coordinator in order to visit project sites and evaluate progress.

SIGNIFICANCE: Environmental NGOs are traditionally grassroots organizations without the experience or facility to handle research grants proposals. By providing an active NGO like WFT with the funds and technical assistance, it is expected that it will contribute to development of NGO capacity to peer-review grant proposals.

RELEVANCE: This activity provides the support to strengthen an important Thai NGO in its commitment to the conservation of biodiversity. The small grants fund activities include

PD891F

TITLE: Huay Kha Khaeng/Thung Yai Florula

COMPONENT: Pilot Demonstration Project

FUNDING: \$65,000

DURATION: Initiated September 1991; ends September 1993

IMPLEMENTOR: Royal Forest Department (RFD) Herbarium

CONTACT: BSP: Kathy Saterson 202-861-8330; fax 202-293-9211
AID/Bangkok: Will Knowland 662-255-3661;
fax 662-253-6318
RFD: Thawatchai Santisuk 662-579-1534;
fax 662-579-8611

LOCATION: Thailand/Huay Kha Khaeng and Thung Yai Naresuan
Wildlife Sanctuaries

PURPOSE: To make detailed botanical collections of all plant species in HKK/TYN Wildlife Sanctuaries and to publish a local flora (=florula) describing the taxonomy, botany, ecology and natural history of most of the local species.

DESCRIPTION: The RFD Herbarium is the lead agency for field collecting of botanical specimens, processing the herbarium material and writing the florula for the HKK/TYN Wildlife Sanctuaries. Some of the field inventories will be done quantitatively on permanent inventory plots established in conjunction with the Hubbel/Ashton/RFD mega-plot (50 ha) funded by WWF and with the vegetation survey (PD891G) originally proposed for BSP co-funding. Through the buy-in BSP assists the florula project with field equipment and expenses (e.g., plant drier, tree climbers), travel, illustrations and publication costs. In addition, BSP encourages and supports occasional working visits to HKK/TYN by foreign and Thai botanists to collaborate on the florula project.

PRODUCTS/OUTPUTS: (1) A published florula of the HKK/TYN Wildlife Sanctuaries; (2) Several thousand botanical specimens (collected in 6-10 replicates) for distribution to major herbaria in Thailand and abroad; (3) Semi-annual progress reports on the advances, plans and problems with project implementation; and (4) a working reference collection (mounted sheets and/or photocopies of specimens) maintained at the Khao Nang Rum field station in HKK.

STATUS: AID/Bangkok supported this activity directly from January 1991 to July 1991. BSP support requested due to the coup d'état (see PD891 STATUS). By July 1991, some 700 samples had been collected.

PD891H

TITLE: Huay Kha Khaeng/Thung Yai Research and Facilities

COMPONENT: Pilot Demonstration Project

FUNDING: \$93,363

DURATION: Initiated August 1989; ends September 1993

IMPLEMENTOR: World Wildlife Fund (WWF) and Royal Forest Department Wildlife Conservation Division (RFD/WCD)

CONTACT: BSP: Kathy Saterson 202-802-8330; fax 202-293-9211
WWF: David Hulse 202-778-9617; fax 202-223-6971
AID/W: Molly Kux 202-663-2639; fax 202-647-4958

LOCATION: Thailand/Kanchanaburi, Tak and Uthai Thani provinces

PURPOSE: To provide technical assistance to RFD/WCD to conduct high priority research and to improve the support facilities for conducting research in the two wildlife sanctuaries.

DESCRIPTION: The RFD/WCD proposes improvement and expansion of the existing Khao Nang Rum Research Center in order to make the center a more effective facility for national training, research, and conservation efforts. Buy-in funds are identified to support improvements of facilities, equipment, and staff at Khao Nang Rum, as well as assist with the continuation or initiation of long-term ecological research in the two wildlife sanctuaries.

PRODUCTS/OUTPUTS: Semi-annual reports on research projects, improvements of physical facilities, and administration of HKK/TY National Wildlife Sanctuaries.

STATUS: Because of the considerable uncertainty of the MANRES project WWF-International is about to support HKK directly. Proposed activities have not been initiated.

SIGNIFICANCE: The adjoining Huay Kha Khaeng and Thung Yai Naresuan Wildlife Sanctuaries (HKK/TYNWS) in western Thailand contain the country's largest remaining tracts of primary forests. IUCN calls the HKK/TYNWS the most important protected area in southeast Asia. The HKK/TYNWS complex covers 6,250 square km of outstanding wildlife habitats and critical watersheds. The three major forest types in HKK/TYNWS (dry dipterocarp, mixed deciduous, and moist evergreen) harbor an impressive number of endangered animal species such as tiger, spotted leopard, gaur, banteng, Asiatic elephant, tapir, Sumatran rhino, and green peafowl. Although some research has been conducted on large ungulates (by RFD and Kasetsart Univ.) and small cats (by Wildlife Conservation International), very little is known about population dynamics, habitat and food preferences,

PD891I

TITLE: Field Ecology Course

COMPONENT: Pilot Demonstration Project

FUNDING: \$44,570

DURATION: Initiated 29 August 1989; ends 30 September 1993

IMPLEMENTOR: Kasetsart University and Royal Forest Department

CONTACT: BSP: Janis Alcorn 202-778-9697; fax 202-293-9211
AID/W: Molly Kux 202-663-2639; fax 202-647-4958

LOCATION: Thailand/Khao Nang Rum Research Ctr; other sites

PURPOSE: To design, organize and offer a six-week intensive field ecology course in Thailand.

DESCRIPTION: The field course will be modeled after the highly successful courses run by the Organization for Tropical Studies (OTS) in Costa Rica, with the Thailand course coordinator having experience as an OTS course coordinator. Other faculty and resource persons for the Thai course will be selected from the professional ecologists in the country. After the first offering of the field course, a thorough evaluation of course schedule, content, faculty, participants, length, etc. will be used to make a decision on subsequent courses in field ecology, including funding options. Participants will be selected from university junior faculty and graduate students, mid-level managers of conservation units, and possibly from national NGOs.

PRODUCTS/OUTPUTS: One field course plus report and evaluations.

STATUS: Not yet designed nor carried out.

SIGNIFICANCE: There is broad agreement among university and Royal Thai Government agency officials that university graduates in biological sciences and natural resources need more thorough training and experience in field ecology. These educational needs cover the entire spectrum of specialities within the broad field of ecology, such as ecological methods and techniques, natural history, field identification of native fauna and flora, asking ecological questions, and writing research proposals. Ecological training of managerial-level administrators in the national system of conservation units is particularly urgent.

RELEVANCE: Training of nationals in conservation of biodiversity is an explicit mandate of the BSP terms of reference.

COMMENTS:

PD891J

TITLE: Sustainable Development in Buffer Zones
COMPONENT: Pilot Demonstration Project
FUNDING: \$162,363
DURATION: Initiated 29 August 1989; ends 30 September 1993
IMPLEMENTOR: To be determined
CONTACT: BSP: Janis Alcorn 202-778-9697; fax 202-293-9211
LOCATION: Thailand/protected area to be determined

PURPOSE: To design and initiate sustainable development activities in the buffer zone of a conservation unit.

DESCRIPTION: Project design will bring together a team of Thai and foreign experts to review existing information on sustainable development activities in Thailand, to visit prime candidate conservation areas for this project, and the preparation of a project design proposal. After positive review of the proposal and acceptance by the appropriate agencies, Phase II will begin implementation of the proposed sustainable development activities in the selected buffer zone(s) during the remaining year(s) of this buy-in.

PRODUCTS/OUTPUTS: A project design proposal. Once implementation begins, semi-annual reports will be submitted.

STATUS: Not yet initiated.

SIGNIFICANCE: Despite an extensive national system of protected areas (national parks, wildlife sanctuaries, non-hunting areas), virtually all conservation units are affected by one or more serious problems, such as human encroachment, timber extraction, wildlife poaching, dynamite fishing, agricultural colonization by squatters, as well as scattered settlements of hill-tribes. USAID and WWF funding to Wildlife Fund Thailand has been used to develop innovative approaches involving local villagers in and around Khao Yai National Park in conservation and sustainable development projects. However, even in such an outstanding, very popular national park, these sustainable development activities are inadequate to ensure the long-term viability of the protected area. The Khao Yai and other models of sustainable development must be refined and improved for testing in the buffer zones of other protected areas.

RELEVANCE: Sustainable development in conservation buffer zones is an explicit mandate for BSP.

COMMENTS:

PD891K

TITLE: Speaker for GCC Conference

COMPONENT: Pilot Demonstration Project

FUNDING: \$2,147

DURATION: Initiated 27 August 1990; ended 24 October 1990

IMPLEMENTOR: BSP

CONTACTS: BSP: Meg Symington 202-778-9727; fax 202-293-9211
AID/W: Molly Kux 202-663-2365; fax 202-647-4958
Nick Brown: 607-255-3191; fax 607-255-0349

LOCATION: Thailand/Bangkok

PURPOSE: AID/Bangkok passed on a request to BSP from The Science Society of Thailand to provide funding for and locate a speaker to address the effects of global climate change on agricultural ecosystems at their 22 to 24 October 1990, Conference.

DESCRIPTION: In response to the USAID request, BSP located and provided funding for Nick Brown, a Ph.D. candidate with David Pimentel at Cornell University, to travel to Thailand and deliver a paper on global climate change and agriculture at the Science Society of Thailand's conference on global climate change.

PRODUCTS/OUTPUTS: A manuscript to be published in the conference proceedings entitled, "Anthropogenic climate change and agriculture in Thailand."

STATUS: Completed

SIGNIFICANCE: This activity allowed the sharing of expertise in a relatively new field of scientific activity (global climate change). The world's scientists and leaders should be better informed and more reliable in their decisions and duties concerning trends in global changes.

RELEVANCE: This activity is relevant to BSP's mandate to provide technical assistance to host-country institutions.

COMMENTS:

PD891L

TITLE: Pilot Projects to be Determined
COMPONENT: Pilot Demonstration Project
FUNDING: \$25,212
DURATION: Initiated 29 August 1989; ends 30 September 1993
IMPLEMENTOR: To be determined
CONTACT: BSP: Janis Alcorn 202-778-9697; fax 202-293-9211
LOCATION: Thailand/To be determined

PURPOSE: To allow some flexibility in implementing the buy-in for particularly interesting projects not included in the work-plan.

DESCRIPTION: Proposals would be submitted to AID/Bangkok for preliminary screening. Those proposals of interest to the Mission would be forwarded to BSP for technical or scientific review and funding, the latter contingent on the availability of funds. Some examples of potential projects that could be developed include, but are not restricted to, a survey of wetlands (status, role in biodiversity conservation, economics of resource use and conservation), a survey of freshwater fish in protected areas, and community development activities that contribute to protection of nearby conservation units.

