



U.S. AGENCY FOR  
INTERNATIONAL  
DEVELOPMENT

PD-ARG-995  
84000  
~~PD-10000~~

SEP 26 1992

Ms. Mary L. Higgins  
World Wildlife Fund  
1250 Twenty-Fourth Street N.W.  
Washington, D.C. 20037-1175

Subject: Grant No. LAG-0780-G-00-2023-00

Dear Ms. Higgins:

Pursuant to the authority contained in the Foreign Assistance Act of 1961 and the Federal Grant and Cooperative Agreement Act of 1982, as amended, the Agency for International Development (hereinafter referred to as "A.I.D.") hereby provides to the World Wildlife Fund (hereinafter referred to as "WWF" or "Grantee") the sum set forth in Section 1C.2. of Attachment 1 of this Grant to provide financial support for the program described in Attachment 2 of this Grant entitled "Program Description."

This Grant is effective as of the date of this letter and funds obligated hereunder shall be used to reimburse the Grantee for allowable program expenditures for the period set forth in Section 1B. of Attachment 1 of this Grant.

This Grant is made to the Grantee on the condition that the funds will be administered in accordance with the terms and conditions as set forth in the attachments listed under my signature below, which together constitute the entire Grant document and have been agreed to by your organization.

Please acknowledge receipt and acceptance of this Grant by signing all copies of this Cover Letter, retaining one copy for your files, and returning the remaining copies to the undersigned.

If you have any questions, please contact Kathie Frascella of my staff at (703) 875-1220.

Sincerely yours,



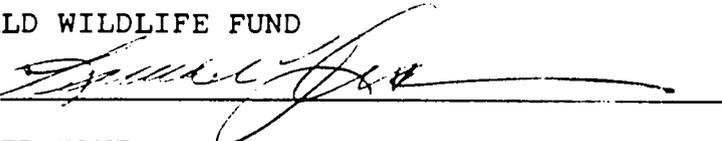
Jay M. Bergman  
Grant Officer  
Chief, LA Branch  
Division B  
Office of Procurement

Attachments:

1. Schedule
2. Program Description
3. Standard Provisions
4. Special Provision entitled "Restrictions on Lobbying"

ACKNOWLEDGED:

WORLD WILDLIFE FUND

BY: 

TYPED NAME: Lawrence J. Amen

TITLE: Vice President for  
Finance and Administration

DATE: 1-14-72

FISCAL DATA

A. GENERAL

- A.1. Total Estimated A.I.D. Amount: \$145,295
- A.2. Total Obligated A.I.D. Amount: \$145,295
- A.3. Cost-Sharing Amount (Non-Federal): \$375,914
- A.4. Other Contributions (Federal): \$-0-
- A.5. Project No.: 598-0780
- A.6. A.I.D. Project Office: LAC/DR/E, J. Wilson
- A.7. Funding Source: A.I.D./W
- A.8. Tax I.D. No.: 52-1693387
- A.9. CEC No.: 07-484-5447
- A.10. LOC No.: 72-00-1464

B. SPECIFIC

- B.1.(a) PIO/T No.: 598-7080-3-2653021
- B.1.(b) Appropriation: 72-1121021.3
- B.1.(c) Allotment: 243-65-598-00-69-21
- B.1.(d) BPC: LDNA-92-35598-KG12
- B.1.(e) Amount: \$145,295

**ATTACHMENT 1**

**SCHEDULE**

**1A. PURPOSE OF GRANT**

The purpose of this Grant is to provide financial support for the program described in Attachment 2 of this Grant entitled "Program Description."

**1B. PERIOD OF GRANT**

The effective date of this Grant is the date of the Cover Letter and the estimated completion date is September 30, 1993. Funds obligated hereunder (see Section 1C.2. below) shall be used to reimburse the Grantee for allowable program expenditures incurred by the Grantee in pursuit of program objectives during such period. Funds obligated hereunder are anticipated to be sufficient for completion by the Grantee of the program described in Attachment 2 of this Grant by the estimated completion date.

**1C. AMOUNT OF GRANT AND PAYMENT**

**1C.1.** The total estimated amount of this Grant for its full period, as set forth in Section 1B. above, is \$145,295.

**1C.2.** A.I.D. hereby obligates the amount of \$145,295 for the purposes of this Grant during the indicated period set forth in Section 1B. above, thereby fulfilling A.I.D.'s funding requirements. A.I.D. shall not be liable for reimbursing the Grantee for any costs in excess of the obligated amount, except as specified in paragraph (f) of the Standard Provision of this Grant entitled "Revision of Grant Budget."

**1C.3.** Payment shall be made to the Grantee in accordance with procedures set forth in the Standard Provision of this Grant entitled "Payment - Letter of Credit," as shown in Attachment 3.

**1C.4.** The total estimated amount of the program described in Attachment 2 of this Grant is \$521,209, of which A.I.D. may provide the amount specified in Section 1C.1. above, and the Grantee will provide \$375,914 in accordance with Section 1L. below.

**1D. GRANT BUDGET**

1D.1. The following is the Budget for the total estimated amount of this Grant (see Section 1C.1. above) for its full period (see Section 1B. above). The Grantee may not exceed the total estimated amount or the obligated amount of this Grant, whichever is less (see Sections 1C.1. and 1C.2., respectively, above). Except as specified in the Standard Provision of this Grant entitled "Revision of Grant Budget," as shown in Attachment 3, the Grantee may adjust line item amounts as may be reasonably necessary for the attainment of program objectives.

Revisions to the budget shall be in accordance with Section 1C. above and the Standard Provisions entitled "Revision of Grant Budget" and "Cost Sharing (Matching)."

1D.2. Budget

<u>Cost Element</u>	<u>A.I.D.</u>	<u>Grantee/ Others (Non-Fed)</u>	<u>Total</u>
WWF Tech. Asst.	\$ 4,994	\$ 64,170	\$ 69,164
Diag. Monitoring & New Area Eval.	26,790	27,500	54,290
Rio Tatabro-Bajo Anchicaya	46,322	62,993	109,315
Bahia Malaga	23,895	27,160	51,055
Utria Sound Natl Park	<u>43,294</u>	<u>194,091</u>	<u>237,385</u>
Total	\$145,295	\$375,914	\$521,209

1D.3. Inclusion of any cost in the budget of this Grant does not obviate the requirement for prior approval by the Grant Officer of cost items designated as requiring prior approval by the applicable cost principles (see the Standard Provision of this Grant set forth in Attachment 3 entitled "Allowable Costs") and other terms and conditions of this Grant, unless specifically stated in Section 1I. below.

**1E. REPORTING**

1E.1. Financial Reporting

1E.1.(a) Financial reporting requirements shall be in accordance with the Standard Provision of this Grant entitled "Payment - Letter of Credit," as shown in Attachment 3. If a Standard Form 269 is required by the aforesaid Standard Provision, the "Long Form" of said form shall be used.

**1E.1.(b)** All financial reports shall be submitted to A.I.D., Office of Financial Management, FA/FM/CMPD/DCB, Room 700 SA-2, Washington, D.C. 20523-0209. In addition, three copies of all financial reports shall be submitted to the A.I.D. Project Office specified in the Cover Letter of this Grant, concurrently with submission of the Quarterly Technical Reports (See Section 1E.2. below).

**1E.1.(c)** The frequency of financial reporting and the due dates of reports shall be as specified in the Standard Provision of this Grant referred to in Section 1E.1.(a) above.

**1E.1.(d)** The Grantee's financial reports shall include expenditures of A.I.D. Grant funds provided hereunder, as well as non-federal matching funds and any other contributions in accordance with Section 1L. below.

**1E.2.** Program Performance Planning and Reporting

**1E.2.(a)** Quarterly Reports

The Grantee shall submit five (5) copies of brief quarterly program performance reports, which coincide with the financial reporting periods described in Section 1E.1. above, to the A.I.D. Project Office specified in the Cover Letter of this Grant. In addition, two copies shall be submitted to A.I.D., POL/CDIE/DI, Washington, DC 20523-1802. These reports shall be submitted within 30 days following the end of the reporting period, and shall briefly present the following information:

**1E.2.(a)(1)** A comparison of actual accomplishments with the goals established for the period, the findings of the investigator, or both. If the output of programs can be readily quantified, such quantitative data should be related to cost data for computation of unit costs.

**1E.2.(a)(2)** Reasons why established goals were not met, if applicable.

**1E.2.(a)(3)** Other pertinent information including the status of finances and expenditures and, when appropriate, analysis and explanation of cost overruns or high unit costs.

**1E.2.(b)** Special Reports

Between the required program performance reporting dates, events may occur that have significant impact upon the program. In such instances, the Grantee shall inform the A.I.D. Project Officer as soon as the following types of conditions become known:

**1E.2.(b)(1)** Problems, delays, or adverse conditions that will materially affect the ability to attain program objectives, prevent the meeting of time schedules and goals, or preclude the attainment of work units by established time periods. This disclosure shall be accompanied by a statement of the action taken, or contemplated, and any A.I.D. assistance needed to resolve the situation.

**1E.2.(b)(2)** Favorable developments or events that enable time schedules to be met sooner than anticipated or more work units to be produced than originally projected.

**1E.2.(b)(3)** If any performance review conducted by the Grantee discloses the need for change in the budget estimates in accordance with the criteria established in the Standard Provision of this Grant entitled "Revision of Grant Budget," the Grantee shall submit a request for budget revision to the Grant Officer and the A.I.D. Project Officer specified in the Cover Letter of this Grant.

**1E.2.(c)** Technical and Research Reports and Publications

The Grantee shall summarize technical and research activities of the project in reports, and distribute such reports to the appropriate USAID Missions, LDCs, and host country and international institutions in order to encourage use of the technology developed. Such reports will be completed within 60 days after completion of the activity. Journal articles and other publications are encouraged. See also Section 1I. of this Grant pertaining to publications.

**1E.2.(d)** Environmental Impact

If it appears that outputs of this project will result in an adverse environmental impact, the Grantee shall notify the A.I.D. Project Officer prior to implementation, in order to allow for orderly preparation of an environmental impact statement. The Grantee shall assure that appropriate U.S. Government and/or host country procedures are followed.

**1E.2.(e)** Trip Reports

Within 30 days following the completion of each international trip, the Grantee shall submit 3 copies of a trip report summarizing the accomplishments of the trip to the A.I.D. Project Officer specified in the cover letter of this Grant. If several individuals are travelling together to one site, a single report representing the group will suffice. The report shall include the purpose of the trip, technical observations, suggestions and recommendations, overall impressions of the site situation (if appropriate), and a list of persons visited with their title and organization affiliation.

**1E.2.(f)            Training Reports**

**1E.2.(f)(1)**    If the Standard Provision entitled "Participant Training" applies to this Grant (see Section 1K. for applicability), the Grantee shall comply with reporting and information requirements of the Standard Provision of this Grant entitled "Participant Training," as well as Chapters 5 and 24 of A.I.D. Handbook 10.

**1E.2.(f)(3)**    The Grantee shall provide ten (10) copies of all training manuals produced under this Grant to the A.I.D. Project Officer.

**1E.2.(g)            Final Report**

Within 90 days following the estimated completion date of this Grant (see Section 1B. above), the Grantee shall submit five (5) copies of a final report to the A.I.D. Project Office specified in the cover letter of this Grant. In addition, two copies shall be submitted to A.I.D., POL/CDIE/DI, Washington, DC 20523-1802. It will cover the entire period of the Grant and include all information shown in Sections 1E.2.(b) through 1E.2.(f) above.

**1F.                TITLE TO PROPERTY**

Title to property acquired hereunder shall vest in the Grantee, subject to the requirements of the Standard Provision of this Grant entitled "Title To and Use of Property (Grantee Title)" regarding use, accountability, and disposition of such property, except to the extent that disposition of property may be specified in Section 1I. below.

**1G.                PROCUREMENT AND (SUB)CONTRACTING**

**1G.1.            Applicability**

This Section 1G. applies to the procurement of goods and services by the Grantee (i.e., contracts, purchase orders, etc.) from a supplier of goods and services (see the Standard Provisions of this Grant entitled "Procurement of Goods and Services" and "AID Eligibility Rules for Goods and Services"), and not to assistance provided by the Grantee (i.e., a subgrant or [sub]agreement) to a subrecipient (see the Standard Provision of this Grant entitled "Subagreements").

**1G.2. Requirements**

In addition to other applicable provisions of this Grant, the Grantee shall comply with paragraph (b)(1) of the Standard Provision of this Grant entitled "AID Eligibility Rules for Goods and Services," concerning total procurement value of less than \$250,000 under this Grant. If, under the order of preference set forth in paragraph (b)(1)(i) of said Standard Provision, the Grantee procures goods or services from cooperating country sources, the Standard Provision of this Grant entitled "Local Cost Financing" shall also apply. However, paragraph (b)(1) of the Standard Provision entitled "AID Eligibility Rules for Goods and Services" does not apply to: the restricted goods listed in paragraph (a)(3) of said Standard Provision and paragraph (e) of the Standard Provision entitled "Local Cost Financing," which must be specifically approved by the Grant Officer in all cases, except to the extent that such approval may be provided in Section 1I. below; or to paragraph (d) of said Standard Provision pertaining to air and ocean transportation, to which the Standard Provisions entitled "Air Travel and Transportation" and "Ocean Shipment of Goods" apply, respectively. Paragraph (b)(2) of the Standard Provision entitled "AID Eligibility Rules for Goods and Services" does not apply.

**1G.3. Approvals**

Inclusion of costs in the budget of this Grant for the purchase of nonexpendable equipment obviates neither the requirement of Section J.13. or OMB Circular A-21 (for educational institutions) or Section 13 of Attachment B of OMB Circular A-122 (for nonprofit organizations other than educational institutions) for prior approval of such purchases by the Grant Officer, nor any other terms and conditions of this Grant, unless specifically stated in Section 1I. below.

**1G.4. Title to Property**

See Section 1F. above.

