

Statement of

**Samual H. Hitt
Director, Forest Guardians**

**Written by Randall W. Gingrich,
International Director, Forest Guardians**

BEFORE THE

**U.S. HOUSE OF REPRESENTATIVES
SUBCOMMITTEE ON FOREIGN OPERATIONS,
EXPORT FINANCING AND RELATED PROGRAMS**

CONCERNING

FISCAL YEAR 1995 APPROPRIATIONS FOR INTERNATIONAL AID

APRIL 25, 1994

TABLE OF CONTENTS

I. Introduction	3	
II. Sierra Madre Program	9	
A. Background	9	
B. Mission and Objectives	11	
C. Program Explanations	13	
Community Reserves	13	
Guacamaya Project	14	
Agro-ecology Program	15	15
Policy Development & Implementation	17	
D. Community Histories	18	
Coloradas de la Virgen	18	
Baborigame	19	
Pino Gordo	21	
Yoquivo	22	
Cieneguilla	23	
III. World Bank Forestry Development Program	24	
A. Environmental Impact Studies	26	
B. Results	27	
C. Unresolved Issues	28	
IV. North American Free Trade Agreement	30	
V. Social and Environmental Impacts of Drug Enforcement Policies	35	
VI. Conclusion	39	

I. Introduction

Mr. Chairman, thank you for the opportunity to testify today before the Senate Subcommittee on Foreign Operations. I am Sam Hitt, Director of Forest Guardians, a nonprofit environmental organization from Santa Fe, New Mexico. I am testifying on behalf of Forest Guardians and three other U.S. and Mexican nongovernmental organizations, Arizona Rainforest Alliance, The Advisory Council of the Sierra Madre, and the Regional Confederation of the Tepehuan and Tarahumara People. These organizations have collaborated to form the Sierra Madre Program, which receives much of its funding from the Biodiversity Support Program, a USAID funded coalition of the World Wildlife Fund, the Nature Conservancy, and the World Resources Institute. Much of my statement today reflects the collaboration of my colleagues, Randall Gingrich, U.S. Director of the Sierra Madre Program, and Edwin Bustillos, Technical Director of the Advisory Council of the Sierra Madre (or CASMAC).

On behalf of these four regional organizations, I would like to thank you, Mr. Chairman, and the members of the Subcommittee, for the leadership role this Subcommittee has taken over the years in promoting social and environmental concerns in our bilateral and multilateral foreign assistance. My testimony today regards a remarkable success story made possible by a relatively small amount of U.S. foreign assistance. I understand that budget realities are forcing the United States Government to deeply cut foreign assistance, but I would remind Congress that the North American Free Trade Agreement was passed under promises of increased U.S. assistance for environmental problems in Mexico. Our analysis suggests that NAFTA has harmed Mexico's ability to fund conservation due to ongoing recessions and budget cuts in the agricultural and forestry sectors.

Protecting the environment is interrelated with many of the most serious economic and political issues in Mexico. The uprising in Chiapas reminds us all that we cannot afford to ignore the problems of rural Mexico. Hundreds of millions of dollars in military expenses, social and environmental damages in Chiapas could have been avoided with proper investments in social justice, grassroots development and environmental conservation ten to twenty years ago. The rebellion in Chiapas is no isolated incident, but is indicative of systemic problems throughout Mexico. Similar problems of injustice, environmental destruction, and indigenous unrest exist in northwestern Mexico.

The experience of the Sierra Madre Program, which organizes community development and conservation in the state of Chihuahua, Mexico, provides insight into the potential of U.S. foreign assistance when international nongovernmental partnerships are empowered to bridge the gap between governmental agencies and communities in recipient nations. I would encourage the Subcommittee on Foreign Operations to consider the efficiency and effectiveness of grassroots support networks in enhancing environmental, social, and economic stability in many regions of the developing world. Grassroots support projects funded by The Biodiversity Support Program, InterAmerican Foundation, Appropriate Technology International, and USAID are a very productive use of American tax dollars. We encourage funding increases for these innovative

programs which lead U.S. efforts towards building a sustainable and equitable future. These programs far outpace the effectiveness of megadevelopment schemes which are often funded by multilateral institutions such as the World Bank.

The Sierra Madre Program was initiated with private donations and a small grant from the Biodiversity Support Program (BSP). Over the past sixteen months, the program has received \$75,000 from BSP and has raised other funds from private sources.

The Sierra Madre Program integrates conservation with the development needs of the indigenous and mixed blood (or mestizo) people of the Sierra Madre Occidental of Chihuahua, Mexico. Over seventy thousand aboriginal Tarahumara, Tepehuan, Pima, and Warihio and a greater number of mestizos live in conditions of extreme poverty in the Sierra. Years of exploitation and competition for forest resources now threaten the last remaining segments of the most biologically diverse ecosystem in North America. This program is the first significant international assistance to reach these remote mountains in northwestern Mexico. In just sixteen months of operation, the program has brought hope and technical assistance to remote communities suffering from environmental degradation, hunger, drought, corruption, and violent repression from drug traffickers and local political bosses known as *caciques*.

The Sierra Madre Program has taken the lead in exposing and denouncing the root causes of social and environmental problems in the Sierra. Murder, slavery, starvation, drug trafficking, land theft and corruption are among the problems uncovered by Mexican conservation partners in the Sierra Madre Program. Over the past twenty years, the Sierra Madre has grown into the second most prolific drug-producing region in the world. Drug-related violence has destroyed dozens of indigenous communities and displaced hundreds of families. In the most extreme case, forty Tarahumara have been murdered and the remaining Tarahumara families driven out of their traditional ejido (or communal) lands by local *caciques* working in cooperation with drug traffickers and logging companies from Sinaloa.

In the municipality of Baborigame in far southwestern Chihuahua, three to four murders occur every week and indigenous families are regularly driven from their land. These crimes are almost never prosecuted because the justice system is controlled by drug traffickers. In one community, Coloradas de la Virgen, twenty-three families have lost their fathers to this violence. Numerous women and children have been raped or killed. The surviving family members flee to outlying communities where they face extreme poverty, malnutrition, homelessness and starvation.

The Sierra Madre Program not only brings international support to the Sierra, but facilitates a number of Mexican governmental agencies in an effort to bring justice and social services to this remote region. At the same time, the Sierra Madre Program is protecting some of the last remnants of the most biologically diverse pine forest in the world. Community participation is now being integrated into ecosystem management throughout the Sierra.

Wary of indigenous unrest throughout Mexico, government agencies and political leaders in Mexico are beginning to offer support and are seeking counsel from CASMAC. Extremely productive relationships have been established with a number of federal and state institutions in Mexico as well as U.S. agencies, including the U.S. Forest Service. Cooperative projects that would have taken years to develop between government agencies have been organized in weeks or months by nongovernment organizations. The results have been dramatic:

- 1) Indigenous Communities have agreed to protect 100,000 acres of land in the Sierra for watersheds, medicinal plants, and wildlife. By the end of the year, CASMAC is working to protect 300,000 acres of primary forests, watersheds, and sacred sites in the Sierra.
- 2) A Center for Agro-ecology Research and Training has been started in the Tarahumara community of Cabórachi. This center trains local farmers in biodynamic agriculture and landscape management.
- 3) The state of Chihuahua has passed a new constitution which includes landmark protection of indigenous rights and lands. The constitutional articles and upcoming regulations resulted from over a dozen participatory workshops in indigenous communities. These reforms in Chihuahua have been recognized nationally, and the Sierra Madre Program will submit recommendations directly to the Secretaria de Gobernación for federal regulations protecting indigenous rights.
- 4) The most violent drug trafficker in Chihuahua, Artemio Fontes, is now a fugitive of the law and two of the killers working for his family have been brought to justice.
- 5) Indigenous communities have directed police to destroy over 250 acres of marijuana and opium plantations which were planted by invading drug gangs on indigenous lands.

