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Report No. 13047-BR

PILOT PROGRAM TO CONSERVE THE BRAZILIAN RAIN FOREST
MEMORANDUM AND RECOMMENDATION
OF THE DIRECTOR
OF THE LATIN AMERICA AND THE CARIBBEAN DEPARTMENT I
TO THE REGIONAL VICE PRESIDENT
ON A PROPOSED GRANT
FROM THE
RAIN FOREST TRUST FUND
IN AN AMOUNT EQUIVALENT TO US\$3.0 MILLION
TO THE
FEDERATIVE REPUBLIC OF BRAZIL
FOR AN
EXTRACTIVE RESERVES PROJECT

October 27, 1994

Pilot Program to Conserve the Brazilian Rain Forest
Country Department I
Latin America and the Caribbean Region

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CURRENCY EQUIVALENTS

(As of October 26, 1994)

Currency	:	Brazilian Real
Exchange Rate	:	0.851

(As of June 21, 1994)

Currency	:	European Currency Unit (ECU)
Exchange Rate	:	US\$ 1.00 = ECU 0.866

WEIGHTS AND MEASURES

The metric system is used throughout the report.

GOVERNMENT OF BRAZIL FISCAL YEAR

January 1 to December 31

GLOSSARY

AOP	Annual Operation Plan
CAS	Country Assistance Strategy
CNPT	Centro Nacional de Desenvolvimento Sustentado das Populações Tradicionais (National Center for the Sustainable Development of Traditional Populations)
CNS	Conselho Nacional dos Seringueiros (National Rubbertappers Council)
CPT	Comissão de Populações Tradicionais (Commission of Traditional Populations)
CTA	Centro de Trabalhadores da Amazônia (Center for Amazonian Workers)
CEC	The Commission of the European Communities
ECU	European Currency Unit
FUNAI	Fundação Nacional do Índio (National Indian Foundation)
GIS	Geographic Information System
GOB	Government of Brazil
GTA	Grupo de Trabalho Amazônico (Amazonian Working Group)
IBAMA	Instituto Brasileiro do Meio Ambiente e dos Recursos Naturais Renováveis (Brazilian Institute for the Environment and Renewable Natural Resources)
IEA	Instituto de Estudos Amazônicos e Ambientais (Institute for Amazonian Studies)
INCRA	Instituto Nacional de Colonização e Reforma Agrária (National Institute for Colonization and Agrarian Reform)
ISPN	Instituto Sociedade, População e Natureza (Institute for the Study of Population and Nature)
MMA	Ministério do Meio Ambiente e da Amazônia Legal (Ministry of the Environment and the Legal Amazon)
NGO	Non-Governmental Organization
OED	Operations Evaluation Department
PCU	Project Coordinating Unit
RFT	Rain Forest Trust Fund
UNDP	United Nations Development Programme

BRAZIL

PILOT PROGRAM TO CONSERVE THE BRAZILIAN RAIN FOREST
EXTRACTIVE RESERVES PROJECT

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IBRD Map No. 25943

This project is based on the findings of a World Bank and Commission of the European Communities appraisal team which visited Brasilia from April 18 to 29, 1994. The mission was composed of Messrs./Mmes. Claudia Alderman, Judith Lisansky, Graciela Lituma and Jamison Suter (Land and Forest Team, LA1EA); Christoph Diewald (LA1EA); Douglas Graham (LATEN); and José Vasconcelos (Commission of the European Communities). Additional preparation work was done by Messrs./ Mmes. Karen Luz (LFM Team, LA1EA); Luis Constantino (LATEN); John Butler and John Wilson (consultants). The Rain Forest Pilot Program Manager is Mr. Stephen J. Ettinger, the Project Advisor is Mr. Orville Grimes and the Country Director is Mr. Gobind T. Nankani.

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BRAZIL**PILOT PROGRAM TO CONSERVE THE BRAZILIAN RAIN FOREST
EXTRACTIVE RESERVES PROJECT****GRANT AND PROJECT SUMMARY**

Grantor: Rain Forest Trust Fund (RFT)

Recipient: Federative Republic of Brazil

Beneficiaries: National Center for the Sustainable Development of
Traditional Populations (CNPT)

Communities and community-based organizations in the four
selected Extractive Reserves

Amount: US\$3.0 million

Terms: Grant

Financing Plan:

<u>Source</u>	<u>TOTAL (US\$ million equivalent)</u>
Rain Forest Trust Fund	US\$3.0 million
The Commission of the European Communities	US\$5.8 million (5.0 million ECU)
Brazilian Government	<u>US\$0.9 million</u>
Total	US\$9.7 million

Economic Rate of Return: N/A

Map: IBRD No. 25943

**MEMORANDUM AND RECOMMENDATION OF THE DIRECTOR
OF THE LATIN AMERICA AND THE CARIBBEAN DEPARTMENT I
TO THE REGIONAL VICE PRESIDENT
ON A GRANT
FROM THE RAIN FOREST TRUST FUND
TO THE FEDERATIVE REPUBLIC OF BRAZIL
FOR AN
EXTRACTIVE RESERVES PROJECT**

1. I submit for your approval the following memorandum and recommendation on a proposed grant from the Rain Forest Trust Fund (RFT) to the Federative Republic of Brazil of US\$3.0 million. The grant would finance an Extractive Reserves Project aimed at improving the management and conservation of the Brazilian rain forest by promoting sustainable social, economic and environmental management methods based on refinements of the knowledge and traditional practices of the local populations. This project is part of the Pilot Program to Conserve the Brazilian Rain Forest, which is funded by the Group of Seven countries, the European Union and the Netherlands, and administered by the World Bank.

I. BACKGROUND

The Setting

2. Brazil's rain forests are a repository of a large share of the world's biodiversity and play a major role in the carbon cycle. Their destruction means the loss of biodiversity and could cause adverse global climate changes due to the release of greenhouse gases. The standing forest also protects major watersheds and is important to local hydrological cycles and climate. It is home to many tribal peoples and other regional populations, whose livelihood and cultures are threatened by encroaching development and deforestation. About eight percent of the Amazon rain forest has already been felled for a range of activities including cattle ranching, small-holder agriculture, logging and mining. If the rate of forest destruction is to be slowed, less destructive activities need to be developed and promoted.

3. The Pilot Program to Conserve the Brazilian Rain Forest was initiated at the request of the Group of Seven (G-7) at the Houston Summit in 1990. Individual projects are financed by the Rain Forest Trust Fund (RFT), which was established by Resolution 92-2 of the Bank's Executive Directors in March 1992, and by associated bilateral co-financing (all on grant terms). The Program is intended to support an integrated set of projects that will contribute to a reduction of the rate of deforestation in the Amazon rain forests while using their resources sustainably. These projects fall within three broad sub-programs: (i) strengthening of the capacity of the public sector to set and enforce sound environmental policy; (ii) improvements in management of special protected areas; and (iii) increases in research and the use of environmentally benign technologies in the Amazon.

4. Extractive Reserves are a relatively recent conservation mechanism, predicated on the premise that extractivist activities can have relatively little negative impact on the forest compared to other uses of the land. By supporting the well-being of extractivist communities, therefore, it is expected that unnecessary deforestation can be averted. The extractive reserve concept is experimental and as yet untested. Referred to generically throughout the Amazon as "rubbertappers," the traditional forest-dwelling population has practiced for generations a mixed livelihood system including slash-and-burn agriculture, hunting and fishing, gardening, animal husbandry, and the collection of non-timber forest products. Production is largely subsistence-oriented. The connection to outside markets has been through the sale of various non-timber forest products, primarily rubber, Brazil nuts and palm fruits.

5. Extractive reserves were initially proposed in Brazil during the 1970s by the non-Indian inhabitants of the forests of the state of Acre, who were losing access to their lands because of frontier expansion. In 1985, rural extractivists throughout the Amazon formed the National Rubbertappers Council (CNS), which advocated extractive reserves as areas to be set aside for the exclusive usufruct of the local populations. In these reserves, natural resources would be conserved and sustainably managed. In 1989, the Brazilian Congress adopted a law permitting the creation of extractive reserves as one type of conservation unit. In extractive reserves the government grants use rights to an organized association of extractivists by means of a long-term concession contract, conditioned on their fulfilling environmental protection obligations. In 1990, the government established the first four extractive reserves in the Legal Amazon: two reserves in the state of Acre-- Alto Juruá (506,186 hectares, population 5,821) and Chico Mendes (970,570 hectares, population 12,017)--, Rio Cajari in the state of Amapá (481,650 hectares, population 3,639), and Rio Ouro Preto (204,583 hectares, population 775) in the state of Rondônia. In 1992, the Brazilian Institute for the Environment and Renewable Natural Resources (IBAMA) created a new semi-autonomous, administrative unit specifically to administer the extractive reserves, the National Center for the Sustainable Development of Traditional Populations (CNPT). Working closely with the CNS, other NGOs and representatives of the reserves, the CNPT moved quickly to regularize approximately 2.0 million hectares in the four existing reserves and instituted an emergency assistance program for the four reserves. During the past two years, CNPT has established six regional offices to coordinate its work and has helped establish five additional extractive reserves both within and outside the Amazon region. The degree of political commitment to the extractive reserves model is indicated by the willingness of the Government to deploy resources for establishing CNPT's regional offices and for recruiting qualified and committed personnel.

6. Despite considerable international interest and publicity, however, extractive reserves are not yet completely established and the approach has yet to be fully operationalized. Local associations of reserve inhabitants are still being formed, and lack adequate infrastructure and sufficiently trained human resources. The people in the reserves are poor and have limited access to basic health, education and other services. If they are to remain in the forest as conservation "stake-holders," they will require technical assistance, training, community organization and other support.

Lessons from Previous Bank Involvement

7. Extractive Reserves constitute an untested approach to conservation and development. The Rondônia Natural Resource Management Project (Loan No. 3444-BR) includes a component designed to provide support to extractive reserves and extractive forests in the state of Rondônia¹. Since this project is in the early stages of implementation, lessons cannot yet be drawn. However, there are many similarities between social forestry projects and extractive reserves which make most lessons learned from the forestry sector likely to be relevant to extractive reserves as well. In addition, several studies carried out by the Bank's Environment Department on the economic, social and ecological aspects of extractive reserves, and on integrated conservation and development projects, provide guidelines for evaluating the potential benefits and pitfalls of extractive reserve projects.

8. There is now a recognition of the growing importance of the partnership between conservationists and indigenous or local peoples. The linkage of conservation and development objectives in social forestry or extractive reserve projects means that such projects are more likely to be successful when: (i) they are developed with a sound understanding of local social and economic systems, taking into account: (a) the "vernacular economies" that most target groups have, that is, the complex, mixed subsistence-and-cash household economies that usually include subsistence agriculture, hunting and fishing, the collection of non-timber forest products, communal activities, and even preliminary processing, (b) the differential impacts the projects might have on local groups, and (c) the land tenure system and land use conflicts; (ii) there is strong emphasis on local participation in the design and implementation of the project; and (iii) appropriate local institutional structures are identified and strengthened (given the often low level of local management capacity). The proposed project represents a partnership between conservationists and local peoples, and was developed with the active and influential involvement of local communities. In addition, participatory research carried out by social science and interdisciplinary researchers and NGOs (some of which was funded by project preinvestment funds) provides an unusually rich data set on socio-economic and ecological conditions in the reserves.

9. Three interrelated lessons about implementation are that: (i) projects generally need to strengthen the role and capacities of the relevant institutions; (ii) priority should be given to human resource development, specifically to assure adequate capacity for management and administration, and for basic skills such as developing and carrying out management plans, resource assessment studies, and ground survey work; and (iii) if cooperation among several line agencies is required in the planning and implementation of the project, an effective mechanism for coordination is crucial. Further, in experimental projects of this type, monitoring and evaluation mechanisms must be in place to track project implementation and to facilitate supervision and final evaluation. The proposed project design includes an emphasis on strengthening the relevant institutions, particularly at the local level (paras. 14, 17 and 19; Annex 3);

¹ See Annex 1 for a review of the distinction between federal and state extractive reserves.

development of effective mechanisms of interagency coordination (Annex 3); priority to human resource development (paras. 15 and 16, Annex 3); and an effective monitoring and evaluation system (para. 22 and Annex 7).

10. There is also need for increased knowledge of natural resources and natural forests which could contribute to the formulation of sound forest resource management practices. The proposed project includes activities to develop improved forest management practices (para. 16; Annexes 5 and 6), and supports testing of sustainable uses and commercialization of non-timber forest products (para. 15 and Annex 5).

II. THE PROJECT

Project Objectives

11. The main objective of the proposed project is to improve the management and conservation of the Brazilian rain forest by promoting sustainable social, economic and environmental management methods based on refinements of the knowledge and traditional practices of the local populations. To this end, the project would develop and test in four extractive reserves an appropriate approach of social, economic and environmental management, through co-management by government and local associations, in order to refine the procedures used by traditional populations in the administration of natural resources. More specifically, the project would support activities to: (i) complete the legal establishment of four extractive reserves in the Legal Amazon; (ii) strengthen the community organizations and install social and community infrastructure in these extractive reserves; (iii) develop, test and disseminate appropriate technologies to improve subsistence and market-oriented production and commercialization of non-timber forest products; (iv) refine the conservation and sustainable management of the natural resources of the reserves; and (v) support participatory management and administration of the project.

Project Description

12. To achieve these objectives, the project has the following components:

13. Component 1 - Establishment and Strengthening of Extractive Reserves (Estimated cost including contingencies: US\$1.24 million). The objectives of this component are: (i) to fulfill the remaining basic legal and organizational requirements for the implementation of the four extractive reserves and the awarding of long-term Extractive Reserve Concession Contracts (see Annex 1), (ii) to establish protection plans for the reserves, and (iii) to review, recommend and disseminate public policies pertaining to extractive reserves. This component includes the following activities: (i) completion of legal evaluations to clear the tenure status of lands in the reserves; (ii) completion of the physical demarcation and sign-posting for the boundaries of the Extractive Reserves; (iii) organization of meetings to formally establish the reserve associations (where needed); (iv) development and approval of Extractive Reserve Utilization Plans; (v) issuance of long-term Concession Contracts; (vi) development of participatory reserve protection plans; and (vii) public policy-related seminars and a

feasibility study of an extractive reserve trust fund. As a condition for RVP approval of the grant agreement, the draft administrative rules for regularizing the extractive reserves, including guidelines for Extractive Reserve Utilization Plans and Extractive Reserve Development Plans, would be satisfactory to the Bank (para. 37 (a)). (See Annex 1 for a detailed description of the legal and technical aspects of establishing and regularizing extractive reserves.) The Extractive Reserve Utilization Plans, to be adopted in the first year and required by law for the Concession Contract, will provide the initial framework for regulating natural resource use in the reserves. The presentation of an Extractive Reserve Utilization Plan satisfactory to the Bank is a condition of disbursements for commercial productive activities to be funded under Component 3 (Subcomponents 2, 3 and 4, except research activities in 4) of the project (para. 39 (a)). See Annex 4 for further information on Extractive Reserve Utilization and Development Plans (para. 16). The extractive reserve protection activities include improving the infrastructure (primarily border guard posts, transportation and communication equipment) of existing IBAMA agents and developing a collaborative approach between IBAMA agents and the local population to prevent encroachment and to supervise resource use in the reserves. Additional conditions of disbursement with respect to each Extractive Reserve are: (i) signature and effectiveness of an umbrella agreement satisfactory to the Bank between IBAMA and at least one Local Association acceptable to the Bank in the Extractive Reserve (para.39 (b)); and (ii) evidence that the Government holds legal possession (*emissão de posse*) of the areas of the Extractive Reserve (para. 39 (c)).

14. Component 2 - Community Organization (Estimated cost including contingencies: US\$2.57 million). The objective of this component is to establish and/or strengthen the local and national organizations working in, as well as the health and education systems of, the extractive reserves. The project would provide: (i) basic offices, communication equipment, staff support, travel and technical assistance for CNPT's central and regional offices and for the reserve associations; (ii) training for local para-technicians in administration and finance, accounting, business skills, and project design and implementation; (iii) support to basic education through the construction of schools, teacher training and adult literacy programs; and (iv) support to basic health through the construction of health posts, training of health agents, and public health activities. The majority of these activities would be implemented by local reserve associations and the National Rubbertappers Council (CNS). The umbrella agreements between IBAMA and the local associations will specify the association's responsibilities and define the responsibilities and the specific instruments of other entities for the staffing, operations and maintenance of the community facilities. As a condition of grant effectiveness, an umbrella agreement satisfactory to the Bank between IBAMA and the National Rubbertappers Council (CNS) would be signed and effective (para. 38(a)).