**1H. INDIRECT COST RATES**

**1H.1.** Pursuant to the Standard Provision of this Grant entitled "Negotiated Indirect Cost Rates - Provisional," an indirect cost rate or rates shall be established for each of the Grantee's accounting periods which apply to this Grant. Pending establishment of final or revised provisional indirect cost rates, provisional payments on account of allowable indirect costs shall be made on the basis of the following negotiated provisional rate(s) applied to the base(s) which is (are) set forth below:

<u>Type</u>	<u>Rate</u>	<u>Base</u>
Provisional	80.86%	1/

1/ Base of Application: Salaries and Fringe Benefits

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**1I. SPECIAL PROVISIONS**

**1I.1. Limitations on Reimbursement of Costs of Compensation for Personal Services and Professional Service Costs**

**1I.1.(a) Employee Salaries**

Except as the Grant Officer may otherwise agree in writing, A.I.D. shall not be liable for reimbursing the Grantee for any costs allocable to the salary portion of direct compensation paid by the Grantee to its employees for personal services which exceed the highest salary level for a Foreign Service Officer, Class 1 (FS-1), as periodically amended.

**1I.1.(b) Consultant Fees**

Compensation for consultants retained by the Grantee hereunder shall not exceed, without specific approval of the rate by the Grant Officer: either the highest rate of annual compensation received by the consultant during any full year of the immediately preceding three years; or the maximum rate of a Foreign Service Officer, Class 1 (FS-1) (as periodically amended), whichever is less. A daily rate is derived by dividing the annual compensation by 2,087 and multiplying the result by 8.

**1I.2. Publications**

**1I.2.(a)** The Grantee agrees to provide one copy of the manuscript of any proposed publication to the A.I.D. Project Officer not later than submission to the publisher, and to give serious consideration to any comments received from the A.I.D. Project Officer.

**1I.2.(b)** In the case of publication of any of the reports described in Section 1E.2. of this Grant, A.I.D. reserves the right to disclaim endorsement of the opinions expressed. For other publications, A.I.D. reserves the right to dissociate itself from sponsorship or publication. In both cases, the Grantee will consult with the A.I.D. Project Officer as to the nature and extent of any A.I.D. disclaimer of endorsement or dissociation from sponsorship or publication.

**1I.2.(c)** If A.I.D. does not choose to disclaim endorsement or dissociate itself from sponsorship or publication, the Grantee shall, in accordance with the Standard Provision of this Grant entitled "Publications," acknowledge A.I.D. support as follows:

"This publication was made possible through support provided by the Office of Development Resources, Bureau for Latin America and the Caribbean, U.S. Agency for International Development, under Grant No. LAG-0780-G-00-2023-00."

**1I.2.(d)** In addition to providing one copy of all published works and lists of other written work produced under this Grant to the A.I.D. Project Officer, as required by paragraph (b) of the Standard Provision of this Grant entitled "Publications," the Grantee shall also provide two copies of such publications and lists to A.I.D., POL/CDIE/DI, Washington, D.C. 20523-1802.

**1I.3. Equipment Purchases**

**1I.3.(a) Requirement for Prior Approval**

Pursuant to Sections 1D.3. and 1G.3. above and the Standard Provisions of this Grant entitled "Allowable Costs" and "Revision of Grant Budget," and by extension, Section 13 of Attachment B of OMB Circular A-122, the Grantee must obtain A.I.D. Grant Officer approval for purchases of the following:

**1I.3.(a)(1) General Purpose Equipment**, which is defined as an article of nonexpendable tangible personal property which is usable for other than research, medical, scientific or technical activities, whether or not special modifications are needed to make them suitable for a particular purpose (e.g., office equipment and furnishings, air conditioning equipment, reproduction and printing equipment, motor vehicles, and automatic data processing equipment), having a useful life of more than two years and an acquisition cost of \$500 or more per unit); and

**1I.3.(a)(2) Special Purpose Equipment**, which is defined as an article of nonexpendable tangible personal property, which is used only for research, medical, scientific, or technical activities (e.g., microscopes, x-ray machines, surgical instruments, and spectrometers), and which has a useful life of more than two years and an acquisition cost of \$1,000 or more per unit).

**1I.3.(b) Approvals**

In furtherance of the foregoing, the Grant Officer does hereby provide approval for the following purchases, which shall not be construed as authorization to exceed the total estimated amount or the obligated amount of this Grant, whichever is less (see Section 1C. above):

N/A

**1I.3.(c)            Exception for Automation Equipment**

Any approval for the purchase of automation equipment which may be provided in Section 1I.4.(b) above or subsequently provided by the Grant Officer is not valid if the total cost of purchases of automation equipment (e.g., computers, word processors, etc.), software, or related services made hereunder will exceed \$100,000. The Grantee must, under such circumstances, obtain the approval of the Grant Officer for the total planned system of any automation equipment, software, or related services.

**1I.3.(d)            Compliance with A.I.D. Eligibility Rules**

Any approvals provided in Section 1I.4.(b) above or subsequently provided by the Grant Officer shall not serve to waive the A.I.D. eligibility rules described in Section 1G. of this Grant, unless specifically stated.

**1I.4.            Restricted Goods**

Pursuant to Section 1G. above, paragraph (a)(3) of the Standard Provisions of this Grant entitled "AID Eligibility Rules for Goods and Services," and, if applicable (see Section 1K. below for applicability), paragraph (e) of the Standard Provision or this Grant entitled "Local Cost Financing," the Grant Officer's approval is required for purchase of the restricted goods described therein. In furtherance thereof, the Grant Officer does hereby provide such approval to the extent set forth below. The Grant Officer's approval is required for purchases of such restricted goods if all of the conditions set forth below are not met by the Grantee. Any approval provided below or subsequently provided by the Grant Officer shall not serve to waive any terms and conditions of this Grant unless specifically stated.

**1I.4.(a)            Agricultural Commodities**

Agricultural commodities may be purchased provided that they are of U.S. source (generally, the country from which the commodities are shipped) and origin (generally, the country in which the commodities are mined, grown, or produced) and purchased from a U.S. supplier, except that wheat, rice, corn, soybeans, sorghums, flour, meal, beans, peas, tobacco, hides and skins, cotton, vegetable oils, and animal fats and oils cannot be purchased under any circumstances without the prior written approval of the Grant Officer.

**1I.4.(b) Motor Vehicles**

Motor vehicles, if approved for purchase under Section 1I.4.(b) above or subsequently approved by the Grant Officer, must be of U.S. manufacture and must be of at least 51% U.S. componentry. The source of the motor vehicles, and the nationality of the supplier of the vehicles, must be in accordance with Section 1G.2. above. Motor vehicles are defined as self-propelled vehicles with passenger carriage capacity, such as highway trucks, passenger cars and busses, motorcycles, scooters, motorized bicycles, and utility vehicles. Excluded from this definition are industrial vehicles for materials handling and earthmoving, such as lift trucks, tractors, graders, scrapers, and off-the-highway trucks.

**1I.4.(c) Pharmaceuticals**

Pharmaceuticals may be purchased provided that all of the following conditions are met: (1) the pharmaceuticals must be safe and efficacious; (2) the pharmaceuticals must be of U.S. source and origin (see Section 1G. above); (3) the pharmaceuticals must be of at least 51% U.S. componentry (see Section 1G. above); (4) the pharmaceuticals must be purchased from a supplier whose nationality is in the U.S. (see Section 1G. above); (5) the pharmaceuticals must be in compliance with U.S. Food and Drug Administration (FDA) (or other controlling U.S. authority) regulations governing United States interstate shipment of pharmaceuticals; (6) the manufacturer of the pharmaceuticals must not infringe on U.S. patents; and (7) the pharmaceuticals must be competitively procured in accordance with the procurement policies and procedures of the Grantee and the Standard Provision of this Grant entitled "Procurement of Goods and Services."

**1I.4.(d) Pesticides**

Pesticides may only be purchased if the purchase and/or use of such pesticides is for research or limited field evaluation by or under the supervision of project personnel. Pesticides are defined as substances or mixtures of substances: intended for preventing, destroying, repelling, or mitigating any unwanted insects, rodents, nematodes, fungi, weeds, and other forms of plant or animal life or viruses, bacteria, or other micro-organisms (except viruses, bacteria, or other micro-organisms on or living in man or other living animals); or intended for use as a plant regulator, defoliant, or dessicant.

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**1I.4.(e)**            Rubber Compounding Chemicals and Plasticizers

Rubber compounding chemicals and plasticizers may only be purchased with the prior written approval of the Grant Officer.

**1I.4.(f)**            Used Equipment

Used equipment may only be purchased with the prior written approval of the Grant Officer.

**1I.4.(g)**            Fertilizer

Fertilizer may be purchased if it is either purchased in the U.S. and used in the U.S., or if it is purchased in the cooperating country with local currency for use in the cooperating country. Any fertilizer purchases which do not comply with these limitations must be approved in advance by the Grant Officer.

**1I.5.**            Limitation on Use of Funds

**1I.5.(a)**            The Grantee shall not utilize funds provided by A.I.D. for any testing or breeding feasibility study, variety improvement or introduction, consultancy, publication, conference or training in connection with the growth or production in countries other than the United States of an agricultural commodity for export which would compete with a similar commodity grown or produced in the United States.

**1I.5.(b)**            The reports described in Section 1E.2. shall contain a statement indicating the projects or activities to which United States funds have been attributed, together with a brief description of the activities adequate to show that United States funds have not been used for the purpose in Section 1I.5.(a) above.

**1I.5.(c)**            The Grantee agrees to refund to A.I.D. upon request an amount equal to any United States funds used for the purposes prohibited by Section 1I.5.(a) above.

**1I.5.(d)**            No funds provided by A.I.D. under this Grant shall be used to provide assistance, either directly or indirectly, to any country ineligible to receive assistance pursuant to the Foreign Assistance Act as amended, related appropriations acts, or other statutes and Executive Orders of the United States (also see the Standard Provision of this Grant entitled "Ineligible Countries").

**1J. RESOLUTION OF CONFLICTS**

Conflicts between any of the Attachments of this Grant shall be resolved by applying the following descending order of precedence:

- Attachment 1 - Schedule
- Attachment 3 - Standard Provisions
- Attachment 4 - Special Provision entitled "Restrictions on Lobbying"
- Attachment 2 - Program Description

**1K. STANDARD PROVISIONS**

The Standard Provisions set forth as Attachment 3 of this Grant consist of the following Standard Provisions denoted by an "X" which are attached hereto and made a part of this Grant:

**1K.1. Mandatory Standard Provisions For U.S., Nongovernmental Grantees**

- ( X ) Allowable Costs (November 1985)
- ( X ) Accounting, Audit, and Records (September 1990)
- ( X ) Refunds (September 1990)
- ( X ) Revision of Grant Budget (November 1985)
- ( X ) Termination and Suspension (May 1986)
- ( X ) Disputes (November 1989)
- ( X ) Ineligible Countries (May 1986)
- ( X ) Debarment, Suspension, and Other Responsibility Matters (March 1989)
- ( X ) Nondiscrimination (May 1986)
- ( X ) U.S. Officials Not to Benefit (November 1985)
- ( X ) Nonliability (November 1985)
- ( X ) Amendment (November 1985)
- ( X ) Notices (November 1985)

**1K.2. Additional Standard Provisions For U.S.,  
Nongovernmental Grantees**

- ( X ) Payment - Letter of Credit (November 1985)
- ( ) Payment - Periodic Advance (January 1988)
- ( ) Payment - Cost Reimbursement (November 1985)
- ( X ) Air Travel and Transportation (November 1985)
- ( X ) Ocean Shipment of Goods (May 1986)
- ( X ) Procurement of Goods and Services (November 1985)
- ( X ) AID Eligibility Rules for Goods and Services (November 1985)
- ( X ) Subagreements (November 1985)
- ( X ) Local Cost Financing (November 1988)
- ( X ) Patent Rights (November 1985)
- ( X ) Publications (November 1985)
- ( ) Negotiated Indirect Cost Rates - Predetermined (May 1986)
- ( X ) Negotiated Indirect Cost Rates - Provisional (May 1986)
- ( X ) Regulations Governing Employees (November 1985)
- ( X ) Participant Training (May 1986)
- ( ) Voluntary Population Planning (August 1986)
- ( ) Protection of the Individual as a Research Subject (November 1985)
- ( ) Care of Laboratory Animals (November 1985)
- ( ) Government Furnished Excess Personal Property (November 1985)
- ( X ) Title To and Use of Property (Grantee Title) (November 1985)
- ( ) Title To and Care of Property (U.S. Government Title) (November 1985)
- ( ) Title To and Care of Property (Cooperating Country Title) (November 1985)
- ( X ) Cost Sharing (Matching) (November 1985)
- ( X ) Use of Pouch Facilities (November 1985)
- ( X ) Conversion of United States Dollars to Local Currency (November 1985)

**1L. COST SHARING AND OTHER CONTRIBUTIONS**

**1L.1.** The Grantee agrees to expend an amount not less than (a) the amount shown in the budget of this Grant for financing by the Recipient and/or others from non-federal funds (see Sections 1D. and/or 1H.), and (b) the amount shown in the budget of this Grant for financing by the Recipient and/or others from other federal funds.

**1L.2.** The Standard Provision of this Grant entitled "Cost Sharing (Matching)" makes reference to project costs. "Project Costs" are defined in Attachment E of OMB Circular A-110 as all allowable costs (as set forth in the applicable cost principles [see the Standard Provision of this Grant entitled "Allowable Costs"]) incurred by a Grantee and the value of in-kind contributions made by the Grantee or third parties in accomplishing the objectives of this Grant during the program period.

**1L.3.** The restrictions on the use of A.I.D. funds provided hereunder, as set forth in this Grant, do not apply to cost-sharing (matching) or other contributions unless such restrictions are stated in the applicable federal cost principles and/or imposed by the source of such cost-sharing (matching) funds or other contributions.

**ATTACHMENT 2**

**PROGRAM DESCRIPTION**

The Grantee's proposal entitled "Conservation and Sustainable Resource Use in the Colombian Choco" and dated December 22, 1991 is attached hereto as the Program Description (Attachment 2) and is made a part of this Grant.