- 6) The federal attorney general and indigenous communities have agreed to keep all community protected areas free from drug cultivation.
- 7) Two illegal logging operations have been stopped and investigations are under way to recover thousands of acres of land stolen from indigenous communities.
- 8) Timber contractors and a former ejido official from the Baborigame have been prosecuted for embezzling over \$300,000, creating the opportunity for a future community forestry program.
- 9) CASMAC has brought government aid to the most remote communities in the sierra, including food, school supplies, and indigenous teachers.
- 10) Indigenous communities throughout the Sierra are working together to protect their rights and violence against indigenous leaders has diminished.
- 11) The logging industry has requested negotiations with CASMAC over forestry development in the Sierra. The industry is expected to recognize protected areas and to show greater respect for indigenous rights in future operations.

Forest Guardians is concerned that the Sierra Madre Program and other innovative conservation and development efforts will be undermined by cuts in U.S. Foreign Appropriations. We agree that some cuts may be unavoidable, but we remind Congress that the North American Free Trade Agreement was passed under the pretext that environmental protection and social reforms would be priorities for the United States, Mexican, and Canadian governments. NAFTA has set the stage for improved relations between our nations. Today there is an unprecedented opportunity for cooperation between government and nongovernment organizations in Mexico and the United States to address our common problems.

In the Sierra Madre, the impacts of logging and drug trafficking are connected to international commerce and binational policies. Despite increased awareness of these problems in the U.S. and Mexico, there is little hope that government agencies will proceed with meaningful reforms without the constant vigilance and facilitation of nongovernment organizations supporting community efforts. Although we receive less U.S. foreign assistance than would support one embassy staff person, the Sierra Madre Program can ill afford to lose BSP funding. The credibility associated with receiving U.S. government assistance has opened many doors in Mexico and with private funders, enabling the program to meet the urgent needs of many communities. U.S. support has also provided some security for our staff and volunteers who work under constant threat from drug traffickers.

Instead of across-the-board cuts in foreign assistance, Congress should consider the efficiency and effectiveness of foreign assistance programs. The waste associated with some foreign aid programs, especially multilateral projects, is staggering. Many programs have been initiated without thorough understanding of the issues involved. Misplaced assumptions are often

made about the capabilities and motives of in country recipients. Proposed community programs are often funded with little assurance of actual grassroots participation. In other words, misguided foreign assistance empowers corruption and further disenfranchises the proposed beneficiaries.

The recently canceled World Bank Forestry Development Program in the Sierra Madre exemplifies how multilateral (or even bilateral) aid can be misdirected. The National Indigenous Institute (INI) and the Secretary of Agriculture and Hydraulic Resources (SARH) of Mexico spent over six years and ten million dollars creating misleading environmental and social baseline studies for the World Bank. Besides erroneous reports, this program achieved absolutely nothing. The only tangible result was the murder of an indigenous leader who protested illegal logging made possible by a World Bank-financed road.

In contrast, with \$75,000 in BSP grants and private donations, the Sierra Madre Program has produced accurate information on the status of the forests and people of the Sierra and has developed an effective strategy for conservation and development in the region with the participation of the local communities. Grassroots support organizations like CASMAC, who often work with U.S. nongovernment partners, are an effective and efficient means for distributing foreign assistance. The in-country partners have the experience and knowledge to work directly with communities. They also understand the potentials and pitfalls of government agencies. As a U.S. partner, Forest Guardians provides funding, technical advice, strategic planning, logistical services, and program monitoring for our Mexican associates.

Even as the Sierra Madre Program gains support within Mexico, the transition to sustainable development, conservation, and justice in the Sierra will rely on consistent, long-term international assistance. At least ten to twenty years of training, extension, and alternative development will be necessary to build a sustainable culture in the Sierra. The alternative is a declining quality of life for all species, loss of indigenous traditions, and a self-perpetuating culture of violence.

The success of the Sierra Madre Program to date is due to sacrifices on the part of the Sierra Madre Program staff and numerous volunteers. Often working without pay and accumulating personal debts to sustain their work, the staff has persevered despite life threatening repression:

* Corrupt local police beat CASMAC director, Edwin Bustillos, and eight Tarahumara friends in December of 1993. Bustillos nearly died from head injuries during the beating.

* Military units, after a "suggestion" from drug traffickers, harassed the elderly parents of one Tepehuan liaison.

* Last September, armed men working for drug traffickers maintained a threatening vigilance outside the Sierra Madre Program offices in Chihuahua.

Nevertheless, the program has proceeded with even greater success due to the strong support of the Federal and State Attorney General (Procuraduría General de la República and Procuraduría General de la Justicia Estatal), the Secretaría de Gubernación, the Autonomous University of Chihuahua, the Governor of Chihuahua and international supporters.

The following testimony provides detailed support for this introductory statement and further demonstrates the effectiveness of international conservation partnerships in resolving the complex matrix of social, environmental, and political problems which threaten much of the developing world today.

I will conclude my statement by urging Congress to actually increase appropriations to the Biodiversity Support Program worldwide and especially to increase funding for integrated conservation and development programs in Mexico. International funding to sustain grassroots development and conservation are equally important for the long-term stability of both northern and southern Mexico. The American public is well aware that environmental problems as well as commerce freely cross national boundaries. The government of the United States must now prove that social justice and environmental protection also transcend national boundaries by increasing appropriations for integrated conservation and development in Mexico.

Furthermore, we urge the Appropriations Committee to consider establishing programs to help the victims of the campaign against drugs. Emergency funding is desperately needed for starving families in Coloradas de la Virgen and other communities. We urge Congress to fund demand reduction programs, programs to stimulate alternative economies, and conservation programs in drug-producing areas. Communities have asked for this assistance.

We would be happy to meet and work with your staff to plan the most effective ways in which U.S. foreign assistance can assure a better future for rural Mexico.

II. The Sierra Madre Program

A. Background

The Sierra Madre Program was officially started in January, 1993 with a six-month, \$25,000 planning grant from Biodiversity Support Program. However, the program builds upon eight years of professional research and community extension work by Edwin Bustillos, the key Mexican partner, and three years of research by Randall Gingrich, the U.S. program director. The program now receives \$50,000 per year from BSP and has received support from a variety of foundations and individual donors in the United States.

The Sierra Madre Program empowers indigenous communities through community workshops, conservation training, human rights investigations, and legal and institutional advice. Arizona Rainforest Alliance (ARA) and Forest Guardians provide the Advisory Council of the Sierra Madre (CASMAC) and communities with planning, fundraising, networking, technical advice, logistical and administrative support. Forest Guardians also works to build international awareness and support for the problems facing the Sierra. This program is an essential extension of Forest Guardians efforts to preserve environmental and cultural values in the national forests of the southwestern United States and ARA programs to build conservation links between Arizona and the tropics.

Ecological Significance

The forests of the Sierra Madre contain a greater diversity of plants than the rainforest of southern Mexico and are perhaps the most biologically diverse pine forests in the world. The pine/oak forests and subtropical canyons of the Sierra Madre form unique ecological gradients that inspired the International Union for Conservation of Nature to nominate the region as a global center for plant diversity. Over 3,500 vascular plants found in the region include tropical and temperate species as well as hundreds of endemic species. At least sixty wild relatives of major crops and over six hundred useful and wild plants are found in the region.

These forests are habitat to a number of threatened or endangered species: jaguar, Mexican Gray Wolf, Mexican Spotted Owl, Apache Goshawk, Thick-billed Parrot, numerous native fish, and several hundred endemic plant species. Additionally, these forests are important migratory corridors for songbirds and predators such as jaguar and ocelot which occasionally enter Arizona and New Mexico. The watersheds of the Sierra Madre provide one-third of the flow to the lower Rio Grande and provide irrigation water for nearly one million hectares in Mexico. Erosion and runoff from logging roads increases siltation of reservoirs, raises downstream river beds and increases flood damage.

Community Priorities

The Sierra Madre Program works with indigenous communities through traditional forms of government and communication. Indigenous liaisons working for CASMAC demonstrate respect at all times for traditional shamans, governors and other authorities. Honoring traditional protocol is the most ethical method for working in indigenous communities and is the only way to include traditional communities in planning and managing their forests. CASMAC works with priority problems as defined by the communities. The priorities of the Tarahumara and Tepehuan communities, obtained at various workshops, are ranked and briefly described below.