15. Component 3 - Improvement of Productive Activities (Estimated cost including contingencies: US\$3.05 million). The objective of this component is to improve the standard of living of local communities by improving subsistence and commercial productive activities, hence providing a tangible incentive to sustainably use and manage the reserve's forest resources. This component includes: (i) extension of improved subsistence technologies and pilot activities such as diversified home

gardens, agroforestry and small animal and fish farming; (ii) improvements in processing and commercialization of traditionally marketed extractive products (e.g. through the establishment of two nut processing factories, the creation of decentralized processing facilities, and the distribution of basic equipment and training for improved rubber collection and processing); (iii) applied research on income-generating activities, including feasibility and market assessment studies for alternative domesticated and wild forest products (e.g. oils, fruits, medicinal plants, honey) as well as pilot processing and marketing activities; and (iv) support to productive activities through the construction of warehouses, improvement and maintenance of transportation systems (e.g. waterways and foot and cart paths), acquisition of freight vehicles, and provision of radio communication equipment for each reserve. The applied research on income-generating activities will be developed under the project and reviewed annually with the submission of the Annual Operating Plan. At negotiations, agreement was reached that a letter defining criteria and mechanisms satisfactory to the Bank for approving funds for applied subprojects on alternative products, marketing assessments and pilot processing and marketing activities would be provided to the Bank by January 31, 1995 (para. 36(a)).

16. Component 4 - Environmental Management (Estimated cost including contingencies: US\$0.92 million). The objective of this component is to improve the management of the natural resources of the reserves to promote improvements in the standard of living of local populations without compromising the services provided by the forest (productivity, biodiversity conservation, watershed protection, carbon sequestration, etc.). As further described in Annex 6, this component includes activities designed to: (i) establish a set of baseline environmental data for the reserves, including both biophysical and socio-economic data; (ii) develop and approve Extractive Reserve Development Plans, based in part on Extractive Reserve Utilization Plans (see Annex 5); (iii) execute supporting studies on the productive potential and sustainable management of natural resources in the reserves; and (iv) develop and implement a broad environmental monitoring system for each reserve, based upon the baseline data. The Extractive Reserve Development Plans will incorporate results of project-funded activities, complement the initial Utilization Plans and map out the long-term development and management of natural resources in the reserves. The Development Plan will be designed during the second and third years of the project and is expected to be updated periodically as lessons learned, new studies and monitoring and evaluation results become available. See Annexes 6 and 7 for more detailed information. At negotiations, agreement was reached that final versions satisfactory to the Bank would be completed of: (i) Extractive Reserve Development Plans for Extractive Reserves Alto Juruá and Chico Mendes by December 31, 1995 and for Extractive Reserves Rio Ouro Preto and Cajari by December 31, 1996; and (ii) Environmental Monitoring Systems for each reserve by September 30, 1995. (para. 36(b)).

17. Component 5 - Project Management and Evaluation (Estimated cost including contingencies: US\$1.88 million). The objectives of this component are to strengthen the institutional capacity of CNPT/IBAMA to ensure proper coordination and management of the project and, through independent evaluations, to improve project activities and implementation and to draw lessons for extractive reserves in general.

The component will: (i) provide support to CNPT-Brasília and to the relevant regional CNPT offices for the implementation of the project; (ii) train personnel working on the project; (iii) create and support the Project Consultative Committee (see para. 20 and Annex 3); (iv) install and operationalize a computer information system; and (v) contract consultants for mid-term and final project evaluations. The establishment of the Project Consultative Committee with responsibilities, structure and functions all satisfactory to the Bank and with members in adequate numbers and with adequate qualifications is a condition of Grant effectiveness (para. 38(b)). At negotiations, agreement was reached that the terms of reference for the independent mid-term and final project evaluation would be delivered for review by the Bank by January 30, 1995 (para. 36(c)).

Project Cost and Financing

18. The total project cost is estimated at US\$9.7 million including contingencies. The project would be financed jointly by the Rain Forest Trust Fund and the Commission of the European Communities (CEC) in the amounts of US\$3.0 million, and 5.0 million ECU (approximately US\$5.8 million), respectively. The CEC contribution would be made through a cofinancing trust fund to be established at the World Bank. A condition for RVP approval of the Grant agreement was the signing by the CEC and the Bank of the Financing Agreement for the CEC co-financing of the project (para. 37(b)). Counterpart funds from the Federative Republic of Brazil (US\$0.9 million) would be made available as parallel financing. Counterpart funds will be used to finance the completion of legal tenure evaluations and the reserve protection activities under Component 1, selected applied research activities on income generation under Component 3, and office equipment, supplies and recurrent costs under Subcomponent 1 of Component 3. The project cost tables do not include reserve associations' contributions of labor.

Project Implementation

19. Management. The project would be implemented over a four-year period by CNPT/IBAMA. It would be administered and coordinated by a Project Coordinating Unit (PCU) reporting directly to the Director of CNPT-Brasília, and implemented in conjunction with regional CNPT offices and the local extractivist associations, which are described in more detail in Annex 2. Establishment of the PCU in CNPT with responsibilities, structure and functions satisfactory to the Bank and with management and staff in adequate numbers and with adequate qualifications is a condition of Grant effectiveness (para. 38(c)). CNPT-Brasília would report to the Technical Secretariat of IBAMA for the Pilot Program, which reports to the Executive Secretariat of the Pilot Program in the Ministry of the Environment and the Legal Amazon (MMA). IBAMA will enter into an agreement (*convênio*) with MMA for ensuring timely availability of funds to implement the project. Signature and effectiveness of the legal agreement between IBAMA and MMA is a condition of Grant effectiveness (para. 38(d)). NGOs, including CNS and others, and government agencies would be contracted to undertake specific project activities (see Annexes 2 and 3 for more detail). Because of the diverse and complicated nature of tasks to be undertaken by local extractive reserve associations and by the National Rubbertappers Council

(CNS), umbrella agreements (*acordo-quadro*) will be signed by IBAMA with these organizations (see paras. 13 and 14). These umbrella agreements would outline the principles that would regulate the relationship of the organizations in question. Specific activities will be carried out by operating agreements (*convênios*) between IBAMA and the implementing agency(-ies). Technical assistance for project implementation, partly funded by the project, will be provided by the United Nations Development Programme (UNDP) under a pre-existing UNDP-GOB technical cooperation agreement.

20. To ensure the input of local participants at the national coordination level, a Project Consultative Committee would be created, including a wide range of NGOs and extractive reserve association representatives², to supervise and comment on the implementation of the project and on project personnel, to propose changes and to review the hiring of consultants for related tasks (see para. 17 and 38 (b)). The committee will meet every six months (see Annex 3).

21. Operational Plans and Reporting. The project will be implemented according to a financial and operational timetable for the four-year period specifying activities, implementing agencies, timing and costs, which was reviewed by the Bank prior to negotiations. This project timetable will be further operationalized by Annual Operation Plans (AOPs) detailing for the coming year, by component and subcomponent, activities, physical goals, implementation responsibilities, time frames/dates, monthly expenditures and personnel requirements. AOPs will also map out training programs and bidding and contracting activities. At negotiations, agreement was reached that the Bank will receive evidence of project counterpart funding by November 30 of each year for the following year and a CNPT/IBAMA Annual Operating Plan satisfactory to the Bank by each December 15 of the year before. (para. 36(d)). The Bank has received an Annual Operating Plan (AOP) for the period July to December 1994, and provided comments as a guide for the preparation of future AOPs. CNPT will structure its AOPs on models already in use in IBAMA. CNPT's AOPs will be based on specific Annual Work Plans for each reserve, which will be developed by the reserve associations in conjunction with the appropriate regional CNPT office. Detailed draft implementation mechanisms and plans for institutional strengthening are in Annex 3.

22. Monitoring and Evaluation. There will be three kinds of monitoring and evaluation of the project: (i) monitoring of the annual financial and operational plan; (ii) environmental (including socio-economic parameters) monitoring; and (iii) project

² The project advisory committee, or "Consultative Committee," would include representatives from the four extractive reserves, the National Rubbertappers Council (CNS), the Amazon Working Group (GTA) which represents 240 Amazonian NGOs, the Technical Secretariat in MMA for the Pilot Program, the director of CNPT and the five directorates of IBAMA. General CNPT activities are overseen by CNPT's existing Consultative Council, which consists of representatives of the following organizations: CNS, National Fishermen's Movement (MONAPE), GTA, the Center for Indigenist Work (CTI), the Coordination of Brazilian Amazonian Indigenous Organizations (COIAB), the Institute for Environmental and Amazonian Studies (IEA), and representatives of nine extractive reserve associations.

evaluation. Coordinating project monitoring and evaluation will be the responsibility of the PCU. However, the executing responsibilities belong to many different participants. Using a computerized management system to be funded by the project, the financial and operational project monitoring will be prepared semi-annually by the PCU according to the indicators stipulated in the AOP and based on the standard semi-annual reports to be prepared by CNPT-Brasília and quarterly reports from the regional CNPT offices and the reserve associations. At negotiations, agreement was reached that the PCU will prepare and submit to the Consultative Committee and the donors semi-annual financial, operational and environmental monitoring reports by February 28 and August 31 of each year. The project mid-term report will include the mid-term external evaluation report, and the final project report will include the final external evaluation report (para. 36 (e)). Environmental monitoring, including social-economic parameters, will be developed and coordinated by the PCU, but the main responsibilities for data collection will lie with experts and specialized organizations, in collaboration with reserve associations and regional CNPT offices. The environmental monitoring system cannot be fully developed until certain baseline biological and socio-economic studies have been completed and the Extractive Reserve Development Plans have been drafted (see Annexes 6 and 7). The satisfactory version of the environmental monitoring system would be presented by September 30, 1995 (see para. 16 and 36(b)). The project evaluation will occur at several levels, and thus involves many actors. Each reserve association is encouraged to evaluate the progress it is making towards meeting both the physical and operational goals set out in its Annual Work Plan and the overarching goals of the project. At the project level, recommendations from the PCU's monitoring reports and the Project Consultative Committee's recommendations will be fed back into project implementation to help the project better attain its physical and global objectives. Finally, the PCU will hire an independent consultant(s) for the project mid-term and final evaluations and seminars (see also para. 17). A special Technical Secretariat has been set up in IBAMA to provide overall coordination among those Pilot Program projects implemented by IBAMA, and between IBAMA and the MMA. Annex 7 provides more detailed information on monitoring and evaluation. Bank supervision missions are planned for six-month intervals to supervise project progress. At negotiations, agreement was reached that not later than September 30 of each year the Government would hold an annual review with the Bank, at which time the adequacy of the project strategy would be assessed and modifications discussed and agreed if necessary (para. 36 (f)).

23. Procurement. The proposed procurement arrangements are summarized in Schedule B. At negotiations, agreement was reached that all procurement for civil works and goods to be carried out according to LCB procedures will be made on the basis of standard bidding documents satisfactory to the Bank (para. 36 (g)).

24. Civil works financed under the project (about US\$1.0 million, including contingencies) will include very small and scattered works in four geographically dispersed and isolated extractive reserves. Civil works include the construction of school houses, health posts, community association offices, and household and community storage structures, small scale latex processing plants, and other small plants and structures for experimental processing and commercialization of non-timber

forest products. Civil works will also include the demarcation and posting of extractive reserve areas, as well as clearing of waterways and trails for transport. Contracts for works exceeding US\$100,000 would be procured through LCB procedures, acceptable to the Bank. Works valued below US\$100,000 but greater than US\$25,000 would be procured on the basis of local shopping procedures with price quotations from at least three contractors. Construction of some smaller works valued below US\$25,000 would be carried out directly by the extractive reserve associations. The total cost of these works is estimated at US\$30,000. The Bank would finance only the construction materials and equipment necessary for their execution, while the extractive reserve associations would provide the labor. Building materials would be procured through procedures outlined below for goods. The total cost of goods (including US\$1.7 million for equipment and US\$1.6 million for supplies) is estimated at US\$3.3 million, including contingencies. Contracts for goods grouped in packages of US\$250,000 or more would be procured on the basis of LIB procedures, satisfactory to the Bank, based on a list of qualified suppliers (such contracts would be primarily for equipment and vehicles, the maintenance of which would require established service facilities in Brazil). Goods grouped in packages valued at less than US\$250,000, but more than US\$100,000, would be procured through LCB procedures satisfactory to the Bank. Contracts for goods valued at less than US\$100,000 would be procured through local shopping procedures, satisfactory to the Bank, with price quotations from at least three suppliers. Foreign suppliers wishing to participate in bidding for LCB contracts would be allowed to do so in accordance with local procedures.

25. The total cost of technical assistance and contractual services is estimated at US\$3.6 million, including contingencies. The selection and appointment of consultants will be in accordance with the August 1981 "Bank Guidelines for the Use of Consultants." Foreign consultants would not be subject to prior registration as a condition of their participation in the selection process. Registration would be a pre-condition, not of selection, but of contracting of engineering and architectural consulting services. In accordance with Bank guidelines, bids for consulting contracts with firms would be invited from a short list of three to six prequalified firms, for each specific contract.

26. The Bank would review and approve before contract award all procurement documentation for (i) all goods to be procured through Limited International Bidding procedures, and (ii) the first two contracts for the procurement of goods and for civil works, under LCB procedures. Prior Bank review of procurement documentation would cover about 40% of the total amount of goods and services financed by the RFT and CEC. Documentation for consultant contracts with firms over US\$60,000 and contracts with individuals over US\$30,000 would be subject to prior review by the Bank. For consultants' contracts below these limits, the Bank's prior review would cover only terms of reference. Post-award review of documentation of other consultant contracts would cover about 20% of such contracts. Other contracts and bid evaluations would be subject to selective post-award review by Bank staff.

27. Procurement information will be collected and recorded as follows: (i) prompt reporting of contract award information by the implementing agencies; (ii)

comprehensive semiannual reports by the borrower, indicating any revision in cost estimates for individual contracts and the total project; any revisions in the timing of procurement actions; and compliance with aggregate limits on specified methods of procurement; and (iii) a completion report by the Government within three months of the closing date.

28. Disbursements. The proposed grants totalling US\$8.8 million (US\$ 3.0 million from the RFT, and US\$5.8 million from the CEC) would be disbursed over a four-year period (Schedule B-2). The project Completion Date will be October 31, 1998 and the Closing Date will be April 31, 1999. The proceeds of the RFT grant will be disbursed as follows: Civil Works: 34% of total expenditures; Equipment and Supplies: 34% of total expenditures; and Consultancies (including technical assistance and contractual services): 34% of total expenditures. The proceeds of the CEC grant will be disbursed as follows: Civil Works: 66% of total expenditures; Equipment and Supplies: 66% of total expenditures; and Consultancies (including technical assistance and contractual services): 66% of total expenditures.

29. Withdrawal applications for goods with a contract value of US\$250,000 or more, for consultants' services with a contract value of US\$60,000 or more for firms or US\$30,000 or more for individuals, and for the first two contracts for works, would be supported by full documentation. Contracts valued below US\$250,000 for goods (except the first two contracts), below US\$60,000 for consultant services from firms, and below US\$30,000 for consultant services from individuals, and for works (except the first two contracts), as well as disbursements against activities not undertaken by contract, would be made on the basis of Statements of Expenditure (SOEs). Supporting documents would be maintained by the executing agency and made available for selective review by visiting Bank missions.

30. Accounts and Audits: CNPT/IBAMA and the extractive reserve associations would maintain separate accounts for project expenditures. In order to expedite project execution, Special Accounts may be opened and maintained in US dollars at a commercial bank acceptable to the Bank. Expected authorized allocation for the Special Accounts will be US\$200,000 and \$400,000, respectively. The accounts would show expenditures for each project component, subdivided by expenditures financed by the RFT, the CEC and the Government. At negotiations, agreement was reached that (i) the Special Account and the project accounts would be maintained and audited annually by independent auditors acceptable to the Bank according to standards and procedures satisfactory to the Bank; (ii) terms of reference for the auditors would include, *inter alia*, detailed procedures for the examination and verification of the SOEs for the project accounts; and (iii) certified copies of the audited accounts and of the auditors' reports would be submitted to the Bank within six months of the close of each fiscal year (para. 36 (h)).

Project Sustainability

31. A major purpose of these pilot efforts is to increase knowledge and experience in activities and institutions that would ensure sustainable management of natural resources. To this end, sustainability is encouraged by: (i) promoting activities to

increase the income of local communities to provide them with a tangible incentive to better manage their natural resources; (ii) emphasizing collaboration between government, local communities and NGOs; (iii) devoting considerable resources to training paraprofessionals and to strengthening local organizations which would have long-term responsibility for project continuity; and (iv) exploring the possibility of establishing an Extractive Reserve Trust Fund.