PRODUCTS/OUTPUTS: Reports or proposals for initiating one or more pilot projects.

STATUS: Not yet initiated

SIGNIFICANCE: It is expected that some very worthwhile proposals will be submitted to USAID for funding, hence a small portion of this buy-in will be reserved for funding project design or pilot studies.

RELEVANCE: Any pilot projects funded through this buy-in will be part of the broad mandate for BSP-supported efforts to improve local capacity to conserve biodiversity.

COMMENTS:

PD893B

TITLE: Nepal NECTARI

COMPONENT: Pilot Demonstration Project

FUNDING: \$50,000

DURATION: Initiated 1 September 1989; ends 30 September 1993

IMPLEMENTOR: King Mahendra Trust for Nature Conservation (KMTNC)

CONTACT: BSP: Janis Alcorn 202-778-9697; fax 202-293-9211
AID: Molly Kux 202-663-2365; fax 202-647-4958
WWF/Asia: Mingma Sherpa 202-778-9622

LOCATION: Nepal/Royal Chitwan National Park & Kathmandu

PURPOSE: To provide start-up funding to implement recommendations (see TA891) to create the Nepal Conservation Research and Training Institute (NECTARI), including staff support at KMTNC headquarters, upgrading the Sauraha field station in Royal Chitwan National Park, and support of field staff.

DESCRIPTION: This activity is an outgrowth of previous efforts in Nepal to save the endangered Bengal tiger. Centered in Royal Chitwan National Park, Project Tiger eventually encompassed protection of key prey species such as chital deer. Later the joint KMTNC/WWF/SI research was broadened to include the world's tallest grasslands as part of the Nepal Terai Ecology Project. The Sauraha field station on the edge of Royal Chitwan National Park was the headquarters for all these research projects. In 1989 USAID funded a feasibility study for transforming the Nepal Terai Ecology Project into a national institute (see TA891). This buy-in is for the support of the initial establishment and development of NECTARI by helping to fund the support staff, materials, equipment and field projects including workshops, courses, reforestation and habitat management.

PRODUCTS/OUTPUTS: Progress Reports

STATUS: Active; this project was initially delayed and remains hampered by lack of a director to provide leadership and direction for NECTARI. Nevertheless, considerable progress has been made in Chitwan and Sauraha.

SIGNIFICANCE: Nepal is characterized by the United Nations as one of the least developed of the developing countries. The country straddles the central Himalayan Mountains, extending from the monsoonal tropical lowlands of the Terai (base of the Himalayas) to the world's highest peak--Mt. Everest (Sagarmatha)--an altitudinal gradient that occurs in less than 200 kms. In order to stem the environmental destruction resulting from human population growth due to the eradication of Malaria beginning in

PD894B

TITLE: South Pacific CDC Development

COMPONENT: Pilot Demonstration Project

FUNDING: \$65,000

DURATION: Initiated 1 October 1989; ends 30 June 1991
(Amended to December 1991)

IMPLEMENTOR: The Nature Conservancy (TNC), South Pacific Office

CONTACT: BSP: Bruce Leighty 202-778-9685; fax 202-293-9211
AID/W: Sy Sohmer 703-875-4669; fax 703-875-4394
TNC: Sam Pearsall 808-948-8829; or 808-956-3521

LOCATION: South Pacific/Western Samoa and other islands

PURPOSE: To examine current biological information needs in the South Pacific, establish a pilot demonstration of a biological conservation database in Western Samoa, and prepare a tentative plan for a regional network of such databases.

DESCRIPTION: Endemism on tropical islands is higher than in any other environment. In Fiji, for example, 50% of the vascular plants are endemic. Endemism leads to vulnerability because species loss from an island usually means its extinction. Without knowing what is present on these islands, potential losses cannot be determined or prevented as development occurs. TNC, working with USAID, the East West Center (EWC), the South Pacific Regional Environment Program (SPREP), WWF, and others, is exploring methodologies for establishing conservation databases in the region. Ecosystems, species populations and habitats, biological conservation policy, land use and environmental impact decisions are to be addressed in these databases.

During the course of this project, TNC has established four objectives:

- 1) Modifying their Biological and Conservation Data Base (BCD) methodology to adapt it to a) a region of several countries; b) a region of islands; and c) a region where location data are scarce and distribution data must be substituted while location data are developed;
- 2) Developing and demonstrating a pilot project for a national conservation data center in Western Samoa including: a) data collection and processing; b) park and protection areas planning; c) data application assistance for planning and management; and d) demonstration of the potential data applications;
- 3) Developing a regional network plan: a) to sustain, coordinate, distribute and interpret data within the region and transmit the data; b) that has an administrative center and c) can interface network data with national development

PD894C

TITLE: Himalayan Jungle Project

COMPONENT: Pilot Demonstration Project

FUNDING: \$30,000

DURATION: Initiated 26 November 1990; ends June 1992

IMPLEMENTOR: International Council for Bird Preservation (ICBP)

CONTACT: BSP: Janis Alcorn 202-778-9697; fax 202-293-9211
AID/W: Molly Kux 202-663-2365; fax 202-647-4958
ICBP: Guy Duke 44-223-2277318; fax 44-223-277200

LOCATION: Pakistan

PURPOSE: 1) To prepare detailed, land-management plans for protected Himalayan forests to assure adequate protection for the tragopan birds; 2) to plan and promote sustainable development initiatives to reduce pressure on these forests; and 3) to create educational initiatives to raise the awareness of the need for conservation among local populations and within the Pakistani government.

DESCRIPTION: This buy-in partially funds the salary of the project coordinator in the first year of a three-year project. In addition, funds will be used to purchase equipment, including a camera and a wordprocessor, and reference and/or educational materials. ICBP is preparing detailed land-management plans for protected areas, will create socio-economic profiles of project areas in order to recommend sustainable development initiatives, will train Pakistani personnel to assure follow-on activities, will develop ecological research of the western tragopan (Tragopan melanocephalus, Galliforme), and establish long-term monitoring of threatened species.

PRODUCTS/OUTPUTS: Interim report due 30 December 1991; final report due 30 June 1992.

STATUS: Active. The government of Pakistan (GOP) has concurred on the proposal and BSP is processing the contract. Initially, the processing was delayed because of government concerns about suggested study sites and the war in the Gulf. In addition, ICBP attempted to change the scope of work in the hope of purchasing two vehicles. Final agreement on contract details is expected very soon.

SIGNIFICANCE: The buy-in will help support the preparation of a model for forest management that aims at integrating conservation and sustainable development in Pakistan's Himalayan forests.

RELEVANCE: The activity supports the creation of conservation

PD894D

TITLE: PNG Conservation Needs Assessment (CNA)

COMPONENT: Pilot Demonstration Project

FUNDING: \$200,000 (sources: ANE; S&T; APRE)

DURATION: Initiated April 1990; ends December 1992

IMPLEMENTOR: WWF Protected Area Assessment Team; BSP; AID/South Pacific; Wildlife Conservation International (WCI); Greenpeace; Conservation International (CI); Kew Gardens; Bishop Museum; AID/Center for Development Information and Evaluation (CDIE); Australian National University (ANU); World Resources Institute (WRI); and Others

CONTACT: BSP: Janis Alcorn 202-778-9697; fax 202-293- 9211
AID/PNG: Louis Kuhn 675-213666
or 675-213717; fax 675-212886
WCI: Mary Pearl 212-220-5123; fax 212-293-7114
AID/W: Molly Kux 202-663-2365; fax 202-647-4958

LOCATION: Papua New Guinea (PNG)

PURPOSE: A team of specialists will collect, catalog and analyze existing information about PNG's biodiversity to identify conservation priorities implementation issues/options. The assessment will serve as an information base to be used for technical assistance to the Government of Papua New Guinea (GOPNG). Proposals for the next phase of conservation action will be discussed during a workshop conducted by GOPNG's Department of the Environment and Conservation (DEC). In addition to technical assistance, the activity also supports the involvement of local NGOs in the CNA process (see Activity TA911). The final report will be used to prepare the GOPNG Global Environmental Fund (GEF) proposal to the World Bank.

DESCRIPTION: A team of consultants including internationally-known experts, will compile and analyze existing information in their specific areas of expertise in biology, human ecology and conservation planning. Team members will prepare a report assessing the quality of existing information and identify gaps in knowledge. In addition, the team will prepare an analysis of existing information that suggests first cut priorities for GOPNG conservation activities. This exercise will culminate in a planning workshop, hosted by GOPNG's DEC, that will consider both the results of the BSP-supported specialist team and that of the WWF Protected Areas Assessment.

An information specialist from AID/CDIE will develop a cataloging system on biodiversity information in PNG (as well as known references and resources outside PNG), and compile a comprehensive bibliography.

PD895A

TITLE: INBio Parataxonomists Course/Costa Rica
COMPONENT: Pilot Demonstration Project
FUNDING: \$100,168 (supplemented with \$40,000 core funds)
DURATION: Initiated 1 January 1990; ended 30 September 1991
IMPLEMENTOR: Instituto Nacional de Biodiversidad (INBio)
CONTACTS: BSP: Meg Symington 202-778-9727; fax 202-293-9211
 AID/W: Jim Hester 202-647-8093; fax 202-647-8098
 INBio: Rodrigo Gamez 506-364269; fax 506-362816
 Dan Janzen 506-695598 (Guanacaste)

LOCATION: Costa Rica/Guanacaste National Park and San José

PURPOSE: To train 15 "parataxonomists" (see DESCRIPTION for definition) and establish 5 more biodiversity offices within the Costa Rican URC (Unidad Regional de Conservacion) system. This activity strongly reinforces the countrywide biodiversity survey framework that has been established, strengthens INBio as an institution, and contributes concretely to the country's biodiversity inventory efforts (see TR901).

DESCRIPTION: A biodiversity survey of a conserved wildland requires year-round observation and collection of specimens and data. The collectors and observers require ecological and taxonomic training to the level of full competence in the technology and philosophy of a biodiversity survey, but they do not need the university and postgraduate training required of a professional taxonomist. To borrow a word from the medical and legal professions, these collectors and observers may be called "parataxonomists." The first 16 parataxonomists were trained under a grant from A.I.D.'s LAC Bureau in 1989. This grant funded the second parataxonomists course, held in the first half of 1990, to train 15 Costa Rican civil servants employed in the wildlife and wildlands sector as parataxonomists and will place them in the URC's around the country where they are needed. The course and biodiversity offices are primarily organized to encompass insects (and other arthropods), with a strong secondary emphasis on plants. Insects were selected as the model group because they are extremely species-rich (approximately 80% of Costa Rica's fauna and flora of 500,000 species are insects), poorly known, and easily collected and processed. The matching funds (\$300,000) obtained from the Pew Charitable Trusts will provide an endowment for the training of future parataxonomists.