#1 Human Rights

Clearly the highest priority of the Tepehuan and Tarahumara communities is to end the various forms of violence and repression that destroy their autonomy and affect every aspect of traditional life. A few violent *caciques* hold much of the political and economic power in the region. An average of three to four murders are documented every week in this zone, including the killing of traditional leaders. CASMAC has researched human rights problems in the region and is working successfully with the Procuraduría General de la República (Attorney General) to resolve some of the worst cases. However, a determined government effort is needed to improve conditions on a regional basis. INI (the federal agency responsible for indigenous affairs) has officially abandoned the region, leaving indigenous communities with limited access to federal agencies. Conservation and development programs will increase attention to the region, strengthen indigenous organizing and eventually improve the human rights condition.

#2 Recognition of Traditional Authority

Although traditional authorities are officially recognized by law, in practice government agencies work only with ejido leaders, caciques, and industry. Traditional leaders and their representatives should be involved in every step of development and enforcement of laws, regulations, and policies which affect their communities. Some representatives called for recuperation of the pueblos, the governing system originated by Catholic missionaries before the ejidos were established. Proposals have been discussed with SARH and SEDESOL to work directly with traditional governors to regulate community forest, punish violators, and to establish conservation areas on a community basis.

#3 Security of Land Tenure and Recuperation of Traditional Lands

CASMAC is advising indigenous ejidos with respect to changes in land tenure policy and on other aspects of ejido reorganization. The Tarahumara and Tepehuan prefer a community land tenure system to individual ownership or sustaining the ejido system. However, the best and most feasible options for land tenure will depend on local conditions in each ejido.

#4 Respect for Agricultural Work

Agriculture and nontimber forest extraction are more important than logging and cash employment. Assistance with agro-ecological problems is therefore a higher priority than community forestry; however these issues are clearly related. Applied research and pilot programs in agriculture, range management, watershed management, and forestry, in cooperation with traditional leaders, are needed to improve ecosystem management.

#5 Protection of Watersheds, Sacred Sites and Areas of Ethno-botanical Significance

Article 27 of the Mexican Constitution will enable communities greater liberty to establish conservation areas. Although each community has not been thoroughly evaluated for conservation priorities, Mesa de los Martínez, Mesa Lisa, Cordón de la Cruz, and Juntas de Arriba in Baborigame are early candidates for protection.

B. Program Mission and Objectives

The Sierra Madre Program mission is to build the capacity in rural communities to organize and sustain integrated conservation, agricultural and development activities. CASMAC and Forest Guardians help indigenous and mestizo communities manage their own resources through training, advising and participatory development of community policies and regulations, based on their ecological and cultural needs and limitations. The short- and long-term objectives of the Sierra Madre Program are:

Training and Extension

Agro-ecology Program: Establish an Agro-ecology Center in the Tarahumara community of Cabórachi which will investigate and develop culturally and ecologically appropriate alternatives to slash-and-burn agriculture, overgrazing and other environmentally destructive subsistence practices. Specific objectives for the coming year are to hire and train a full-time agro-ecology coordinator and a Tarahumara trainer and their spouses, develop test plots for cover crops, modify bean harvesting practices, study range and agricultural practices and begin construction of a training center in Cabórachi.

Community Workshops: CASMAC conducts community workshops on forest management, traditional organization, land tenure, ejido regulations, development issues and human rights problems as prioritized by the communities.

Radio Program: CASMAC broadcasts a weekly educational radio program, “Los Tiempos Cambian,” to all indigenous communities in the Sierra.

Land Tenure Extension Services: CASMAC works with traditional communities, ejidos and government agencies to resolve land tenure issues resulting from recent changes to Articles 27 and 4 of the Mexican Constitution.

Advisory Network: CASMAC provides institutional and legal advice to communities on forest management, indigenous rights, and development issues.

Public Education: Conduct research and develop programs and materials to train teachers in methods of environmental education, incorporating the knowledge of traditional healers, women, and indigenous authorities.

Community Conservation Programs

Community Reserves: Establish and develop management plans for at least 300,000-acre community reserves in each ejido and community in the Sierra Madre in cooperation with traditional indigenous authorities, ejido authorities, and government agencies. The majority of the community reserves are old-growth forests that will be excluded from timber production and managed for watersheds, ethno-botanical resources and wildlife.

Guacamaya Program: Develop an educational, participatory program to stop poaching and protect habitat for the threatened Thick-billed Parrot (locally known as Guacamaya) in cooperation with government agencies, NGOs and indigenous communities.

Integrated Forest Management Program: Incorporate indigenous community values and ecosystem management principles into overall forest management in the Baborigame district. Train indigenous people in forest management and technical skills to begin transition from forest industry contractors to community forestry.

Other Objectives

Institutional Development: Develop the technical and administrative capacity and financial stability to provide grassroots support for forested ejidos and indigenous organizations in Chihuahua over the long term.

Institutional Cooperation: Build institutional cooperation and collaboration between Mexican and foreign government agencies, NGOs, and indigenous communities by building pilot programs according to local needs and ecological priorities.

Economic Diversification: Assist and sponsor research and development of economic alternatives to forestry and drug trafficking as appropriate to local cultural and ecological conditions, such as ecotourism, crafts, woodworking, oak production and ethno-botanical products.

C. Program Explanations

Community Reserves -- An Explanation

The Sierra Madre Program is working with indigenous communities to establish a series of conservation reserves which will be designated and managed by traditional communities. The largest remaining old-growth stands and threatened Thick-billed Parrot habitat are priority sites. These community reserves were selected by a combination of ecological significance, cultural interest and political feasibility. These reserves will be officially recognized by the government but managed by the community.

Ejido forest management has traditionally ignored non-timber forest values which are important to indigenous members of the ejido. Preservation of ethno-botanical resources and watershed protection are the most important priorities to the communities. CASMAC and Forest Guardians will provide communities with the technical, legal and institutional assistance needed to establish and manage their own reserves.

Workshops conducted in Baborigame, Pino Gordo and other ejidos indicate a strong desire to protect these areas. New regulations for ejido reform and indigenous rights have created the legal mechanism for communities to create reserves independent of the ejido management structure or forest unit plans. CASMAC and Forest Guardians will meet with the Procuraduría Agraria (federal land reform agency) and SEDESOL (federal agency for the environment and social development) to gain official recognition of protected areas and community management plans. The following protected areas have so far been designated or proposed by communities:

Pino Gordo	37,000 acres
Baborigame	
Mesa de Los Martínez	4,000 acres
Cerro de Aguila	2,500 acres
Coloradas de la Virgen	25,000 acres
Yoquivo	5,500 acres
Cieneguilla	12,500 acres
Malanoche	12,500 acres
El Metate	1,000 acres
<u>Munerachi</u>	<u>7,000 acres</u>
Total	100,000 acres

These protected areas include approximately 57,000 acres of old-growth forests, transition forests, subtropical forests in the barrancas, agricultural lands, and a few areas that have been previously logged. CASMAC hopes to assist communities with designation of 300,000 acres of reserves in 120 ejidos. Development of community-based management plans and integration of protected areas into overall ecosystem management will require additional training, extension, and monitoring.

Guacamaya Project -- An Explanation

The Thick-billed Parrot, known locally as guacamaya, is the northernmost member of the parrot family, formerly inhabiting pine and oak woodlands from northern Michoacán to southeastern Arizona. Like the Spotted Owl, the guacamaya is dependent upon old-growth forests for nesting and is an important indicator of forest health. A heavily built green parrot with red and yellow markings, the guacamaya has been declining throughout its range for most of this century. The guacamaya is endangered by trapping for the illegal pet market in the U.S. as well as habitat loss.

Today, guacamayas exist in isolated forest fragments in southwestern Chihuahua, Sonora, Sinoloa, and Durango. This species is heavily dependant on old-growth pine, nesting predominately in cavities of large standing dead trees and feeding on pine cones. In Chihuahua, the largest populations inhabit the pine forests on the southern rim of the Barranca Sinforosa and side canyons. Several flocks inhabit the proposed community reserves in the Guadalupe y Calvo district.

A cooperative study is being planned with Noel Snyder of Wildlife Preservation Trust International which will study the distribution and status of the guacamaya into the Chiricahua mountains of Arizona in cooperation with Mexican and U.S. parrot researchers. This three-year research program will conclude with management recommendations and specific programs for conservation.