Rationale for RFT Funding

32. The Bank's country assistance strategy (CAS) for Brazil, which was discussed by the Executive Directors on June 29, 1993, is to support policies and investments that encourage economic growth and macroeconomic stability, with emphasis on efficient resource allocation and administration in the public sector and appropriate targeting and delivery of support systems to the poor. The Pilot Program to Conserve the Brazilian Rain forest fits the objectives of the country strategy. The proposed project warrants support under the Pilot Program because it would test the conditions under which the extractive reserve model would become viable. It is fully consistent with the CAS. If successful, extractive reserves could provide one alternative to converting the standing forest to other, more environmentally destructive activities such as cattle raising, uncontrolled logging or large-scale agriculture. Specifically, the activities to be supported in extractive reserves are expected to foster the development of economically and ecologically sustainable uses of forest resources and thus contribute to their conservation over the long-term. The activities supported under this project would be complemented by other Pilot Program projects, such as the Science Centers/Directed Research and Demonstration projects.

Environmental Aspects

33. This project is classified as a "B" for purposes of environmental impact assessment. A sectoral environmental analysis was completed, and the report was approved by LATEN. The main concerns are the potential risks of overexploitation of the natural resources in the extractive reserves which could result from the increased commercialization of non-timber forest products. There is also a need to increase the knowledge base on the impacts of natural resource use to determine best practices, and determine optimal enforcement mechanisms to limit resource use. These potential risks will be minimized in two ways. First, two kinds of management plans will be developed and implemented: (i) in the short-term, a Utilization Plan for each reserve (required to obtain the concession contract) will be developed and established, and (ii) after about three years, a Development Plan would build on the results of project and program-funded research and experience, and orient economic and community activities in greater detail than Utilization plans and with forward-looking goals. Both plans would be evaluated by IBAMA and reviewed by the Bank. Annex 5 gives further details on these plans. An environmental monitoring system would also be established to serve as an early warning system for environmental concerns. This system is described in Annex 7. The National Indian Foundation (FUNAI) has provided confirmation that there are no indigenous populations in the extractive reserves. There has been and will continue to be extensive participation of local people in all aspects of this project.

Project Benefits

34. The proposed project would have local benefits including the improved well-being of extractive reserve populations and the improved use and management of natural resources. Global benefits include the protection of biological diversity and global climate, through a reduction in the rate of deforestation. The project would allow for the testing of alternative models for the sustainable use and management of the Amazon rain forest.

Project Risks

35. The principal risks to the project are the experimental nature of the extractive reserve conservation and development approach, and the limited institutional capacity of the implementing agencies, specifically CNPT/IBAMA and the extractive reserve associations. The relative slowness of the establishment of the extractive reserves since 1990 may be attributed to several factors including the highly participatory nature of the undertaking, the lack of institutional capacities and experience of the national and local extractivist organizations, the recent (1992) creation of the CNPT in IBAMA, the need to create and establish legal precedents and regulations for a new kind of conservation mechanism, and deficient and irregular funding. The proposed project specifically includes institutional strengthening activities designed to provide training, technical assistance and additional human resources for project implementation. Pre-investment activities have also contributed significantly to clarifying the legal and regulatory aspects of regularizing and implementing the extractive reserves, which will also be addressed under Component 1 which will complete the legalization of the reserves. The experimental nature of the project requires adequate monitoring and evaluation which would be provided by a three-pronged approach, involving project performance monitoring, environmental monitoring and project evaluation that involves participants at all levels of the project. Moreover, one of the supervision missions each year will be planned as an annual review to assess the adequacy of the project strategy and, if necessary, discuss design modifications. The potential risks of overexploitation of the natural resources of the extractive reserves will be minimized by the preparation, implementation and monitoring of the Extractive Reserve Utilization and Development Plans (see para. 16). Another risk of the project is the poverty of the extractivists and the need to improve their livelihoods. This will be addressed by activities to strengthen subsistence production, improve the commercialization of traditional products (e.g. adding value by processing and improved marketing), and applied subprojects on income generation alternatives including feasibility studies and market assessments of non-traditional products and other pilot activities.

III. AGREEMENTS REACHED AND RECOMMENDATION

36. At negotiations, the Bank and the Government agreed that:

- a. a letter defining criteria and mechanisms satisfactory to the Bank for approving funds for applied pilot activities on alternative products,

marketing assessments and pilot processing and marketing activities would be provided to the Bank by January 31, 1995 (para. 15);

- b. final versions satisfactory to the Bank would be completed of: (i) Extractive Reserve Development Plans for Extractive Reserves Alto Juruá and Chico Mendes by December 31, 1995 and for Extractive Reserves Rio Ouro Preto and Cajari by December 31, 1996; and (ii) Environmental Monitoring Systems for each reserve by September 30, 1995 (para. 16);
- c. terms of reference for the independent mid-term and final project evaluation would be delivered to the Bank by January 30, 1995 for review (para. 17);
- d. the Bank would receive evidence of project counterpart funding by November 30 of each year for the following year and a CNPT/IBAMA Annual Operating Plan satisfactory to the Bank by each December 15 of the year before (para. 21);
- e. the PCU would prepare and submit to the Consultative Committee and the donors semi- annual financial, operational and environmental monitoring reports by February 28 and August 31 of each year. The project mid-term and final reports would include the mid-term and final external evaluation reports respectively (para. 22);
- f. not later than September 30 of each year it would hold an annual review with the Bank, at which time the adequacy of the project strategy would be assessed and modifications discussed and agreed if necessary (para. 22);
- g. all procurement for civil works and goods to be carried out according to LCB procedures would be made on the basis of standard bidding documents satisfactory to the Bank (para. 23);
- h. (i) the Special Account and the project accounts would be maintained and audited annually by independent auditors acceptable to the Bank according to standards and procedures satisfactory to the Bank; (ii) terms of reference for the auditors would include, *inter alia*, detailed procedures for the examination and verification of the SOEs for the project accounts; and (iii) certified copies of the audited accounts and of the auditors' reports would be submitted to the Bank within six months of the close of each fiscal year (para. 30).

37. As a condition for RVP approval of the Grant Agreement, the following conditions were met:

- a. the administrative rules for regularizing the extractive reserves, including the guidelines for Extractive Reserve Utilization Plans and

Extractive Reserve Development Plans, are satisfactory to the Bank (para. 13);

- b. the Financing Agreement for the CEC co-financing of the project was signed by the CEC and the Bank (para. 18).

38. Conditions of grant effectiveness are:

- a. signature and effectiveness of an umbrella agreement satisfactory to the Bank between IBAMA and the National Rubbertappers Council (CNS) (para. 14);
- b. establishment of the Project Consultative Committee with responsibilities, structure and functions satisfactory to the Bank and with members in adequate numbers and with adequate qualifications (para. 17);
- c. establishment of the Project Coordinating Unit (PCU) in CNPT/IBAMA with responsibilities, structure and functions all satisfactory to the Bank and with management and staff in adequate numbers and with adequate qualifications (para. 19);
- d. signature and effectiveness of the legal agreement between IBAMA and MMA (para. 19).

39. Conditions of disbursement with respect to each Extractive Reserve are:

- a. presentation of an Extractive Reserve Utilization Plan satisfactory to the Bank for disbursements for the commercial productive activities under Component 3 of the project (Subcomponents 2,3 and 4 except research activities in 4) (para. 13);
- b. signature and effectiveness of an umbrella agreement satisfactory to the Bank between IBAMA and at least one Local Association acceptable to the Bank in the Extractive Reserve (para. 13);
- c. evidence that the Government holds legal possession (*emissão de posse*) of the Extractive Reserve (para. 13).

40. Recommendation. I am satisfied that the proposed RFT grant would comply with Resolution 92-2 of the Bank's Executive Directors, and recommend approval of the grant.

Gobind T. Nankani
Director, Country Department I
Latin America and the Caribbean Region

Attachments
Washington, D.C.
October 27, 1994

BRAZIL
Pilot Program to Conserve the Brazilian Rain Forest
Extractive Reserves

SUMMARY OF PROJECT COSTS BY COMPONENT (US\$ Million equivalent)

COMPONENT	Local	Foreign	Total	% Foreign Exchange	% Total Base Costs
A. Establishment and Strengthening of Extractive Reserves	1.2	0.0	1.2	0	13
B. Community Organization	2.2	0.3	2.5	12	27
C. Improvement of Productive Activities	2.5	0.3	2.8	12	31
D. Environmental Management	0.7	0.1	0.8	15	10
E. Project Management and Evaluation	1.5	0.2	1.7	15	19
Total Base Costs	8.1	0.9	9.0	10	100
Physical Contingencies	0.3	0.0	0.3	11	5
Price Contingencies	0.4	0.0	0.4	11	3
Total	8.8	0.9	9.7	11	108

BRAZIL
Pilot Program to Conserve The Brazilian Rain Forest
Extractive Reserves

Financing Plan					
Category of Expenditure	Government	RFT (US\$ million)	CEC (ECUs million)	Total (US\$ equiv.)	Proposed RFT/ Donors %
Civil works	0.03	0.30	0.57	1.00	97
Equipment	0.25	0.45	0.86	1.70	85
Supplies	0.16	0.46	0.87	1.63	99
Technical Assistance & Contractual Services	0.34	1.27	1.70	3.60	90
Maintenance and Operating Costs	0.03	0.00	0.00	0.03	0
Long-term Consultants	0.00	0.12	0.23	0.39	100
Travel & per diems	0.05	0.40	0.77	1.35	96
Total	0.86	3.00	5.00	9.70	91

Brazil
Pilot Program to Conserve The Brazilian Rain Forest
Extractive Reserves

Summary of Proposed Procurement Arrangements (US\$ Million equivalent)					
Project Element	Procurement Method				Total Cost
	ICB	LCB	Other	NBF	
Works					
Construction		0.97		0.03	1.00
Demarcation/Posting		(0.33)		(0.00)	(0.33)
Goods					
Equipment		0.75	0.70 a/	0.25	1.70
		(0.26)	(0.23)	(0.00)	(0.49)
Supplies		0.72	0.75 b/	0.19	1.66
		(0.24)	(0.24)	(0.00)	(0.48)
Consultancies					
Technical Assistance and Contractual Services			3.26 c/	0.34	3.60
			(1.11)	(0.00)	(1.11)
Travel and per diems			1.30 d/	0.05	1.35
			(0.44)	(0.00)	(0.44)
Long-term Consultants			0.39	0.00	0.39
			(0.13)	(0.00)	(0.13)
Total	0.0	2.44	6.40	0.86	9.70
	(0.0)	(0.83)	(2.16)	(0.00)	(2.99)

a/ Limited International Bidding

b/ Local shopping

c/ Contracting of consultants and studies in accordance with Bank guidelines.

d/ Reimbursement of expenditures for per diems, travel, transport, and storage.

e/ Maintenance costs include maintenance of buildings, equipment and vehicles.

Operating costs include operating capital, transport and storage.

Notes:

Numbers in parenthesis reflect RFT financing. Totals represent total estimated costs per category, including contingencies.

NBF: Not Bank/RFT financed.

BRAZIL

PILOT PROGRAM TO CONSERVE THE BRAZILIAN RAIN FOREST
EXTRACTIVE RESERVES

Summary of Disbursement Arrangements

CATEGORY	RFT AMOUNT (US\$'000)	CEC AMOUNT ('000 ECU)	ITEM and % of Expenditure
Civil Works	300	550	34% (RFT) 66% (CEC)
Equipment and Supplies	800	1,500	34% (RFT) 66% (CEC)
Consultants' Services, Travel, and Per Diem	1,600	2,500	34% (RFT) 66% (CEC)
Unallocated	300	450	34% (RFT) 66% (CEC)
TOTAL	3,000	5,000	

RFT DISBURSEMENT SCHEDULE (US\$ '000)

Bank FY	1995	1996	1997	1998	1999
Annual	250	810	810	710	420
Cumulative	250	1060	1870	2580	3000

EXTERNAL FUNDS DISBURSEMENT SCHEDULE (US\$ '000 equivalent)

Bank FY	1995	1996	1997	1998	1999
Annual	467	1577	1577	1402	817
Cumulative	467	2044	3621	5023	5840

BRAZIL**PILOT PROGRAM TO CONSERVE THE BRAZILIAN RAIN FOREST
EXTRACTIVE RESERVES****Schedule C: Timetable of Key Project Processing Events**

Time Taken to Prepare:	20 months (August 1992 to April 1994)
Prepared By:	IBAMA and CNPT World Bank: Claudia Alderman, Judith Lisansky, Graciela Lituma, Jamison Suter; Douglas Graham (LATEN) Commission of the European Communities: José Vasconcelos
First Bank Mission:	August 1992
Appraisal Mission Departure:	April 1994
Negotiations:	August 1994
Planned Date of Effectiveness:	February 1995
Summary Supervision Plan:	Missions are planned for 4-6 month intervals to supervise progress. Technical expertise would include institutional specialists, ecologists, natural resource economists and social scientists. One mission each year will be planned as an annual review to assess the adequacy of the project strategy and, if necessary, discuss design modifications. Supervision staff would be based in Brasilia.

BRAZIL**PILOT PROGRAM TO CONSERVE THE BRAZILIAN RAIN FOREST
EXTRACTIVE RESERVES PROJECT****TECHNICAL ANNEXES**

Annex 1	LEGAL AND TECHNICAL ASPECTS OF ESTABLISHING EXTRACTIVE RESERVES
Annex 2	BACKGROUND ON THE FOUR EXTRACTIVE RESERVES SUPPORTED BY THE PROJECT
Annex 3	IMPLEMENTATION ARRANGEMENTS AND CAPACITY- BUILDING
Annex 4	IMPLEMENTATION SCHEDULE
Annex 5	EXTRACTIVE RESERVES: RESERVE UTILIZATION PLANS AND DEVELOPMENT PLANS
Annex 6	NATURAL RESOURCE ISSUES
Annex 7	MONITORING AND EVALUATION
Annex 8	OTHER PROJECTS IN THE EXTRACTIVE RESERVES
Annex 9	REPORTS AND DOCUMENTS IN PROJECT FILE
Annex 10	DETAILED PROJECT COST TABLES
Map	IBRD No. 25943

BRAZIL

PILOT PROGRAM TO CONSERVE THE BRAZILIAN RAIN FOREST
EXTRACTIVE RESERVES PROJECTAnnex 1: LEGAL AND TECHNICAL ASPECTS OF ESTABLISHING
EXTRACTIVE RESERVES

1. **Background.** Extractive reserves were initially proposed during the 1970s by the non-Indian inhabitants of the forests of the State of Acre. Primarily long-term squatters with livelihoods based on subsistence production and the collection of non-timber forest products, these extractivists were losing access to their lands because of frontier expansion. In 1985, extractivists throughout Brazil, usually referred to generically as *rubbertappers*, organized the National Rubbertappers Council (CNS) which lobbied nationally for the creation of "extractive reserves," areas to be set aside for the exclusive usufruct of the local forest dwelling population in which natural resources would be conserved and sustainably managed.

2. **Legal framework.** The Constitution of 1988 strengthened the legal framework for environmental protection in Brazil, and Article 225 provides the legal mandate for creating extractive reserves. On July 18, 1989, Law 7804 was adopted to amend the National Environmental Policy Law 6938 of August 31, 1981, specifically to amend Article 9, Section VI, to include extractive reserves as one type of conservation unit that could be established. On January 30, 1990, Decree 98,897 was passed which provided the general legal framework specifically for the creation of extractive reserves under the jurisdiction of the Brazilian Institute for the Environment and Renewable Natural Resources (IBAMA).¹ This decree defined the creation and legal regularization of an extractive reserve and provided a list of requirements to be fulfilled for the local extractive reserve association to receive a long-term concession contract from the federal government. These basic requirements include (i) a decree that creates (but does not regularize) the extractive reserve; (ii) approval by IBAMA of a reserve utilization plan; (iii) the issuance of a use concession contract from IBAMA according to article 7 of Decree law 271 of February 28, 1967, including a clause rescinding the contract in the cases of environmental damage and transferral of the concession *inter vivos*, (iv) Congressional approval of the use concession contract;² and (v) IBAMA's undertaking supervision responsibilities. In 1992, the National Center for the Sustainable Development of Traditional Populations (CNPT) was created within IBAMA to coordinate the creation and development of Brazilian extractive reserves. To date, CNPT has helped establish nine extractive reserves nation-wide, although none of these reserves has been fully regularized. In October,

¹ From 1987-89, ten "extractivist settlements" (*assentamentos extrativistas*) were created under the jurisdiction and management of the National Institute for Colonization and Agrarian Reform (INCRA). While similar in many respects to extractive reserves, extractivist settlements are not exclusive to local inhabitants, nor do they require Utilization Plans. Many issues regarding their implementation remain unresolved. In addition to extractive reserves and extractive settlements, certain Amazonian states have created "extractive forests." The legal status of state reserves remains ambiguous; their implementation is also unclear.