PRODUCTS/OUTPUTS: Fifteen newly trained parataxonomists and five newly established biodiversity offices within the Costa Rican URC system.

STATUS: Completed

PD895B

TITLE: WCI Cloud Forests/Ecuador
COMPONENT: Pilot Demonstration Project
FUNDING: \$78,805
DURATION: Initiated November 1989; ends 31 December 1991
IMPLEMENTOR: Wildlife Conservation International (WCI)
 Pontifica Universidad Catolica de Ecuador (PUCE)
CONTACTS: BSP: Meg Symington 202-778-9727; fax 202-293-9211
 AID/W: Jim Hester 202-647-8093; fax 202-647-8098
 WCI: Stuart Strahl 212-220-7158; fax 212-220-7114
LOCATION: Ecuador

PURPOSE: To support a biological assessment program in mid-level cloud forests in eastern Ecuador, and to provide formal training and financial support for Ecuadorian nationals in conservation-oriented field programs. WCI will support inventory work and ecological studies on indicator species in several mid-altitude forests, with particular emphasis on key protected areas (Podocarpus National Park and Cayambe-Coca Ecological Reserve). Research will focus on measuring the impact of various forms of exploitation on forest environments.

DESCRIPTION: This project combines ecological research, training of host-country nationals, and on-the-ground conservation. Patricio Mena (M.S. Botany) and Luis Suarez (M.S. Zoology), adjunct professors at PUCE, are the project leaders in the field. At Podocarpus National Park, they have completed baseline surveys throughout the park and are now focussing their attention on the southwestern portion of the park, which is particularly threatened by hunting, artesanal gold mining and selective logging. They are overseeing research by five Ecuadorian licenciatura students on topics ranging from the natural history of the bearded guan (an important indicator species) to local attitudes toward wildlife. One student has organized an ambitious research project involving surveys of professional and subsistence hunters in the area surrounding the park. In December 1989, a team visited a region of the park that was under heavy pressure from gold mining. Mercury levels downstream from a small placer mine at the head of the San Luis watershed were measured to be 150-170 times the WHO-accepted standards for mercury. The team followed up by meeting with institutions involved with local environmental management as a first step toward organizing a campaign to confront mining conflicts in the parks of Ecuador. The project will fund the production of a video about the problem of mining in national parks. In Cayambe-Coca, research will assess the impact of hunting by indigenous and colonist communities located in the reserve.

PD895C

TITLE: Establishment of a Conservation Division and Expansion of the Protected Areas System/Belize

COMPONENT: Pilot Demonstration Project

FUNDING: \$100,414

DURATION: Initiated 1 March 1990; ends 1 March 1992

IMPLEMENTOR: World Wildlife Fund (WWF); Government of Belize (GOB); Belize Center for Environmental Studies (BCES)

CONTACTS: BSP: Meg Symington 202-778-9727; fax 202-293-9211
AID/W: Jim Hester 202-647-8093; fax 202-647-8098
WWF: Steve Cornelius 202-778-9654; fax 202-293-9211

LOCATION: Belize

PURPOSE: To improve the capacity of the Belize Forestry Division (FD) to manage wildlife, protected areas and forest reserves in accordance with existing laws by creating a Conservation Division (CD); to provide technical assistance in staff development and programming to allow the CD to assume administrative functions normally expected of government, such as policy making and strategic planning; and to identify areas of critical importance to be included in an expanded national system of protected areas.

DESCRIPTION: Belize's institutional capacity to manage its natural resources in the face of increasing social, economic and demographic threats is largely inadequate. Furthermore, government's default to the non-governmental sector of protected area policy and management responsibilities is widely felt to be an unacceptable arrangement. At the request of the GOB, in August 1989, WWF supported a consultant to work with the FD to identify the mission, objectives, and areas of responsibility of a protected areas management authority. The consultant drafted an internal organizational structure and chain of command and a five year plan estimating budgetary needs for staffing, equipment, training of personnel and operations. This plan forms the basis for the current project.

In 1990, the GOB established and staffed the CD according to plan. The BSP grant funded the BCES to do a diagnostic study of potential additions to the protected areas system and prioritize their candidacies based on established criteria of uniqueness of the resource, feasibility of present and future management, and degree of threat. BSP funds were also applied to consultancies provided to the CD in the areas of fees and concessions and wildlands area management. WWF matching funds have been used in CD staff training and in purchasing equipment for the CD offices.

PD895D

TITLE: Les Arcadins Marine Park/Haiti

COMPONENT: Pilot Demonstration Project

FUNDING: \$110,000

DURATION: Initiated 2 July 1990; ends 30 September 1992

IMPLEMENTOR: World Wildlife Fund (WWF)

CONTACTS: BSP: Meg Symington 202-778-9727; fax 202-293-9211
AID/W: Jim Hester 202-647-8093; fax 202-647-8098
WWF: Evelyn Wilcox 202-778-9728; fax 202-293-9211

LOCATION: Haiti

PURPOSE: To establish a national marine park at Les Arcadins, Haiti, and to develop a community-based fisheries management program that will improve the quality of life for those living in the vicinity of Les Arcadins, while protecting the resource base.

DESCRIPTION: The rich biological diversity of the marine environment surrounding Les Arcadins, which is located off the west coast of Haiti about an hour's drive from the capital city of Port-au-Prince, is in stark contrast to the country's severely degraded terrestrial environment. The abundance of reef fishes at Les Arcadins compares favorably with some of the best developed reef systems in Puerto Rico and the Virgin Islands. In addition, the sheltered location of the reef and high water transparency encourage an unusual and abundant diversity of sponge life and coral species.

In 1989, an action plan for the establishment of a national marine park at Les Arcadins was completed following a two-year multidisciplinary study funded by the IAC Bureau. This action plan provides a solid biological, social, economic and institutional basis for establishing a marine park and fisheries program at Les Arcadins, and is the foundation for this project. WWF is working closely with the Luly Fishing Cooperative (COPELU), the Haiti Hotel Association, a local dive club and the government of Haiti to bring permanent protection to the site, while simultaneously increasing the profitability and sustainability of the local fishery. It is hoped that, in the future, the Les Arcadins Marine Park can be an important economic asset to Haiti and Luly through the development of tourism.

PRODUCTS/OUTPUTS: At the end of two years the following outputs are expected: 1) an ongoing community-based fisheries management program in Luly; 2) a formally declared national marine park at Les Arcadins, complete with necessary equipment and infrastructure; 3) an NGO established that can effectively continue the work of the first two years by managing the park and

PD895E

TITLE: ACE NGO Training/Caribbean

COMPONENT: Pilot Demonstration Project

FUNDING: \$35,109 (+ \$4,891 supplemental from core)

DURATION: Initiated 1 July 1990; ends 31 December 1991

CONTACTS: BSP: Meg Symington 202-778-9727; fax 202-293-9211
AID/W: Jim Hester 202-647-8093; fax 202-647-8098
ACE: Jessica Brown 508-356-0038; fax 508-356-7322

IMPLEMENTOR: Atlantic Center for the Environment (ACE)

LOCATION: Caribbean

PURPOSE: To strengthen local institutions working to build public support for protected areas and wildlife habitat throughout the wider Caribbean region, thereby contributing to the conservation of biodiversity in the region.

DESCRIPTION: From 18 August to 16 September 1990, ACE offered a training program for Caribbean conservation professionals focussing on the stewardship and interpretation of natural areas. The four week program was designed to provide an opportunity for Caribbean conservation professionals to acquire practical skills, share information with their counterparts, and form professional contacts who will help them be more effective in their own work. Seven conservation professionals from the Caribbean region participated, representing national park agencies, NGOs and interpretive centers in St. Lucia, St. Vincent, Grenada, Nevis, Antigua, and Jamaica.

The format of the program incorporated a study tour and week-long individual assignments, tailored to each participant's specific area of interest and expertise. The study tour was designed to expose participants to a range of approaches to the management of national parks and protected areas, environmental education and interpretation techniques, voluntary land conservation measures, and techniques for encouraging citizen involvement in conservation.

Kate Irvine carried out the single technical assistance assignment funded under this grant. She acted as a visiting environmental educator to the Environmental Awareness Group in Antigua to assist with their recently initiated Youth Education Program.

PRODUCTS/OUTPUTS: Seven Caribbean conservation professionals trained on the stewardship and interpretation of natural areas; a single technical assistance assignments carried out in environmental education. ACE Report to BSP: Study Tour for

PD895F

TITLE: NYBG Amboro Inventory/Bolivia

COMPONENT: Pilot Demonstration Project

FUNDING: \$40,000

DURATION: Initiated 1 July 1990; ends 31 December 1991

IMPLEMENTOR: New York Botanical Garden

CONTACTS: BSP: Meg Symington 202-778-9727; fax 202-293-9211
AID/W: Jim Hester 202-647-8093; fax 202-647-8098
NYBG: Wayt Thomas 212-220-8642; fax 212-220-6504

LOCATION: Bolivia/Amboro National Park (ANP)

PURPOSE: To explore botanically Amboro National Park (ANP) and to use the data acquired through botanical inventory to advise and assist in the conservation of the park. The project is also designed to assist in the development of the Natural History Museum in Santa Cruz and in the education of its staff, and to stimulate the use of ANP by scientists and visitors, thus, effectively increasing its protection.

DESCRIPTION: The featureless plains of eastern Bolivia are abruptly terminated by a line of ridges, the first Andean foothills, about 30 km west of the city of Santa Cruz. One peak, Cerro Amboro, has a peculiar rounded form and has been held in awe since pre-Columbian times. The surrounding forested plains, which were a National Forest Reserve for several decades, became Parque Nacional Amboro (2000 km²) in 1984. Elevations in the park range from 300m to about 1900m on the highest peaks. The rainfall is estimated at between 2000 to 2500 mm per year, and probably varies from site to site.

Biological inventory in the park has been limited; less than 15% of the 3200 plant species thought to occur in the park have been collected to date. Dr. Michael Nee, of NYBG, will lead several botanical collecting trips to ANP over the course of the grant. These trips will be made in collaboration with the Museo de Historia Natural of the Universidad Gabriel Rene Moreno, and Dr. Nee will be accompanied by students from the University, and assisted by Mr. Robin Clarke, a scientific advisor for the park.

PRODUCTS/OUTPUTS: 1) A checklist and basic plant identification manual will be produced that can be used to train students and park service personnel, as well as be useful for visiting scientists and tourists; 2) a system of foot trails will be established within the park that will result in more effective use by the scientific community, park protection officials and tourists; and 3) 3-5 young Bolivian botanists trained in tropical botany and ecology.