Forest Guardians and CASMAC are organizing a multidisciplinary reconnaissance mission to study Thick-billed Parrot populations and habitat in the Baborigame region. The team will include biologists from U.S. Fish and Game, Mexican and U.S. universities, SEDESOL, and anthropologists. CASMAC will follow up by organizing and educating communities to help study and protect guacamayas. Educational efforts will be designed after similar programs in the Caribbean and other regions. The radio program, schools, and workshops will be utilized to inspire communities to take pride in saving the guacamaya and other species.

The Agro-ecology Program

The Agro-ecology Training and Research Center was conceived from workshops conducted in communities who rank traditional agriculture and extraction of native plants as high priorities for sustaining their culture. The Tarahumara, Tepehuan and many mestizos are basically forestland farmers who supplement agriculture with hunting, extraction of wild plants, and wage labor. Many have been forced into drug cultivation by narcotraffickers or economic conditions. Over the past decade, drug cultivation and violence has increased dramatically in this zone. An integrated agricultural and environmental training, research, and extension program is being initiated in the Tarahumara ejido of Cabórachi to build long-term solutions to these complex issues.

In December, 1993, a group of Tarahumara and Tepehuan leaders visited the Rural Development Training Center in Mora, New Mexico. They were excited to learn about

biodynamic technologies and a training philosophy which supplements their traditional knowledge. CASMAC Technical Director, Edwin Bustillos, has donated ninety hectares of agricultural land in the Tarahumara community of Cabórachi to start the Center for Agro-ecology Training and Research. This land, situated in the heart of the Sierra Tarahumara, includes dryland areas and land suitable for small-scale irrigation. Cabórachi also has a small population of mestizo (or mixed blood) campesinos. A modern cabin with electricity is available to house the center for \$150 per month.

The Tarahumara and Tepehuan are forestland farmers whose agricultural problems are more immediate than forest management issues. Periodic drought, poor soils, erosion, overgrazing, and loss of valuable agricultural lands to invading mestizos all contribute to hunger, malnutrition, and related health problems. Throughout the Sierra, subsistence farming and grazing practices damage the forest leading to frequent conflicts with forest managers. Each year, farmers travel farther from their homes to plant beans in slash-and-burn clearing. Bean fields are abandoned after one or two seasons and more forest is cleared. The land near many indigenous communities is barren and heavily eroded. Riparian areas are often stripped of vegetation near communities. In cooperation with CASMAC, many communities are attempting to end this unsustainable pattern of forest clearing by protecting areas and prohibiting clearing of new areas.

The Agro-ecology Program is designed to train forestland farmers in culturally adapted organic practices which will improve productivity, restore soils and relieve pressure on forested areas. Culturally sensitive agricultural training and extension can reduce deforestation pressures and the threat of fire. Combining traditional systems with biodynamic practices can help sustain traditional cultivars while improving productivity of the land. Watershed protection and restoration will be incorporated with programs to preserve and enhance medicinal and other valuable forest plants. Grazing and livestock management practices will be incorporated into a landscape management plan.

From May 1, 1994 to September 30, 1994, CASMAC will send the Agro-ecology Coordinator Tonio Nuñez, his wife, Sandra Urena, and Tarahumara Coordinator, Primitivo Cruz Moreno, and his family to the five-month trainer's course at the Rural Development Training Center in Mora, New Mexico. Tonio Nuñez is an agronomist with four years experience working with Tarahumara communities. Primitivo Cruz is a former Tarahumara Promoter for Instituto Nacional Indigenista, a traditional farmer, and a highly respected community leader from Cabórachi. Sandra Urena and María Cruz will coordinate training for women and children.

The Rural Development Service center emphasizes bilingual training for trainers and follow-up consulting. The training curriculum includes intensive cropping, animal husbandry, farm design, fertility management, soil conservation, cover crops, terracing, contouring, compost production, plant propagation, garden planning, community relations, group dynamics, organization, and project planning. Training at the RDSG Center will also include developing short- and long-term plans for the Agro-ecology Center. Forest Guardians, CASMAC, and

RDSG are planning to form a long-term coalition to support community improvements of agriculture and watershed management in the Sierra. The CASMAC agro-ecology staff will work with RDSG trainers to develop a month-by-month, year-by-year strategy for training and extension in the Sierra. These work plans will include budgets and objectives and, upon returning to the Sierra, the staff will begin pilot projects and courses at a center to be constructed by the state of Chihuahua. RDSG staff will follow up the course with field visits.

The Coordinadora Estatal de la Tarahumara, a Chihuahua state agency, has agreed to co-sponsor the Agro-ecology Training Center by providing staff salaries beginning in July, 1994. Funding from Wallace Genetic Foundation and Omina Freundeshilfe have provided scholarships and per diem expenses for four adults at the Rural Development Service Center. The Biodiversity Support Program, a USAID-funded coalition including World Wildlife Fund, The Nature Conservancy, and the World Resources Institute, provide general support to CASMAC and Forest Guardians. The Coordinadora Tarahumara will provide one full-time and three part-time salaries to the Nuñez and Cruz families, beginning in July, 1994. Forest Guardians and CASMAC request \$2,500 from Agricultural Missions to assist with basic equipment and other direct costs associated with starting the Center. The Agricultural Missions contribution will cover seeds, tools, concrete, irrigation hoses, transportation, and communication expenses. The specific priorities for equipment purchases will be established by RDSG staff working with the CASMAC agro-ecology team.

Policy Development and Implementation

The conservation programs described above are all being organized in cooperation with state and federal agencies. These programs establish working examples of how agencies should incorporate traditional knowledge and decision-making processes into programs in the Sierra. CASMAC is advising other agencies, including public defenders and the Procuraduría General de la República on procedures for working with indigenous communities. CASMAC is also coordinating actions with the Procuraduría Agraria to ensure land tenure security in Pino Gordo and Coloradas de la Virgen in accordance with Article 27. Community workshops are being planned in cooperation with the Procuraduría Agraria and SEDESOL.

The rights of indigenous people are guaranteed in Article 4 of the Mexican Constitution. This article was recently amended and regulations are currently being written. CASMAC submitted draft regulations to federal authorities in April, 1994. CASMAC has also been instrumental in drafting articles and regulations for the new state constitution in Chihuahua. These rights guarantee the right to bilingual Spanish/indigenous education, bilingual legal rights, the right to enforce the law with traditional forms of justice for indigenous offenders, and indigenous land rights.

Edwin Bustillos and his promoters have gathered input from indigenous communities for regulations that guarantee the right of indigenous people to participate in all land management decisions. Among the recommendations which have been submitted are: 1) the right to protect

areas for traditional use, 2) the right to participate in all forest studies and management planning processes (with interpretation in their language), 3) approval by seventy-five percent of community members shall be required to approve any contract, 4) the right of community leaders to audit all operations impacting their lands, and 5) a requirement for SARH (Department of Agriculture) to train communities in forest management.

D. Community Histories

The magnitude of related human rights and environmental problems in the Sierra Madre is difficult to comprehend. Four indigenous groups numbering about seventy thousand struggle against 150,000 mestizos who are often supported by caciques, drug traffickers and logging companies who have corrupted the military, local police, municipal leaders, and every level of government. The land tenure system includes over 150 ejidos, dozens of communities, and private lands with innumerable boundary conflicts. The following case studies demonstrate the effectiveness of grassroots support networks in challenging current and past patterns of exploitation and abuse.

Coloradas de la Virgen

Coloradas de la Virgen is a predominately Tarahumara community in the far southwest corner of Tarahumara country. This remote community contains some of the largest continuous stands in the Sierra and hosted some of the largest traditional festivals in the Sierra until drug traffickers began a campaign of extreme violence in the late 1980s. From 1991 through 1993, associates of Artemio Fontes committed at least thirty-five murders in Coloradas (see Appendix A). Many indigenous families have fled the region and many of the remaining families are denied access to their traditional lands. Most government agencies are afraid to enter the region due to a combination of violence or corruption. Lacking social services, fatherless and landless families now face possible starvation.