² According to Article 188, Paragraph 1 of the Brazilian Constitution, Congressional approval of the use concession contract is required for areas larger than 2,500 hectares.

1994, IBAMA adopted Administrative Rules (*Portaria*) further specifying the procedures for the creation and regularization of extractive reserves in Brazil.

3. Initial steps for the creation of an extractive reserve. Table 1 outlines the principal steps for creating an extractive reserve. The process of establishing an extractive reserve is initiated when a group of extractivists submits a signed petition to CNPT requesting the creation of an extractive reserve. The petition is generally accompanied by letters of support from CNS, local inhabitants' associations and other NGOs. The petition should be accompanied by available reports or existing data on the juridical, sociological, economic, agronomic and ecological conditions of the proposed reserve.

4. A local extractive reserve community organization, usually an association, must be formed in order to represent the inhabitants of the proposed extractive reserve. As early as possible, this association must be formally established, prepare its constitution and be legally registered to act as the legal representative body for the extractive reserve regarding all administrative, legal and managerial activities.

5. On receipt of the petition and accompanying materials, in accordance with IBAMA Administrative Rules and Item 37 of the Procedures for Establishing an Extractive Reserve adopted by the Consultative Council of the CNPT, CNPT initiates visits to the proposed extractive reserve to collect additional information. The following information is collected and analyzed: (i) cartographic data (including proposed location, area and perimeter, and natural resources and their distribution); (ii) biological data (e.g., species and their frequency of occurrence, productive capacity and viability of sustained management and use of natural resources); (iii) preliminary socio-economic data (including the status of the land tenure situation, natural resource management practices, history of human occupation, demographic information, settlement patterns, economic activities, social services, infrastructure and quality of life indicators); (iv) preliminary assessment of the level and representativeness of the community organization; (v) photographs; (vi) legal justifications (documents pertaining to the creation of the extractive reserve and to its environmental characteristics); (vii) documentation of community and NGO support for the reserve; and (viii) bibliographic materials. This information is then reviewed by the Commission of Traditional Populations (CPT) of IBAMA (IBAMA *Portaria* 46-N), an advisory commission created in May, 1994 and composed of representatives from the Attorney General's office of IBAMA, the CNPT and other IBAMA units with the capacity to examine issues related to traditional populations and extractive reserves. The CPT should make a technical recommendation within 90 days as to whether or not the extractive reserve should be established to the President of IBAMA. A favorable recommendation is forwarded by IBAMA to the Office of the President of the Republic, who then may sign a Decree specifically to create the extractive reserve in the defined area.

6. Regularization of the Lands of the Extractive Reserve. After the Presidential Decree is signed and the notification published in the Daily Gazette of the Republic, IBAMA proceeds with the steps necessary to regularize the lands of the extractive reserve in accordance with Decree 98,897 of January 30, 1990 and the Administrative Rules. These steps include: (i) resolving all land tenure questions within its boundaries; and (ii) physical demarcation of the reserve boundaries (by cutting a 2.5 meter strip along its perimeter) and sign posting. A census and socioeconomic survey

of extractive populations must also be undertaken by the community organization with the assistance of IBAMA/CNPT at this time. Resolution of land claims is carried out by IBAMA with the assistance of the Federal Attorney General, and the demarcation and sign posting may be done by the army or by contract to private firms in conjunction with the local reserve inhabitants. In order to complete the process of land appropriation necessary for the creation of the extractive reserve, first, any persons or legal entities with legitimate land claims in the proposed area or along common borders are identified. The current practice is to determine values for the claims according to established INCRA criteria. According to IBAMA Administrative Rules, the values should be assessed within 90 days of publication of the Presidential Decree creating the extractive reserve. Compensation is paid in cash by the government. In instances in which the disputing party is not satisfied with the administrative offer, a settlement must be made in court. After appropriation and compensation, all lands inside the reserve become property of the State and a federal judge issues a declaration of possession (*emissão de posse*) in the name of IBAMA. From then on, legally the area can be used only for "self-sufficient use and conservation of renewable natural resources by extractivist populations."

7. Extractive Reserve Utilization Plans. For the local extractive reserve association to receive a long-term concession contract from the Government, it must prepare and present for approval by IBAMA an Extractive Reserve Utilization Plan. This Utilization Plan is developed with the assistance of IBAMA/CNPT, CNS, other NGOs and outside consultants. It is based on the already completed biological and socio-economic studies and should orient, regulate and supervise natural resource use in the reserve. The Utilization Plan is reviewed by the Commission of Traditional Populations, which forwards the plan with its recommendation to the President of IBAMA for approval. See Annex 5 for a more detailed description of Utilization Plans.

8. Extractive Reserve Concession Contracts. Once the Utilization Plan has been approved by IBAMA, CNPT then proceeds (in conjunction with the local association) to draft the Extractive Reserve Concession Contract (*Concessão de Direito Real de Uso*), which is a use contract as defined by Decree Law 271 of February 28, 1967. Congressional approval is necessary on all land concessions greater than 2500 hectares, thus the political will of the Government of Brazil is necessary for this project to proceed. Every indication to date has shown that such will exists, and will continue after the upcoming October 1994 elections. This Concession Contract confers on the local association the powers of surveillance, regulation and intervention with respect to the inhabitants' activities, and allows inhabitants usufruct rights to renewable natural resources. Supervision of the local association's compliance with the utilization plan and overall protection of the extractive reserve and its natural resources is vested in IBAMA. Additional direct uses of natural resources may be proposed by the local population; however, the authority for approving such uses remains with IBAMA. The use concession contract is not valid in perpetuity but for a minimum period of 40 years. During the approval process of the concession contract, IBAMA presents a model Use Authorization Contract to the local extractive reserve association. After the concession contract is approved, the association signs individual Use Authorization Contracts with each member, granting use privileges and obliging members to obey the conditions set forth in the utilization plan. Residents who are not members of the association may sign contracts directly with IBAMA. The Extractive Reserve Concession Contract and the individual contracts contain clauses

stipulating that if the association or any individual fails to abide by the restrictions in the Utilization Plan, a penalty is applied ranging from a fine to rescinding the contract. Neither type of contract is transferable, except in the case of death to an heir or spouse.

9. Temporary Concession Letters. In order to allow extractivists in the reserves of this particular project access to credit before the granting of concession contracts and use authorization contracts, IBAMA has proposed issuing temporary concession letters (*cartas de anuência*) to individuals. These letters would substitute for the contracts until the latter are issued. The Ministry of the Environment and the Legal Amazon has provided a legal opinion, available in the project files, confirming that this procedure is in accordance with Brazilian law. The temporary concession letters do not eliminate, however, the need for a utilization plan.

10. Extractive Reserves Development Plans. After an extractive reserve is regularized, an "Extractive Reserve Development Plan" is proposed to further operationalize the Utilization Plan, whose primary function is to orient initial resource use and to obtain the Extractive Reserve Concession Contract. Unlike the Utilization Plan, which primarily establishes general norms for resource use, the Development Plan proposes development activities to pursue the dual goals of environmental protection and sustainable, long-term development of the extractivist population (see Annex 5 for information on Development Plans). The Administrative Rules (*Portaria*) adopted by IBAMA require the preparation and approval of the Development Plan within one year after the approval of the Utilization Plan. Development Plans must also be periodically reviewed.

11. Supervision and Enforcement. Once an extractive reserve is established and functioning, IBAMA is responsible for ensuring proper supervision of the reserve. Supervision is the duty of IBAMA, but IBAMA may enter into agreements with other federal, state or local agencies, in conjunction with or under contract to local inhabitants. The development and implementation of Extractive Reserve Protection Plans will be undertaken by IBAMA and financed by the Government. The protection plans include infrastructural improvements to IBAMA border control posts and the development of a collaborative approach between IBAMA field agents and the local population to prevent encroachment and to supervise resource use on the reserves. In addition, Extractive Reserve Utilization Plans provide for local monitoring of resource use in individual and common areas by community organizations to ensure that utilization guidelines are being observed. Repeated infraction of the plan would result in the imposition of a range of penalties as stipulated in the plan, but subject to appeal to IBAMA.

Table 1. Steps for the Creation and Legalization of the Extractive Reserves under the Project

Dates in parentheses represent expected time of completion for the given reserve. The finalized timetable for the project will set out specific dates, quantities and responsibilities for the steps still to be completed. See Annex 4.

STEP	Alto Juruá	Chico Mendes	Rio Ouro Preto	Rio Cajari
1. Request by the local population for the creation of an Extractive Reserve.	1989	1985	1989	1989
2. Creation of an organization to represent the local community.	1989	Unions in existence since 1975	1991	1992
3. Field visit by IBAMA, resulting in a report approving the creation of the reserve.	1989	1990	1990	1990
4. Survey of cartographic data; biological report; socio-economic survey.	1989 ³	1990 ³	1989 ³	1990 ³
5. Creation of the Extractive Reserve.	1990	1990	1989	1990
6. Land tenure regularization, resulting in the issuance of a Declaration of Possession to the representative community association. ⁴	Completed 1992	Completed 1992	Begun 1992	Begun 1992
7. Census of inhabitants (and updating of socio-economic survey).	1993	1993	(1994)	1993
8. Development of a Reserve Utilization Plan	1993	1993	(1995)	(1995)
9. Issuance of temporary concession letters to inhabitants.	(1994-95)	(1994-95)	(1994-95)	(1994-95)
10. Approval of the Utilization Plan	1994	(1994)	(1995)	(1995)
11. Granting of Concession Contracts and Use Authorization Contracts	(1994)	(1995)	(1996)	(1996)
12. Development of a Reserve Development Plan	(1995)	(1995)	(1996)	(1996)

³ Information on all four reserves was updated in 1993 (step 7) with preinvestment funds.

⁴ The expropriation process is still ongoing.

BRAZIL**PILOT PROGRAM TO CONSERVE THE BRAZILIAN RAIN FOREST
EXTRACTIVE RESERVES PROJECT****Annex 2: BACKGROUND ON THE FOUR EXTRACTIVE RESERVES
SUPPORTED BY THE PROJECT**

1. The extractive reserves targeted in the project are the first four legally created in Brazil. They were created in December 1990 and are all in the Amazon region. The four reserves are: Extractive Reserve Alto Juruá and Extractive Reserve Chico Mendes in the state of Acre, Extractive Reserve Rio Cajari in the state of Amapá and Extractive Reserve Rio Ouro Preto in the state of Rondônia. The reserves are administered by the National Center for the Sustainable Development of Traditional Populations (CNPT) of the Brazilian Institute for the Environment and Renewable Natural Resources (IBAMA). The CNPT was created in February 1992. Brief descriptions of each extractive reserve follow.

EXTRACTIVE RESERVE ALTO JURUA

2. Created in January 1990 by Decree 98.863/90, Alto Juruá is located in the western portion of the state of Acre, approximately 150 km south of the city of Cruzeiro do Sul. It covers 506,186 hectares (5,062 km²) and in 1991, had a population of 5,821 persons (865 families). Rubber is the only product currently marketed, hence there is considerable interest in diversifying the reserve's economic activities. The reserve is accessible only by airplane or by boat (200 km by water from Cruzeiro do Sul), and seasonal fluctuations in river levels make access to many areas irregular throughout the year.

3. In accordance with the regulations for the establishment of extractive reserves (see Annex 1), a local association was created, the Rubbertappers' and Farmers' Association of Extractive Reserve Alto Juruá (ASAREAJ), and a formal census was carried out in 1991. ASAREAJ submitted a reserve utilization plan to IBAMA the same year; the plan was approved in October, 1994, and a concession contract is still pending. To date approximately 500 of the 865 families belong to ASAREAJ, a participation rate of 58%. Land appropriation and compensation activities were conducted in 1992, but the area has not yet been physically demarcated. The census was updated in 1993 with Pilot Program preinvestment funds.

4. Other organizations that have carried out activities in the reserve include the National Rubbertappers Council (CNS)-Alto Juruá, the Ecumenical Center for Documentation and Information (CEDI), Health Unlimited and other NGOs. A health program for the reserve has been started. The reserve has also received modest funding for improvements in rubber production and marketing, natural resource management, transportation, communications and education. See Annex 8 for a complete list of all current activities in the reserve. Despite its four years of existence, ASAREAJ is still institutionally weak and in great need of training in the areas of literacy, administration, management, finances, business skills and other areas.

EXTRACTIVE RESERVE CHICO MENDES

5. The Chico Mendes Extractive Reserve is located in the southeast portion of the state of Acre, about 50 km south of the city of Rio Branco. It was created in March 1990 by decree 99.144/90, and covers 970,570 hectares (9,706 km²). A preliminary census was completed in 1992 that documented 12,017 residents (1,838 families). Rubber and Brazil nuts are currently the principal products. The reserve is accessible by boat, car and airplane, although some parts may be reached only seasonally because rain makes the roads impassable. Two highways, BR-317 and the former AC-403, pass near and through the reserve, respectively.

6. Chico Mendes has three local reserve associations that cover the three contiguous portions of the reserve and which will receive concession contracts from IBAMA. These associations are: (i) the Rural Workers' Union of Xapuri (STRX) in the northern and eastern sections of the reserve, (ii) the Rural Workers' Union of Brasiléia (STRB) in the southern portion, and (iii) the Rural Workers' Union of Assis Brasil (STRAB) in the western area. The Agro-Extractivist Cooperative of Xapuri (CAEX) is another important local organization that works in the northern and eastern parts of the reserve, has overlapping membership with STRX, and will help to set up and manage programs in the Xapuri region; but it is not a designated "Reserve Association" that will receive a concession contract. All four organizations have members both inside and outside the reserve so membership data is imprecise. It is unknown what percent of the population in the Xapuri region currently participates in STRX. Nearly all of the 370 families in the Brasiléia area of the reserve are members of STRB, although they represent less than one-third of the total membership of STRB. In the Assis Brasil section of Chico Mendes, only 30 of the 620 families participate in STRAB (5% participation). Because these associations have members inside and outside the reserves, sub-associations representing only the members inside the reserve will be formed to receive concession contracts from IBAMA. The three reserve associations together submitted a reserve utilization plan to IBAMA in 1992, but it has yet to be approved and concession contracts have yet to be granted. Land appropriation and compensation were carried out in 1992, although some compensation amounts are being contested and reviewed. Demarcation was completed in 1992. The census was updated in 1993 with Pilot Program preinvestment funds.

7. The National Rubbertappers Council (CNS) of the Acre-Purus Valley and Center for Amazonian Workers (CTA) have provided significant support to the reserve. Many other NGOs, both domestic and international, have assisted on a smaller scale with technical and financial support (see Annex 8). The Brazil nut cooperative at Xapuri is the most significant accomplishment in the reserve, and is the only one of its kind in any of the four targeted reserves. Apart from Xapuri, however, the reserve does not have sufficient storage facilities. Modest initiatives to improve subsistence production, resource management and infrastructure are underway. Even though local associations have been in existence since the 1970s, the need for local managerial, administrative, financial and technical training is acute. Health and educational services in the reserve are also severely limited.

EXTRACTIVE RESERVE RIO CAJARI

8. The Extractive Reserve of Rio Cajari was created in January 1991, by Decree 99.145/90, in the southern portion of the state of Amapá, 100 km southwest of the

city of Macapá. It has an area of 481,650 hectares (4,817 km²) and has 3,639 residents (651 families). Its principal products are rubber, Brazil nuts and açaf fruit and heart of palm. One highway, BR-156, crosses the northern part of the reserve (200 km by car to Macapá) and is accessible year round, whereas the southern portion of the reserve is accessible only by boat and access is far more extensive during the flooded than during the dry season. Economic activity is severely limited by inadequate storage facilities and the lack of easy access to much of the reserve.

9. The required census of the reserve is currently being completed with Pilot Project preinvestment funds, and a plan to mark the area's boundaries (*sinalização*) has been completed but not implemented. Little has been accomplished thus far on the reserve's utilization plan. Land appropriation and compensation are also currently underway.