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PD896E

TITLE: DAI Wetlands Report

COMPONENT: Pilot Demonstration Project

FUNDING: \$13,179

DURATION: Initiated 13 March 1991; ended 16 August 1991

IMPLEMENTOR: Development Alternatives, Inc. (DAI)

CONTACTS: BSP: Meg Symington 202-778-9727; fax 202-293-9211
AID/W: Nora Berwick 703-875-4539; fax 703-875-4394
DAI:Dennis DeSantis 301-718-8699; fax 301-718-7968

LOCATION: Worldwide

PURPOSE: To prepare a report on A.I.D.'s ongoing and planned FY 1992 activities that affect and/or conserve wetland resources in A.I.D.-assisted countries.

DESCRIPTION: In the report accompanying H.R. 5114 (Foreign Operations, Export Financing, and Related Programs Appropriations Bill, 1991), the Senate Appropriations Committee, chaired by Senator Patrick Leahy, requested that A.I.D. present the committee with a report on its activities and progress to conserve wetlands in those countries where it works. In order to assist A.I.D. with the preparation of this report, BSP contracted with Random Dubois through DAI to compile a report on A.I.D. projects and activities that impact on wetlands. A standard data sheet was employed to detail project specific data including: type of project; nature of impact on wetlands; type of wetland affected; mitigative measures employed, where relevant, to reduce adverse project-related impacts; level of funding; and project duration.

PRODUCTS/OUTPUTS: A comprehensive final report that served as the basis for A.I.D.'s report to Congress: "A.I.D. Wetland Activities--Report to Congress" April 1991. DAI (K.A. McKay, R. DuBois, L. Hughes) 90 p.

STATUS: Completed

SIGNIFICANCE: Wetlands are important habitats, from the point of view of both biodiversity and environmental services; this report provided A.I.D. with the information needed to assess its activities and plan future interventions with regard to wetlands.

RELEVANCE: This activity addresses BSP's mandate to assemble information that can be applied to the design, modification, and implementation of ongoing and future A.I.D. efforts.

COMMENTS:

PD902

TITLE: S&T Global Climate Change

COMPONENT: Pilot Demonstration Project

FUNDING: \$777,000

DURATION: Initiated September 1990; ends December 1991

IMPLEMENTOR: World Wildlife Fund, Smithsonian Institution, Woods Hole Research Center, New York Botanical Garden, Cultural Survival--all in Brazilian Amazon; BSP (in Africa)

CONTACTS: BSP: Les Whitmore 202-861-8302; fax 202-293-9211
Kate Newman 202-778-9524; fax 202-293-9211
AID/W: Twig Johnson 703-875-4022; fax 703-875-4394

LOCATION: Brazil and Central Africa

PURPOSE: In June of 1990, A.I.D.'s Science and Technology Office of Forestry, Environment and Natural Resources (S&T/FENR) asked BSP to address the effects of global warming by looking at the production of CO₂ in tropical regions in Africa and Brazil. See individual activity summaries PD902A-F.

DESCRIPTION: See also individual project descriptions.

- A. Cultural Survival report on rain forest products
- B. WWF projects on Amazon forest management and policy
- C. Smithsonian's Biological Dynamics of Forest Fragments
- D. Woods Hole for restoring degraded Amazonian lands
- E. NYBG commemorative publication
- F. BSP start-up activities on GCC in Africa

OUTPUTS/PRODUCTS: Semi-annual progress reports or technical reports

STATUS: All subcomponents well along in implementation

SIGNIFICANCE: Interest and concern in global climate change is increasing exponentially. A consequence of U.S. public concern is a congressional earmark of AID's budget obligating the agency to spend \$15 million on new initiatives addressing global climate change. Brazil is a key focal country for these new initiatives, hence S&T/FENR increased BSP's core funds to address the subcomponents described above.

RELEVANCE: The integration of global climate change initiatives with tropical forestry and the conservation of biodiversity is a particularly relevant activity for BSP.

COMMENTS:

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PD902B

TITLE: S&T/GCC/WWF: Amazon Forest Management and Policy

COMPONENT: Pilot Demonstration Project

FUNDING: \$317,085

DURATION: Initiated 24 September 90; ends 30 September 91

IMPLEMENTOR: World Wildlife Fund/Bob Buschbacher 202-778-9511

CONTACT: BSP: Les Whitmore 202-861-8302; fax 202-293-9211
AID/W: Twig Johnson 703-875-4106; fax 703-875-4106
WWF: Garo Batmanian 202-778-9713

LOCATION: Brazil/Amazon Basin

PURPOSE: This activity is to establish forest management demonstration projects for local companies and communities so that there will be a reduction in the rate of deforestation in the Brazilian Amazon.

DESCRIPTION: This activity is funded by a BSP pass-through of \$317,085 from S&T/FENR. It is part of the WWF Tropical Forestry Program's "larger program of interrelated activity aimed at reducing deforestation in the Brazilian Amazon", and aims to reduce rates in two major ways:

A. By promoting sustainable land management systems which provide an economic incentive for maintaining forest cover and reduce pressure for continued forest clearing. Specific activities include applied research and on-the-ground demonstration of the social, economic and environmental viability of these alternative land uses.

B. By analyzing and disseminating information on these land management alternatives, to provide decision makers with the information they need to develop policies and provide incentives for sustainable land use. Specific activities include analyzing policy constraints and economic benefits of the sustainable forest management alternatives to be demonstrated under (A) above, communicating such analysis to decision makers, and strengthening NGOs to play an effective role in policy reform.

PRODUCTS/OUTPUTS: 1) The development of a sustainable timber management plan that will be implemented by a local private sawmill in Paragominas; 2) Development and implementation of several community-based forest management demonstration projects; and 3) Establishment of a working group of scientists, government officials and representatives of industry to make recommendations to the Brazilian government concerning Amazon forest policy issues.

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PD902C

TITLE: Biological Dynamics of Forest Fragments (BDFF)

COMPONENT: Pilot Demonstration Project

FUNDING: \$74,183

DURATION: Initiated 1 November 1990; ends 31 October 1991

IMPLEMENTOR: Smithsonian Institution (SI)

CONTACT: BSP: Les Whitmore 202-861-8302; fax 202-293-9211
AID/W: Twig Johnson 703/875-4106; fax 703-875-4394
SI: Rob Bierregaard 202-287-3796

LOCATION: Brazil/Amazon Basin

PURPOSE: To enhance the training and outreach capacity of the Biological Dynamics of Forest Fragments Project. BDFF feels that the training of Latin American graduate students is one of the more significant contributions that the project is making toward conservation of neotropical forests. This grant will provide funds for the following: 1) three graduate research projects and one post-doctoral fellowship; and 2) will enhance BDFF's links with OTS in Costa Rica and with 3 other longterm tropical forest field stations.

DESCRIPTION: Currently in its 11th year, the Biological Dynamics of Forest Fragments (BDFF) Project is a large-scale ecological study that seeks to understand the effects of forest fragmentation in Amazonian forests on biodiversity conservation. While the accumulation of scientific data relating to reserve planning and management is essential to rational development in the Amazon, BDFF recognizes that any long-term conservation measures for Latin American forests will have to come from local initiatives. Consequently, the project has tried to involve as many Latin American graduate students as possible, in the hope that the coming generation of scientists and science policy makers in Brazil and its neighboring Amazonian countries will understand the importance of conserving intact tropical forest ecosystems.

PRODUCTS/OUTPUTS: With funds provided by BSP, the BDFF project funded two graduate student projects at the masters level, and one post-doctorate fellowship. Additional funding was obtained from the Tinker Foundation that allowed the project to offer fellowships to 12 Brazilian, Bolivian and Colombian graduate students carrying out their M. Sc. thesis research, in addition to five Brazilian students conducting doctoral studies under BDFF auspices. Three of the students are supported with BSP funds.

STATUS: Interim report and proposal for second year received.

PD902D

TITLE: WHRC: Restoring Agricultural Productivity on Degraded Amazonian Lands

COMPONENT: Pilot Demonstration Project

FUNDING: \$93,818

DURATION: Initiated 1 November 1990; ends 31 October 1991

IMPLEMENTOR: Woods Hole Research Center (WHRC)

CONTACT: BSP: Les Whitmore, 202-861-8302; fax 202-293-9211
AID/W: Twig Johnson 703-875-4106; fax 703-875-4394
WHRC: Dan Nepstad 508-540-9900; fax 508-540-9700
or 55-91-226-6622; fax 55-91-235-1124

LOCATION: Brazil/Amazon Basin: Para, Acre and Rondonia

PURPOSE: This study: a) evaluates the ecological, economic and social performance of existing agricultural systems on degraded Amazonian lands; b) expands our knowledge of promising agricultural systems for degraded lands through applied research; c) communicates the results of this evaluation to extension workers, rural unions, policy makers and NGOs; and d) trains Brazilian scientists through apprenticeships with project investigators.

DESCRIPTION: This activity will occur over a three-year period and include collaborative efforts of several individuals. Dr. Daniel Nepstad, a tropical forest ecologist based in Belem, is project coordinator. To help execute the study, he selected two full-time Brazilian fellows--one with a graduate degree in agronomy and one with a graduate degree in economics. This three-person research team comprises the core of the project. Dr. I. Foster Brown, who has studied the biogeochemical impacts of land use in Rio de Janeiro and Rondonia since 1986, is assisting in project implementation. Three Brazilian student interns per year are also a part of the project team.

The geographic focus of the project is the northeastern region of the Amazon, in the state of Para, where a great diversity of agricultural systems has been established. The project is evaluating agricultural systems on degraded lands in other regions such as Rondonia and Acre in the south of Para. The project aims to reduce Amazonian deforestation and associated releases of carbon dioxide, methane, and other heat-trapping gases by increasing the agricultural options available to residents of degraded lands.

PRODUCTS/OUTPUTS: A portable Geographic Information Systems (GIS) was acquired. The GIS database includes a satellite image map of Para with a drought index map superimposed. Database on tree flora of Para is being compiled, with 950 species included

PD902E

TITLE: S&T/GCC/NYBG: Commemorative Issue

COMPONENT: Pilot Demonstration Project

FUNDING: \$3,000

DURATION: Initiated 1 April 1991; ends 31 March 1992

IMPLEMENTOR: New York Botanical Garden (NYBG) 212-220-8700

CONTACT: BSP: Les Whitmore 202-861-8302; fax 202-293-9211
AID/W: Twig Johnson 703-875-4106; fax 703-875-4394
NYBG: Doug Daly 212-220-6507; fax 212-220-6504

LOCATION: Brazil/Amazon

PURPOSE: To finance the publication of a special commemorative issue of the Boletim do Museu Paraense Emilio Goeldi.