CONSERVATION AND SUSTAINABLE RESOURCE USE  
IN THE COLOMBIAN CHOCO

Proposal to the U.S. Agency for International Development  
Matching Grants Program

Submitted by  
World Wildlife Fund

Contact Person:

Mary Louise Higgins  
Senior Program Officer for the Northern Andes  
1250 - 24th Street N.W.  
Washington D.C. 20037  
(202) 778-9759  
(202) 293-9211 Fax

Proposed Starting Date: March 1, 1992  
Proposed Ending Date: February 28, 1992  
Amount of Money Requested: \$147,338  
Date Submitted: December 22, 1991

World Wildlife Fund  
1250 Twenty-Fourth St., NW Washington, DC 20037-1175 USA  
Tel: (202) 293-4800 Telex: 64505 PANDA FAX: (202) 293-9211  
*Incorporating The Conservation Foundation. Affiliated with World Wide Fund for Nature.*



## Executive Summary

### I. Introduction

In December 1985, WWF sponsored a workshop in Bogotá aimed at reviewing background biological information and identifying priorities for conservation in the Colombian Chocó region. The workshop identified twenty-one priority areas for conservation, many of which are under considerable threat from human encroachment and nonsustainable resource use. Since 1986, WWF has been supporting conservation efforts in the Pacific coast or Chocó biogeographic region, and considers it to be among its highest conservation priority for Latin America and the Caribbean based on analyses of biological diversity and threat.

The Chocó biogeographic region stretches from southeastern Panama to northwestern Ecuador, with the most extensive portion found along the Pacific coast of Colombia. The Chocó is defined by three main features. It is a coastal unit separated from the Amazon basin by the Andes mountains. It has extreme climatic conditions (very high rainfall from 4,000-10,000 mm per annum falling on an aseasonal basis). It is characterized and dominated by species-rich tropical wet and pluvial forests.

In addition to being one of the most biologically rich regions in the world, the Chocó is probably one of the most threatened regions in Colombia. First, it is intrinsically vulnerable due to high rainfall, thin soils and steep slopes, particularly in the areas adjacent to the Andes. This ecological fragility has greatly limited the development of agriculture and livestock beyond subsistence practices. While the Chocó has been largely ignored for decades by the Colombian government, it is now being viewed as the next development frontier. In 1985, PLADEICOP presented a regional development plan for the Pacific coast of Colombia. Development opportunities are considered to be numerous given the wealth of natural resources.

### Proposed Program for USAID Support

WWF's program in Colombia has set priorities for conservation based on analyses of the biological significance, level (degree and imminence) of threat, and opportunities. Following from this analysis, field projects have been supported to address the immediate threats facing high priority areas. What has been lacking in all of these efforts is: 1) a detailed analysis of priority regions that would direct selection of future conservation efforts; and 2) a monitoring tool to enable assessing the impact of our conservation dollars. This shortcoming applies to each of the project areas that WWF has supported in the Colombian Chocó.

The proposed project focuses on area-specific conservation activities which generally aim to promote conservation by addressing basic human needs and economic development. To address the absence of baseline data needed for planning and monitoring, the design also includes a detailed assessment of project regions for forest cover and condition to assist in fine-tuning the selection of future areas, and to establish baseline data for monitoring and evaluation. Within specific projects, policy issues are being examined related to land tenure and titling for the black riverine communities and forest management. The general objectives over the next year are:

- A. Development of a regional diagnostic of project sites examining forest cover and condition of vegetation through an analysis of satellite imagery and ground truthing in full collaboration with local communities.
- B. Development of alternative options for resource management and income generation that are less destructive environmentally (e.g. exploration of potentially useful species, improved management practices of organic banana production for export, and natural forest management for wood and nonwood forest products).
- C. Further consolidation of three field initiatives in the central and central northern Chocó through strengthened collaboration with local communities, environmental education and training.

In addition to the above three objectives, and over the next 3-5 years, the program in the Chocó will aim to undertake the following.

- D. Identification of new areas based on an analysis of biological importance, threat and opportunity as determined through satellite imagery analysis and ground truthing studies.
- E. Examination in greater detail of high priority sites identified in the 1985 Bogotá workshop and their associated biological richness focusing on butterfly diversity as biological indicators and potentially useful plant and animal species as determined by users (Indian and Black populations) as economic indicators.

## I. Introduction

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### A. Chocó: Context and Conservation Threats

#### 1. Geography

The Chocó biogeographic region stretches from southeastern Panama to northwestern Ecuador, with the most extensive portion found along the Pacific coast of Colombia covering a total of 95,000 Km<sup>2</sup>, of which 65,000 Km<sup>2</sup> is below 500 meters elevation. The Chocó is defined by three main features. First, it is a coastal unit separated from the Amazon basin by the Andes mountains, which rise over 3,000 meters along most of the eastern side of the Chocó and influence local climate patterns. Second, it has extreme climatic conditions (very high rainfall from 4,000-10,000 mm per annum falling on an aseasonal basis). Third, it is characterized and dominated by species-rich tropical wet and pluvial forests.<sup>1</sup>

#### 2. Ecosystems and Biodiversity

Rainfall varies both latitudinally and altitudinally. Maximum rainfall occurs in the central Chocó (5-6 ), with levels exceeding 9000 mm per year. Further north and south, rainfall levels decline to an average of 2500 mm per year, and fall on a more seasonal basis. Rainfall in the north is highest in the lowlands, while in the south, levels are higher at mid-elevations than in the lowlands.

Accordingly, the Chocó vegetation reflects these local and regional differences in climate with 11 different vegetation types identified for the region, ranging from open marsh and mangrove to dry forests and sub-páramo. Tropical pluvial and tropical rain forest life zones dominate the region, comprising nearly 50 percent of the existing vegetation cover. These forests receive more than 8000 mm of rainfall per year and are found almost exclusively in the Chocó biogeographic zone. Gentry (1986) considers these forests to be the most floristically species-rich rain forests in the world.<sup>2</sup> These same forests also tend to be found on clay and sand soils that are generally poor in nutrients, acidic and often with a high aluminum content.

The special biogeographic, climatic and historical events described above have led to the evolution of a very unique and diverse set of ecosystems, habitats and species. The long separation of the Chocó and the Amazon has resulted in the evolution of a large number of species and taxa found nowhere else. For example, as much as 20 percent (1500 species) of the flora of the Department of Chocó may be endemic to the region. High levels of endemism have also been found for birds, where 100 taxa may be found only in the Chocó, 56 taxa of amphibians and 47 percent of the reptile species. The Chocó endemics are also special in that they tend to have relatively restricted geographic ranges along a north-south and altitudinal gradient. For example, endemic birds within Colombia are highly localized, sometimes known from single localities.<sup>3</sup> Several bird distributions are segregated along altitudinal gradients.<sup>4</sup>

### 3. Socioeconomic Context

Besides its biological richness, the Chocó is home to an array of ethnic and cultural groups. There are approximately 1 million inhabitants in the Chocó region, 93 percent of which are Afroamericans, 4 percent indigenous peoples from the Embera, Waunana, Kunas and Awá-Kwaikeres groups, and 3 percent mestizos.<sup>5</sup> The Blacks were brought in as slaves and colonized the Chocó following liberation in the 1820's or as escapees much earlier. About fifty percent of the population lives in six urban centers: Buenaventura, Tumaca, Quibdó, Turbo, Guapi and Istmina. The other half lives dispersed along rivers and along the coast. Most of the indigenous peoples live within 76 resguardos that cover a total of 1.1 million hectares.

The predominance of Black and Indigenous communities presents a very different and unique cultural context from that in the Andes and Interandean valleys. Cultural norms differ and organizational structures are less well-defined, and organizational capacity is limited. Thus, different approaches are required for promoting community involvement in improved resource management and conservation programs. Most development initiatives have failed in the region, perhaps attributable to the lack of attention given to these cultural differences.

The isolation of the Chocó has also influenced considerably the cultural and economic development of the Pacific region of Colombia. Few roads penetrate the region. The first railroad began to run in the 1930s between Cali and Buenaventura, and the first road connecting Cali and Buenaventura was completed in the 1950s. There still is no north-south road network. The lack of communication channels has greatly limited the development of infrastructure and commercial activities.

Historically, the economic base of the Chocó has been

extractive in nature. The Indian population relies mostly on hunting and gathering. More important has been the extraction of mineral and forest resources. During the colonial period, Colombia's prime export, gold, accounted for 17-39 percent of the world production. Gold mining continued into the early part of the 20th century, when it dropped to 5 percent of the world production.<sup>6</sup>

The emphasis on extractive activities continues today. Mining has made a comeback in the Chocó and is attracting large numbers of people from other regions of the country, with an estimated 60 percent of the population earning at least some portion of its income from goldmining.<sup>7</sup> Forest resources provide 55 percent of the nation's lumber while they only comprise 16 percent of the nation's forests. Forest clearing is now quite extensive in the Chocó, totalling approximately 2 million hectares since 1959. At this rate, it has been estimated that by the end of 1991, only one-half or 4.8 million hectares of the original forest cover will be remaining. Exact figures on deforestation unfortunately, are not available.

#### 4. Conservation Threats

In addition to being one of the most biologically rich region of the world, the Chocó is probably one of the most threatened regions in Colombia. First, it is intrinsically vulnerable due to high rainfall, thin soils and steep slopes, particularly in the areas adjacent to the Andes. This ecological fragility has greatly limited the development of agriculture and livestock beyond subsistence practices. Nevertheless, agricultural expansion continues, particularly in Urabá in the north and Nariño in the south.

While the Chocó has been largely ignored for decades by the Colombian government, it is now being viewed as the next development frontier. In 1985, PLADEICOP presented a regional development plan for the Pacific coast of Colombia.<sup>8</sup> Development opportunities are considered to be numerous given the wealth of natural resources. Fisheries, for example may offer an important income source for the local populations, but very little information is available about fish populations and the management of marine resources. Currently exploitation of marine resources is limited largely to artesanal harvesting.

The effects of mining are on the hydrological and biological resources are particularly serious in the Chocó. On a daily basis, approximately 4,400 ton of solids are eroded into waterways which results in a decline of available oxygen content. Where mercury is used in gold mining, mercury levels found in fish exceed 100 times the allowable level for human consumption, and fish are a primary source of protein intake in the region. Regionally, approximately 1,000 hectares per year are degraded

from mining activities.

A number of roads and infrastructure projects are planned or underway to increase access to Pacific coast ports. The Pan-Am Highway may be extended, and it would run through Los Katíos and Utría Sound national parks. Under the Plan Nacional de Centrales Hidroeléctricas, projects contemplated could generate 5,500 megawatts (megavattios). While this would meet all of the energy needs of the interior of the country, it would threaten and destroy important biological resources. Additional hydroelectric projects have been proposed for the Bajo Anchicayá, an area of considerable importance in the buffer zone of Los Farallones de Cali National Park.

Most of these development schemes are formulated in Bogotá or in one of the five departmental capitals (Chocó; Quibdó, Antioquia; Medellín, Nariño; Pasto, Cauca; Popayán, and Valle; Cali) that control the region politically, far from the areas where the projects are to be implemented. With the exception of Quibdó, each of departmental capitals is located outside of the biogeographic region. Thus, greater participation of the Chocó rural and semi-rural populations must be encouraged, and environmental protection and conservation must be integrated into the economic development planning process.

Despite the wealth of natural resources in the region, the Pacific coast remains one of the poorest regions of Colombia. Sixty percent of the population lives in absolute poverty, and basic services go unsatisfied for about 83 percent of the population. The literacy rate reaches 37 percent compared to 11 percent nationally, and unemployment is on the order of 43 percent, with 59 percent of the population receiving a monthly income less than the legal minimum. The incidence of certain diseases such as malaria is very high and endemic throughout most of the coast. The overall mortality rate is 8 percent and the infant mortality rate is approximately 130 per 1000 live births compared to 41 per 1000 live births nationally.<sup>9</sup>

#### 4. Land Tenure and Protection Status

Since 1968, nine national parks have been established in the Chocó, totaling 400,000 ha (see Appendix A). Other areas have been set aside for watershed protection, forestry or research. They are administered largely by INDERENA. In some cases the regional development corporations are responsible for management where the park area overlaps with watersheds important for hydroelectricity production. In some cases, NGOs are involved directly (e.g. Utría Sound National Park) or peripherally in park management.

The present park system does not fully overlap with the zones of biological endemism that have been identified by

scientists, and few of the parks remain free of interventions.<sup>10</sup> In addition, most of the established parks do not contain a significant proportion of habitat and/or elevational gradients within their boundaries, and thus do not cover the whole diversity gradient.

Historically, the indigenous populations of the Chocó have enjoyed a greater level of protection of territorial lands compared to the Blacks. Several laws (including Ley de Resguardos and the Agrarian Reform Laws of 1961 and 1988) and most recently the new constitution protect indigenous peoples lands. Article 67 of the new constitution provides that indigenous territories be considered fully protected, that they cannot be seized, claimed nor transferred and that this right is not timebound. As of 1991, 76 resguardos covering about 1.1 million hectares have been established in the Chocó. Some of these territories overlap with existing national parks (Utría Sound National Park), which implies the need for a different approach to the management of these park lands.

Of particular significance to the Black communities, is the fact that the new constitution also treats the ownership of their lands. Article 55 stipulates that riverine lands traditionally occupied by black communities in the Pacific watershed may be eligible for communal title designation. The national government is in the process of developing and introducing regulations to direct this process during the next two years which is the period during which this article applies. Black communities are also meeting and considering the significance of this legal opportunity for the ownership and management of their lands. This presents an important opportunity for creating multiple use conservation units and community reserves that could extend the protection of existing units (e.g. Los Farallones de Cali National Park and Utría Sound National Park), and could offer protection to as yet unprotected but important areas such as Bahía Málaga.

#### B. WWF's Conservation Program in Colombia

WWF's support for conservation in Colombia dates back to 1964 with support for conservation of Los Farallones de Cali, a Pacific wet forest area that was decreed a national park in 1968, and an area that continues to be a very high priority site and focus of WWF support in Colombia. The program and conservation support have evolved considerably in the last 20 years from an emphasis largely on protected areas management and species protection to one of integrated conservation and development programs within specific biogeographic priority zones.

During 1991, WWF has developed a more complete and focused strategic plan for the conservation program in Colombia, a summary of which has been included with this proposal (Appendix

B). For the next 3-5 years, WWF will seek to consolidate its efforts in three biogeographic regions, the Chocó, the remnant high Andean Forests and the Colombian Amazon. Parallel and complementary to these field priorities, we have defined six strategic objectives that we consider to be essential for effective conservation in Colombia. These include:

- a. organizational development and strengthening;
- b. improved management of priority protected areas and their associated buffer zones through sustainable use of natural resources;
- c. integration of conservation and development in national and regional development policies;
- d. increased environmental awareness and strengthened environmental education;
- e. more effective environmental legislation and policies; and
- f. more stable and sustainable sources of financial support that may be made possible through innovative conservation finance mechanisms.