In February of 1993, two logging companies, Impulsora and Duraply began logging in the Tarahumara community, Coloradas de la Virgen. These companies did not have authority from the ejido to log, but apparently official permits were arranged by Artemio Fontes. When the Tarahumara objected to this invasion, one of their leaders was killed. Fontes is reportedly a silent partner in Impulsora and is one of the most violent narcotraffickers in all of Mexico. Associates of Fontes have killed thirty-five people in Coloradas since 1991.

The World Bank may have unwittingly increased exploitation in this region. The road to Coloradas was improved with World Bank credits. Mexican agencies have repeatedly suppressed information to the World Bank. Impulsora and Duraply have been building roads and logging or attempting to log many of last stands of old growth as identified by World Bank studies, including Malanoche and Coloradas de la Virgen.

The Sierra Madre program is bringing global attention to the plight of these people. Edwin Bustillos and the indigenous promoters of CASMAC have been the only source of help for these people. CASMAC has helped the government open schools in the region and brought some material aid. CASMAC stopped illegal logging in Coloradas, and will negotiate any future logging contracts on behalf of the indigenous communities. CASMAC cooperation with the state and federal attorney generals have led to some arrests and several killers, including Artemio Fontes, are now fugitives of the law, but remain at large.

Defense of Coloradas de la Virgen has been very costly to CASMAC. Gumerciendo Torres, the Tarahumara promoter from Coloradas, was shot two years ago and left for dead and the Fontes family killed his brother. Edwin Bustillos was beaten by associates of Fontes, who represent a constant threat to program staff and volunteers. The perseverance of CASMAC has resulted in state and federal commitment to resolve this issue.

Baborigame

A multidisciplinary investigation and community workshop was conducted in the Tepehuan ejido of Baborigame in May, 1993. The investigation team included representatives from the U.S.D.A. Forest Service, SARH, Escuela Nacional de Antropología e Historia (ENAH), and SEDESOL. Additional support was provided by the Coordinadora Estatal de la Tarahumara and DIF Estatal (Agency for Integrated Family Development). Follow-up investigations have been conducted with the Procuraduría General de México, Procuraduría de Justicia de Chihuahua, and COSYDDHAC (Committee for Solidarity and Defense of Human Rights). These investigations have uncovered severe corruption in the ejido and a timber contractor and a former ejido commissioner have been charged with embezzling nearly \$300,000 from the ejido.

Baborigame is one of the highest volume producers of pine in the Sierra. However, due to control by caciques, corruption and human rights violations, the economic structure of the forest industry in the region clearly has not served the interests of the indigenous majority. The Tepehuan, who are a seventy-five percent majority of the Ejido Baborigame, receive very little benefit from the existing logging operations run by Duraply and a local contractor. In recent years, the 435 ejido members have each received between \$100 and \$300 U.S. per year from timber operations. Most of the timber-related jobs are filled by outsiders, with only fifteen percent of the work force being Tepehuan. Because most of the loggers have nothing but short-term interests at stake, forestry and environmental regulations are unenforceable.

Despite the low level of benefits to most ejido members and the high impact on traditional forest use, it is not advisable for the Tepehuan community to terminate logging operations in Baborigame. Even though a majority of ejido members would likely support such an idea, a movement to end logging in the ejido would provoke potentially violent conflicts between mestizo loggers and indigenous ejido members in the zone. Also, it may be in the best interest of Tepehuan communities to continue selective logging, while reorganizing and gaining more community control over planning, management and operations. Continued management is

necessary to correct past impacts of logging, such as erosion of logging roads and the proliferation of dense thickets of small pines. Tepehuan leaders were impressed with the systems of monitoring and accountability developed by Zapotec communities in Oaxaca. The logging contract in Baborigame has been granted to Duraply, and the community is working to ensure better accountability. Within three to five years, CASMAC hopes to train the community to operate their own forest industry while managing their forests on a sustainable basis.

An improved forest economy does not ensure better management, but the poor condition of the regional infrastructure greatly limits the potential for financing improved forest management. Road improvements and telephone service could improve the economic feasibility of ecosystem management as well as government services such as health care and law enforcement. Two production alternatives have been proposed (to be operated by the community), which may also help improve the economic feasibility of better forest management. The first alternative would be the use of portable sawmills to harvest and process small-diameter trees in the field. The second alternative involves managing and processing oaks.

The community of Ixtlán, Oaxaca, has agreed to share technology for producing tool handles from oak. This small-scale industry is very profitable and does not use much oak. There is an abundance of oak in Baborigame and surrounding areas; however, an integrated management plan must be developed prior to any exploitation of oak. This program could provide an alternative to dependency on pine production, leading to more balanced forest management. According to sources in Ixtlán, they are unable to meet the demand for their products. CASMAC has submitted a proposal to SEDESOL to start an oak processing project in Chihuahua.

Pino Gordo

Pino Gordo, a purely Rarámuri ejido located south of the Río Verde between Guachochi and Guadalupe y Calvo, is one of the most traditional Rarámuri ejidos and has some of the best wildlife conditions in the Sierra Tarahumara. The details of recent events in Pino Gordo represent the type of political manipulation and coercion facing the Rarámuri throughout the Sierra.

Pino Gordo has a population of approximately four hundred traditional Rarámuri and one mestizo, who married a Rarámuri woman. Pino Gordo contains 17,000 hectares of pine-oak woodland and descends to subtropical zones in the Barranca Sinforosa. Most of the people in Pino Gordo live in the pines in the summer and migrate to the barranca in the winter. The Rarámuri least affected by the outside world live deep in the barrancas all year. A few families live in the high sierra all year.

Pino Gordo has never been logged, but faces external and some internal pressures to begin forest exploitation. Despite pressures to log and the intermittent presence of narcotics traffickers, Pino Gordo is the most peaceful ejido south of the Río Verde (Bustillos, 1992). Last year this peace was threatened by an invasion of heavily armed drug traffickers led by a former ejido president, Raúl Aguirre. They planted over a dozen marijuana and opium plantations, destroying virgin forests. These plantations were later destroyed by CASMAC working with federal police.

Currently, all but six ejido members are opposed to logging. The ejido has officially voted to preserve their forests five times and official documents have been approved by federal agencies. Existing logging concessions for the area were illegally gained and will not be honored by the government. Approximately four years ago, Raúl Aguirre, a Tarahumara, was illegally elected president of Pino Gordo by sixteen people from the barranca in the presence of Reforma Agraria officials in Cumbres de Sinforosa. Besides favoring logging, Aguirre and his supporters favored resolving a land tenure conflict in favor of a neighboring ejido, Coloradas de los Chavez. Reportedly, Aguirre received ten million pesos from Coloradas and fifteen million pesos from Impulsora, the logging company that was awarded a logging concession for Pino Gordo. By conceding the land to Coloradas, which included the rancharía of Pino Gordo, Aguirre would have effectively divided his chief political opposition in the uplands. The land concession to Coloradas also involved significant stands of timber which would be exploited by Gonzales Muzquis, a major logging company which owns the timber concession in Coloradas.

After completing these complex and illegal negotiations, Impulsora proceeded to construct a road into Pino Gordo and arranged for UCDF #9, a union of civil foresters in the Guadalupe y Calvo district, to prepare a forest management plan which cost fifty-six million pesos. The plan was prepared based on two overflights with no field survey and no local involvement. The road cost an additional three hundred million pesos. Impulsora wants forty thousand cubic meters of pine for payment (an equivalent of \$2.50 per cubic meter). Sources

inside the government claim that World Bank funds were used to build the road, against World Bank policy not to build new roads. The World Bank denies approving funding for the road, but is forcing the Mexican government to repay about half of the funds dispersed so far because they violated environmental guidelines

The Reforma Agraria Commissioner, Sr. Perea, favored Aguirre in these negotiations. However, at the urging of INI officials and a nongovernmental human rights commission (COSYDDHAC), a well respected Reforma Agraria official, Martín Aviles, interceded; Aguirre was forced to resign; and Maurilio Ramos was legally elected president three years ago. Aguirre and some of his supporters have left the ejido and now live in Chihuahua City. They have repeatedly claimed to represent the ejido to governmental agencies. At their request, the Coordinadora Tarahumara loaned fertilizer to the community last spring. They returned in the fall to collect money after the harvest. Crops are grown strictly for subsistence and no money was available to pay, so the state official attempted to force the ejido to sell timber to Impulsora. CASMAC intervened and the community is now doing conservation work on their land to pay for the fertilizer.