DESCRIPTION: These funds will permit the Museu Goeldi to publish a special issue of the Boletim, dealing with valuable recent research results in the field of Amazonian botany. It will also complement the S&T portfolio of global climate change activities in Brazil and support the relationship between the NYBG and the Museu Goeldi, which is a model of international collaborative research. This special issue will commemorate the 30 years of collaboration between the Museu and the Garden, as well as the NYBG Centennial. It will include about 30 articles.

PRODUCTS/OUTPUTS: Publication of a special issue; 500 extra copies for distribution throughout Latin America.

STATUS: In press

SIGNIFICANCE: This activity will help to provide important technical material concerning recent botanical research in Brazil to a wide audience throughout Latin America.

RELEVANCE: This project addresses BSP's mandate in information networking by documenting results of research and disseminating technical information to institutions and individuals.

COMMENTS:

PD902F

TITLE: Central Africa Global Climate Change Project

COMPONENT: Pilot Demonstration Project

FUNDING: \$100,000

DURATION: Initiated December 1990; ends December 1991

IMPLEMENTOR: BSP; Goddard Space Flight Center (GSFC); (WRI); U.S. Forest Service (USFS); Univ. Maryland (UM); (WWF); Wildlife Conservation International (WCI); U.S. Geological Survey (USGS); Univ. Illinois (UI).

CONTACT: BSP: Kate Newman 202-778-9524; fax 202-293-9211
AID/Africa: Tony Pryor 703-235-3832;
fax 703-235-3805

LOCATION: Central Africa Republic, Cameroon, Congo, Gabon, Equatorial Guinea, and Zaire.

PURPOSE: This buy-in enables BSP to bring together NGOs and governmental organizations with considerable field experience, scientific knowledge, and in-house capacity to conduct a series of data gathering and analytical activities necessary to develop a global climate change action plan for central Africa.

DESCRIPTION: The U.S. Congress, having acknowledged the need to mitigate gaseous emissions that contribute to global climate change, has mandated that A.I.D. identify areas with high future emissions potential. As a result, A.I.D. has decided to focus its attention in Africa on the central Africa region which contains the largest and most carbon-rich forested area on the continent. The Central Africa Global Climate Change Project has been initiated through a collaborative process between BSP and the Africa Bureau to determine the potential for future carbon emissions from the region and to provide a readily accessible source of information to those policy makers, particularly within the A.I.D. structure, responsible for deciding how best to mitigate them.

This activity: (a) establishes a baseline estimate of the extent of forest resources; (b) establishes estimated rates of forest depletion; (c) identifies the modes and dynamics involved in forest modification; and (d) estimates present and future carbon emissions in central Africa. This information will be used to develop a climate change action plan for the Bureau.

PRODUCTS/OUTPUTS:

- A. A remote sensing analysis, supported by ground-truthing efforts, to produce a map of the region that estimates the extent of forest cover and rates of change.
- B. Desk studies of central Africa's bio-geophysical setting, policy and macroeconomic framework, population

PD903

TITLE: Mexico Ecodevelopment Program

COMPONENT: Pilot Demonstration Project

FUNDING: \$650,000

DURATION: Initiated 1 January 1991; ends 31 March 1992

IMPLEMENTOR: WWF Wildlands and Human Needs & Mexico Programs

CONTACTS: BSP: Meg Symington 202-778-9727; fax 202-293-9211
AID/Mexico: Frank Zadroga 525-211-0042;
fax 525-511-9980
WWF: Brad Ack 202-778-9652; fax 202-293-9211
Mario Ramos 202-778-9501; fax 202-293-9211

LOCATION: Southern Mexico

PURPOSE: To design and implement projects to promote environmentally sound community development around biologically important, threatened wildland areas in southern Mexico. The overall goal of the program is to decrease the rate of deforestation in these wildland areas, and to protect them as healthy diverse ecosystems, while achieving sustainable methods and levels of resource use for the people living in and around them.

DESCRIPTION: As the second largest producer of greenhouse gases in Latin America, Mexico has been designated as a "key" country for special attention under A.I.D.'s Global Climate Change (GCC) Initiative. Beginning in July 1990, AID/Mexico, WWF, and BSP designed an integrated conservation and development program that would decrease emissions of greenhouse gases due to deforestation in southern Mexico, while simultaneously conserving the region's rich biological diversity and improving the quality of life for the region's rural poor. The result of these design efforts is a program that will focus on environmentally-sound community development in the buffer zones of four priority wildland areas:

- A. the Chimalapas region of Oaxaca (PD903A)
- B. the Calakmul Biosphere Reserve in Campeche (PD903B)
- C. the El Ocote Ecological Reserve and (PD903C)
- D. the El Triunfo Biosphere Reserve in Chiapas (PD903D)

Each subproject will be implemented by a Mexican environmental NGO with experience in and commitment to its particular wildland area. Technical assistance, oversight, and coordination will be provided by the WWF Wildlands and Human Needs and Mexico Programs. Initial efforts focus on trying to identify alternative agricultural technologies that will result in increased productivity for local farmers without leading to further degradation of the surrounding forest. Alternative technologies will be identified using state-of-the-art participatory rural appraisal techniques and then disseminated

PD903A

TITLE: Community Development in Chimalapas, Oaxaca

COMPONENT: Pilot Demonstration Project

FUNDING: \$86,000

DURATION: Initiated 1 January 1991; ends 31 March 1992

IMPLEMENTOR: Maderas del Pueblo, A.C. and WWF

CONTACTS: BSP: Meg Symington 202-778-9727; fax 202-293-9211
AID/Mexico: Frank Zadroga 525-211-0042;
fax 525-511-9980
WWF: Brad Ack 202-778-9652; fax 202-293-9211
Mario Ramos 202-778-9501; fax 202-293-9211

LOCATION: Mexico/Oaxaca

PURPOSE: To design and implement an environmentally-sound community development project in the biologically important and threatened Chimalapas region of Oaxaca. The goal is to decrease the rate of deforestation in the Chimalapas region, and to protect it as a healthy diverse ecosystem, while achieving sustainable methods and levels of resource use for the people living in the region.

DESCRIPTION: The Chimalapas region of eastern Oaxaca comprises some 640,000 ha and is one of the five largest tracts of tropical forest left in Mexico. The vegetation is varied and includes tropical dry, tropical humid, cloud, pine-oak, and elfin forests, as well as riparian ecosystems. It is an important watershed for the Gulf of Mexico to the north and for the Pacific coast of the Isthmus of Tehuantepec.

WWF has supported Maderas del Pueblo, A.C., a Mexican NGO, since October 1989 to carry out field-level conservation/development efforts in the region. This activity supports Maderas del Pueblo in a continuation of their initial efforts. In 1990, they completed a comprehensive assessment of the causes and magnitude of forest destruction in the Chimalapas. They collected detailed information on the area and its environmental problems through 60 community surveys, some 200 personal interviews with representatives of diverse interest groups in the area, and on-the-ground investigation of environmental degradation.

From this work, a program to address critical environmental and economic problems in the Chimalapas region has been designed. This project initiates a community extension program to provide technical and organizational assistance to local residents. The project begins in two of six delineated zones in the Chimalapas, with an initial focus on promoting alternative technologies in basic grain production to curtail the widespread slash-and-burn practices, and to improve the production of coffee, a principal

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PD903B

TITLE: Calakmul Buffer Zone Development

COMPONENT: Pilot Demonstration Project

FUNDING: \$78,000

DURATION: Initiated 1 April 1991; ends 31 March 1992

IMPLEMENTOR: Pronatura Peninsula de Yucatan, A.C. and WWF

CONTACTS: BSP: Meg Symington 202-778-9727; fax 202-293-9211
AID/Mexico: Frank Zadroga 525-211-0042;
fax 525-511-9980
WWF: Brad Ack 202-778-9652; fax 202-293-9211
Mario Ramos 202-778-9501; fax 202-293-9211

LOCATION: Mexico/Campeche, Calakmul Biosphere Reserve

PURPOSE: To design and promote environmentally sound community development around the biologically important, threatened Calakmul Biosphere Reserve in Campeche, Mexico. The goal is to decrease the rate of deforestation in and around Calakmul, and to protect it as a healthy diverse ecosystem, while achieving sustainable methods and levels of resource use for the people living in the buffer zone around the reserve.

DESCRIPTION: Located in central and southern Campeche, near the borders with Guatemala and Belize, the Calakmul Biosphere Reserve is one of the 15 most important sites for biodiversity conservation in Mexico, according to government and private sources. Calakmul has one of the five largest tracts of tropical forest remaining in the country. The site was declared a biosphere reserve (723,185 ha) in May 1989. Reserve management plans are still being developed.

To complement to the ongoing planning process, programs are being designed to improve resources management in the local communities. The viability of the Calakmul ecosystem is pressured by human populations that are competing for the same space and resources. Major threats include: uncontrolled and unsound timber extraction, extremely poor agricultural practices, excessive commercial hunting, road construction in sensitive areas and archeological looting. Addressing the most pressing of these threats will be the long-term focus of this project.

PRODUCTS/OUTPUTS: Information that will lead to situating, designing and initiating a community-based extension program that will have appropriate agriculture and forest management techniques at the end of the first year. Over time, successes should be modeled in other areas around the reserve until the buffer zone becomes a viable multiple-use area for the communities who will also protect the reserve.

PD903C

TITLE: El Ocote Sustainable Development, Chiapas

COMPONENT: Pilot Demonstration Project

FUNDING: \$60,560

DURATION: Initiated 1 April 1991; ends 31 March 1992

IMPLEMENTOR: Centro de Estudios para la Conservación de los Recursos Naturales (ECOSFERA, A.C.) and WWF

CONTACTS: BSP: Meg Symington, 202-778-9727; fax 202-293-9211
AID/Mexico: Frank Zadroga 525-211-0042;
fax 525-511-9980
WWF: Brad Ack 202-778-9652; fax 202-293-9211
Mario Ramos 202-778-9501 fax 202-293-9211

LOCATION: Mexico/Chiapas, El Ocote Ecological Reserve

PURPOSE: To design and promote environmentally sound community development around the biologically important, threatened El Ocote Ecological Reserve in Chiapas, Mexico. The goal is to decrease the rate of deforestation in and around El Ocote, and to protect it as a healthy diverse ecosystem, while achieving sustainable methods and levels of resource use for the people living there.