At a regional level, we are taking a broader-based approach and are proposing to establish baseline information to permit more effective monitoring and evaluation of project activities, with a primary focus on the integration of conservation with economic development. This is based on the general assumption that conservation is not possible without at the same time considering human needs and the need for sustainable economic development. Each of the project activities being proposed reflects this basic premise.

WWF has been working with a variety of nongovernmental organizations, each of which is trying to address conservation needs through economic development. Each organization is attempting either to address needs of local communities or to promote an integrated approach to regional planning by working with local and national level decisionmakers. WWF is also expanding its initiatives beyond local level field activities. We are exploring with the Department of National Planning the possibility of establishing a conservation trust fund which would be part of a government-sponsored private trust fund for the environment.

## II. Project Objectives

WWF's program in Colombia has set priorities for conservation based on analyses of the biological significance, level (degree and imminence) of threat, and opportunities. Following from this analysis, field projects have been supported to address the immediate threats facing high priority areas. What has been lacking in all of these project activities is: 1) a detailed analysis of priority regions that would direct

selection of future conservation efforts; and 2) a monitoring tool to enable assessing the impact of our conservation dollars. This shortcoming applies to each of the project areas that WWF has supported in the Colombian Chocó.

The proposed project focuses on area-specific conservation which generally aim to promote conservation by addressing basic human needs and economic development. To address the absence of baseline data needed for planning and monitoring, the design also includes a detailed assessment of project regions for forest cover and condition to assist in fine-tuning the selection of future areas, and to establish baseline data for monitoring and evaluation. Within specific projects, policy issues are being examined related to land tenure and titling for the Black riverine communities and forest management. The general objectives over the next year are:

- A. Development of a regional diagnostic of project sites (described below under Sections III. B-D) examining forest cover and condition of vegetation through an analysis of satellite imagery and ground truthing to be conducted in full collaboration with local communities.
- B. Development of alternative options for resource management and income generation that are less destructive environmentally (e.g. exploration of potentially useful species, improved management practices of organic banana production for export, and natural forest management for wood and nonwood forest products).
- C. Further consolidation of three field initiatives in the central and central northern Chocó through strengthened collaboration with local communities, environmental education and training.

In addition to the above three objectives, and over the next 3-5 years, the program in the Chocó will aim to undertake the following.

- D. Identification of new areas based on an analysis of biological importance, threat and opportunity as determined through satellite imagery analysis and ground truthing studies.
- E. Examination in greater detail of high priority sites and their associated biological richness focusing on butterfly diversity as biological indicators and potentially useful plant species as determined by users (Indian and Black populations) as economic indicators.

### III. Projects Sites and Project Activities

The need for diagnostics and baseline information gathering is evident in the histories of each of the WWF supported projects in the Colombian Chocó.

In 1982, WWF and the Colombian Fundación para la Educación Superior (FES) responded to an opportunity to save a small piece of land destined for logging. This site, La Planada Nature Reserve, has become an important center for training, environmental education and research. La Planada sits within the binational Awá Territory and is one of a few remnants of Andean/Chocó forest in the southwest of Colombia. To date, there has been no base of information established for the region that would permit consistent monitoring and evaluation of project impacts, or that can guide the selection of future conservation initiatives in the region.

In 1989 and 1990, two field initiatives were undertaken further north, close to Buenaventura. In the first project (1987), located in the watershed of the Río Tatabro-Bajo Anchicayá, Fundación Herencia Verde's initial emphasis was placed on establishing a consistent presence with the Black communities and immediate identification of improved resource management methods for income generation. As project activities have grown, and with the potential for establishing communal territories for the black communities, the need for a broad regional base of information has become evident to both meet project objectives and guide the expansion of the project.

In 1990, WWF began to work with a Colombian NGO, Cenipacífico in the area of influence of Bahía Málaga. This site was identified in the original 1985 study, and with the completion of a 105 km road connecting the Cali-Buenaventura road with the Bahía Málaga Naval Base, the threats became serious and immediate. The first year's activities established a presence with the community of Juanchaco, the town that is the eventual final destination of the road, and initial studies of the deforestation that has ensued following completion of the road. It has become evident that further planning and monitoring will require a better base of information on the status of the forests and current threats.

In 1987, Utria Sound was declared a national park. The designation of the park, its limits and exact location were determined largely as an exercise on paper, without considering the actual presence of communities and current land uses. For this reason, and an initial focus on research, Fundación Natura has emphasized zonification of the park and its buffer zone as a means of ensuring that the park boundaries minimize conflicts with the local communities. In addition, roads and hydroelectric development are being promoted for the region, which must be monitored carefully to minimize the environmental impacts on these fragile ecosystems. Thus, it is important that the area be carefully mapped to guide development and monitor impact.

#### A. Diagnostics, Monitoring and New Area Identification

Each of the above project sites has underway or is in need of a better base of information on the status of the forest cover, the condition and the presence of communities and their current uses. Since conservation dollars are limited, selection of priorities and monitoring of impact are critical and depend on such information. The field project sites have not been examined in greater detail to determine their conservation status and potential for improved management from a regional perspective. Thus, during the next 18 months, a series of studies will be undertaken to complement the area-specific conservation programs described below in Sections B-D.

WWF will collaborate with Fundación Herencia Verde (FHV) to conduct the proposed research. The baseline information that will be obtained in this project will complement directly three WWF supported projects in the Chocó (La Planada, Bajo Anchicayá-Río Tatabro, and Bahía Málaga), along with three other priority areas identified in the 1985 workshop. The same type of information is being collected for Utría Sound National Park as a component of the project with Fundación Natura (see below).

The objective of this initiative is three-fold and will utilize the following methodologies.

- Using satellite imagery and ground truthing, Fundación Herencia Verde will evaluate vegetation coverage and condition in the Awá Territory, Río Tatabro-Bajo Anchicayá and Bahía Málaga. In the Awá Territory and La Planada, and Bahía Málaga, FHV will work collaboratively with project staff of FES and La Planada and Cenipacífico, respectively, in the development and implementation of the assessments. They will also evaluate three high priority sites, one of which is a feeding site for about 80% of the migratory shorebirds that overwinter or pass through Colombia. The other two sites to be examined in this study are the western slopes down to the coast of Los Farallones de Cali National Park and the region between Río Baudó and Río San Juan.
- The biological diversity of selected sites will be assessed through studies of the abundance and richness of butterfly species as biological indicators, and through assessments of potentially useful species as perceived by the local residents.
- Opportunities for new conservation initiatives will be evaluated by examining land tenure and the potential for the establishment of community management, multiple-use reserves, and the assessment of the status of community organizations and grassroots groups within the regions of the Awá Territory, Río Tatabro-Bajo Anchicayá and Bahía Málaga.

This information will permit more effective monitoring and evaluation of project impacts and will help to define a broader regional approach in each of the project areas. Fundación Herencia Verde will also take advantage of the skills developed in this activity, and apply them to the work being done in Alto Quindio in the Central Andes. Forestry staff from Fundación Herencia Verde has already begun training by visiting (in September 1991) a similar WWF supported project that is underway to identify conservation priorities for Oaxaca State in Mexico.

#### B. Tatabro River-Bajo Anchicayá

**Location and Context:** Located on the western flanks of the Andes, Los Farallones de Cali is one of the largest protected areas in the Chocó, covering a total of 150,000 ha. The park extends over a wide range of elevations (200-4100 m) from the Pacific lowlands up to and over the Andes into the Cauca Valley near the city of Cali and protects important watersheds that serve as the source of drinking water for Cali. About 70 percent of the park is forested which is in part attributable to its inaccessibility; the central part of the park contains steep slopes and dissected topography.

On the northwestern side of Los Farallones, the Anchicayá Reserve protects the watershed of two important hydroelectric facilities, Alto and Bajo Anchicayá. Los Farallones de Cali and the Bajo Anchicayá are considered to be among the highest biological priorities based on existing faunal surveys (e.g. birds and butterflies).

The area is under considerable threat from colonization of whites and mestizos. It is bordered on two sides by the old and new Cali-Buenaventura roads that link the Cauca Valley with the major Pacific coast port in Colombia, and an important development pole along the Pacific coast (contains about 40 percent of the total Pacific population). The greatest threats facing the region however, have come from forest exploitation primarily to supply the pulp mills of Cartón de Colombia, the major paper producer in Colombia, and gold mining operations with associated negative social and environmental impacts (e.g. soil erosion, siltation, loss of forest cover, disruption of the social fabric).

**Project Activities:** Recognizing the severity of the conservation threat facing the region, and the biological importance, Fundación Herencia Verde (FHV) developed a project focused on community participation in conservation and sustainable resource use in 1989. At the end of its second year, the project has progressed exceedingly well.

The initial focus of the project was to establish a solid and consistent presence in the region, collect baseline

information on land use patterns of 2-4 black communities, socioeconomic conditions, and biological diversity, and to identify options for improved resource management with the local black communities. FHV constructed a small administration center which is managed by an important community leader, and both he and his wife have participated fully in the agricultural management activities. FHV with the assistance of an agronomist began initially to explore the commercialization of existing crops for both the national and international market. The first option has been organic production of 'bananitos' (small finger bananas). A fruit export company in Bogotá has donated funds to support the agronomist working with the project and is exploring export potential. An important approach being taken by FHV is that the cooperative members are involved in all of the processes. FHV provides technical assistance but is attempting to avoid any role as an intermediary. After about 1.5 years, production and management has improved and progress is being made on the commercialization.

Objectives and future directions: The major objectives and methodologies and approaches of the project during the next 3 years are to:

- 1) strengthen the ability of the communities to manage their own resources;
- 2) establish special management zones with the communities that would extend the protection and conservation of Los Farallones de Cali National Park, the identification of which will be made through the diagnostics described above;
- 3) develop alternative management systems that both build on and improve existing production systems (e.g. agriculture), and that explore new options (e.g. production of ornamentals, butterfly ranching and forest management);
- 4) promote environmental education and consciousness-raising with the local communities; and
- 5) mitigate the negative impacts of mining in the area by facilitating community action and control, education, and policy level initiatives with the government agencies controlling mining activities.

Viewing community participation and organization to be essential to the sustainability of any conservation efforts, FHV is strengthening its own internal ability to address social and organizational issues and those within the project. A social anthropologist and social worker will be working with the communities in the region that will begin to meet several of the above objectives. First, they are engaged in a dialogue with the local black communities in the Bajo Anchicayá region to consider the implications of the new constitution and the potential establishment of communal territories. Second, the social workers will work increasingly with community organizations to strengthen their ability to manage the bananito production

cooperative and negotiations with the export company.

The development of alternative production systems is a long term process that aims in the short term to improve existing systems. Management of bananito for market production and other crops for subsistence will meet this objective. Second, FHV is developing a center for applied research that is located approximately one-half km upstream from the administration center that FHV built last year. The land and existing infrastructure were donated and FHV are in the process of improving the facility. The facility is being designed to permit phased construction in order to respond to the needs as they arise, as well as the capacity of and resources available for the project. FHV is establishing research priorities, with the initial focus on developing commercially viable options to the current resource use practices. FHV will be conducting a feasibility study for butterfly ranching and ornamental production. With assistance from WWF's Tropical Forestry Program, FHV also will be examining the potential for developing pilot natural forest management programs.

Mining activities are currently the most intractable problem faced in the region. FHV is working with the community and INDERENA to address the absence of controls and environmental management among existing operators in the region.

The project staff and community are collaborating with a variety of other governmental and nongovernmental entities involved in the area. This includes some of the following: the Municipal Association of Agriculturists, the national natural resource management agency (INDERENA), the Secretaries for Health and Agriculture of the Department of Valle, CIPAV, Fundación Restrepo Barco, Kent University in England, the Institute for a Better Campesino (IMCA), and the national agrarian reform agency (INCORA).

### C. Bahía Málaga

**Location and Context:** Bahía Málaga is located in the central Chocó just south of the San Juan River delta and slightly north and east of the city of Buenaventura. The area of influence of the Bay of Málaga covers approximately 200,000 hectares of terrestrial and marine ecosystems. During the reproductive season, whale species visit this site, and the mangrove forests are critical breeding grounds for important fish, crustacean and shellfish species. Tropical wet and pluvial forests dominate the region.

Until very recently, the area was relatively inaccessible except by waterways. With the construction of a road into the naval base that sits at the entrance of the bay, the pressures have reached critical proportions. The road extends for 105 km

from the main Cali-Buenaventura road to the naval base stopping 18 km short of the town of Juanchaco that sits along the coast. With the completion of the road, woodcutters moved rapidly into the area from Buenaventura and other parts of Colombia, setting up frame huts and tarps to set about on their harvesting activities. The situation is very dynamic, changes daily, and is influenced by a variety of external factors.

Cartón de Colombia, one of the largest paper and carton manufacturers, has a forest concession of 60,000 hectares in the area that has been under their management for the past 17 years. They are harvesting tropical hardwoods in large part for pulp production. In addition to the harvest from concessions, intermediaries purchase logs harvested by individuals that are eventually sold to Cartón de Colombia. The presence of Cartón de Colombia provides the market for individual loggers.

In addition to the logging activities along the Bahía Málaga road, the regional development corporation proposed to build another road to connect with the town of Bahía Malagita which sits to the north of the Bahía Málaga road along the San Juan River. This would open access to the upper San Juan river basin and its associated forests.

**Project Activities:** Management and development of a plan for the use of natural resources in Bahía Málaga represents the work of an interinstitutional agreement between Cenipacífico, the Armada Nacional, the Universidad del Valle, the Corporación Regional del Valle de Cauca (CVC)/Pladeicop, and the Fundación para la Educación Superior (FES). Cenipacífico, a research and conservation organization based in Cali, is spearheading the efforts in the region. Within the plan, Cenipacífico has defined three main program areas: research; community development; and environmental education.

Cenipacífico prepared the environmental impact statement for the construction of the road. Based on this study, and the subsequent threats following completion of the road, Cenipacífico developed a series of initiatives that focus on two fronts: 1) establishing a field presence in three communities in the region; and 2) policy negotiations regarding protection and conservation of the region.

In the first year, Cenipacífico achieved some important objectives by building alliances with both communities and decision-makers. In Juanchaco, they helped to establish a community center that can be used for environmental education activities. The environmental education specialist working with the project has trained a member of the community to work with the community center on education activities. A series of exhibits was completed for the opening of the center that illustrate the importance of marine and coastal ecosystems.