10. The Workers' Association of the Rio Cajari Valley (ASTEX-CA) was founded in 1991 as the reserve's managing association. It has 235 members (36% of all families in the reserve). The National Rubbertappers Council of Amapá has provided important assistance to ASTEX-CA in the fields of health, education, institutional strengthening and technical assistance, and often by channelling outside assistance from NGOs such as the World Wildlife Fund. Relative to the other reserves, however, Extractive Reserve Rio Cajari has received relatively little outside assistance (see Annex 8). ASTEX-CA is presently weak from the standpoints of personnel, finances, infrastructure and management. The reserve also lacks health and educational services.

EXTRACTIVE RESERVE RIO OURO PRETO

11. The Extractive Reserve of Rio Ouro Preto was created by Decree 99.166/90 on March 12, 1990, with an area of 204,583 hectares (2,046 km²). It is located in the western part of the state of Rondônia, 400 km southwest of city of Porto Velho and 35 km east of the regional capital of Guajará-Mirim, and has a population of 775 (123 families). It is accessible only by boat or by car and boat. During the rainy season, roads often become impassable whereas as the river level rises, water transport becomes easier. Rubber, Brazil nuts and heart of palm are the principal extractive products, but the reserve has no storage facilities.

12. The regularization process of Rio Ouro Preto has only just begun. Land appropriation and compensation are underway and demarcation began February 1994 under another Bank operation, the Rondônia Natural Resource Management project, Loan 3492-BR. However, a proposal is pending that would reduce the reserve by 30,000 ha. A census of the reserve was undertaken with Pilot Program preinvestment funds, but has not yet been completed. The reserve utilization plan has not been started.

13. The Rubbertappers' Association of Guajará-Mirim (ASGM) was created in March 1991 and will receive a concession contract from IBAMA when all requirements are completed. It has 80 members inside the reserve (65% participation) and 46 outside the reserve, although a sub-association will be formed to receive the concession contract of only the residents inside the reserve. The Institute for Amazonian Studies (IEA) is the primary NGO assisting ASGM. The National

Rubbertappers Council used to be involved with ASGM but no longer has a regional office. Because of assistance from IBAMA as well as several international donors (see Annex 8), the reserve is relatively well equipped with buildings, supplies, transportation and communication systems, schools and health posts. However, ASGM badly needs training in production technology, literacy, finance, and business and management skills.

BRAZIL**PILOT PROGRAM TO CONSERVE THE BRAZILIAN RAIN FOREST
EXTRACTIVE RESERVES PROJECT****Annex 3: IMPLEMENTATION ARRANGEMENTS AND CAPACITY-
BUILDING****Introduction**

1. The Extractive Reserves Project is an innovative, experimental project designed to progressively increase the capacity of local extractive reserve populations to administer and manage their reserves. To that end, the model for implementation should be understood as one which devotes considerable resources to preparing, training and increasing the capacity of local organizations to administer and manage the project activities.

2. During the initial phase of the project implementation period, the majority of implementation responsibilities will be carried out by the National Center for the Sustainable Development of Traditional Populations (CNPT), with assistance from other departments in the Brazilian Institute for the Environment and Renewable Natural Resources (IBAMA). Experienced NGOs and technical experts will also be contracted. During this period, training and technical assistance will be targeted to improving the implementation capacity of the local organizations (see "Capacity-Building" section). Thus, during the first years there will be significant investments in the development of human resources in the extractive reserves and in local governmental and non-governmental agencies. It is expected that over time, certain implementation responsibilities will be transferred to local extractive reserve associations as they become institutionally and financially capable of carrying them out. Investment costs would decrease rapidly, and recurrent costs would be assumed increasingly by the local associations as reserve economic activities become more remunerative.

Governmental Institutions

3. The Pilot Program to Conserve the Brazilian Rain Forest is coordinated by an Executive Secretariat in the Ministry of the Environment and the Legal Amazon (MMA). The MMA is responsible for setting environmental policy in Brazil, and IBAMA, created in 1989, is its executive agency. IBAMA is headquartered in Brasilia and has state offices nation-wide. It is organized into five major executive directorates: (i) Surveillance and Supervision; (ii) Renewable Natural Resources; (iii) Ecosystems; (iv) Research and Dissemination; and (v) Administration and Finance. IBAMA is being strengthened under another Bank project, the National Environment Project (Ln. 3173-BR).

4. CNPT was created within IBAMA in 1992 specifically to administer the establishment of extractive reserves. CNPT is organizationally independent of IBAMA's five directorates, and reports to the Presidency of IBAMA. Although relatively new and understaffed, CNPT has a dynamic and highly qualified staff which, with the additional institutional strengthening to be provided by this project, should ensure that CNPT will be capable of successfully implementing the project.

CNPT is divided into executive and participatory branches. The executive branch includes the office of the director in the main CNPT Brasília office, and the seven regional CNPT offices in the states of Acre, Rondônia, Amapá, Pará, Mato Grosso/Tocantins, Amazonas and Santa Catarina. The regional offices work with local extractive reserve associations, municipal and state governments, NGOs and research institutions. The participatory branch of the CNPT is comprised of the Consultative Council, a body reporting directly to the director of CNPT. The Council is responsible for monitoring the activities of CNPT and for proposing policies. It is composed of representatives from the National Council of Rubbertappers (CNS), the National Fishermen's Movement (MONAPE), the Amazon Working Group (GTA), the Center for Indigenist Work (CTI), the Coordination of Brazilian Amazonian Indigenous Organizations (COIAB), the Institute for Environmental and Amazonian Studies (IEA), and each of the nine national extractive reserves. Regional Consultative Councils are also part of the participatory branch, supervising the activities of the regional CNPT offices. These councils are composed of regional government and NGO representatives. See Chart 1 in this Annex for an organizational chart of CNPT.

Project Implementation Arrangements

5. Project Technical Coordination Unit (PCU). The project will be managed and coordinated by a Project Technical Coordination Unit (PCU) in the CNPT whose specific responsibilities will be to (i) coordinate CNPT's activities with IBAMA's five Directorates, (ii) direct, supervise and evaluate activities of the regional CNPT offices with local and state agencies, and with NGOs, (iii) coordinate the project with the Pilot Program Technical Secretariat in IBAMA and with the World Bank, (iv) oversee all budgetary matters, and (v) coordinate the project monitoring system and the computer information system. In addition to CNPT's four professional and two support staff working directly on the project, the PCU will be strengthened over the life of the project by the hiring of two additional support staff and four long-term consultants: a project manager, an assistant manager and experts in finance and reserve development. The PCU will be advised by a Consultative Committee on matters related to project progress and personnel, and to the hiring of consultants and technicians. The Consultative Committee will also carry out periodic supervision and evaluation activities. It is composed of the Director of CNPT, and representatives from the Technical Secretariat of the Pilot Program in IBAMA, the directorates of IBAMA, the local associations, the National Rubbertappers Council (CNS) and the Amazonian Working Group (GTA). Chart 2 in this Annex displays the implementation structure of the project.

6. Annual Operation Plans. A draft timetable of activities, time frames and costs will be delivered to the Bank prior to negotiations. This timetable will be operationalized by Annual Operation Plans (AOPs) detailing for the coming year, by component and subcomponent, activities, physical goals, implementation responsibilities, time frames/dates, monthly expenditures and personnel requirements. The AOPs will also map out training programs and bidding and contracting activities. CNPT will base its annual operation plans on models already in use in IBAMA. CNPT's AOPs will be based upon Annual Work Plans for each reserve, which will be developed by the reserve associations in conjunction with the appropriate regional CNPT office.

7. Monitoring and Evaluation. Coordinating monitoring and evaluation will be the responsibility of the PCU. However, the executing responsibilities belong to many different participants. Project monitoring will be carried out semiannually by the PCU, based upon standard semiannual reports to be prepared by CNPT-Brasília and quarterly reports from the regional CNPT offices and the reserve associations. Environmental Monitoring, too, will be developed and coordinated by the PCU, but the main responsibilities for data collection will lie with reserve associations and regional CNPT offices. Project evaluation will occur at several levels, and thus involves many actors. Each reserve association is encouraged to evaluate the progress it is making towards meeting both the physical goals set out in its Annual Work Plan and the overarching goals of the project. At the project level, recommendations from the PCU's monitoring reports and the Consultative Committee's recommendations will be fed back into project implementation to help the project better attain its physical and global objectives. Finally, the PCU will hire an independent consultant(s) for a project mid-term and final evaluation study and seminar. Annex 7 provides more information on monitoring and evaluation.

8. Regional CNPT Offices. The regional CNPT offices will direct, supervise and assist in the planning, implementation and management of project activities undertaken by the extractive reserve associations. This assistance is intended to improve the managerial capacity of the associations so they will eventually become capable of managing their affairs independently. Regional offices will also orient and supervise work in the extractive reserves by municipal, state and non-governmental agencies, and prepare periodic monitoring reports for the national CNPT office. For the period of the project, four people will be hired for each regional office: a project coordinator, a field technician, a financial expert and a secretary.

9. Local Extractive Reserve Associations. The local extractive reserve associations are the primary planning and implementing agencies for field activities such as education, health, public works, production, marketing, transport, communications, community organization and local project management. The project design includes significant institutional strengthening for the associations. At present the associations vary widely in experience, infrastructure, managerial capacity and human resources. However, at the present time, none are yet considered ready to assume the responsibilities of administering the project.

10. Initially, the local associations will need to be strengthened through the provision of training, infrastructure and technical assistance so they will eventually become capable of autonomously managing their internal affairs. For each reserve, the project will support for the first three years a reserve manager, a field technician, an accountant for the reserve association, a second accountant and a finance expert whose responsibilities will be primarily to train local residents, and two support staff. The reserve association will assume part of the cost of this personnel in year 4. After the project ends, the reserves will decide what their staff needs are and finance them in their entirety.

11. The associations will establish project implementation units to be comprised of technicians in areas such as agroforestry extension, marketing and management, assisted by one or two support staff. Local and other organizations, such as the CNS, Health Unlimited and other state or municipal agencies and NGOs, will also participate in specific implementation activities which will be coordinated by CNPT.

With assistance from CNPT, NGOs and specialists, associations will develop and submit for approval an Extractive Reserve Utilization Plan to receive a concession contract from IBAMA, and at a later date, an Extractive Reserve Development Plan. Annexes 1 and 5 provide further details on these issues.

12. **Other Organizations.** Municipal and state governments, universities and research organizations, the National Council of Rubbertappers (CNS), international NGOs such as the World Wildlife Fund, and other local associations such as the Agro-Extractivist Cooperative of Xapuri (CAEX), will all play important roles in providing training, technical assistance, health and educational services, and in assisting the research and public relations activities of various subprojects. Most of these agencies and organizations will continue to assist the reserves after project termination, thereby strengthening project sustainability. The specific responsibilities and tasks of each organizations will receive greater specification in each reserve's annual work plan. See Annex 8 for a complete list of other projects underway in the target extractive reserves.

13. Some of the most important organizations participating in this project are:

- (i) The National Council of Rubbertappers (CNS). Founded in 1985 and headquartered in Acre, the CNS grew out of the rubbertapper movement to protect the environment and to ensure extractivists access to land and natural resources by creating extractive reserves. It has a national office and regional offices in nearly all Amazonian states. CNS has the most extensive experience of any organization working with extractive reserves, although its capacity to deliver services has been relatively weak.
- (ii) The Institute for Amazonian Studies (IEA). IEA is an NGO headquartered in Paraná that has provided a variety of support and assistance to the extractive reserve movement since 1978. It seeks sustainable alternatives to traditional large-scale development activities in the Amazon.
- (iii) The Center for Amazonian Workers (CTA), headquartered in Acre, is an NGO which has participated in the early efforts to provide educational and health services for the extractive reserves.
- (iv) The Institute for the Study of Population and Nature (ISPN), based in Brasília, provides considerable technical assistance to CNPT.
- (v) The Amazonian Working Group (GTA). Founded in 1991 in response to the Pilot Program's need for a single group to represent Amazonian NGOs, the Amazonian Working Group presently counts over 300 NGO members. It is in the process of defining its goals and strategies. It will assist the Extractive Reserves Project, among other ways, in the area of establishing a GIS database for environmental monitoring.

14. Because of the diverse and complicated nature of tasks to be undertaken by local associations and by the CNS, two umbrella agreements (*acordos*) will be signed: one between IBAMA and the local associations, and the other between IBAMA and CNS. These agreements will outline the principles to regulate the relationship of the organizations in question. Specific activities will be carried out by memoranda of understanding (*convênios*) between IBAMA and the implementing agency(-ies). Technical assistance for project implementation, partly funded by the project, will be provided by the United Nations Development Programme (UNDP) under a pre-existing UNDP-GOB technical cooperation agreement.

Capacity-Building

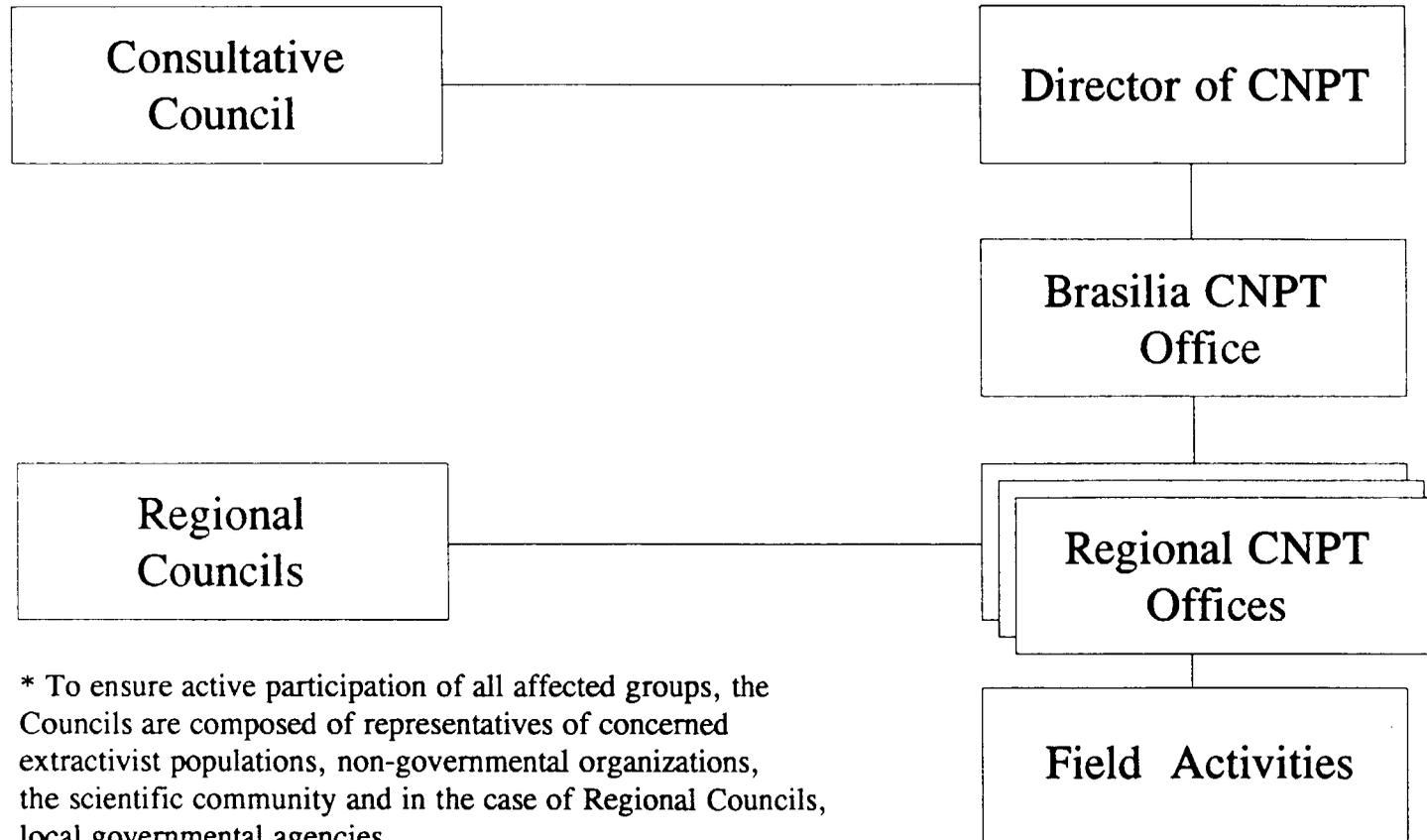
15. To strengthen the capacity of the reserves to manage their economic, administrative and surveillance activities, courses are planned for personnel of the reserve associations, local governmental and non-governmental organizations, and CNPT. Courses will be on the following topics: (i) Administration/Management; (ii) Finance and Accounting; (iii) Business Skills, including training on market assessments and new product development; and (iv) Project Design and Implementation. Course curricula will be developed in such a way as to ensure their applicability to the reserves, emphasizing practical knowledge and, when possible, local technologies already in use. Curricula development will begin with a needs assessment in which trainers will spend a week in each reserve interviewing residents and assessing their training needs. After developing course plans, they will conduct one-week training sessions. Course evaluations will be conducted after trainees have had an opportunity to apply what they learned. Participants will be selected on the basis of their membership in the reserve associations or local organizations and/or perceived ability to disseminate information to others. CNPT would be responsible for coordinating training activities, but the training itself will be done largely by consultants, specialists in IBAMA, universities, research institutes, CNS and perhaps other NGOs.