DESCRIPTION: El Ocote Ecological Reserve is an area of approximately 30,000 ha of humid tropical forest in the state of Chiapas, neighboring the Chimalapas region of Oaxaca. Both areas are in the same mountain range and share a number of characteristics, including habitat types, species and culturally similar residents. El Ocote has been considered a priority for protection since the 1950s and was formally included in the Chiapas state system of protected areas in 1972. In 1986, WWF supported the Instituto Historia Natural of Chiapas (IHN) to evaluate conservation needs for El Ocote and El Triunfo reserves; IHN found major deterioration in El Ocote's surrounding areas, with deforestation, unplanned and inappropriate land use, expansion of human settlements, slash and burn agriculture, cattle ranching and illegal timber extraction all posing threats to the area.

In 1989, WWF supported ECOSFERA, A.C. for an updated diagnostic study and evaluation of the El Ocote reserve; ECOSFERA found increased planned and unplanned colonization in the region in the intervening years. Legal boundaries of the reserve have not been completely respected, and 11 settlements partially or completely within the reserve. Slash-and-burn agriculture provides the main source of income for the communities in the area, with maize, beans, chili peppers, and coffee being the chief crops.

PD903D

TITLE: Community Development in the Buffer Zone of the El Triunfo Biosphere Reserve, Chiapas

COMPONENT: Pilot Demonstration Project

FUNDING: \$70,000

DURATION: Initiated 1 April 1991; ends 31 March 1992

IMPLEMENTOR: Instituto Historia Natural (IHN) and WWF

CONTACTS: BSP: Meg Symington 202-778-9727; fax 202-293-9211
AID/Mexico: Frank Zadroga 525-211-0042;
fax 525-511-9980
WWF: Brad Ack 202-778-9652; fax 202-293-9211
Mario Ramos 202-778-9501; fax 202-293-9211

LOCATION: Mexico/Chiapas, El Triunfo Biosphere Reserve

PURPOSE: To design and promote environmentally sound community development around the biologically important, threatened El Triunfo Biosphere Reserve in Chiapas, Mexico. The goal is to decrease the rate of deforestation in and around El Triunfo, and to protect it as a healthy diverse ecosystem, while achieving sustainable methods and levels of resource use for the people living there.

DESCRIPTION: El Triunfo Biosphere Reserve, located in the Sierra Madre del Sur, is one of the richest tropical forest areas in Mexico in terms of species endemism and presence of endangered species. The reserve has a legal extension of 119,177 ha with an altitudinal variation of 500-2800 m. It contains a variety of forest types, including pine-oak, riverine, tropical montane, and evergreen. Most importantly, the reserve includes some of the last cloud forest in Mexico.

WWF has supported planning and management activities by IHN at El Triunfo since 1985. When the reserve was enlarged from its 10,000 ha in 1990, more than 100 communities were incorporated into the buffer zone. Land use in and around the reserve is dominated by shifting agriculture, coffee production and cattle ranching with some commercial extraction of timber, and firewood and local construction material collected throughout the year. Hunting is common along the peaks and some wild plants and animals are collected for the wildlife trade.

The first phase of this project fielded a team to begin working in three strategically located communities. Following training, the team carried out participatory rural appraisal exercises in these communities that focus on subsistence agriculture and coffee production.

PD903E

TITLE: Participatory Rural Appraisal Training Program

COMPONENT: Pilot Demonstration Project

FUNDING: \$29,400

DURATION: Initiated 1 April 1991; ends 31 March 1992

IMPLEMENTOR: World Resources Institute (WRI) Participatory Rural Appraisal (PRA) Training Program and WWF

CONTACTS: BSP: Meg Symington 202-778-9727; fax 202-293-9211
AID/Mexico: Frank Zadroga 525-211-0042;
fax 525-511-9980
WWF: Brad Ack 202-778-9652; fax 202-293-9211
WRI: Aaron Zazueta 202-638-6300

LOCATION: Mexico

PURPOSE: To design and implement a training program in Participatory Rural Appraisal (PRA) oriented to those organizations participating in the Mexico Ecodevelopment Program.

DESCRIPTION: PRA is a set of flexible information gathering methods used at the community level to articulate problems and opportunities for local natural resources management. The PRA package brings together simple, yet powerful techniques, that have been designed to help semi-literate populations analyze and articulate their needs in ways that lead them to group action. The method uses many techniques for analysis: 1) diagrams and drawings (transect, farm sketches and Venn diagrams) to help assess ecosystems, land use patterns and local organizations; 2) line and bar graphs to document trends; and 3) brief analytical tables to assess and rank problems and opportunities.

PRA is a particularly useful method in developing integrated conservation and development projects. It can help environmental NGOs and local people reach consensus on priority actions by providing a forum to jointly articulate problems and opportunities. PRA is generally conducted by interdisciplinary teams that include technicians, project managers and representatives of the local community. This mixed team configuration is an important element of PRA that helps integrate technical and local knowledge in project planning.

WRI's Center for International Development and Environment (CIDE) will train and provide technical support to those NGOs participating in the Mexico Ecodevelopment Program. CIDE will focus on training and providing financial support to one additional NGO, that will, in turn, provide training and technical backstopping to other NGOs in Mexico. In collaboration with these organizations, CIDE will adapt and translate the new PRA Trainers Manual for use by Spanish-speaking NGOs.

PD903F

TITLE: El Ocote Environmental Education, Chiapas

COMPONENT: Pilot Demonstration Project

FUNDING: \$30,000

DURATION: Initiated 1 April 1991; ends 31 March 1992

IMPLEMENTOR: PRONATURA Chiapas, A.C. and WWF

CONTACTS: BSP: Meg Symington 202-778-9727; fax 202-293-9211
AID/Mexico: Frank Zadroga 525-211-0042;
fax 525-511-9980
WWF: Brad Ack 202-778-9652; fax 202-293-9211
Mario Ramos 202-778-9501; fax 202-293-9211

LOCATION: Mexico/Chiapas, El Ocote Ecological Reserve

PURPOSE: To design and implement an environmental education program that will be complementary to the ECOSFERA (see Activity PD903C) community development project in El Ocote Ecological Reserve in Chiapas, Mexico.

DESCRIPTION: The objective of this activity is to introduce environmental knowledge to El Ocote communities in a way that is useful to them. The focus is largely on the indigenous population in and around El Ocote. These residents belong to the Tzotzil and Tzeltal ethnic groups, who have little or no understanding of Spanish. Likewise, only a few have had any formal education and their culture must be understood in order to work with them.

Pronatura-Chiapas will carry out in-depth research and analysis of the target populations, including their sociocultural habits, education, understandings and beliefs regarding the natural environment, forms of organization and communication, and perceived environmental problems. Information will be gathered through informal interviews, formal surveys, focal group discussion and other participatory techniques. With this information, conservation education materials will be designed and tested in selected communities. After analyzing native population acceptance of the conservation education materials, project leaders will produce a strategy for program implementation that will be followed by design and production of educational materials.

PRODUCTS/OUTPUTS: The first year of this project is focussed on defining needs and communication channels, designing and testing materials, and putting together a specific program strategy for the longer term.

STATUS: Project implementation is on schedule.

PD904

TITLE: LAC/GCC Macroeconomics

COMPONENT: Pilot Demonstration Project

FUNDING: \$100,000 (Contract Amendment #4)

DURATION: Initiated 24 September 1990; ends 30 September 1991

IMPLEMENTOR: WWF Tropical Forestry Program (TFP)

CONTACTS: BSP: Meg Symington 202-778-9727; fax 202-293-9211
AID/W: Jim Hester, 202-647-8093; fax 202-647-8098
WWF/TFP: Garo Batmanian 202-778-9713

LOCATION: Brazil

PURPOSE: To develop and implement a training program in natural resources economics for Brazilian policymakers. Focus of the course is on policies affecting the emission of greenhouse gases.

DESCRIPTION: Sustainable development in Brazil requires the implementation of national economic policies to support the citizenry in generating income from natural resources; the key is to conserve and enhance, rather than destroy, the productive potential of the resource base. This activity works with and assists the government of Brazil to design and implement these environmentally sound macroeconomic policies.

In June 1991, a WWF/TFP consultant compiled a list of institutions and individuals in the U.S. that could be used as trainers and consultants for the natural resource economics program in Brazil. A Brazilian professor at the Federal University of Rio Grande was contracted to compile a similar data set for Brazilian institutions and individuals. A working group has been established within the Brazilian government to develop applications for national income accounting within their jurisdictions. WWF/TFP Program Officer Garo Batmanian has met twice with this group to discuss WWF's collaboration in the process.

The workshop scheduled for October will bring the working group together with international experts to discuss national income accounting and how it applies to the Amazon. WWF plans to co-organize, with Brazilian Congressman Fabio Feldman, a workshop to discuss natural resources economics in general, that will bring together leading Brazilian macroeconomists and international experts in the field.

PRODUCTS/OUTPUTS: One or more workshops involving Brazilian economists and policymakers and international experts in the field of natural resources economics and national income accounting. Case study background papers will be prepared for

PD905

TITLE: S&T/FENR Miscellaneous
COMPONENT: Pilot Demonstration Project
FUNDING: \$80,000
DURATION: Initiated September 1990; ends June 1993
IMPLEMENTOR: BSP and Various
CONTACT: BSP: Bruce Leighty 202-778-9685; fax 202-293-9211
AID/W: Sy Sohmer 703-875-4669; fax 703-875-4394
LOCATION: Various

PURPOSE: To manage various biodiversity activities in support of the objectives and goals of the Science & Technology's Office of Forestry, Environment and Natural Resources (S&T/FENR).

DESCRIPTION: The following activities are proposed or completed under this buy-in (please see activity summaries that follow):

- A. Women in Development Proposal
- B. Pacific Science Congress Biodiversity Symposium

PRODUCTS/OUTPUTS:

- A. Semi-annual progress reports
- B. Participation in Congress and publication of papers

STATUS: A not yet initiated; B partially completed.

SIGNIFICANCE: This buy-in offers S&T/FENR flexibility in funding unanticipated opportunities to aid in the conservation of biodiversity.

RELEVANCE: The availability of modest funds through this buy-in enable BSP to respond positively to requests from our home office within A.I.D.

COMMENTS:

PD905A

TITLE: Women in Development Proposal

COMPONENT: Pilot Demonstration Project

FUNDING: \$20,000

DURATION: Initiated September 1991; ends June 1993

IMPLEMENTOR: World Wildlife Fund/Wildlands & Human Needs Prog.
International Center for Research on Women (ICRW)

CONTACT: BSP: Gary Hartshorn 202-778-7600; fax 202-293-9211
WWF: Barbara Wyckoff-Baird 202-778-9626
ICRW: Michael Paolisso 202-797-0007

LOCATION: Africa, Asia and Latin America/Case Studies

PURPOSE: To provide a 2:3 match for a requested \$30,000 from A.I.D.'s Office of Women in Development (WID) in partial support of the WWF & ICRW proposal Gender, Community Development, and Conservation of Biological Resources. This research attempts to integrate gender issues into community-based efforts to conserve biological diversity through sustainable development.