Pino Gordo has voted five times to protect the entire ejido and the Procuraduría has approved the community reserve. However, Raúl Aguirre has continued to interfere. Most recently he warned the people of Pino Gordo not to trust the gringos because they plan to bring fierce lions that will eat the Tarahumara children and cannot be killed with guns. This may seem funny to outsiders, but it is a serious problem for CASMAC. Aguirre knows exactly how to play the archetypal fears and mistrust of outsiders. After a workshop with CASMAC, the community decided to continue to protect their forests. Currently, Impulsora is attempting to negotiate with CASMAC to log Pino Gordo, but it is unlikely that the community will change its opposition to logging.

Yoquivo

CASMAC has uncovered a case of slavery in Yoquivo, and is heading a state and federal crackdown on the caciques involved in slavery, theft of indigenous lands, and drug growing. A common practice by mestizos in the Sierra is to simply fence off a section of communal forest for private use and threaten the Indians if they enter the area. They often enforce their claim with murder. Antonio Gonzales and his brothers recently fenced off three sections of Tarahumara lands, totalling about 1200 acres. They are reportedly growing drugs in the area and have kept a Tarahumara family as slaves for nine years. They attempted to bribe CASMAC employees in March and April. A crackdown is planned and much of the fenced area will become part of a protected area, prohibited from commercial logging. The land recovered under this operation is part of the watershed leading into a old-growth forest on the rim of the Barranca Sinforosa, a six thousand-foot deep canyon.

Cieneguilla

The Tarahumara of Cieneguilla would like to preserve the remaining 12,000 acres of old growth in the ejido. However, the mestizos living in Cieneguilla have killed forty Tarahumara and the others have fled. Loggers from Sinaloa are cutting some of the largest trees in the Sierra. Only one Tarahumara remains in Cieneguilla, but the other survivors wish to return. State and federal investigations coordinated by CASMAC will soon be underway.

III. THE WORLD BANK FORESTRY DEVELOPMENT PROGRAM

In August, 1989, the World Bank approved a \$45.5 million loan to Mexico as part of a \$90 million "Forestry Development Project" in the Sierra Madre of Chihuahua and Durango. This project includes \$48 million in credits for timber producers and \$33.6 million for rehabilitation of 1200 kilometers of the most important logging roads in Chihuahua and Durango. The remainder of the loan would go into consulting fees, institutional development, training, and environmental studies. From its inception, the project has been plagued by institutional conflicts within the government of Mexico, which resulted in the inability to produce a satisfactory environmental or social baseline study until February, 1992, five years after the initial project assessment began. This project has reportedly been cancelled at the request of the Mexican government, but no official announcement has been made.

To date, five roads have been rehabilitated in southern Chihuahua (prior to completion of the social and environmental baseline studies) and some funding for small credits has been released. About half of these credits proved to be for environmentally unsound operations. Although the World Bank is in denial, three of the five road segments constructed were contrary to the loan specifications. The World Bank is now demanding that the Mexican institutions repay specific loans that fail to meet project criteria. Pressure from environmental and human rights activists in Mexico and the United States has resulted in intense scrutiny of project implementation. The Environmental Defense Fund, Texas Center for Policy Studies, and the Commission for Solidarity and Defense of Human Rights in Chihuahua have been the leading critics of the project.

In an interview with Daniel Gibson, published in *Crosswinds*, William Beattie, the World Bank Project Manager, stated: "The main purpose of the project is to improve forest management in order to revive these forests and make them efficient producers of more and higher quality wood, while at the same time reducing the environmental impact of harvesting...the main premise of the project is that the people who will benefit will be the small landowners and the ejidos."

Activists and scientists familiar with the region claim that, given the past environmental record of World Bank development programs and the track record of the chief executing agency, SARH, the cumulative impacts of the World Bank loan and ongoing logging activity will lead to even greater damage to the forests. In the same interview, Beattie admitted: "There is no guarantee at all that someone who is not working with project funds will go out and make a mess of their land. I don't really know how we can stop that."

In January, 1991, an international forum was held in Tucson, Arizona, called "Treasures of the Sierra Madre: Resolving Development Agendas." The forum was co-organized by Randall Gingrich and was sponsored by the Southwest Center and the Udall Center for Studies of Public Policy at the University of Arizona, and a number of environmental organizations. The agenda for this conference was derived from research published by Rick Lowerre of the Texas Center for Policy Studies. This forum resulted in intense scrutiny of the project by both activists and the World Bank.

The World Bank project has since been delayed for three reasons. First, the initial environmental baseline study was not accepted by the Mexican government, but the second study was accepted by SEDUE in February, 1992. Supplementary studies of old growth and endangered species were submitted to the Bank in November, 1992. Second, the executing agencies, SARH, SEDESOL (formerly SEDUE), and INI are unable to work together officially. The reorganization of SEDESOL/SEDUE will not likely result in improvements because of the vague and contradictory nature of Mexican environmental law. Third, grassroots pressure in Mexico and the U.S. has increased scrutiny of the entire project. Although the project has probably been cancelled, there remain plans for a second loan beginning in 1996.

The World Bank made a credible attempt to monitor the loan, but is reliant upon the Mexican government and short-term field appraisals for information. Furthermore, the World Bank lacks the capacity and authority to investigate the level and mechanisms of corruption in the region. This shortcoming may be the biggest flaw in the project, because entrenched corruption is perhaps the biggest barrier to an efficient marketplace in the Sierra. Also, the limited political ability of the Amerindians and poor mestizos is the major obstacle to improving overall social welfare.

The main goal of the World Bank is to stimulate economic growth by providing credit for economically efficient programs. One means of achieving economic efficiency is through an open marketplace, however too many conditions for market failure exist in this region. Economists in the World Bank need to first recognize the structural barriers to distribution of economic benefits in Mexico.

The corporatist structure of the Mexican government is characterized by mutually supportive alliances between the ruling party (PRI) and an ordered structure of multitiered unions and civil associations. This top-down, centralized structure allows immense concentration of power at each level, such as a union boss, association president, or the patrons of these officials. In the Sierra, local bosses (or caciques) dominate political and economic activity in the Sierra. The interests of the caciques are generally supported by PRI, who gain mestizo votes through cacique influence. Forest managers work with the logging companies and caciques to the exclusion of community participation in forest management decisions. All ejido contracts are influenced by these associations, resulting in inequitable distribution of ejido profits and leading to ejido debts. The ejidos are held in a form of debt peonage to contractors.

Patronage has always played a dominant role in the Mexican economy. Special privileges are still granted to individuals rather than letting the public compete based on the quality of product or service (Junco, 1991). Considering the actual social, political and environmental conditions in the region, it is a giant leap of faith to believe that roadbuilding and improvement of the operating efficiency of a few sawmills and logging operations will enhance the welfare of the entire region. The problems with completion and proper implementation of environmental and social baseline studies for the World Bank program epitomize regional development efforts to date.

A. Environmental Impact Studies

Until the World Bank project, developers were able to bypass the federal requirement for environmental impact assessments (EIAs) The EIA was one of the justifications for the projects, and is used by the World Bank as a “tool for advocacy planning” (Bojorques, 1992). The *de facto* attitude of SARH towards EIAs has consistently been that they are a costly bureaucratic step for obtaining World Bank funds. Rather than providing a basis for planning and negotiating environmental (and social) conflicts among agencies, industry and the public, EIAs (and social impact studies) are performed after the project has been planned (Bojorques, 1992) and in this case approved and initiated.

Environmental Impact Assessment should be a continuous process, concurrent with technical and economic planning (Munn, 1975). Environmental, social, economic, and technical assessments should all be completed prior to the pre-design phase (Bojorques, 1992). Continued NGO involvement and public scrutiny are necessary to monitor the integration of social and environmental assessments in this project as it proceeds and to ensure that EIAs are integrated in the pre-design stage for future loans.