16. Training for CNPT and certain NGOs will take place as part of other subcomponents, and will occur outside of the reserves. This training will focus on managerial and financial skills, complex computer and data management operations, public relations and other subjects to improve project implementation and monitoring.

Chart 1: Structure of the National Center for the Development of Traditional Populations (CNPT)

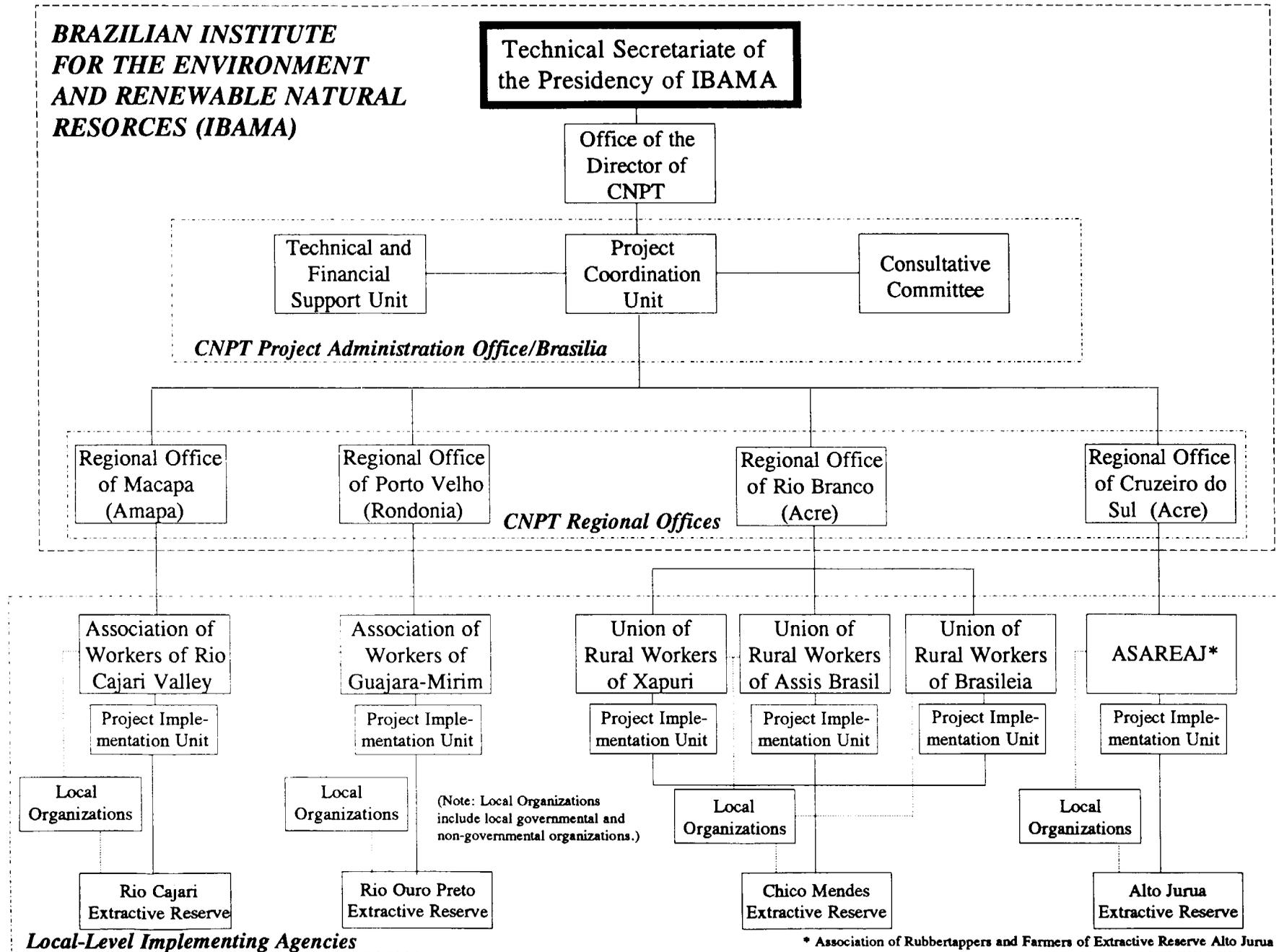
Participatory Branch*

Executive Branch



* To ensure active participation of all affected groups, the Councils are composed of representatives of concerned extractivist populations, non-governmental organizations, the scientific community and in the case of Regional Councils, local governmental agencies.

Chart 2: Project Implementation Structure



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**PILOT PROGRAM TO CONSERVE THE BRAZILIAN RAIN FOREST
EXTRACTIVE RESERVES PROJECT**

Annex 4: IMPLEMENTATION SCHEDULE

The following tables outline key implementation activities and the estimated date of their completion. Table 1 outlines the responsibilities of the Project Coordinating Unit (PCU) of CNPT/IBAMA. Table 2 outlines the responsibilities of the extractive reserves' local organizations.

Table 1. Project Coordinating Unit (PCU) Responsibilities

Output	Estimated Completion Date
Furnish evidence of counterpart funds	November 30 of each year for the following year
TOR and CVs for independent mid-term and final evaluations	January 30, 1995
Semi-annual financial, operational and environmental monitoring reports	By March 31 and September 30 of each year
Annual review	By October 31 of each year
Annual operating plan	December 15 of each year for the following year
Satisfactory criteria and mechanisms for approving funds for income generation studies and pilot projects	By January 31, 1995
Mid-term external evaluation report (sent with semi-annual report)	By March 31, 1997
Final external evaluation report (sent with semi-annual report)	By March 31, 1999

Table 2. Extractive Reserve Responsibilities

Reserve	Extractive Reserve Utilization Plan	Extractive Reserve Development Plan	Environmental Monitoring Plan
Chico Mendes	Prior to disbursements for Component 3	By December 31, 1995	September 30, 1995
Alto Juruá	Prior to disbursements for Component 3	By December 31, 1995	September 30, 1995
Rio Ouro Preto	Prior to disbursements for Component 3	By December 31, 1996	September 30, 1995
Rio Cajari	Prior to disbursements for Component 3	By December 31, 1996	September 30, 1995

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PILOT PROGRAM TO CONSERVE THE BRAZILIAN RAIN FOREST
EXTRACTIVE RESERVES PROJECTAnnex 5: EXTRACTIVE RESERVES: RESERVE UTILIZATION PLANS AND
DEVELOPMENT PLANS

1. Extractive Reserve Utilization Plan. Article 4 of Decree 98,897 of January 30, 1990 requires that for every proposed extractive reserve to receive a Concession Contract, an Extractive Reserve Utilization Plan ensuring the sustainable use and conservation of the area's natural resources be approved by the Brazilian Institute for the Environment and Renewable Natural Resources (IBAMA). The decree also states that IBAMA will be responsible for supervising extractive reserves.
2. IBAMA, CNPT, and CNS have established that the local extractive reserve association, with assistance from or in conjunction with these three organizations, will prepare a Utilization Plan for each extractive reserve. The draft plans submitted to date are more sets of general norms governing resource use than plans of action, proposed by local inhabitants and based upon their accumulated knowledge, serving to ensure that activities in the reserve do not harm the area's natural resources.
3. According to CNPT and IBAMA's Administrative Rules (*Portaria*), an extractive reserve utilization plan will address the following topics: (i) forest use (extractive products, tree felling, wood consumption), (ii) agriculture (allowable location and size of fields, fallow practices, agroforestry technologies, home gardens), (iii) management of fauna (hunting, fishing, domesticated animals, apiculture), (iv) monitoring and surveillance, and (v) penalties for violating the Utilization Plan. The plan would stipulate all activities which are permitted or forbidden concerning the use and protection of renewable resources to be used in all actual or potential economic activities in the area. Guidelines should set limits not only for individuals' resource use but also for the total resource use permissible in the extractive reserve. The plan would be based upon the biological and socio-economic studies carried out as part of establishing the extractive reserve (see Annex 1). The plan will also explain how local inhabitants will supervise resource use, both in their personal areas and in areas of common use. Finally, the plan should contain procedures to assess infractions of the plan, adjudicate conflicts and impose penalties. A Utilization Plan is not merely a statement of intention, but rather a contractual agreement which, if ignored, could result in cancellation of the Concession Contract. Monitoring and evaluation activities will determine how well every Utilization Plan is followed. Provision will be made in the plan for amending the original guidelines to correct any problems later revealed through monitoring and evaluation or future scientific research.
4. Extractive Reserve Development Plan. In October, 1994, IBAMA approved Administrative Rules (*Portaria*) requiring that an Extractive Reserve Development Plan be developed to further operationalize the Utilization Plan. Unlike the Utilization Plan, which provides general resource use guidelines, the purpose of the Development Plan would be to map out the development of the extractive reserve over the long term in a flexible manner which permits regular updating, bearing in mind

the dual goals of environmental conservation and improvement in the lives of local inhabitants.

5. IBAMA/CNPT would be responsible for coordinating the elaboration of the Development Plans, but each plan would be drafted by local inhabitants and representatives of the community organizations in consultation with technical specialists. The local community would be responsible for implementation of the Development Plan, with supervision by IBAMA. The Development Plan will incorporate the results of the environmental baseline studies and production studies (see Components 3 and 4), as well as feedback from the monitoring and evaluation process (Annex 7). The plan will be reviewed and updated periodically as lessons learned from experience, new studies and monitoring and evaluation results become available.

6. The main features of the proposed Development Plan would be to: (i) regulate each economic activity in a way that considers biological production potential, ecological zoning, ecological fragility, geographic location/infrastructure and socio-economic factors; (ii) provide conditions for new economic activities to be incorporated into the plan, including mechanisms for development and impact assessment of new resource use and technologies; (iii) consider how to provide incentives for good management of natural resources and disincentives for their poor management; and (iv) provide for surveillance and enforcement procedures to apply to this plan. Monitoring and evaluation will evaluate how well Development Plans are followed. (See Annex 6 for further discussion of the Extractive Reserve Development Plan.)

BRAZIL**PILOT PROGRAM TO CONSERVE THE BRAZILIAN RAIN FOREST
EXTRACTIVE RESERVES PROJECT****Annex 6: NATURAL RESOURCE ISSUES**

1. The fundamental precept underlying this project is that human populations can assure for themselves an acceptable standard of living by exploiting resources in tropical forest areas, and yet simultaneously allow the forests to continue providing an acceptable level of "environmental services," in terms of production of tangible goods as well as biodiversity conservation, watershed protection, carbon sequestration and other intangible services. It is thus implicit in the very concept of the project that this project try to develop an Amazonian development model that makes resource use as environmentally benign and sustainable as possible.

2. Because the extractive reserve remains an essentially untested model, an acceptable level of environmental services cannot yet be defined, i.e. how much disturbance of the forest is permissible. Future evaluations of the extractive reserve concept will have to compare and judge the level of environmental services provided by this type of reserve versus other options of conversion, use or conservation.

3. Thus two natural resource goals are central to this project: on the one hand, every effort must be made to limit the impacts on the natural resources of the forest; this is accomplished by two types of resource management plans. On the other hand, the impact on the forest must be measured, and that goal is accomplished through the project's environmental monitoring plan.

Management Plans

4. In this project, at least three separate planning tools have been or will be used to limit impacts or to make human use of resources as benign and sustainable as possible: (a) an environmental impact assessment, already completed by IBAMA, which laid out the framework for the management of environmental impacts; (b) an Extractive Reserve Utilization Plan that defines in general terms how resource-use will be limited; and (c) an Extractive Reserve Development Plan that will define in detail how the forest resources are to be exploited and sustainably managed in the context of improving the local standard of living. Annex 4 further describes Utilization Plans and Development Plans.

5. Utilization Plans. The Utilization Plan fulfills an immediate legal requirement in the process of legally establishing the Extractive Reserve (see Annex 1). It is developed by consensus in the Reserve Association and lays out basic restrictions on natural resource use. It is, however, primarily proscriptive but not prescriptive, detailing how resources are to be controlled but not how they are to be managed. Furthermore, the Utilization Plan is prepared prior to most of the detailed work that will feed into the Development Plan and thus may lack scientific substance.

6. The project addresses these problems. The environmental surveys, carried out with pre-investment funds, will provide input into the preparation of the plans. More detailed studies will be carried out in the first two years to provide the baseline data

for monitoring and evaluation and can provide information for the two utilization plans yet to be devised. During preparation, a pre-investment study was financed to produce a Utilization Plan preparation guide that includes environmental criteria and guidelines. Recently promulgated IBAMA Administrative Rules (*Portaria*) address the issue of long-term management and planning by requiring the creation of Extractive Reserve Development Plans to complement the Utilization Plans.

7. Development Plans. As an instrument for promoting sustainable use of resources, the Development Plan is much more important than the Utilization Plan. The Development Plan will in effect set forth the guidelines for managing the resources of the reserve, drawing on existing studies and information as well as on new reserve-specific research (see Component 4, Subcomponent 3) to provide the best management information possible. It is an overall plan of development so the human element of natural resource management will be adequately addressed. The project will provide significant resources for conceiving, producing and revising the Development Plan. In addition, the Environmental Monitoring component will provide feedback that will improve the plan once the first results are obtained.

Monitoring Plan

8. The Monitoring Plan is a very important instrument that will serve on the one hand to provide feedback on the status of resources in the reserves and thus to allow refinement and improvement of Development Plans. On the other hand, the Monitoring Plan will provide critical input into an evaluation of the viability of the extractive reserve as a model for simultaneously meeting human needs and goals of environmental protection.

9. The Extractive Reserves Project provides for a significant amount of research and preparation that will lead to a useful and effective monitoring plan. The Environmental Monitoring component is described in detail in Annex 7.

BRAZIL**PILOT PROGRAM TO CONSERVE THE BRAZILIAN RAIN FOREST
EXTRACTIVE RESERVES PROJECT****Annex 7: MONITORING AND EVALUATION**

1. Three different monitoring and evaluation functions have been identified in the development of the Extractive Reserves Project: i) project monitoring (*Acompanhamento do Projeto*), which tracks physical and financial indicators to measure progress in implementing project activities; ii) environmental monitoring (*Monitoramento Ambiental*), which measures the impact of the project on the biophysical and human "environments" of the reserves; and iii) project evaluation (*Avaliação do Projeto*), which measures success in meeting project objectives.

Project Monitoring

2. Project monitoring will be primarily the responsibility of the Project Coordination Unit (PCU) in CNPT-Brasília. Using a computerized management system to be funded under the project, the team will maintain databases on the status of each project activity. The computerized project information system will store such basic indicator data as, for example, the number of schools or health posts built and financial status of each activity so that the degree to which physical goals are being met may be measured. While most monitoring indicators would be quantitative, in some cases qualitative indicators might be more appropriate. The Reserve Associations and the CNPT regional offices will be expected to provide most of the input for project monitoring in quarterly reports to CNPT-Brasília. See Table 1 for Key Project Performance Indicators provided by the CNPT/IBAMA. These monitoring indicators will be adjusted based on experience gained during project implementation.

3. A semiannual monitoring report will be prepared by the PCU in collaboration with the project administrators and circulated within CNPT as well as delivered to the Consultative Committee, the World Bank, and the donors. The monitoring program and reports will be used by the project administrators to readjust project schedules or implementation procedures. Success in using monitoring information to improve the implementation process will be reviewed during project evaluation.

Environmental Monitoring and Evaluation

4. Environmental monitoring and evaluation are concerned with the environmental impacts of the project. It will measure the status of and changes in the reserves' natural resources and in various socio-economic parameters of the reserve's inhabitants. These data will be used to determine which resource consuming activities should be encouraged and which restricted, in order to minimize the environmental damages caused by human use of the reserves' natural resources.