Juanchaco is a popular site for tourists, and educational programs will highlight the linkages between conservation and tourism.

At the policy level, Cenipacifico has been instrumental in halting the construction of the Bahía Málaga-Bahía Malagita road, thus limiting access to the region to river traffic. In addition, Cenipacifico, among others, has been pressuring Cartón de Colombia to close down its concession in the Pacific. While Cartón de Colombia claims to practice sustainable forest management, they are unable to protect selectively logged areas from invading colonists, and the logic and economic sense of harvesting tropical wet and pluvial forests for pulp production is questionable.

**Objectives and future directions:** The first year of Cenipacifico's efforts focused on addressing immediate threats to conservation in the region. Having made some progress with both field projects and policy initiatives, Cenipacifico will aim to develop a more comprehensive regional resource management plan during 1992. This will include an analysis of the appropriate protection status for the region, critical resource management needs, and institutional opportunities for carrying out a resource management plan for the region. The satellite imagery data and ground truthing to be conducted by Fundación Herencia Verde will support this planning process. The planning efforts will be undertaken through a series of workshops that will draw on each of the institutions that has been involved in the region, along with representatives from local communities. A series of workshops with diverse participation will result in a greater likelihood that broad-based support for the plan and recommendations will be developed.

Cenipacifico will continue to work with the local communities of Juanchaco, Triana and San Cipriano on environmental education and sustainable resource use. In Juanchaco, the orientation will be towards the linkages of conservation for more profitable tourism, and environmental education for tourists. A recycling and trash program will be one of the first education efforts. In Triana and San Cipriano, Cenipacifico needs to establish more consistent and continuous technical assistance for the development of aquaculture programs to generate additional income.

This next year will be an important one for defining future directions and goals, and the strategy for getting there. Within this planning process, Cenipacifico will further analyze the feasibility of establishing a marine applied research station. There is a critical need for a Pacific research station to enable collection of important data for fisheries management, and interest exists at the national and regional government level. WWF's Andes team and Tropical Forestry Program will provide the

necessary technical assistance for strategic planning and feasibility studies for natural forest management and forest policy analyses.

#### D. Utria National Park

**Location and Context:** Utria Sound National Park is located in northwestern Colombia in the Department of Chocó. The park was legally decreed in 1987 to cover a total area of 54,300 hectares, of which approximately 10,000 are coastal and 44,300 are terrestrial. The Park sits within the Baudó range and includes elevational changes from sea level to 1800 meters. It is an important migration site for whales from both the northern and southern hemispheres, including humpbacks, and over 200 species of birds have already been identified. The Park protects four diverse ecosystems: mangroves, estuaries, coral reefs and tropical wet and pluvial forests.

Seventy-five percent of the Park overlaps with three indigenous reserves of the Emberá ethnic group. An agreement that was signed in 1990 between OREWA, an indian organization that represents the two main indigenous groups living in the Colombian Chocó, and INDERENA, lists a total of 13 resguardos in the park and surrounding the park on part of its eastern and southern flanks, with a total of approximately 1,500 indians. To the north is the community of El Valle and to the south are smaller black communities, with a total population of about 25,000 people. Further south is Nuquí, the proposed site for a new Pacific coast port, which would be linked by road to Pereira in the Andean Department of Risaralda, an important coffee-growing zone of Colombia.

The region is generally very politicized and suffers from problems of economic and social marginality. The economic and political center is based far from Bahía Solano in Quibdó and politicians take advantage of the needs in the municipalities to garner political support. They make promises but rarely follow through. The closest town to Utria Sound, El Valle, is mostly black, poor, and has suffered from this political manipulation. For example, electricity, or lack thereof, has been a major point of contention between the Park and the town for some time, and stems from a proposal to construct a small hydroelectric facility on the Mutatá River, to the east and south of the park. The project has been on the books for some years, however it has never moved forward due to lack of funding, and more recently, it has been considered unfeasible due to changing demographics of the region, and the potential of the plant to generate sufficient electricity to meet the changing needs. Politicians used the proposal during elections to generate support, but the needs go unmet, and in the case of Utria, the Park has been blamed for the lack of follow-through.

Other development threats in the region include the completion of the Pereira-Nuqui Road and the Pan-Am Highway. While Nuqui is located 12 km south of the Park, there are additional plans to connect Nuqui with Bahía Solano to the north of the Park upon completion of the Pereira-Nuqui Road.

**Project Activities:** WWF is working with Fundación Natura, a Colombian conservation NGO, and INDERENA, the state agency for natural resources in Colombia for the Consolidation and Management of Utria Sound National Park. Three main areas are being supported: protection; community participation; and scientific research in and around the park.

Upon establishment of the Park, Fundación Natura signed an agreement with INDERENA for the joint management of the area, along with the development of a biological and socioeconomic research program to serve as a tool for gathering basic information for the Park's management plan. The agreement between FN and INDERENA has been modified over the years to reflect changing demands and challenges. In addition, FN has signed an agreement with the federation representing indigenous communities in the region, OREWA, to implement joint management efforts in the areas of overlap between the Park and the indigenous reserves.

Community Programs: An anthropologist, Dolly Palacio, based in Bogotá and field social worker, Carmen Lucia Gomez, based in El Valle are in charge of the community programs. The social community component of the project currently involves five or six different groups: Perlas del Pacifico; PROMESA; ASPROVAL; Padres de Familia; Grupo Ecológico; and a group of senior citizens. FN is focusing on environmental education activities and improved agricultural production, and the activities range from special events, workshops, talks and presentations to generating oral histories.

More recently, FN has started to focus on aspects of improved agricultural production through a small group made up of about 15 agriculturalists called ASPROVAL (Asociación Progresista del Valle). In this case, they have contacted an agronomist, Luis Emilio Arenas to provide technical assistance to ASPROVAL on appropriate technologies for agricultural production in the Costa Pacifica. He spends one week per month, and although he does not live in the region, he originates there, and is thus well-received and cognizant of the special conditions in the region. The Borrojó, a fruit native to the Pacific, shows promise as a tree crop with some folks in Bahía Solano already producing and selling jams and marmalades from the Borrojó fruit. It is also a very popular fruit juice.

FN is also working with local fishermen on tourism. WWF has provided support for the project director to attend the

attend the University of Rhode Island Coastal Resources Management Course in June, and this information and training opportunity should greatly strengthen their work with fisheries and tourism. This is a very popular area for Colombian tourists, particularly during Easter week.

Scientific Research: The scientific research program is well underway. Student researchers are present in the park and the first year of a study with local indigenous communities on their use of wildlife resources had been completed, with support from Wildlife Conservation International. It is valuable that the research program is in part focusing on resources being used such as fish and wildlife. Future consideration will be given to conducting an ethnobotany study instead of a more complete flora of Utria, as it may be more useful and acceptable at this point to the Indian communities.

Objectives and future directions: During the next year, the project will maintain the same programmatic directions of:

- socioeconomic and biological research to identify needs, misuses, potential and lost traditional uses of natural resources;
- promotion of participatory processes with communities and local organizations for joint management of natural resources;
- promotion of discussion processes between communities, the Park managers and nongovernmental and other governmental entities towards integrated conservation of Utria Sound National Park; and
- joint supervision of the implementation of resources management and protection plans with INDERENA and the local communities.

Nine major objectives have been identified for the next 1-3 year period that will contribute to the overriding goal of developing sustainable production alternatives in the tropical forests and marine ecosystems in and surrounding Utria Sound National Park.

1. Complete construction of the biological station and consolidate its operations through appropriate staffing and training.
2. Continue the collection of baseline data and monitoring for coral reef growth, climate, fauna and flora commonly used by the local species.
3. Through demonstration plots and small scale experimentation, alternative agricultural production systems will be developed.
4. Provide ongoing technical support to local communities.
5. Evaluate current and potential artesanal fishing practices in El Valle and Jurubidá villages along with market

- perspectives on the context of sustainable use of fish resources.
6. Continue to implement a faunal supply and demand study in collaboration with indigenous communities.
  7. From the faunal supply and demand study, develop with OREWA plans and policies for more sustainable use.
  8. Evaluate marine resource potential, abundance, seasonal variations (fish, mollusks, crustaceans) associated with physical, chemical and climatic patterns.
  9. Implement an economic model which will promote recovery of opportunity costs of marine turtle exploitation, and reduce harvesting pressures.

#### IV. Colombian Partners

WWF's conservation programs are based on partnerships with several local Colombian organizations. It is a partnership relationship that is based not only on financial support, but also incorporates technical assistance, information and training. WWF works closely with its Colombian partners throughout the project cycle from project design and implementation to monitoring and evaluation. We also may work with local groups on organizational development issues by providing technical assistance and/or training, with the belief that strong, self-reliant conservation organizations are the backbone of effective conservation. Thus, we are committed not only to the conservation activities but to the organizations as they represent the conservation movement of Colombia today and into the future.

##### A. Fundación Herencia Verde

Fundación Herencia Verde is a membership environmental and conservation organization established in 1983 in Cali, that aims to integrate conservation of natural resources with meeting human needs and economic development. To meet this mission, their programs use environmental education, conservation of wildlands through management of private reserves, sustainable development and research on sustainable resource management, (agroecology, silviculture and forestry), and alternative resource use. The field programs of Herencia Verde focus on two areas of particular biological and economic importance, the high Andean forests of the Central Cordillera of the Colombian Andes, and the Pacific Choco.

It is composed of a diverse group of professionals with practical experience in resource management and community participation. The day to day operations of field programs are managed by a group of 26 individuals, 15 of which are professionals, one technician, two secretaries and eight field workers. They have received the support of a number of

international (e.g. WWF, Conservation International and Wildlife Conservation International) and national institutions, both public and private, and are working collaboratively with local government and nongovernmental entities in both the Pacific coast and in the Central Andes.

#### B. Cenipacífico

Cenipacífico is a nonprofit organization established in 1981 in Cali. It is a nongovernmental entity with representation from NGO and governmental bodies that include the Regional Development Corporation of the Cauca Valley, the Fundación para la Educación Superior (FES), the Colombian Commission for Oceanography, the Universities of the Valle and Cauca, the Fundación para el Desarrollo Integral del Valle and Colciencias (Colombia's equivalent to the National Science Foundation).

Cenipacífico's primary objective is to promote science and technology that will result in the protection and better management of marine and coastal resources of the Colombian Pacific. Cenipacífico has three main program areas that include: administration of offices in Buenaventura and Cali and a research station for the Bay of Málaga; applied research of marine and coastal ecosystems; and community development which includes environmental education. Cenipacífico has received support from a variety of local sources including the Fundación para la Educación Superior and the regional development corporation.

#### C. Fundación Natura

Fundación Natura is a nonprofit, nongovernmental conservation organization based in Bogotá, Colombia. Fundación Natura has grown exponentially in its seven years, and has developed an ambitious set of field initiatives while participating in national level environmental policy concerns. All of its efforts are directed towards the preservation of biological diversity in Colombia with an emphasis on human well-being.

Fundación Natura maintains a core staff of professionals in its Bogotá office that direct the field operations, and manage policy and legislative issues, fundraising and outreach. They have maintained a small research and environmental education center close to Bogotá since 1985 when the Fundación was established. Their other major area-specific conservation project is Utria Sound National Park. Other project activities include management of the Conservation Data Center and the Parks in Peril Program, both in collaboration with The Nature Conservancy. Beyond WWF, the Fundación has successfully garnered the support of a number of international donors including Wildlife Conservation International, Conservation International, The Noyes Foundation, and The MacArthur

Foundation. For the future, they aim to strengthen the local base of support from national sources, and have initiated a series of fundraising strategies.

#### D. Fundación para la Educación Superior and La Planada

The Fundación para la Educación Superior (FES) is a private, nonprofit entity established in 1964, to promote higher education and socially relevant research in the Universidad del Valle. FES has broadened its initial educational mandate to also promote the social development of Colombia by supporting educational, scientific and cultural programs that contribute to improve the quality of life of the disadvantaged. FES earns income by operating as a financial institution investing its net earnings into social programs. FES's programs have expanded to all regions of Colombia and are concentrated in four priority areas, one of which is Environment and Natural Resources.

In May of 1983, FES and WWF-US signed an interinstitutional agreement which established the guidelines for the management and development of La Planada as a nature reserve. The Reserve and its facilities are the property of FES, and are operated as part of FES's Environmental Sector, under the direction of the Director of the Environmental Section. An Administrator and technical staff are based at La Planada, and handle all day to day operations and implementation of programs. The Reserve has been supported by WWF since its inception in 1982.

Other regional entities are involved in the Awá Territory and are integral to all project initiatives. This includes the Awá Federation, Corponariño (the regional development corporation of Nariño), and UNIPA, the Unidad Indígena del Plan Awá, who is just beginning to organize its efforts with the Awá communities in the region.

#### V. Opportunities and Constraints

In July 1991, Colombia approved a new constitution which for the first time in Colombian history, makes specific reference to environmental protection. This opens a number of new opportunities for strengthening conservation and environmental protection. The new constitution contemplates greater popular participation towards environmental protection (Articles 81-82), and creates the opportunity to establish a national environmental policy. Of importance for WWF's conservation work in the Pacific, a transient article (Article 55) is included in the new constitution that will permit the establishment of communal territories of the Black riverine communities that have traditionally used these lands. This has potential for greater community involvement of lands management in the Colombian Chocó.

A second important opportunity is that the Colombian government is in the final stages of establishing a National Fund for the Environment. This would be a privately managed trust fund with a board of directors comprised of governmental and nongovernmental entities. The establishment of a trust fund mechanism can be a means by which international and national funds for the environment are managed for long term yields to support environmental protection and conservation. The interest from such an account would support conservation at a pace that corresponds to the absorptive capacity of institutions and community groups. WWF is exploring the possibility of establishing a subaccount for the trust that would focus on support to NGOs.

A third important opportunity is given by the growing international interest that has been expressed in the Chocó. Earlier this year, the Global Environmental Facility (GEF) of the World Bank/UNDP designated the Chocó the focus of a technical cooperation grant. The project is in the design phase, but should be able to build on the progress of the activities that are already underway both in Ecuador (UTEPA and the Awá Territory) and Colombia.