The environmental impact studies accepted by the World Bank have been found to be completely misleading and erroneous. Utilizing satellite photos, aerial overflights, and on-site visits, Native Seeds SEARCH of Tucson, Arizona has found over 170,000 acres of old growth in a region where World Bank studies identified only 9,000 acres. Most of the old-growth sites identified in the Bank studies had been logged or deforested. According to one World Bank consultant, the other environmental baseline studies were seriously deficient because SARH withheld the contracts until late in the field season. Biologists had little opportunity for field studies and most of the environmental database resulted from previous studies and computer-generated gap analysis without field data. World Bank Project Manager, Augusta Mulnor, later commented that the lack of environmental data is unimportant because in 1993, the World Bank sponsored a team of biologists to name priority conservation sites in Mexico. The team, which did not include a single biologist with field experience in the Sierra Madre, did not list the Sierra Madre as a conservation priority site in Mexico. “Therefore the Sierra Madre must not be as important as the people in Tucson are saying.” (Augusta Mulnor, 1993). The Tarahumara and Tepehuan disagree.

B. Project Results

Five road segments were rehabilitated under the World Bank program. Two of these segments are in indigenous areas, and three others are in areas that contain virgen forests. These segments were selected by SARH and the following information supplied by Edwin Bustillos:

1. Coloradas de la Virgen

The first road segment improved by the World Bank led to Coloradas de la Virgen, the most violent and highest drug producing region in the Sierra. Despite pleas for assistance from the Tarahumara, the INI forestry director forbade INI forestry staff from entering this zone. Edwin Bustillos, who was then the INI forestry coordinator in this region, went anyway and collected the baseline human rights, social and environmental data now being used by the Sierra Madre Program. Bustillos later resigned in protest of INI policies. In February, 1993, two forestry companies illegally began logging this ejido. When the Tarahumara protested, one of their leaders was killed. CASMAC and the community have since stopped the logging.

2. Puerto de Talayotes - San Julian

This segment affects parts of the ejidos Chinatú, Catedral, Cruz de Piedra, and La Trinidad. This is a mixed Rarámuri/mestizo zone. Three corporations, Duraply, Triply de Chihuahua and Ponderosa Industries control all forest exploitation in this zone. In Trinidades, Duraply has sponsored an Evangelist mission, which is providing a combination of food, friendship, love, and exploitation that is resulting in many people abandoning their traditions. In Chinatú, the caciques have created a four million dollar debt. The ejido has since been reorganized into smaller districts, but each district remains in control of mestizos despite an indigenous majority.

3. El Pinito - Tableteros: Mestizo zone with a large area of virgen forest.

4. Guadalupe - El Venadito: Mestizo zone with virgen forests.

5. Guadalupe - San Simon - Galeana: Mestizo zone, heavily into narcotics growing and trafficking.

Reportedly, a segment was planned for Norogachi, where there has been a lot of controversy surrounding the route for the road. The people want a multipurpose road that is convenient for local transportation needs. The logging industry wants the most efficient route for transporting logs. The engineers who designed the road sided with the loggers, even though (or perhaps because) this segment is more costly to construct.

C. Unresolved Issues

The following comments and questions have been raised by NGOs familiar with the World Bank project:

1. The World Bank field visits consisted of a series of marathon drives into the Sierra to look at a road segments or for brief meetings with SARH, UCDF, sawmill operators, or ejido representatives. It is impossible to gather meaningful social or ecological information on this type of mission. Therefore, the bank is entirely dependent upon information supplied by the government. Since July, 1992, nine INI employees have resigned, in protest over INI managers. Several of their major problems with INI were outlined in the preceding section on INI. The internal problems in INI stem partially from management's lack of experience and knowledge of the indigenous people in the project area. Corruption may have been a factor in the management decision to ignore the Coloradas de la Virgen region, even while the World Bank was funding road construction to Coloradas. All things considered, it is highly probable that the social baseline studies contain biased and inaccurate information on the communities impacted by the World Bank Credit.

2. According to the World Bank mission, the civil foresters in the Guadalupe y Calvo district have no training (and little interest) in integrated forest management.

3. World Bank consultant reports are not released directly to the Mexican government, and are not accessible to the public through the World Bank. The World Bank reportedly sends a summary of consultants' findings to the Mexican government. One of the important recommendations made by consultants years ago was that INI incorporate indigenous promoters and field coordinators in planning and feedback processes for all INI programs. The resignation of eight INI employees in 1992 indicates that little progress has been made in this area. Without a sincere effort to improve the working of Mexican government institutions in this region, adherence to World Bank indigenous and environmental policies is unlikely.

4. The World Bank has repeatedly stated that the Forestry Development Program will not build new roads or improve roads that will impact old-growth forest, but two of the five road segments are into areas containing significant stands of old growth (see above summary of roads).

5. Many questions still need to be answered by the bank and the Mexican government: Have integrated management plans been developed to protect ethnobotanical resources and traditional forest use? Have the cumulative social impacts of fundamentalist missionaries and logging been addressed in the social baseline studies? Logging in this zone is reportedly controlled by Duraply, Triply de Chihuahua, and Ponderosa Industries. Have concession agreements been evaluated to determine who the chief beneficiaries of the roads will be: industry or the ejiditarios? Have these ejidos been audited to ensure an equitable distribution of benefits to Indians and mestizos? Do cacique-owned businesses control transportation and other production services? Are these contracts competitive or is the ejido being exploited by industry and the caciques? This road reportedly affects part of Chinatú, where the ejido has accumulated approximately four million dollars in debts due to corrupt management. How is this debt issue being handled by the Mexican government? Will Chinatu ejiditarios ever benefit from exploitation of their forests or will the forests be mined to repay the debt?

6. Free Trade Agreement - The World Bank foresters on the mission were of the opinion that free trade will economically destroy much of the Sierra Madre timber industry because they are unable to compete with the technological advantages of U.S. and Canadian producers. The Mexican producers receive few roadbuilding subsidies, therefore, the costs of transportation and roadbuilding are higher in the Sierra Madre. If the opinions of World Bank foresters are correct, the Sierra Madre industry will go bankrupt and Mexico will not be in a position to repay the World Bank loan as planned.

6. A World Bank feasibility study to pulp the oaks of the Sierra was reportedly converted into an oak charcoal enterprise. No environmental studies were conducted.

IV. North American Free Trade Agreement

Nearly half of the timber production in Chihuahua is exported to the United States as paper and a small percentage as wood products. NAFTA will have mixed results on the timber industry. Some operations will benefit or at least be able to compete economically with U.S. and Canadian wood production, but many areas will not be able to compete due to poor roads, poor technology, under-capitalization or past over-exploitation. Mexico is currently seeking internal capitalization to replace the World Bank Program, however community forestry operations throughout Mexico will suffer from elimination of protective tariffs on imported lumber. In some cases, logging operations may operate despite losses due to affiliations with drug money.

Two feasible impacts from NAFTA should be noted: first, U.S. or Canadian firms looking for inexpensive raw materials may attempt to purchase land in the Sierra. Canadian firms are investigating prospects in the Sierra, including buyouts of Mexican logging companies in the Sierra, but so far the ejidos (including Baborigame) have turned down Canadian proposals. Second, as inexpensive U.S. wood products enter the Mexican market, the smaller, under-capitalized ejido producers will have difficulty competing, due to their high production costs (Sierra Club, 1991). In order to compete with U.S. and Canadian production, ejidos may be forced into unsustainable management practices, or stop using forests for production.

Mexico is a net importer of wood products, largely due to dependence on imported pulp as a raw material for the paper industry. From 1982 to 1984, Mexico imported 311 million cubic meters of roundwood and sawn logs and exported twenty-one million cubic meters of sawnwood and twelve million cubic meters of logs (World Resources Institute, 1992). In 1991, Mexico imported three hundred million dollars of U.S. forest products despite existing tariff and nontariff barriers, ranking fourth in export markets for the U.S. forest industry. Elimination of tariffs under the Free Trade Agreement is expected to double U.S. exports by the year 2000 (U.S. National Forest Products Association, 1991). In 1991, Mexico exported \$245 million in wood and articles of wood and \$120 million in paper products to the United States.