DESCRIPTION: WWF and ICRW seek to improve the capacity of international conservation projects to integrate local women into community development efforts to conserve natural resources. The two NGOs will conduct interdisciplinary case studies in each major tropical region. After analyzing the case studies, WWF and ICRW will offer technical assistance, training, and policy-oriented dissemination to address one of the most complex aspects of rapid environmental change--the critical relation of women's traditional and evolving roles to the use and sustainability of natural resources.

STATUS: Not yet initiated

SIGNIFICANCE: There is still too little analysis and focus on the roles of women in the sustainable use of natural resources. This project will help alert the conservation and development communities to gender as an issue that must be considered in projects involving local communities in managing local resources.

RELEVANCE: Although BSP does not have a specific mandate to address gender issues in the conservation of biodiversity, the role of women in development is a specific A.I.D. focus. Even if women were not the focus of this project, its objectives still address BSP's mandate to analyze local community involvement in the conservation of biodiversity.

COMMENTS:

PD905B

TITLE: Pacific Science Biodiversity Symposium
COMPONENT: Pilot Demonstration Project
FUNDING: \$19,000
DURATION: Initiated December 1990; ends December 1991
IMPLEMENTOR: WWF/BSP
CONTACT: BSP: Janis Alcorn 202-778-9697, fax 202-293-9211
LOCATION: Hawaii/Honolulu

PURPOSE: This activity enabled five LDC scientists to attend the XVII Pacific Science Congress, 27 May to 2 June 1991, and to present technical papers in a symposium on Biodiversity & Sustainable Development. The symposium provided the opportunity for the scholars not only to present their research, but interact with other international participants concerned with issues in the Pacific region.

DESCRIPTION: Through the buy-in, three persons from LDCs: Pisit na Patalung of Wildlife Fund Thailand; Simon Saulei of University of Papua New Guinea; and Jorge Orejuela of Cali, Columbia; were able to travel to the Congress. BSP also provided travel for WWF's Celso Roque and Jito Sugardjito to attend the Congress and present papers at the symposium. Each person presented a paper reviewing the status of conservation efforts in his country in the symposium on Biodiversity and Sustainable Development, organized by Sy Sohmer, AID/S&T/FENR and Janis Alcorn of BSP.

PRODUCTS/OUTPUTS: Symposium Proceedings (when published) will include the following:

Jorge Orejuela:	"Advances in Conservation and Development in Columbia"
Simon Saulei:	"Forestry and Biodiversity Conservation in Papua New Guinea".
Pisit na Patalung:	"Conservation and Development in Thailand"
Jito Sugardjito:	"Conservation and Management of Biodiversity in Indonesia: Priorities and Strategies"
Celso Roque:	"The Prospects for Sustainable Development in the Philippines"
Janis Alcorn:	"Biodiversity Conservation and Sustainable Development: Summing Up and Looking Forward"

STATUS: Completed. Symposium papers are being edited with plans for publication.

PD906

TITLE: South Pacific Profitable Environmental Protection
(PEP) Project

COMPONENT: Pilot Demonstration Project

FUNDING: \$145,000

DURATION: Initiated June 1990; ends September 1993

IMPLEMENTOR: WWF/BSP; Foundation for the Peoples of the South
Pacific (FSP)

CONTACT: BSP: Janis Alcorn 202-778-9697; fax 202-293-9211
FSP: Bruce Grogan 619-279-9820; fax 619-694-0294

LOCATION: A.I.D. assisted South Pacific countries

PURPOSE: To be determined.

DESCRIPTION: To be determined.

PRODUCTS/OUTPUTS: To be determined.

STATUS: BSP has been working in close consultation with FSP to assure that their PEP project for the South Pacific has a strong conservation component. The design of the first phase of the project is underway and WWF's Peter Hunnan is participating in the design of the project. BSP has suggested the project include a monitoring and evaluation element that could be designed by WWF's Barbara Wyckoff-Baird. FSP has informally approached USAID about a possible buy-in, but no formal request has been made.

SIGNIFICANCE: To be determined.

RELEVANCE: To be determined.

COMMENTS:

PD911

TITLE: APRE Bureau/Asia

COMPONENT: Pilot Demonstration Project

FUNDING: \$456,000

DURATION: Approval pending

IMPLEMENTOR: WWF, Wildlife Conservation International (WCI) and others

CONTACT: BSP: Janis Alcorn 202-778-9697; fax 202-293-9211
AID/W: Molly Kux 202-663-2639; fax 202-663-2149

LOCATION: Regional/Asia and the Pacific

PURPOSE: Working in consultation with the APRE Bureau, BSP is developing a program under this buy-in that strengthens the consortium's efforts and capabilities to conserve biological diversity in the region, while contributing useful information and assistance to the Bureau and A.I.D. Missions in Asia and the Pacific. Together, this information and assistance will enhance the ability of host-countries to address biodiversity conservation.

DESCRIPTION: This buy-in has three major components: planning and analysis, short-term technical assistance and a regional NGO workshop with specific activities proposed. (See activity summaries). These activities include:

- A. An A.I.D. Regional Conference/Sri Lanka;
- B. Strategy and Analysis for Asia;
- C. Support for a South Pacific Program Officer;
- D. Environmental NGO Conference; and
- E. Small Grants Program

PRODUCTS/OUTPUTS:

- A. A Conference including Environment and Agriculture Officers and Workshop in Sri Lanka, September 1991.
- B. Contribute to the Bureau's new environmental support project, Phase II (ESP II).
- C. South Pacific Program Officer participation in PNG CNA and implementation of PEP.
- D. Published proceedings and publicity from meeting in 1992.
- E. Might produce research documents, workshops, ICOPs, others.

STATUS: Active.

SIGNIFICANCE: This set of activities provides the opportunity for BSP to assist the AID/Asia Bureau in its conservation of biodiversity.

PD911B

TITLE: Strategy and Analysis

COMPONENT: Pilot Demonstration Project

FUNDING: \$100,000

DURATION: Initiated 11 June 1991; ends 30 September 1993

IMPLEMENTOR: WWF and BSP

CONTACT: BSP: Janis Alcorn 202-778-9697; fax 202-293-9211
AID/W: Molly Kux 202-663-2365; fax 202-293-9211

LOCATION: Asia

PURPOSE: To assist USAID Missions and host countries in Asia in defining new A.I.D. environmental initiatives and Asia Bureau Environment/Natural Resources Strategy (ENRS) for Phase II of the Environmental Support Project (ESP). The analysis will focus on environmental and sectoral policy reforms; institutional development in the public and private sector; and heightening public awareness and government accountability in conservation efforts.

DESCRIPTION: BSP proposes to provide long- and short-term technical assistance, support applied research and policy studies, information dissemination, workshops and study tours, by making direct contracts, cooperative agreements and through buy-ins to relevant S&T and PPC Bureaus.

PRODUCTS/OUTPUTS: To contribute to the Bureau's ESP II.

STATUS: This activity will be under review during the workshop following the A.I.D. Regional Conference 9-13 September 1991 (see PD911A).

SIGNIFICANCE: The activity will assist in guiding USAID's initiatives in Asia, particularly in areas of economics and environmental policy, capacity building, and interventions for addressing key regional problems.

RELEVANCE: The activity will help establish regional conservation priorities and formulate proposals for research and institutional development, fulfilling BSP's mandate.

COMMENTS:

PD911C

TITLE: South Pacific Support/Program Officer

COMPONENT: Pilot Demonstration Project

FUNDING: \$90,000

DURATION: Initiated 7 August 1991; ends 30 December 1992

IMPLEMENTOR: BSP and WWF

CONTACT: BSP: Janis Alcorn 202-778-9697; fax 202-293-9211
WWF: Bruce Bunting 202-778-9635; fax 202-293-9211

LOCATION: South Pacific

PURPOSE: To deliver technical assistance to governments and local grassroots organizations of the South Pacific, enabling them to act on biological conservation in their own settings. BSP will be responsible for coordinating on-going conservation efforts in the region and develop opportunities for sustainable development and conservation of biological diversity.

DESCRIPTION: A South Pacific Program Officer within the WWF/Biodiversity Support Program is being recruited to provide BSP and the Mission with the following: 1) coordinate activities of the Conservation Needs Assessment in Papua New Guinea; 2) provide technical advice to the Foundation for Peoples of the South Pacific and WWF Wildlands and Human Needs Program under the AID/South Pacific Profitable Environmental Protection Project (PEP); 3) develop and implement BSP support to USAID in the Pacific region; and 4) liaise with appropriate USAID Missions or Bureaus, BSP consortium members and other key organizations involved in conservation of biodiversity. The Program Officer will split his time equally between BSP and the WWF/Asia Program.

PRODUCTS/OUTPUTS: See South Pacific Program Officer job description.

STATUS: The position for the BSP South Pacific Program Officer has been defined and is being advertised in the United States and within the region. Interviews are underway.

SIGNIFICANCE: This activity will assist USAID in the Pacific region and help build capacity of governments and NGOs to better conserve biodiversity.

RELEVANCE: The establishment of national and local conservation priorities is a BSP mandate. This activity also provides for building the capacity of governments and grassroots organizations to act on biodiversity conservation and designing activities that can be built into Mission programs and projects.

COMMENTS:

PD911D

TITLE: Environmental NGO Conference

COMPONENT: Pilot Demonstration Project

FUNDING: \$25,000

DURATION: Initiated 7 August 1991; ends 30 December 1992

IMPLEMENTOR: BSP, World Resources Institute (WRI)

CONTACT: BSP: Janis Alcorn 202 778-9679; fax 202 293-9211
WRI: To be determined

LOCATION: Asia

PURPOSE: Working in conjunction with WRI, USAID and other U.S. organizations, BSP will assist in the preparation and planning of an environmental conference of regional NGOs in Asia.

DESCRIPTION: BSP's support of the conference will include attracting the participation of regional environmental journalists to cover and report to the broader community the conference's proceedings and its recommendations.

PRODUCTS/OUTPUTS: Proceedings and publicity are expected.

STATUS: Planning for this conference has not yet begun.

SIGNIFICANCE: Regional environmental NGOs require a forum in order for them to share their concerns and provide input for setting conservation priorities in the region.

RELEVANCE: The support will allow for exchange and dissemination of information and providing regional NGOs with a growth toward self-reliance, fulfilling BSP's mandate.