Despite the more favorable political climate towards conservation, the potential for undertaking effective conservation and natural resources management projects in the field are still limited. The geographic and economic isolation of the Chocó that has limited the development of commercial activities and linkages to the national economy also limits effective conservation. Communities lack economic options for sustainable economic development, and thus the emphasis is on short-term extractive activities. Turning this around is a real challenge.

The special ecological conditions of the Chocó require a greater emphasis on sustainable resource use based on perennial crops, sustainable natural forest management and the use and management of nonwood forest products and wildlife rather than annual crops and extractive resource exploitation. Very little attention has been given to alternative agricultural management techniques nor forest management, and fisheries exploitation is limited to artisanal and subsistence use. Alternative sustainable management techniques will be key to economic development and conservation of the region.

As mentioned at the outset, the cultural and ethnic framework is different in the Chocó in comparison to the Andes and Interandean Valleys, where the bulk of rural development initiatives have focused. In many areas, the organizational capacity is limited and therefore, challenges traditional approaches. Also, cultural norms differ, further complicating effective program development. Finally, the long history of

extraction of resources by outsiders and the lack of local control have led to the evolution of paternalistic and suspicious attitudes towards outsiders to the region. It is therefore, necessary to develop methodologies that break this cycle.

## VI. Progress Indicators and Evaluation

The focus on the Pacific region of Colombia has several advantages. First, experiences, both positive and negative, can be shared among WWF's Colombian partners. Technical information and management options may be applicable through the region. Second, conservation advances in one area may be used to influence policy makers in other parts of the region as examples and demonstration. Finally, at the community level, members from one region may visit other regions in the Pacific and share experiences and insights, a process which WWF is already promoting in its tropical forestry program activities and in the Awá Territory of northwestern Ecuador and southwestern Colombia.

The baseline information that will be collected in this project will form the foundation for evaluating broadly the impact of WWF and its Colombian partners' conservation efforts. Specific indicators against which progress may be measured include the following:

- establishment of special management zones for sustainable resource use;
- improved and expanded production of alternative crops and products (e.g. organic bananas, ornamentals);
- adoption of new management methods for agriculture;
- evaluation of potential for natural forest management within two of the project sites (Bahía Málaga and Rio Tatabro);
- strengthened community organizations as evidenced by new members, independence, incorporation of new activities and consolidation of ongoing activities;
- maintenance of forest cover in special management zones.

A more complete list of indicators for each program area is being developed collaboratively with our Colombian partners as part of the planning process.

## VII. WWF Comparative Advantage in Colombia

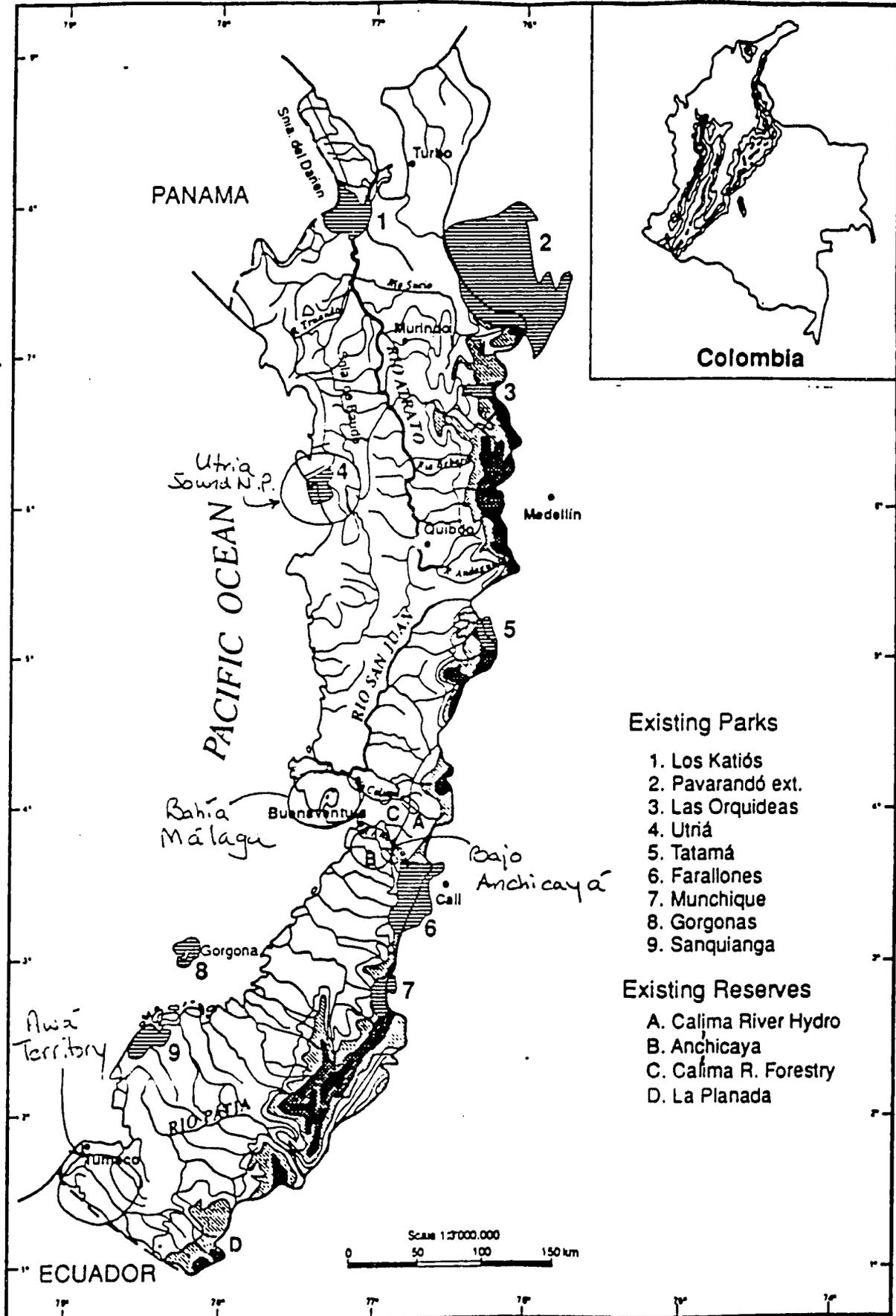
The strong technical human resources in WWF's Latin America Program is complemented by the diverse skills and expertise of the Organizational Development Program (ODP), the Tropical Forestry Program (TFP), the Conservation Finance Program, and RESOLVE, WWF's Dispute Resolution Program. We are able to bring to bear the experiences of the different WWF programs wherever their assistance is most needed. Thus, our support for conservation goes beyond financial, by providing technical assistance, training and interchange among project executants.

Some related activities to the projects described above include the following:

- participation of the project executants in a regional workshop in strategic design of projects and proposals;
- technical assistance and grant support through ODP for strategic planning with Fundación Herencia Verde;
- complementary support and technical assistance for forest policy analyses in collaboration with TFP;
- participation in training courses such as the protected areas management course in Colorado during July-August 1991; and
- technical assistance provided by the Conservation Finance Program to the Department of National Planning on the design of the National Fund for the Environment.

The WWF Family of National Organizations and WWF International collaborate in the overall development and funding of the Latin America and the Caribbean Program, and WWF-US, on behalf of the WWF Family, has the primary coordination role for the program. Thus, in addition to the in-house strengths, WWF-US can draw on the rest of the WWF Family throughout Europe and the rest of the world for added political, technical and financial support.

# Chocó Region: Colombia



Existing Parks and Reserves in the Chocó Region (as of 1989)

**IX. Appendices Listed**

- A. Map of Chocó showing location of national parks and project sites
- B. Summary of WWF Conservation Strategy for Colombia
- C. Map of Chocó showing priority sites per 1985 study in Bogotá
- D. Literature cited
- E. Detailed budget



WORLD WILDLIFE FUND  
CONSERVATION STRATEGY FOR COLOMBIA

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## I. Introduction

Colombia, situated along the northwestern corner of South America, covers a total area of 1,138,891 km<sup>2</sup>, is the fifth largest country in Latin America and the fourth largest country in South America. Colombia's geographic location, forming a land bridge between North and South America, and its prominent geologic features (three north-south mountain ranges of the Andes) have created a series of rather distinct biogeographic regions that not only have greatly influenced the richness and diversity of habitats and organisms, but also have strongly influenced the socioeconomic and cultural development in Colombia.

Based on biological grounds and the major watersheds in Colombia, the country can be divided into five biogeographic units described below and also shown in Figure 1.

1. The Amazon drainage and adjacent forests extend across a total area of 407,348 km<sup>2</sup>, or about 35% of the Colombian territory, and are situated in the southeast region of the country. Population density is low, about 550,000 people or 1 person/km<sup>2</sup>.
2. The Andes Mountains cover a total of 281,292 km<sup>2</sup> (25%) of Colombia and contain characteristic elements of the surrounding Caribbean and Chocóan zones, especially in the interandean valleys. The Andes splits into three separate ranges (western, central and eastern) in Colombia, forming a trident with the base near the border with Ecuador. Approximately 75% of the population is found in the Andes (about 74 people/km<sup>2</sup>).
3. The Orinoco drainage, including the Colombian llanos, comprises 22 percent (258,000 km<sup>2</sup>) of the national territory. This region is characterized by natural grasslands, wetlands and riverine forest habitats. It is also one of the most conflictive zones due to guerrilla activities and the importance of oil exploration in the region. Approximately 3 percent (900,000) of the population lives in this region (3 people/km<sup>2</sup>).
4. The Caribbean coast and adjacent forests, including the Guajira peninsula in the northeast corner of Colombia, is the driest zone found in Colombia. Forests range from arid to xerophytic, interspersed with dry tropical forest, covering a total of 142,238 km<sup>2</sup> or 12% of the land area of Colombia.
5. The Pacific coast and western slopes of the Andes, including the Chocó biogeographic region covers about 95,000 km<sup>2</sup>, of which 65,000 km<sup>2</sup> is lowland wet forests. Although covering

only 8.0 percent of the land area of Colombia, it is one of the richest regions of the world with very high degrees of species richness and endemism. Habitats range from coastal/marine and productive mangrove forests and pluvial tropical forests, to cloud forests on the western slopes of the Andes.

Two other areas of special interest include the Sierra Nevada de Santa Marta which lies within the Caribbean coastal subdivision and extends from sea level to 5800m altitude, and the Sierra de La Macarena which exhibits Amazonian, Orinoquian and Andean biogeographic characteristics, and is situated in the transition zone between the Andes, Orinoco Basin and the Amazon Basin.

### Biological Diversity

Though Colombia's land area comprises only .77% of the earth's surface, it contains approximately 10% of the terrestrial plant and animal species (Table 1). With a recorded 45-50,000 species of higher plants, Colombia nearly reaches Brazil's estimated 55,000 species in an area less than one-seventh the size. Therefore, Colombia is likely the richest country in terms of number of species per unit area. Colombia tops the world list for numbers of palm genera and orchid species. There are more species of birds in Colombia than in any other country, and of the 900 known species of bats, 155 or 19% are found in Colombia, 17% of the earth's vertebrate species (2,876 species) and more than one third of all neotropical primates (27 species). Colombia's documented diversity will doubtless increase substantially with further biological inventories, especially in groups such as invertebrates and plants.

Species endemism is especially high in Colombia, where 33 percent of the flora and 12 percent of terrestrial vertebrates are found nowhere else. This has particular implications for protection of biological diversity. With work completed on most major taxa, 236 plants were listed as rare or threatened in 1988. According to IUCN estimates, about 7 percent (25 species) of mammals, 2 percent (28) of the avifauna, and 6 percent (24 species) of the reptile fauna are threatened.

Table 1. Diversity and Endemism of Colombian biota

Group	No. of Species	No. & % of endemics	% of global total
Vertebrates			
Birds	1,695	73 ( 4%)	19%
Reptiles	383	104 (27%)	6%
Amphibians	430	141 (33%)	10%
Total Mammals	359	24 ( 7%)	9%
Total Terrestrial			
Vertebrates	2,876	342 (12%)	17%
Volant Mammals	155	3 ( 2%)	19%
Primates	27	3 (11%)	12%
Plants			
Total Plants	45-50,000	14,850 (33%)	18%
Palms	253	?	15%
Orchids	3,500	116 (47%)	9-15%

## II. Priority Areas for Conservation

WWF's conservation programs draw upon past and recent experiences in Colombia and other parts of Latin America. It is clear from this experience that a single focus on parks and protected areas or species preservation and single species research is not sufficient to fully address the fundamental threats to conservation, i.e. basic conflicts and tradeoffs over the use and management of natural resources. These tradeoffs and threats must be explicitly identified and defined in order to formulate a comprehensive and cohesive approach aimed at maximizing the conservation of biological diversity.

Using a three-tiered approach based on biological priorities, imminence of threat, and opportunity, a rough ranking can be devised for the five major biogeographic regions of the country. These rankings have guided WWF investments and will define future directions.

### Ranking of Geographic Priorities

Region*	Species Diver.	Species Endemism	Imminence of Threat	Coverage	Opportunity	Total	Rank
1	1	1	1	2	2	7	1
2	2	2	2	4	1	11	2
3	1	1	5	1	3	11	2
4	4	4	4	3	5	20	4
5	3	3	3	5	4	15	3

\*Regions

1. Chocó
2. Andean Forests
3. Amazon - foothills and lowlands
4. Llanos
5. Caribbean coast and Dry forests

The highest priorities for the next three to five years, based on this three-tiered approach are:

- Pacific coast or Chocó biogeographic zone, extending from the coastal lowlands to the tops of the western slopes of the Andes;
- The Amazon basin extending from the lowlands, through the piedmont to the top of the eastern slopes of the Andes; and
- the relict high Andean forests and páramo.

These areas are considered to house the greatest biological richness and levels of endemism. The Chocó probably has the highest levels of endemism and uniqueness in a number of taxonomic groups in all of South America, and contains some of the most vulnerable ecosystems in Colombia, given the extreme climatic conditions and geological features. The coverage and continuity of habitats are far more extensive in the Chocó and Amazon than along the Caribbean coast and in the Andes and Andean valleys, where greater disturbance has occurred since colonial times. As a result, habitats there tend to be more fragmented. Nevertheless, the biological richness of the Andean forests warrant attention, particularly along the western and eastern slopes.