5. According to the project schedule, a final environmental monitoring plan will be available at about the end of the first year of project implementation. Inputs to this plan will continue to be generated throughout the first year of the project and include: biophysical and socio-economic surveys of the reserves, the Environmental Baseline

studies (Component 4, Subcomponent 1), and the Reserve Development Plans. Once a preliminary environmental monitoring and evaluation plan is prepared, it must be discussed with the reserve associations and other stakeholders, since they will be the principal data collectors and users.

6. CNPT-Brasília will have overall responsibility for formulating an environmental monitoring and evaluation plan, with the assistance of specialized consultants, and for compiling and analyzing the results with input from regional CNPT offices and the reserve associations. The adoption of the environmental monitoring and evaluation plan does not require any legal procedures.

7. Agreement has been reached on several aspects of the environmental monitoring and evaluation plan. At the landscape level, forest cover will be monitored by acquiring and processing satellite images of the reserves. The project covers costs of acquiring the satellite images and of personnel to analyze them, as well as specialized training in GIS. The GIS system will also be used for other purposes such as the Baseline Inventory and the Development Plan. The computers and the GIS program (Arc-Info) are to be acquired by a consortium led by the Amazonian Working Group (GTA) under a project financed by the European Union which aims to develop NGO GIS capabilities in support of a number of ongoing projects in Brazil. The equipment would be housed in the CNPT offices.

8. As regards sustainability of the environmental monitoring and evaluation system after project completion, IBAMA/CNPT would need to assure long-term support for the satellite data interpretation, scientific sampling and evaluation of results. However, the bulk of monitoring activities will be carried out by the local associations and the regional offices of the National Rubbertappers Council in the long term, and the project includes training and logistical support to facilitate this arrangement.

9. The results of the environmental monitoring and evaluation will be reported annually in the Project Progress Report required by the Pilot Program.

Project Evaluation

10. Project evaluation is based on data collected by the project and environmental monitoring systems and supplemented as necessary by additional data collection. Evaluation of the project will take place at a number of different levels and by different stakeholders. At the local level, reserve associations will be encouraged to meet, discuss, debate and propose changes in local project implementation and in their productive activities. Devolving significant evaluation responsibilities to the local level involves some risks, but the project has as one objective to support extractivist populations in managing their own productive activities. Training would be provided in order to facilitate the participation of the reserve associations in project evaluation. The goal of such training would be to assist local populations to critically assess their performance in project implementation and to use this information to improve operations. Reserve associations would report the results of their self-evaluation in quarterly reports to CNPT.

11. The PCU will append to one of the semiannual monitoring reports each year a Project Status Report evaluating progress toward project goals. Contracted experts

satisfactory to the Bank will carry out a comprehensive, independent evaluation at project mid-term and completion, reviewing all progress reports and meeting with project implementors. Before the evaluation reports are finalized, the consultants' preliminary results will be presented and discussed in two workshops to promote open debate, to foster ownership of the documents and to allow for more effective feedback of conclusions into extractive reserve activities.

12. Additional evaluation of the project would be carried out by the World Bank Coordinating Unit as part of project supervision, by the Brazilian Coordinating Commission and by the International Advisory Group. Results of these evaluations would also be fed back into project implementation.

Table 1. Key Performance Indicators¹**Component 1: Establishment and Strengthening of Extractive Reserves****General Indicators**

- a. Number of signed Extractive Reserve Concession Contracts.
- b. Number of extractive reserves regularized.
- c. Improvement in extractive reserve public policy.

Specific Indicators

1. Legal evaluations of tenure status of reserve land completed.
2. Demarcation and sign-posting of reserve boundaries completed.
3. Minimum number of legally organized associations to manage the reserves established.
4. Utilization plans completed and approved.
5. Number of reserve protection plans completed and implemented.
6. Studies to prepare public policy proposals on key issues completed.
7. Seminars to discuss public policy proposals carried out.

Component 2: Community Organization**General Indicators**

- a. Association offices equipped and functioning.
- b. Percentage of reserve inhabitants belonging to local organization(s).

Specific Indicators

1. Sufficient equipment acquired and installed in the offices of associations.
2. Technical assistance and technicians contracted.
3. Number of training courses held.
4. Number of people and technicians trained.
5. Number of teachers ("education monitors") trained.
6. Creation and distribution of educational primers.
7. Number of schools constructed and supported.
8. Number of education monitors working within the reserves.
9. Number of health agents trained.
10. Number of health posts constructed and supported.
11. Number of community health agents working within the reserves.

Component 3: Improvement of Productive Activities**General Indicators**

- a. Increase in production of subsistence crops.
- b. Increase in commercialization of traditional products.
- c. Improved collection and processing of traditional products.
- d. Increase in commercial production of non-traditional products.
- e. Improvement of reserve transportation and communications systems.

¹ Targets for each indicator are set annually and recorded in the Annual Operating Plan for each year, in accordance with the four-year project activities timetable agreed upon during appraisal and available in the project files.

Specific Indicators

1. Percentage of families adopting improved production techniques or new subsistence products.
2. Percentage of rubbertapper families trained in and using improved latex collection and processing techniques.
3. Amount of funds disbursed for and percentage of families using revolving credit funds for cultivated rubber or brazil nuts.
4. Number of product processing facilities constructed.
5. Number of alternative income generating activities studied and/or tested.
6. Number of family and community warehouses constructed.
7. Number of kilometers of foot and cart paths improved and maintained.
8. Number of kilometers of riverbank prepared for boat access and repair.
9. Transportation and communication equipment installed and in use.
10. Number of kilometers of obstructed waterways cleared.

Component 4: Environmental Management**General Indicators**

- a. Utilization Plans developed and in use.
- b. Environmental Monitoring Plans developed and in use.

Specific Indicators

1. Studies to define baseline environmental data completed.
2. Studies of natural resource management completed.
3. Environmental Monitoring Plans created, reviewed and approved.
4. Development Plans created, reviewed and approved.
5. Socioeconomic data base established.
6. Environmental monitoring activities regularly carried out.

Component 5: Project Management and Evaluation**General Indicators**

- a. Project Coordinating Unit established and functioning.
- b. Physical and financial monitoring of project activities regularly carried out.
- c. Project evaluation reports produced.

Specific Indicators

1. Consultative Committee created and functioning.
2. Monitoring and evaluation system created and functioning.
3. Computer equipment acquired, installed and in use.
4. Management software installed and in use.
5. Project evaluation seminars held.

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Annex 8: OTHER PROJECTS IN THE EXTRACTIVE RESERVES:¹

Extractive Reserves of Alto Juruá, Chico Mendes, Rio Cajari, Rio Ouro Preto, and more than one reserve.

LOCALITY	PROJECT, GRANT OR ACTIVITY	EXECUTING AGENCY ²	FINANCIAL AGENCY ³	BASIC ACTIONS	STAGE	PROJECT PERIOD	AMOUNT COMMITTED ³	OBSERVATIONS
Alto Juruá	Economic Support Activities	CNS-AJ	BNDES	Support for transport, storage and marketing of rubber production.	Under execution	1988 onward (i.e. no fixed termination date)	large	Started in 1988; currently experiencing difficulties
Alto Juruá	Population Census and Utilization Plan	CNS-AJ	IBAMA	Census, socio-economic survey, proposal for resource utilization plan.	Concluded - Analysis of census and survey incomplete	1991	medium	First phase
Alto Juruá	Wildlife Management Activities	CNS-AJ Indigenous Research Center	Gais Foundation and McArthur Foundation	Execution of wildlife management activities.	Initiated	1994	small (estimated)	
Alto Juruá	Research and Monitoring Activities	USP and UNICAMP	McArthur Foundation	Implementation of basic research and environmental monitoring of reserve.	Initiated	1992-94	large	In initial coordination stage with IBAMA
Alto Juruá	Transportation and Rubber Marketing Activities	CNS-Rubber Tappers	Gais Foundation, C. Mendes Foundation and EDF	Set-up of storage system and purchase of boats.	Concluded	not known	not known	Experiencing difficulties

1- All four extractive reserves had (i) a census and a socio-economic survey and (ii) a natural resources inventory carried out or updated in 1993-94 which were supported by preinvestment funds from the Pilot Program to Conserve the Brazilian Rain Forest. These activities are not reflected in the chart.

2- See the end of this annex for a key of all acronyms.

3- Very Small = under \$5000. Small = \$5001-\$25,000. Medium = \$25,001-\$100,000. Large = \$100,001-\$1 million. Very Large = over \$1 million.

Alto Jurua	Health Activities	ASAREAJ	Health Unlimited	Support for implementation of a basic health system.	Under execution	1991-95	large	To be continued
Alto Jurua	Educational Activities	CEDI-ASAREAJ	IBAMA	Technical assistance for teachers.	Underway	1992 onward	medium	Continuation of activities being negotiated with IBAMA
Alto Jurua	Community Organizational Support Activities	ASAREAJ USP-UNICAMP	USP-UNICAMP	Support for organization of village community associations.	Concluded	1993	small	To be continued
Alto Jurua	Development Planning for the Reserve	ASAREAJ-CNS- UNICAMP	ASAREAJ-CNS- UNICAMP	Discuss and establish guidelines for socio-economic development and natural resource conservation.	No information	not known	not known	
Alto Jurua	Rubber Marketing Activities	CNS	IBAMA	Support for operation of community canteens and transportation infrastructure.	Concluded	1992	small	To be continued
Chico Mendes ⁴	Nut Marketing Activities	CAEX	IBAMA	Support for marketing CAEX's nut harvest.	Concluded	1992	medium	
Chico Mendes	Agroforestry Production and Wildlife Management Activities	EMBRAPA- FUNBESA-EMATER- CAEX-FUNTAC	Austrian Embassy	Improvement of agroforestry production, wildlife management and infrastructure.	Under execution	1993	large	
Chico Mendes	Training and Diversification of Production for Rubber Tappers	CAEX	IBAMA/PMACI	Fisheries, horticulture, fruit production, etc.	Not yet begun	1994	large	Being negotiated
Chico Mendes	Nut Production Project	EMBRAPA-CAEX	EMBRAPA	Development of food technologies.	Under execution	not known	not known	
Chico Mendes	PMACI Project	CAEX-CNS-UFAC- CTA	PMACI	Technical assistance and infrastructure.	Under execution	1993 onward	large	
Chico Mendes	Nut Marketing Activities	CAEX	IBAMA	Support to community canteens.	Concluded	1992	medium	

4- Projects listed here for the Extractive Reserve Chico Mendes affect the entire Acre-Purus Valley, which extends outside the boundaries of the extractive reserve.

Chico Mendes	Rubber Production Activities	CAEX	IBAMA	Support for increasing native rubber production.	Concluded	1992	very small	
Chico Mendes	CIDA Project 204/16379	FUNTAC-CNS-CTA Canadian Executing Agency	Federal Government Canadian Government	Promotion of economic and social development.	Initial phase concluded	*****	*****	Project cancelled
Rio Cajari	Establishment of Community Canteens	ASTEX-CNS/AP	IBAMA	Support for operation of community canteens.	Concluded	1992	small	
Rio Cajari	Creation of Physical Infrastructure	ASTEX-CNS/AP	IBAMA	Construction of schools and health posts.	Halted	1992	medium	Work construction problems
Maracá Settlement	Extractive Reserve Development Activities	IEA	Konrad Adenauer Foundation	Training and extension.	Under execution	1992-94	large	
Rio Cajari and Maracá Settlement	Development Support Activities	CNS/AP, ASTEX	WWF	Institutional strengthening.	Under execution	1991-94	large	
Ouro Preto	Community Development Activities	ASGM-EMBRAPA-INPA-IEA	Swiss Embassy	Organizational support, support for rubber production and agro-forestry systems.	Under execution	1993-94	small	
Ouro Preto, Guajará Region	Community Development Activities	CNS-IEA-EMBRAPA-INPA	IDRC-Canada	Community organization and ecological-economic mapping.	Under execution	1992-93	large	
Ouro Preto	Assistance to Ouro Preto Extractive Reserve	ASGM-CNS	OXFAM	Support to CNS-Community Organization.	Under execution	1992-94	medium	
Ouro Preto	Subsistence Production Activities	ASGM	MISERIOR	Equipment for subsistence production.	Under execution	1993-94	medium	
Ouro Preto	Support for ASGM Activities	ASGM-IEA	IBAMA/UNDP/FAO 87-007	Support to community organization, subsistence production, health, education.	Concluded	1992	small	
Ouro Preto	Health and Educational Activities	ASGM	IBAMA	Construction of schools and health posts.	Concluded	1992	small	

Ouro Preto	Support for Community Canteens	ASGM	IBAMA	Support to community canteens.	Concluded	1992	very small	
Ouro Preto	Physical Infrastructure Activities	ASGM	IBAMA	Storage and transportation infrastructure.	Concluded	1992	medium	
Ouro Preto	Rubber Production Activities	ASGM	IBAMA	Latex collection utensils.	Concluded	1992	small	
All extractive reserves- Rorondônia State	Demarcation and Support to CNPT	CNPT-IBAMA	IBRD-PLANAFLORO	Demarcation of reserve's perimeter and institutional strengthening of CNPT, support for execution of basic actions in the reserve.	Demarcation: Bidding process underway - Strengthening: Being negotiated	1994	large	Signing of IBAMA/ PLANAFLORO agreement is pending
Acre and Amazon States	Natural Resource Product Development	Cultural Survival	Cultural Survival	Identification and creation of markets to sell forest products.	Under execution	1991 onward	large	
Acre, Amapá and Rorondônia States	Institutional Development	CNS/AC	WWF	Institutional strengthening.	Concluded	1992-93	medium	
Acre State	IDB Project	CNS, FUNTAC, UFAC, CTA	IDB	Technical assistance for education, health and production.	Under execution	1992-94	very large	

KEY TO ACRONYMS:

ASAREAJ **Rubbertappers' and Farmers' Association of Extractive Reserve Alto Juruá**
ASGM **Rubbertappers' Association of Guajará-Mirim**
ASTEX **Workers' Association of the Rio Cajari Valley**
BNDES **National Bank of Economic and Social Development**
CAEX **Agro-Extractivist Cooperative of Xapuri**
CEDI **Ecumenical Center for Documentation and Information**
CIDA **Canadian International Development Agency**
CNS **National Council of Rubbertappers**
CNS-AJ **CNS of Alto Juruá**
CNS-AP **CNS of the Acre-Purus Valley**
CTA **Center for Amazonian Workers**
EDF **Environmental Defense Fund**
EMATER **Rural Technical Assistance Organization**
EMBRAPA **Brazilian Agricultural Research Organization**
FAO **Food and Agricultural Organization of the United Nations**

FUNBESA **Unknown**
FUNTAC **Technical Assistance Foundation of Acre**
IBAMA **Brazilian Institute for the Environment and Renewable Natural Resources**
IDRC **International Development Research Council**
IEA **Institute for Amazonian Studies**
INPA **National Institute for Amazonian Research**
MISERIOR **Unknown – German, church organization**
OXFAM **Oxford Famine Relief**
PMACI **Project for the Protection of the Environment and Indigenous Communities**
UFAC **Federal University of Acre**
UNDP **United Nations Development Programme**
UNICAMP **State University of Campinas**
USP **Federal University of Sao Paulo**
WWF **World Wildlife Fund**

BRAZIL**PILOT PROGRAM TO CONSERVE THE BRAZILIAN RAIN FOREST
EXTRACTIVE RESERVES PROJECT****Annex 9: REPORTS AND DOCUMENTS IN PROJECT FILES**

1. Project Proposal from IBAMA dated January 1994
2. Project Timetable
3. Environmental Impact Assessment Sectoral Study
4. Reports from Pre-Investment Studies:
 - Production and Commercialization of Forest Products (ECOTEC)
 - Computerization (Fausto dos Anjos Alvim)
 - Survey of Basic Information on Natural Resources (IDEAS)
 - Update of Chico Mendes Census (CNS-AC)
 - Update of the Alto Juruá Census (Mauro de Almeida)
 - Census and Socio-economic Survey of Rio Ouro Preto (IEA)
 - Census and Socio-economic Survey of Cajari (CNS-AP)
 - Preparation of a Manual on Utilization Plans (José Heder Benatti)
 - Engineering Projects (Valério Alemão and Sérgio Nakamura)
 - Transportation (Vitor Bellia and Luis F. dos Santos)
 - Education and Health (CTA)
 - Institutional Strengthening (IAC)
 - Environmental Impact Assessment (ISPN)
4. Utilization Plan for Alto Juruá Extractive Reserve
5. IBAMA Administrative Rules (*Portaria 46-N*) dated May 6, 1994, creating the Commission of Traditional Populations
6. IBAMA Administrative Rules (*Portaria 118*) dated October 31, 1994, establishing Administrative Rules for the Creation and Regularization of Extractive Reserves