COMMENTS:



PD911E

TITLE: Small Grants Program/Asia

COMPONENT: Pilot Demonstration Project

FUNDING: \$65,000

DURATION: Initiated 7 August 1991; ends 30 September 1993

IMPLEMENTOR: WWF and BSP

CONTACT: BSP: Janis Alcorn 202-778-9697; fax 202-293-9211
AID/W: Molly Kux 202-663-2365; fax 202-6632149

LOCATION: Asia

PURPOSE: To support research and capability of NGOs in such areas as environmental education and public awareness, land tenure issues, integrated conservation-development projects, biodiversity information centers and conflict resolution.

DESCRIPTION: BSP will establish a small grants program that will be administered locally offering grants in the \$15,000 range.

PRODUCTS/OUTPUTS: Research documents that may be suitable for publishing and be of use to A.I.D. Missions in the region.

STATUS: The activity is currently being designed.

SIGNIFICANCE: The activity is expected to contribute to development of NGO capacity to peer-review grant proposals. It will also enhance BSP's world-wide small grants program.

RELEVANCE: The activity is expected to strengthen LDCs and NGOs and their commitment to conservation. The grants will fund activities that include grassroots conservation strategies and education programs to heighten the awareness of the need for conservation efforts, which fulfills BSP's mandate.

COMMENTS:

PD912

TITLE: AFR Bureau

COMPONENT: Pilot Demonstration Project

FUNDING: \$1,440,000

DURATION: Initiated 8 August 1991; ends 30 September 1993

IMPLEMENTORS: BSP; Goddard Space Flight Center; WRI; U.S. Forest Service; University of Maryland; WWF; WCI; U.S. Geological Survey; University of Illinois; and as yet unidentified NGOs and African government agencies.

CONTACT: BSP: Kate Newman 202-778-9524; fax 202-293-9211
AID/W: Tony Pryor 703-235-3832; fax 703-235-3805
Tim Resch 703-235-3786; fax 703-235-3805

LOCATION: Africa

PURPOSE: This buy-in enables BSP to bring together NGOs and governmental organizations with considerable field experience, scientific knowledge and in-house capacity to develop some common understanding of and approaches for the conservation of biological diversity and the mitigation of global climate change. The technical reviews and pilot projects included in this buy-in lay the foundation for future Africa Bureau initiatives to conserve biodiversity. The global climate change efforts provide information to policy makers, particularly within the A.I.D. structure, to help them determine how best to mitigate future carbon emissions from central Africa.

DESCRIPTION: The buy-in was developed through a collaborative process between BSP and A.I.D.'s Africa Bureau, and consists of several biodiversity and global climate change activities.

To address global climate change (see Activity PD912A), the buy-in supports a series of data gathering and analytical activities in central Africa necessary to (a) establish a baseline estimate of the extent of forest resources, (b) establish estimated rates of forest depletion, (c) identify the modes and dynamics involved in forest modification, and (d) estimate present and future carbon emissions from central Africa. The information compiled from this activity will help A.I.D. produce an action plan delineating their role in the mitigation of future gaseous emissions from the central Africa region.

Within the biodiversity activity, BSP is a) conducting a technical review of the Bureau's current biodiversity project portfolio, and a technical review of the Bureau's biodiversity strategy (see Activity PD912B), and b) developing and financing a series of analytical pilot projects to promote the conservation of biological diversity in the region (see Activity PD912C).

PD912A

TITLE: Central Africa Global Climate Change Project

COMPONENT: Pilot Demonstration Project

FUNDING: \$400,000

DURATION: Initiated December 1990; ends June 1992

IMPLEMENTOR: BSP; Goddard Space Flight Center (GSFC); (WRI); U.S. Forest Service (USFS); Univ. Maryland (UM); (WWF); Wildlife Conservation International(WCI); U.S. Geological Survey(USGS); Univ. Illinois(UI).

CONTACT: BSP: Kate Newman 202-778-9524; fax 202-293-9211
AID/Africa: Tony Pryor 703-235-3832;
fax 703-235-3805

LOCATION: Central Africa Republic, Cameroon, Congo, Gabon, Equatorial Guinea, and Zaire.

PURPOSE: This buy-in enables BSP to bring together NGOs and governmental organizations with considerable field experience, scientific knowledge, and in-house capacity to conduct a series of data gathering and analytical activities necessary to develop a global climate change action plan for central Africa.

DESCRIPTION: The U.S. Congress, having acknowledged the need to mitigate gaseous emissions that contribute to global climate change, has mandated that A.I.D. identify areas with high future emissions potential. As a result, A.I.D. has decided to focus its attention in Africa on the central Africa region which contains the largest and most carbon-rich forested area on the continent. The Central Africa Global Climate Change Project has been initiated through a collaborative process between BSP and the Africa Bureau to determine the potential for future carbon emissions from the region and to provide a readily accessible source of information to those policy makers, particularly within the A.I.D. structure, responsible for deciding how best to mitigate them.

This activity: (a) establishes a baseline estimate of the extent of forest resources; (b) establishes estimated rates of forest depletion; (c) identifies the modes and dynamics involved in forest modification; and (d) estimates present and future carbon emissions in central Africa. This information will be used to develop a climate change action plan for the Bureau.

PRODUCTS/OUTPUTS:

- A. A remote sensing analysis, supported by ground-truthing efforts, to produce a map of the region that estimates the extent of forest cover and rates of change.
- B. Desk studies of central Africa's bio-geophysical setting, policy and macroeconomic framework, population

PD912B

TITLE: Biodiversity Project Portfolio and Strategy

COMPONENT: Pilot Demonstration Project

FUNDING: \$112,000

DURATION: Initiated 8 August 1991; ends 30 September 1991

IMPLEMENTOR: BSP

CONTACT: BSP: Kate Newman 202-778-9524; fax 202-293-9211
Jim Webster 202-778-9786; fax 202-293-9211
AID/Africa: Tim Rešch 703-235-3786;
fax 703-235-3805

LOCATION: Africa

PURPOSE: To strengthen the Africa Bureau's goal to conserve biological diversity by examining their projects and helping them determine the direction of future A.I.D. efforts. The activities incorporated in this buy-in will assess the Bureau's history in biodiversity conservation, identify and examine lessons learned, and provide an analytical basis for future Bureau efforts.

DESCRIPTION: BSP will conduct technical reviews of the Bureau's biodiversity project portfolio, and their strategy for conserving biodiversity in Africa. BSP will prepare a database of the Bureau's biodiversity projects for the portfolio analysis and will assess the Bureau's biodiversity grants initiated since 1987, providing the base for a review of the Bureau's biodiversity strategy. This strategy review will include an assessment of the continent's conservation priorities. The Bureau will use the review, and examination of conservation priorities as a base of information upon which to revise their strategy.

PRODUCTS/OUTPUTS:

- A. A technical review resulting in a database of biodiversity projects.
- B. A report summarizing Africa Bureau's biodiversity activities since 1987, highlighting lessons learned.
- C. A comprehensive review of several Bureau biodiversity grants conducted through site visits, interviews, reports, and evaluations.
- D. Strategy review that includes examining key issues such as priorities for conservation from a biological perspective, and social, political, and economic issues.
- E. Results from the above studies will be included in a report suggesting a revised biodiversity strategy for the Africa Bureau.

STATUS: Active

PD912C

TITLE: Biodiversity Pilot Analytical Projects

COMPONENT: Pilot Demonstration Project

FUNDING: \$928,000

DURATION: Initiated 8 August 1991; ends 30 September 1991

IMPLEMENTOR: BSP and as yet unidentified NGOs and African government agencies

CONTACT: BSP: Kate Newman 202-778-9524; fax 202-293-9211
AID/W: Tim Resch 703-235-3786; fax 703-235-3805

LOCATION: Africa

PURPOSE: A series of pilot projects designed to explore key analytical issues involved in the conservation of biodiversity will be funded by this component of the buy-in. These projects will test the underlying assumptions and theories that the Africa Bureau has used to support biodiversity activities as well as those activities being considered for the future.

DESCRIPTION: BSP will develop a plan for targeting these pilot project funds. Based on this plan, BSP will finance a series of pilot projects that promote the conservation of biodiversity in individual countries and regionally. BSP staff will work closely with project implementors to monitor and evaluate the progress and impact of these carefully selected activities.

PRODUCTS/OUTPUTS: An analytical plan to help guide what pilot projects are selected for funding. The pilot projects will deliver a range of outputs depending on what proposals are selected for funding. All project coordinators will be required to submit mid-term and final reports. Results from all of these activities will be summarized in a report.

STATUS: Active

SIGNIFICANCE: Pilot projects strengthen the analytical base of the Bureau's biodiversity program. Because this is a relatively new area of Bureau activity, there are many unanswered questions regarding what are the best approaches for conserving biodiversity. By addressing carefully identified questions, these pilot projects will provide valuable insights, experience and knowledge specifically targeted to assist future Bureau efforts to conserve biodiversity. This information will be prepared for A.I.D. and disseminated to other interested organizations and governments.

RELEVANCE: This activity addresses BSP's mandate to a) identify conservation priorities, b) collect, evaluate, and disseminate information, c) identify critical ecosystems, d) perform policy

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PD913

TITLE: Mexico Ecodevelopment Project II

COMPONENT: Pilot Demonstration Project

FUNDING: \$810,000

DURATION: Initiates 1 April 1992; ends 31 March 1993

IMPLEMENTOR: World Wildlife Fund Wildlands and Human Needs & Mexico Programs

CONTACTS: BSP: Meg Symington, 202-778-9727; fax 202-293-9211
AID/Mexico: Frank Zadroga 525-211-0042;
fax 525-511-9980
WWF: Brad Ack 202-778-9652; fax 202-293-9211
Mario Ramos 202-778-9501; fax 202-293-9211

LOCATION: Mexico

PURPOSE: To design and implement projects to promote environmentally sound community development around biologically important, threatened wildland areas in Mexico. The overall goal of the program is to decrease the rate of deforestation in these wildland areas, and to protect them as healthy diverse ecosystems, while achieving sustainable methods and levels of resource use for the people living in and around them.

DESCRIPTION: This is the second year of the program described in PD903. \$650,000 is budgeted for the second year of activities in the buffer zones of southern Mexico, and \$160,000 is budgeted for a complementary program in the buffer zones of one or two wildlands in the northern borderlands region of Mexico.

PRODUCTS/OUTPUTS: Semi-annual progress reports

STATUS: Pending implementation

SIGNIFICANCE: Mexico is a focal country for A.I.D.'s Global Climate Change initiative. Southern Mexico has several internationally-significant protected areas that are under serious threats (forest conversion, logging, agriculture, poaching). The second-year funding for sustainable development projects in the buffer zone of four areas will help consolidate local support for conservation.

RELEVANCE: This project is directly relevant to BSP's mandate to pursue activities which integrate conservation of biodiversity with grassroots development work, and expand and refine the biosphere reserve concept.

COMMENTS: See Activity PD903 for information on previous buy-in.