Until now, WWF has focused largely on the Chocó and Andean forests, especially those that overlap along an elevational gradient with the Pacific forests (e.g. Los Farallones de Cali), with limited support provided for the Amazon region. While some of the Andean sites conserved are small (e.g. La Planada ±3,600 ha, Alto Quindío 200 ha), they are important biologically, and

they offer additional opportunities for promoting sustainable development, environmental education and research for a larger area of influence. In both cases, development threats have been and continue to be considerable. On the other hand, with the exception of the piedmont of the Andes, the Amazon region has remained relatively isolated, with threats focused around specific areas. These threats are expanding, however. As the program grows, the Amazon will be a high priority for future WWF support, and depending on security issues, the eastern slopes of the Andes will be incorporated into the Colombia program.

Greater representation of habitats will require that needs be addressed along the Caribbean coast and in the Orinoco basin and Llanos. These are viewed as long-term priorities, approximately five years or more down the road. Consolidation of existing efforts in the Andes and Chocó, expansion of activities into the Amazon and eastern Andean slopes, and potentially into other areas of the Pacific coast, and the incorporation of training, environmental education and policy reform are greater priorities for the next five years.

Within each broad geographic area above, specific sites are targeted.

1. Within the Chocó, project activities include Utria Sound National Park, Málaga Bay and its area of influence, the Awá Reserve and surrounding territories, including La Planada, and Los Farallones de Cali National Park and its buffer zones, including Rio Pance and Tatabro. In collaboration with a local organization, we are currently assessing the broader regional context for each of these project sites and potential opportunities for conservation in other areas of the Chocó biogeographic zone.
2. In the Andes, the Alto Quindío Reserve, which began with environmental education, is becoming an important program for regional conservation and sustainable development. La Planada and Rio Pance are also meeting important conservation needs by protecting Andean forests, raising consciousness, providing training, and conducting necessary research.
3. In the Amazonian lowlands, support will continue and be expanded for management and conservation of Cahuinari National Park and surrounding indigenous reserves. Potential for conservation of the eastern slopes in the south of Colombia close to the Ecuadorean border is being explored in an important and as yet unprotected area. More specific priorities and WWF's role in conservation of the Colombian Amazon will be defined during the coming year.

## II. Criteria for Program Focus

While program directions are based on a three-tiered approach, with primary attention focused on biological and biogeographic priorities, socioeconomic, political and institutional factors are considered simultaneously in the analysis. First, poverty and inequity continue to feature largely in land degradation and loss of forest cover. In Colombia, the greatest threat to tropical forests historically and currently stems from land settlement and clearing for agriculture (>70% of current deforestation or about  $\pm 500,000$  ha/year). This is compounded by inequitable land distribution where less than 8 percent of rural households own 40 percent of all land under crops or pasture. This skewed distribution is aggravated by the more recent trend in land speculation by Colombia's drug mafia. In a 1989 newspaper report, the mafia was reported to have snapped up about 1 million ha. of land, primarily in agricultural areas. This trend may complicate the government's land reform efforts. Thus, WWF programs must be informed on land distribution, land use patterns, and tenure issues. Buffer zone management will work towards improved and alternative management techniques to reduce the need for continued expansion. Policy work may examine agricultural and forestry policies (e.g. credit and concessions) that encourage expansion into forested areas, and limit the range of possibilities for reforestation with native species in the Andes.

Second, national economic development policies which are promoting infrastructure development in the absence of effective planning and adequate protection and conservation are opening the way for increased clearing and settlement. In the Chocó for example, high priority is being placed on expanding economic development activities (e.g. road building and hydroelectric development). Most of the land along the Pacific coast is unsuitable for annual crop production or pasture because of its high rainfall, and already existing roads are frequently impassable due to landslides. Many decisions regarding the use of these resources are made far from these areas themselves, failing to recognize specific local needs nor the ecological realities. Thus, complementary activities to field projects need to work towards improved economic and policy analyses at the national and regional level, consciousness raising of decision makers to encourage integration of environment and conservation into development planning, and monitoring support of the multilateral lenders for these development initiatives.

Third, while population densities are relatively low in most rural areas of Colombia, very few areas exist that have not been subject to some type of intervention or exploitation, be it from the presence of indigenous communities and/or colonists, and these areas continue to be under pressure from agricultural colonization. This level of threat and vulnerability of habitats

are key factors that are common throughout Colombia and require incorporating people into the conservation equation.

Although the total indigenous population of Colombia is a small proportion of the overall Colombian population, they have an important presence in certain regions, particularly in the Amazon basin where indigenous territories (13.1 million ha.) and parks (6.8 million ha.) comprise nearly 53 percent (20 million hectares) of a total 38 million hectares. The indigenous population of Amazonia totals about 70,000 Indians. This has important implications for conservation in the region. For example, Cahuinari National Park is surrounded on nearly all sides by indigenous resguardos. In some cases, such as Utria National Park, the Indian resguardo and the national park overlap. Thus, with 18 percent of the national territory declared Indian resguardo, and at least 12 of the 37 national parks and sanctuaries surrounded or bordered by Indian territories, Indian communities and federations have a significant role to play in conservation in Colombia. Sustainable resource management and consideration of the needs of indigenous communities can help buffer core areas of national parks such as Cahuinari.

Environmental Awareness. While governmental agencies and policies are frequently blamed for the trends in deforestation and soil erosion, the concern for environmental deterioration has a relatively long history in Colombia beginning with the indigenous use and management of resources. Establishment of national parks dates back to 1960, and more recently, the growing environmental and conservation movement in Colombia is active and bringing to bear some innovative and creative approaches to help to conserve and better manage the remaining forests and natural habitats.

Nevertheless, the level of awareness in the general public remains relatively poor. First, environmental concerns have been overshadowed by the more demanding problems of drug-associated violence and social and political unrest. Second, formal environmental education is limited at both the secondary and university school level. With the rural-urban shift, greater pressures are being placed on extractive use of natural resources by a segment of the population that has little contact with natural resources, and urban populations typically demonstrate changing consumption patterns. Consciousness raising of urban populations and decision makers through formal and nonformal environmental education programs is essential to build an appreciation of the services provided by natural areas in terms of watershed protection and water quality.

Regionalization, and more recently, political decentralization have featured prominently in the economic development of Colombia. With an accompanying political shift

towards greater regional autonomy over environment and natural resource management and development planning, new opportunities and challenges have emerged. It is important that the already existing support for improving management of specific protected areas and their areas of influence be complemented by strengthened municipal and regional organizations that are cognizant of and sympathetic to the importance of environmental protection and conservation. Decision makers must be tutored in the importance of integrating environmental perspectives into regional development planning instead of seeing resources simply for their extractive value. A country so vast and decentralized can favor greater involvement of governments, communities and NGOs at the local level.

Political and Socioeconomic Conditions. In July 1991, Colombia approved a new constitution which for the first time in Colombian history, makes specific reference to environmental protection. This opens a number of new opportunities for strengthening conservation and environmental protection. The new constitution contemplates greater popular participation towards environmental protection (Articles 81-82), and creates the opportunity to establish a national environmental policy. Of importance for WWF's conservation work in the Pacific, a transient article (Article 55) is included in the new constitution that will permit the establishment of communal territories of the Black riverine communities that have traditionally used these lands. This has potential for greater community involvement of lands management in the Colombian Chocó.

A second important opportunity is that the Colombian government is in the final stages of establishing a National Fund for the Environment. This would be a privately managed trust fund with a board of directors with governmental and nongovernmental representation. The establishment of a trust fund mechanism can be a means by which international and national funds for the environment are managed for long term yields to support environmental protection and conservation. The interest from such an account would support conservation at a pace that corresponds to the absorptive capacity of institutions and community groups. WWF is exploring the possibility of establishing a subaccount for the trust that would focus on support to NGOs.

A third important opportunity is given by the growing international interest that has been expressed in the Chocó. Earlier this year, the Global Environmental Facility (GEF) of the World Bank/UNDP designated the Chocó the focus of a technical cooperation grant for conservation and sustainable resource use in the Choco Biogeographic Zone. The project is in the design phase, but should be able to build on the progress of the activities that are already underway both in Ecuador (UTEPA and the Awa Territory) and Colombia.

Despite the more favorable political climate towards conservation, the potential for undertaking effective conservation and natural resources management projects in the field are still limited. For example, the geographic and economic isolation of the Choco that has limited the development of commercial activities and linkages to the national economy also limits effective conservation. Communities lack economic options for sustainable economic development, and thus economic survival as been based on short-term extractive activities. This is complicated by the fact that the special ecological conditions of the Chocó require a greater emphasis on sustainable resource use based on perennial crops, sustainable natural forest management and the use and management of nonwood forest products and wildlife rather than annual crops and extractive resource exploitation. Very little attention has been given to alternative agricultural management techniques nor forest management, and fisheries exploitation is limited to artesanal and subsistence use. Alternative sustainable management techniques will be key to economic development and conservation of the region.

Unfortunately, Colombia is still plagued by violence associated with narcotics and guerilla groups. This limits and constrains conservation efforts in certain geographic areas. Nevertheless, conservation in Colombia shows a great deal of promise. The Colombian economy has not suffered as severely as that of either Peru or Bolivia, and an array of NGOs are operating in different sectors, sometime collaboratively. Colombia is also lucky to have a relative abundance of skilled professionals to carry out conservation programs.

#### IV. Strategic Approach

Given the socioeconomic, political and institutional conditions described briefly above, conservation work in these regions must go beyond protected areas management to strengthen institutions, integrate conservation and environmental management into national development planning and policies, increase awareness and consciousness of the importance of conservation. Six objectives have been identified as essential.

- A. Strengthen the skills and networks of national and local institutions and empower local organizations that are involved in the use, management and/or conservation of natural resources to assure sound and sustainable use of natural resources and effective conservation of biologically rich ecosystems.

The foundation and growth of the WWF program in Colombia has depended on and resulted from collaboration with capable professionals and institutions in Colombian. Strengthening

the human resource and institutional foundation is fundamental for effective conservation and aims: 1) to build strong organizational management skills of NGOs; 2) to provide and facilitate training in interdisciplinary skills development for NGOs and government staff, including conflict and dispute resolution, participatory planning skills and integrated approaches to natural resources management; 3) to develop a network of mutually reinforcing NGOs; and 4) to emphasize train-the-trainers approaches that can provide training and technical assistance to other organizations, which will foster establishment of networks.

WWF has provided financial and technical assistance for institutional development to a number of NGOs in Colombia (e.g. Fundacion Puerto Rastrojo, Fundacion Herencia Verde, Fundacion Farallones). To deepen the impact of organizational development and dispute resolution training and technical assistance, we are exploring the possibility of launching a broader scale effort beyond those specific organizations with whom we are working on field projects. WWF has discussed the need for organizational strengthening with the Department of National Planning, particularly for those NGOs involved with the Environmental Trust Fund. This will be more firmly planned during the early part of 1992 through joint travel with ODP and RESOLVE.

- B. Improved management and sustainable use of natural resources in and around selected priority conservation areas, parks and reserves. Priority areas have been outlined above for each of the three focal biogeographic zones. While there are clearly many more areas in need of assistance for management, it would be overambitious to extend activities too far beyond the five protected areas or area management programs where we are working currently (Bahía Málaga, Los Farallones de Cali National Park, Utría National Park, Awá Territory, and to a small extent in Cahuinari National Park). Cahuinari is so far a small initiative, but should expand. Ongoing efforts will incorporate sustainable resource use, applied research needed to promote sustainable resource use, and community participation and organizational development.
- C. Integration of environment and conservation into regional and national development planning and policies. In each of the protected areas programs, development policy and planning constrains successful project implementation. For example, Utría National Park and Fundación Natura are struggling with development initiatives (e.g. roads and hydroelectric development) that may impinge upon effective management of the park. While many of the decisions affecting areas in the Chocó and the Amazon are made in the economic and population centers of the Andes, local

authorities are gaining greater control over the management of natural resources. Therefore, analyses and advocacy efforts will work at both the regional and national levels to effect policy change and to improve natural resources management.

- D. Increase environmental awareness and knowledge of the importance of the conservation of biological diversity and natural resources. The establishment and protection of national parks and reserves alone does not guarantee effective conservation of biological diversity. Beyond the boundaries of protected areas, natural resources management and sustainable use are fundamental to conservation, and this depends on the knowledge and awareness of resource users. Urban populations, too, will factor into considerations of the sustainable use of natural resources in terms of consumption and demands for resources. Two approaches for environmental education are being taken: first, in the context of specific field projects; and second, directed at formal education and mass media channels to reach as broad an audience as possible. The latter effort is in a planning stage. During early 1992, we will explore potential needs, collaborators and focus for environmental education and WWF support in Colombia. Gus Medina will assist in this effort by travelling to Colombia in early 1992.
- E. Strengthen government institutions, policies and legislative framework for use and management of natural resources and protected areas.
1. The new constitution calls for changes in existing legislation and policies, and creates an important opportunity to put in place a more effective legislative framework. WWF's role in this area needs to be more fully defined, but may include providing technical assistance or support for analyses and studies in the near term, and support for direct negotiations with Congress and other important ministries, such as Planeación Nacional.
  2. Strengthen the management skills of national park service. This is a longer term objective that will depend on the ultimate restructuring of INDERENA and a new Ministry for the Environment. WWF may provide technical assistance and/or training in organizational management, protected areas planning and management.
- F. Identify opportunities to stabilize funds available for conservation. Conservation organizations, both governmental and nongovernmental, are plagued by financial instability. In collaboration with the Conservation Finance Program, we

are exploring new types of funding mechanisms such as Conservation Trust Funds to support conservation. WWF's Conservation Finance and Andes Programs have been consulting with the Department of National Planning on the structure of a national fund for the environment, as well as the possibility of WWF establishing a subaccount within the national trust. We are exploring potential fund-raising strategies to endow a WWF conservation trust for Colombia.

#### V. Operational Approach

The strong technical human resources in WWF's Latin America Program is complemented by the diverse skills and expertise of other program areas such as the Organizational Development Program (ODP), the Tropical Forestry Program (TFP), the Conservation Finance Program, and RESOLVE, WWF's Dispute Resolution Program. We are able to bring to bear the experiences of the different WWF programs wherever their assistance is most needed. Thus, our support for conservation goes well beyond financial, by providing technical assistance, training and interchange among project executants, and enables WWF to promote a more integrated approach to conservation.

In addition to these in-house strengths, WWF-US can draw on the rest of the WWF Family of national organizations throughout Europe and the rest of the world for added political, technical and financial support.