								Annex 10	
COMPONENT I. Establishment and Strengthening of Extractive Reserves (US\$ '000)									
Subcomponent 1: Land Tenure Regularization								Financing Source	
		Year 1	Year 2	Year 3	Year 4	Total	RFT/EC	GOB	
Investment	Technical Assistance	147				147	108	39	
	Travel and per diems	24				24	18	6	
	SUBTOTAL	171	0	0	0	171	126	45	
	Physical Contingencies*	7	0	0	0	7	5	2	
	Price Contingencies	2	0	0	0	2	2	0	
	Total Subcomponent Costs	180	0	0	0	180	133	47	
Subcomponent 2: Demarcation and Sign-Posting of the Reserves									
Investment	Civil Works	570	0	0	0	570	570		
	SUBTOTAL	570	0	0	0	570	570		
	Physical Contingencies*	23	0	0	0	23	23		
	Price Contingencies	7	0	0	0	7	7		
	Total Subcomponent Costs	600	0	0	0	600	600	0	
Subcomponent 3: Formation of Reserve Associations									
Investment	Travel and per diems	37				37	37		
	Supplies	3				3	3		
	SUBTOTAL	40	0	0	0	40	40		
	Physical Contingencies*	2	0	0	0	2	2		
	Price Contingencies	1	0	0	0	1	1		
	Total Subcomponent Costs	42	0	0	0	42	42	0	
Subcomponent 4: Utilization Plan Development and Approval									
Investment	Technical Assistance	8				8	8		
	Travel and per diems	27	14			41	41		
	Supplies	6	2			8	8		
	SUBTOTAL	41	16	0	0	57	57		
	Physical Contingencies*	2	1	0	0	2	2		
	Price Contingencies	1	1	0	0	1	1		
	Total Subcomponent Costs	43	17	0	0	60	60	0	
Subcomponent 5: Extractive Reserve Protection									
Investment	Civil Works	28				28		28	
	Equipment	119				119		119	
	Subtotal: Investment	147	0	0	0	147		147	
Recurrent Costs	Maintenance and Operative Costs	7	7	7	7	28		28	
	Supplies	17	17	17	17	68		68	
	Subtotal: Recurrent	24	24	24	24	96		96	
	SUBTOTAL	171	24	24	24	243		243	
	Physical Contingencies*	7	1	1	1	10		10	
	Price Contingencies	2	1	2	2	7		7	
	Total Subcomponent Costs	180	26	27	27	260	0	260	
Subcomponent 6: Extractive Reserve Public Policies									
Investment	Technical Assistance		18	10	3	31		31	
	Services			37		37		37	
	Travel and per diems			22		22		22	
	SUBTOTAL	0	18	69	3	90		90	
	Physical Contingencies*	0	1	3	0	4		4	
	Price Contingencies	0	1	5	0	6		6	
	Total Subcomponent Costs	0	19	76	3	99		99	0
TOTAL COMPONENT COSTS									
		Year 1	Year 2	Year 3	Year 4	Total			
Investment	Civil Works	598	0	0	0	598	570	28	
	Equipment	119	0	0	0	119	0	119	
	Technical Assistance	155	18	10	3	186	147	39	
	Services	0	0	37	0	37	37	0	
	Travel and per diems	88	14	22	0	124	118	6	
	Supplies	9	2	0	0	11	11	0	
	Subtotal Investments	969	34	69	3	1075	883	192	
Recurrent Costs	Maintenance and Operative Costs	7	7	7	7	28	0	28	
	Supplies	17	17	17	17	68	0	68	
	Subtotal Recurrent Costs	24	24	24	24	96	0	96	
	Total Base Costs	993	58	93	27	1171	883	288	
	Total Physical Contingencies	40	2	4	1	47	35	12	
	Total Price Contingencies	13	2	6	3	24	16	8	
GRAND TOTAL		1046	63	103	31	1242	935	307	

* A physical contingency rate of 4% was applied.

							Annex 10	
COMPONENT II. Community Organization (US\$ '000)								
Subcomponent 1: Strengthening of Reserve Associations							Financing Source	
		Year 1	Year 2	Year 3	Year 4	Total	RFT/EC	GOB
Investment	Equipment	425				425	425	
	Technical Assistance	115	115	115	115	460	460	
	Travel and Per Diems	10	10	10	10	40	40	
	Supplies	50	25	25	15	115	115	
	Consultants	100	100	100	60	360	360	
	Subtotal: Investment	700	250	250	200	1400	360	
	SUBTOTAL	700	250	250	200	1400	1400	
	Physical Contingencies*	28	10	10	8	56	56	
	Price Contingencies	9	10	18	19	54	54	
	Subcomponent Total	737	270	276	227	1510	1510	0
Subcomponent 2: Training								
Investment	Technical Assistance	60	80	65	50	255	255	
	Travel and Per Diems	35	35	35	30	135	135	
	Supplies	10	5	5	4	24	24	
	Subtotal: Investment	105	120	105	84	414	414	
	Physical Contingencies*	4	5	4	3	17	17	
	Price Contingencies	1	5	7	8	21	21	
	Subcomponent Total	111	130	116	95	451	451	0
Subcomponent 3: Establishment of a Basic Education System								
Investment	Technical Assistance	13	9			22	22	
	Services	8				8	8	
	Travel and Per Diems	12	12			24	24	
	Supplies	1	77	20		98	98	
	Subtotal: Investment	34	98	20	0	152	152	
Recurrent Costs	Supplies		15	15	8	38	36	
	Travel and Per Diems		55	55		110	110	
	Subtotal: Recurrent Costs	0	70	70	8	148	146	
	SUBTOTAL	34	168	90	8	298	298	
	Physical Contingencies*	1	7	4	0	12	12	
	Price Contingencies	0	7	6	1	14	14	
	Subcomponent Total	36	181	100	7	323	323	0
Subcomponent 4: Establishment of a Basic Health System								
Investment	Technical Assistance	15	14	10		39	39	
	Equipment		17			17	17	
	Travel and Per Diems	10	10	10		30	30	
	Supplies	3	35			38	38	
	Subtotal: Investment	28	76	20	0	124	124	
Recurrent Costs	Supplies		15	15	10	40	40	
	Travel and Per Diems		48	48		96	96	
	Subtotal: Recurrent Costs	0	63	63	10	136	136	
	SUBTOTAL	28	139	83	10	260	260	
	Physical Contingencies*	1	6	3	0	10	10	
	Price Contingencies	0	5	5	1	12	12	
	Subcomponent Total	29	150	92	11	283	283	0
TOTAL COMPONENT COSTS								
Investment	Equipment	425	17	0	0	442	442	
	Technical Assistance	203	218	190	165	776	776	
	Consultants	100	100	100	60	360	360	
	Services	8	0	0	0	8	8	
	Travel and Per Diems	67	67	55	40	229	229	
	Supplies	64	142	50	19	275	245	
	Subtotal Investment	867	544	395	284	2090	1700	0
	Supplies	0	30	30	16	76	76	
	Travel and Per Diems	0	103	103	0	206	206	
	Subtotal Recurrent Costs	0	133	133	16	282	672	0
	Total Base Costs	867	677	528	300	2372	2372	0
	Total Physical Contingencies*	35	27	21	12	95	95	0
	Total Price Contingencies	11	27	35	28	101	101	0
	GRAND TOTAL	913	731	584	340	2568	2568	0

* A physical contingency rate of 4% was applied.

							Annex 10	
COMPONENT III. Improvement of Productive Activities (US\$ '000)								
Subcomponent 1: Improvement of Subsistence Production							Financing Source	
		Year 1	Year 2	Year 3	Year 4	Total	RFT/EC	GOB
Investment	Equipment	8	10	10	6	32		32
	Technical Assistance	10	25	25	14	74		74
	Services	1	2	2	1	6		6
	Travel and Per Diems	15	26	26	11	78		78
	Supplies	7	23	23	13	66		66
	SUBTOTAL	39	86	86	45	256		256
	Physical Contingencies*	2	3	3	2	10		10
	Price Contingencies	1	3	6	4	14		280
	Total Subcomponent Costs	41	93	95	51	280		280
								0
Subcomponent 2: Improvement of Traditional Extractive Production								
Investment	Civil Works		40	40		80		80
	Equipment		90	90		180		180
	Technical Assistance		20	20		40		40
	Services	3	3	3		9		9
	Travel and Per Diems	11	11	10		32		32
	Supplies	167	217	208		592		592
	SUBTOTAL	181	381	371	0	933		933
	Physical Contingencies*	7	15	15	0	37		37
	Price Contingencies	2	15	24	0	42		42
	Total Subcomponent Costs	191	411	410	0	1012		1012
								0
Subcomponent 3: Development of New Products								
Investment	Civil Works		45	89	89	223		148
	Equipment		50	100	100	250		150
	Technical Assistance	25	91	70	20	206		156
	Services		56	87	85	228		178
	Travel and Per Diems							50
	SUBTOTAL	25	242	346	294	907		632
	Physical Contingencies*	1	10	14	12	36		25
	Price Contingencies	0	10	23	28	60		43
	Total Subcomponent Costs	26	261	383	333	1004		700
								304
Subcomponent 4: Transport and Storage Systems								
Investment	Equipment	250	70			320		320
	Supplies	60	70	70		200		200
	Subtotal: Investment	310	140	70	0	520		520
Recurrent Costs	Supplies	20	30	20		70		70
	Travel and Per Diems	10	15	5		30		30
	Subtotal: Recurrent Costs	30	45	25	0	100		100
	SUBTOTAL	340	185	95	0	620		620
	Physical Contingencies*	14	7	4	0	25		25
	Price Contingencies	4	7	6	0	18		18
	Total Subcomponent Costs	358	200	105	0	663		663
								0
Subcomponent 5: Communication Network								
Investment	Equipment	70				70		70
	Technical Assistance	9				9		9
	Services		8	8		15		15
	SUBTOTAL	79	8	8	0	94		94
	Physical Contingencies*	3	0	0	0	4		4
	Price Contingencies	1	0	0	0	2		2
	Total Subcomponent Costs	83	8	8	0	100		100
								0
TOTAL COMPONENT COSTS		Year 1	Year 2	Year 3	Year 4	Total		
Investment	Civil Works	0	85	129	89	303		228
	Equipment	326	220	200	106	852		752
	Technical Assistance	44	138	115	34	329		279
	Services	4	69	100	86	258		208
	Travel and Per Diems	26	37	36	11	110		110
	Supplies	234	310	301	13	858		858
	Subtotal Investment	634	857	881	339	2710		2435
Recurrent Costs	Supplies	20	30	20	0	70		70
	Travel and Per Diems	10	15	5	0	30		30
	Subtotal Recurrent Costs	30	45	25	0	100		100
	Total Base Costs	664	902	906	339	2810		2535
	Total Physical Contingencies	27	36	36	14	112		101
	Total Price Contingencies	9	35	60	32	136		118
	GRAND TOTAL	699	973	1001	384	3058		2754
								304

*- A flat physical contingency rate of 4% was applied.

								Annex 10	
COMPONENT IV. Environmental Management (US\$ '000)									
Subcomponent 1: Environmental Baseline Studies								Financing Source	
		Year 1	Year 2	Year 3	Year 4	Total	RFT/EC	GOB	
Investment	Technical Assistance	30	23			53		53	
	Services	5	2			7		7	
	Travel and Per Diems	20	15			35		35	
	SUBTOTAL	55	40	0	0	95		95	
Physical Contingencies*	2	2	0	0	4		4		
Price Contingencies	1	2	0	0	2		2		
Subcomponent Total		58	43	0	0	101		101	0
Subcomponent 2: Extractive Reserve Development Plans									
Investment	Technical Assistance		70	30		100		100	
	Services		20	20		40		40	
	Travel and Per Diems		12	20		32		32	
	Supplies		20	5		25		25	
SUBTOTAL	0	122	75	0	197		197		
Physical Contingencies*	0	5	3	0	8		8		
Price Contingencies	0	5	5	0	10		10		
Subcomponent Total		0	132	83	0	215		215	0
Subcomponent 3: Natural Resource Management Studies									
Investment	Equipment	24				24		24	
	Technical Assistance	29	50	25		104		104	
	Travel and Per Diems	18	18			36		36	
	Supplies	6	6			12		12	
SUBTOTAL	77	74	25	0	176		176		
Physical Contingencies*	3	3	1	0	7		7		
Price Contingencies	1	3	2	0	6		6		
Subcomponent Total		81	80	28	0	189		189	0
Subcomponent 4: Environmental Monitoring System									
Investment	Technical Assistance	40	40	40	40	160		160	
	Services	3	3	3	3	12		12	
	Travel and Per Diems	42	42	42	42	168		168	
	Supplies	10	10	10	10	40		40	
SUBTOTAL	95	95	95	95	380		380		
Physical Contingencies*	4	4	4	4	15		15		
Price Contingencies	1	4	6	9	20		20		
Subcomponent Total		100	103	105	108	415		415	0
TOTAL COMPONENT COSTS									
		Year 1	Year 2	Year 3	Year 4	Total			
Investment	Equipment	24	0	0	0	24		24	0
	Technical Assistance	99	183	95	40	417		417	0
	Services	8	25	23	3	59		59	0
	Travel and Per Diems	80	87	62	42	271		271	0
	Supplies	16	36	15	10	77		77	0
Subtotal Investment		227	331	195	95	848		848	0
Subtotal Recurrent Costs		0	0	0	0	0		0	0
Total Base Costs		227	331	195	95	848		848	0
Total Physical Contingencies		9	13	8	4	34		34	0
Total Price Contingencies		3	13	13	9	38		38	0
GRAND TOTAL		239	357	216	108	920		920	0
* A physical contingency rate of 4% was applied.									

							Annex 10	
COMPONENT V. Project Management and Evaluation (US\$ '000)								
Subcomponent 1: Support to Project Management							Financing Source	
		Year 1	Year 2	Year 3	Year 4	Total	RFT/EC	GOB
Investment	Equipment	55	55			110	0	110
	Technical Assistance	235	235	235	235	940	940	0
	Services	24	24	24	24	96	96	0
	Travel and Per Diems	56	56	56	56	224	224	0
	Supplies	5	5	5	5	20	20	0
	Subtotal: Investment	375	375	320	320	1390	1280	110
Recurrent Costs	Supplies	20	20	20	20	80	0	80
	Travel and Per Diems	10	10	10	10	40	0	40
	Subtotal: Recurrent Costs	30	30	30	30	120	0	120
	SUBTOTAL	405	405	350	350	1510	1280	230
	Total Physical Contingencies*	16	16	14	14	60	51	9
	Total Price Contingencies	5	16	23	33	77	68	9
	Subcomponent Total	426	437	387	397	1648	1399	248
Subcomponent 2: Computer Information System								
Investment	Technical Assistance	29	26	26	26	107	107	
	Equipment	33				33	33	
	Services	11				11	11	
	Travel and Per Diems	3				3	3	
	SUBTOTAL	76	26	26	26	154	154	
	Total Physical Contingencies*	3	1	1	1	6	6	
	Total Price Contingencies	1	1	2	2	6	6	
	Subcomponent Total	80	28	29	29	166	166	0
Subcomponent 3: Independent Project Evaluation								
Investment	Technical Assistance		30		35	65	65	
	SUBTOTAL	0	30	0	35	65	65	
	Total Physical Contingencies*	0	1	0	1	3	3	
	Total Price Contingencies	0	1	0	3	4	4	
	Subcomponent Total	0	32	0	40	72	72	0
TOTAL COMPONENT COSTS		Year 1	Year 2	Year 3	Year 4	Total		
Investment	Technical Assistance	264	291	261	296	1112	1112	0
	Equipment	88	55	0	0	143	33	110
	Services	35	24	24	24	107	107	0
	Travel and Per Diems	59	56	56	56	227	227	0
	Supplies	5	5	5	5	20	20	0
	Subtotal Investment	451	431	346	381	1609	1499	110
Recurrent Costs	Supplies	20	20	20	20	80	0	80
	Travel and Per Diems	10	10	10	10	40	0	40
	Subtotal Recurrent Costs	30	30	30	30	120	0	120
	Total Base Costs	481	461	376	411	1729	1499	230
	Total Physical Contingencies*	19	18	15	16	69	60	9
	Total Price Contingencies	6	18	25	39	88	79	9
	GRAND TOTAL	506	498	416	466	1886	1638	248

* A physical contingency rate of 4% was applied.

MAP SECTION