WWF programs in Colombia are carried out through a variety of means. Financial resources are provided in the form of grants, technical assistance from in-house and consultant expertise, training and networking, each of which is described in a bit more detail below.

##### A. Comprehensive Program Grants (CPG)

Comprehensive Program Grants bring to bear a variety of resources, both financial and human, to address a specific conservation need or bottleneck (e.g. policy or training), and/or in a particular biogeographic region (e.g. Awá, Chocó or Amazon). It implies support for a set of activities or cluster of activities that meet two or more of this strategy's objectives and/or receive adequate levels of WWF funding to guarantee its continuity. In monetary terms, the grant is usually greater than \$50-100,000, which may be partitioned into several subgrants to more than one project recipient. Because they are comprehensive in nature, the various grant recipients should have an opportunity to meet at least annually to discuss collaboration and exchange of experiences.

While approval of funding is done on an annual basis, Comprehensive Program Grants usually involve an institutional

commitment to the project of 3-5 years or more. Recipients may often receive additional support through technical assistance and other services (e.g. networking) provided by inhouse programs, outside consultants, or incountry collaborators.

#### B. Complementary Assistance Grants (CAG)

Complementary Assistance Grants serve at least two purposes. First, they allow WWF to have a diversified project portfolio, maximizing chances of success through a greater number and diversity of project activities and implementors. Second, they enable WWF to remain open and flexible to new ideas and opportunities in Colombia, and unanticipated emergencies that may arise. They may also stimulate support to new, priority regions on a pilot basis not previously supported. Decisions are based on established biogeographic priorities or particularly appealing opportunities. In Colombia, new initiatives for CAG will focus on the Amazon and the Chocó, and areas of policy and training. A Complementary Assistance Grant supports individual projects that generally fall under one of the following scenarios.

1. New conservation initiatives of relevance to WWF and in need of seed funds. In general, funds will be limited, on the order of \$10-15,000, but not greater than \$30,000 per year, and because of their seminal nature, they will seldom be given for more than three years. The grant recipient may be expected to seek additional funding from other sources as the project develops, or it may develop into a Comprehensive Program Grant, depending on the scope, priority and funding availability.
2. Ongoing WWF supported projects, where other institutions (international or local) provide core funding, and WWF is a secondary donor and/or technical advisor. In general, grants will be less than \$50,000, and will be given for a variable length of time, depending on the project.

#### C. Technical Assistance

Technical assistance (TA) can be made available to local institutions and their WWF supported projects in Colombia, with precedence given to conservation initiatives under the Comprehensive Program Grants. TA is available from inhouse and outside experts in fields related to conservation of biodiversity and natural resources, which may include: wildlife management, sustainable resources use, forest management, park planning, ecotourism, conservation finance, sustainable agriculture and rural development, trade of endangered species, environmental education, multilateral bank relations, environmental information, marine and coastal resources management,

organizational management, community organization and leadership, environmental health issues, indigenous issues, environmental legislation, and public policy, among others. Outside consultants are considered when: (i) specifically requested by the project leaders; (ii) WWF lacks inhouse expertise; or (iii) there are time constraints for WWF staff.

Strong, self-reliant conservation organizations are the backbone of the program in Colombia and throughout the world, and are in large part a function of an organization's management, operational, fundraising and communications skills. Support for organizational management is provided in collaboration with WWF's Organizational Development Program (ODP). As in project level support, flexibility is the name of the game to assure meeting the special and unique needs of each organization. ODP may work with individual organizations following the completion of a diagnostic assessment which focuses on the organization's needs and establishes priorities for providing assistance. This assessment may be done with limited guidance from ODP to the organization, or jointly with ODP or the Colombian Program Officer. Following the diagnostic, the organization and ODP can prepare a strategic plan outlining needs for further assistance, which may come in three different forms:

- technical assistance to address a specific organizational need or bottleneck;
- grants providing some core institutional support that allows the organization to work towards achieving its mission and stated goals; and
- training workshops and self-help workbooks in several generic problem areas, including financial resources management, proposal and project design, strategic management and human resources.

In some cases, a workshop can be scheduled for participation of more than one organization. For example, a proposal design workshop emphasizing monitoring and evaluation is being scheduled for October 1991 for the Andes Program (Venezuela, Colombia, Ecuador, Peru and Bolivia).

#### D. Networking

Networking fills a substantial part of our workweek, meeting a variety of needs. First, WWF programs are served by networking as it allows us to identify points of complementarity with other organizations. Further, it may help to encourage involvement of the programs of larger donors in conservation and natural resources management. Additionally, we play a role in facilitating networking between different organizations within Colombia and between Colombian organizations with those in other countries in the region through courses, workshops, or exchanges.

Beyond our role as individuals in the networking channels, a computer networking system is being developed by ODP to facilitate and hasten communication between WWF and its collaborating organizations, and between organizations in the field. An environmental information resource center is also being developed to increase access to information by NGOs in the field.

#### E. Leveraging and Complementary Assistance

Limited budgets and program priorities constrain our ability to address all of the problems threatening conservation in Colombia in the depth and scope needed. Given the variety of capable Colombia organizations and the involvement of a number of international organizations, avoiding overlap and identifying opportunities for complementary funding and technical assistance are essential. For example, the Interamerican Foundation (IAF) is supporting pilot activities of the Escuela Nueva in urban barrios. It perhaps could be possible to complement this activity by incorporating environmental education into the curriculum of these pilots. Further, the interest of the World Bank and the European Economic Community in Colombia to support a Global Environment Facility in Colombia may offer an opportunity to leverage funds with our expertise and contacts in the field to expand programs. Similarly, A.I.D. funded the production of an environmental profile that may be a useful foundation and tool for environmental education and consciousness raising initiatives.

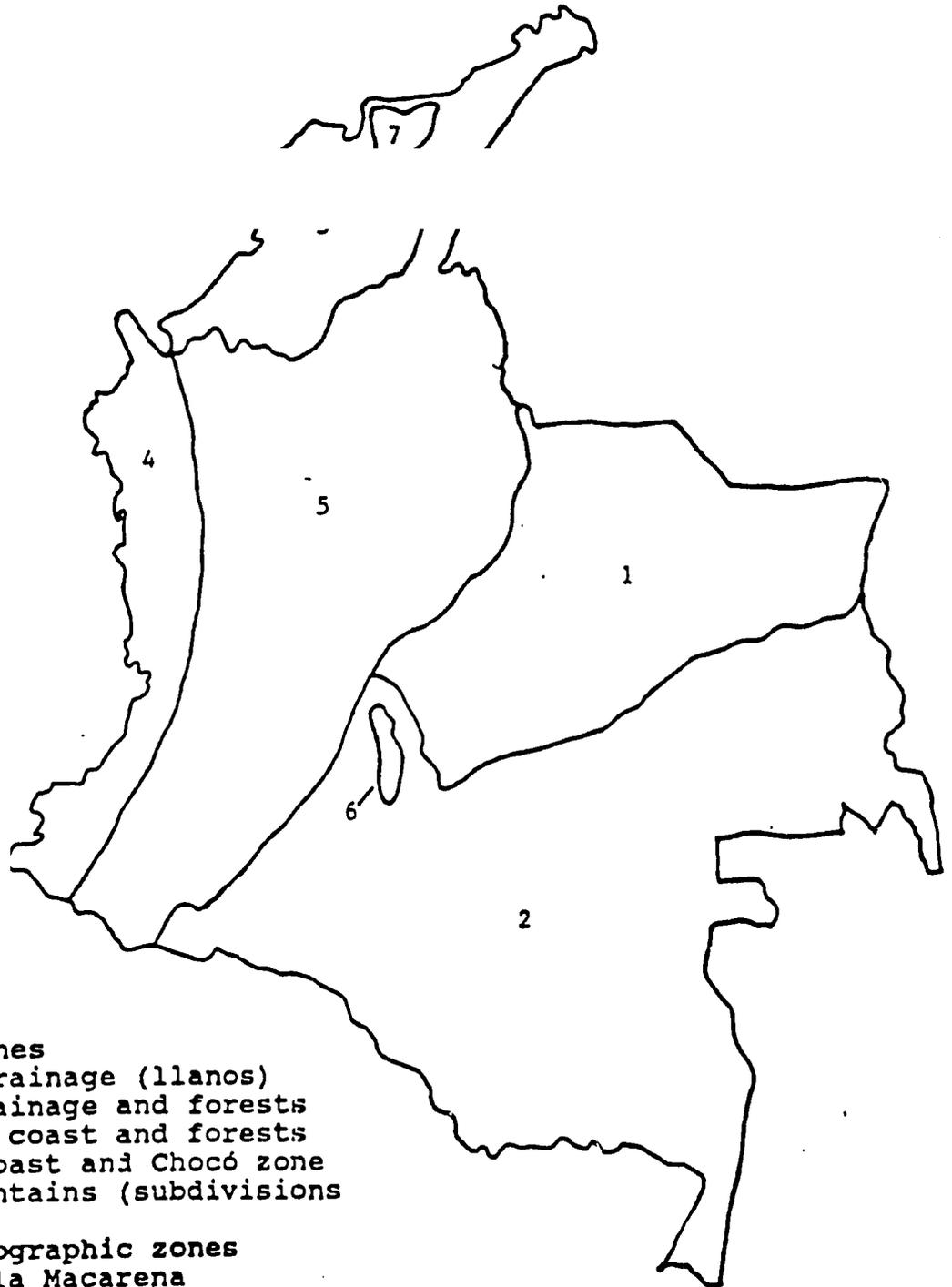
#### F. Training

Participation in short courses and conferences are important for project personnel. It allows staff to further sharpen their technical and organizational skills as well as share with and learn from other projects and programs throughout the region. WWF provides travel support for project personnel in a variety of short courses and conferences throughout the region, and on occasion in the U.S. Some examples include the CATIE and University for Peace courses in Costa Rica in Natural Forest Management, Buffer Zone Management and Agroforestry.

WWF's Organizational Development Programs and RESOLVE offer training opportunities in a variety of areas such as proposal design, strategic design, financial management and dispute resolution. The Tropical Forestry Program is creating more training opportunities in the form of workshops in natural forest management.

FIGURE 1.

Major Vegetation Zones of Colombia  
(based on Sanchez, 1989)



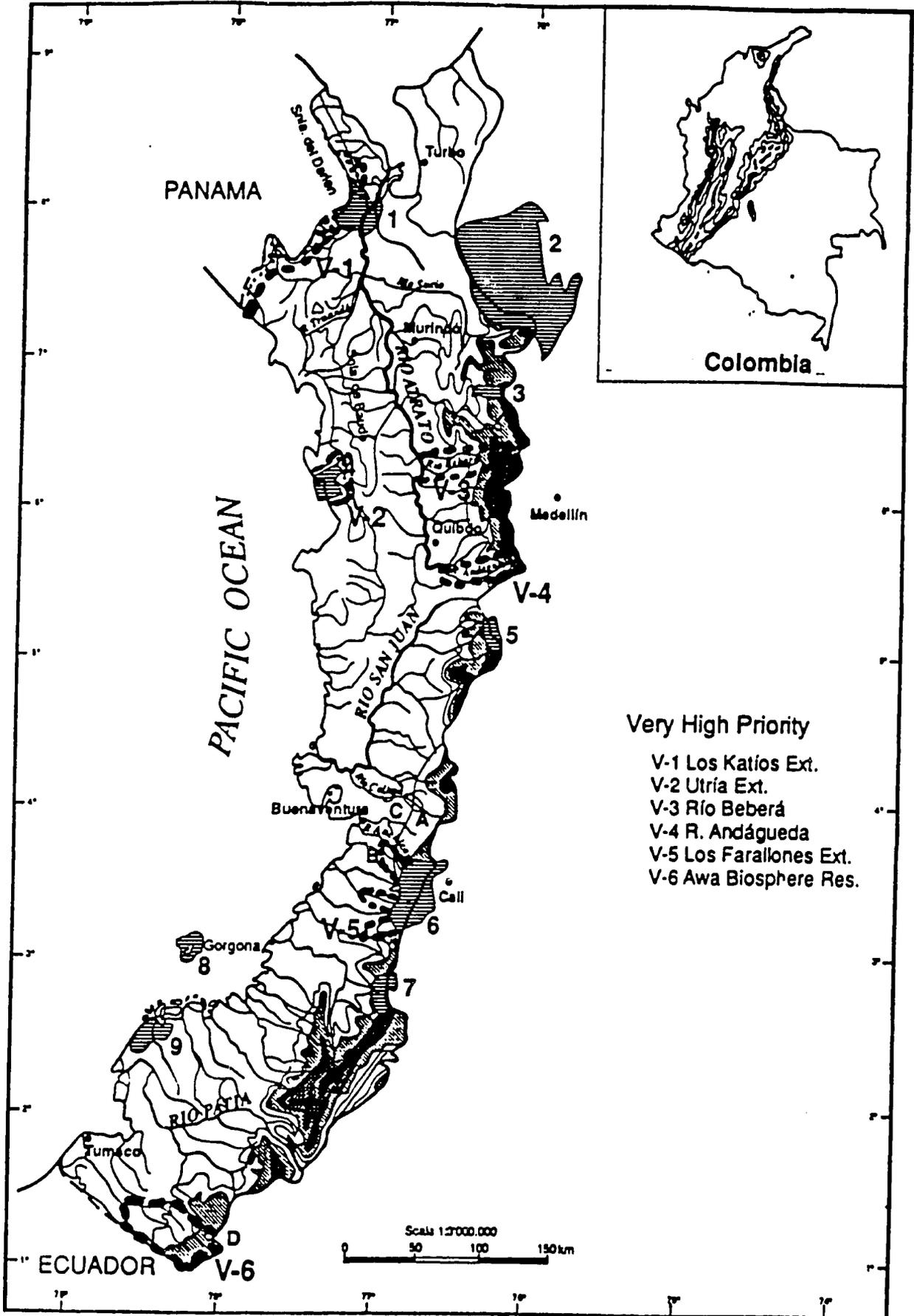
Major Vegetation Zones

- 1) The Orinoco drainage (llanos)
- 2) The Amazon drainage and forests
- 3) The Caribbean coast and forests
- 4) The Pacific coast and Chocó zone
- 5) The Andes Mountains (subdivisions not shown)

Other Notable Biogeographic zones

- 6) La Sierra de la Macarena
- 7) La Sierra Nevada de Santa Marta

# Chocó Region: Colombia



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