The largest pulpmill in Mexico is located in Anahuac, Chihuahua. In 1991, this mill was expanded twenty-five percent with a \$175,000,000 loan from Chase Manhattan Bank (*Wall Street Journal*). This mill, owned by Ponderosa Industries, is currently closed because ejidos are refusing to sell wood at the low prices offered. Despite the fact that Mexico is a net importer of pulpwood, approximately ninety-five percent of the kraft and high quality paper produced in Chihuahua was exported to the United States. Cellulosa (formerly Pondercel) exported 120,000 tons per year of uncoated free sheet for printing and writing to the United States, valued at seventy-two million dollars (sixty percent of Mexico's total paper exports). The Cellulosa plant has the capacity to use forty-five percent of the total wood harvested in Chihuahua.

Most of the sawn wood produced in Chihuahua is either used in Mexico or exported as manufactured products such as mouldings, broom handles, fruit crates, furniture, and paper products. Roughly ten to fifteen percent of sawnwood, particle board, and other wood products

produced in Chihuahua are exported to the U.S., based on imports through El Paso (U.S. Department of Commerce, 1992). In total (when the paper mill is in full operation), approximately fifty-five to sixty percent of timber from the Sierra Madre of Chihuahua is exported to the U.S. as paper, lumber, or wood products.

Prior to NAFTA, the Mexican forestry industry was in a recession due to unilateral tariff reduction. Mexico reduced tariffs on forest products from thirty-three percent in 1987 to between five and fifteen percent in 1992 (Center for International Trade in Forest Products, 1992, World Bank, 1989 and Aguirre, 1992). The reduction of Mexican tariffs caused depressed prices for locally produced timber due to market competition from subsidized timber and unsustainable levels of harvest in the United States, Canada, and tropical rainforests (Winters, 1992). Ad valorem, income, and special ejido taxes in Mexico are additional barriers to Mexican competition with U.S. and Canadian forest products (Aguirre, 1992). In one respect, the available supply of wood could reduce pressure on Mexico's forests, however, local demand exceeds the sustainable forest yield, even at depressed prices.

In Mexico, one reason for privatizing the ejido forests and decentralizing federal authority is to improve the efficiency and competitiveness of the Mexican forest industry in preparation for NAFTA. However, below-cost federal timber sales and roadbuilding subsidies in the United States (Repetto and Gillis, 1988) are an obstacle to fair competition for Mexican producers, who face higher production costs with virtually no subsidies (Aguirre, 1992). These disadvantages are more harmful to small producers such as the ejidos than large, vertically integrated industries who are in a position to gain from inexpensive, imported wood.

The impact of the North American Free Trade Agreement will not in itself significantly increase demand on the forests, but it may limit future policy options. The forest management issues presented herein occur in many parts of the world. Few examples exist of ecologically sustainable and socially equitable forestry in the entire developing world. Trade and commodity sector policies are not likely to become socially or ecologically progressive in the near future, therefore, community education at the production and consumption ends of the timber industry and community assistance within the forests provide the best hope for the forest.

Safeguards

In the Sierra Madre, community building is the first step towards improving conservation and human rights. A unified community is in a position to defend its rights whereas divided communities are at the mercy of outside forces. The current dependency on forestry has left the entire region vulnerable to outside market forces. Although high prices theoretically offset the costs of sustainable forestry, there is no assurance that conservation will prevail without a well organized, educated, and committed community effort. Regardless of the market price, building a nontimber economy has become essential to meet the basic needs of the people, both Rarámuri and mestizo. A strong community is essential to offsetting the values of materialism and individualism which will forever threaten Rarámuri culture. With strong community, Rarámuri

and mestizos alike may benefit from new marketing opportunities presented by free trade, but they must have control over the pace and direction of development in their own communities.

The Sierra Club prepared the following list of safeguards to protect Mexico's forest resources which the Sierra Madre Program is attempting to implement in the region:

1. The strict application of technical guidelines for forest management that promote long term sustainability of forest resources without reducing their genetic diversity, and providing for soil conservation and the protection of surface and groundwater.
2. Wood certification programs (nongovernment programs operated under strict criteria, with public review) that will assist those consumers who are willing to pay higher prices for sustainably produced wood. The certification program would identify those producers who are managing their forest lands sustainably, and would include periodic inspections.
3. The development of mechanisms to allow wood produced from small-scale ejido and other producers practicing small-scale development to compete in free markets. The agreement might consider the imposition of environmental tariffs on those companies which are not practicing sustainable management of their forests or striving to maintain their genetic diversity.
4. Programs to channel investment and technical assistance to sustainable forest management over the long term.
5. Programs to increase the technical skill, equipment, and credit systems available to small-scale ejido and other producers.
6. Data collection and forest management monitoring systems that are independent of governments.
7. Guarantees of the rights of signatory nations, as well as states and municipalities, to limit the export of raw wood as a means to provide local employment and encourage sustainable forest management.
8. The strengthening of existing and development of new laws and regulations governing foreign investment in the forest sector, including those that recognize and protect the diverse forms of Mexican land ownership, such as the forestry-based ejido (and the special rights of traditional Amerindians).
9. The development and implementation of mechanisms to distribute the costs of changing commercial relationships in the forestry sector, such as compensatory or worker adjustment programs for displaced forestry workers, even though this may raise the price of wood.

NAFTA in the Context of Mexican Reforms

The net impacts of NAFTA must be reviewed in the context of other policy changes such as the new forestry law, ejido reform, and newly defined indigenous rights. Powerful caciques are in a favorable position to take advantage of recent federal policies which encourage privatization of communal lands and decentralization of authority. Many traditional people in the region are in danger of losing their land when it is privatized because they are unaccustomed to economic transactions involving land and are vulnerable to exploitation. Reform of the many ejidos is unlikely since they are deeply indebted to the caciques or logging companies. They are unable to challenge unfavorable logging contracts even when corruption is uncovered.

The new forestry law has removed many of the mechanisms for enforcement by the Secretary of Agriculture (SARH) and the Secretary of the Environment (SEDESOL), placing most of the enforcement responsibility on the communities. Federal agencies lack the capacity to enforce existing regulations and the will to ensure fair local participation in forest planning and management. Therefore, a paternalistic management system prevails and indigenous people have no control over the impacts on their forest resources.

The situation is further complicated by obscure and sometimes contradictory regulations and implementation by various agencies. Indigenous communities are poorly informed about upcoming implementation of the new forestry law, ejido reform (Article 27), and indigenous rights (Article 4). The implementing agencies, SARH, SEDESOL, INI, and Procuraduría Agraria fail to coordinate regulatory activities (which are sometimes contradictory) and are functionally unaware of the new policies guiding the other agencies.

Furthermore, the budgets of these agencies have been cut by up to forty percent, reducing enforcement capacity. SARH can no longer afford to enforce forestry regulations in the field. The economic impacts of NAFTA on the forestry sector leave little hope that additional Mexican funding will be available for environmental protection.

Conclusions on NAFTA

Over the next twenty years, the increase in Mexican consumption of paper will be the largest growth segment in the North American market (Merlin, 1992). In the long term, Mexican domestic markets will exert far more pressure on Mexican forests than will international demand. In the short term, there may be some migration out of the Sierra as timber jobs are lost. In many areas, the loss of experienced labor will be a costly if not permanent setback for future production potential. However, the presence of drug money in the timber industry changes economic forecasts.

The impacts on ejidos and industry in the Sierra will vary according to transportation costs and efficiency of production. Many ejido enterprises are not able to compete in the

international market without protection, and the most inefficient mills and remote forests will go out of production until world prices rise enough to enable investment in modernization and road building.

In the short term, some areas of old growth may be removed from the threat of logging due to international competition, but those areas that remain in production will not necessarily be managed better. Conservation of wildlife in old-growth areas will be difficult to improve under declining economic conditions in the Sierra. It should be noted that laundering of drug money through logging enterprises may finance logging operations in the most remote areas, despite market economics.

In conclusion, NAFTA will not directly increase pressures on the Sierra Tarahumara, but may provide less incentive and fewer resources than ever for the conservation of forests in Mexico. NAFTA, along with other reforms in Mexico, increases the opportunity for international financing and forest industry partnerships in the Sierra. Although the threat of multinational corporations is real, complex land tenure and better protection of indigenous rights will make it difficult for firms to introduce timber plantations or other schemes unfavorable to local populations.

The safeguards outlined by the Sierra Club represent important initiatives towards sustainable forestry. NGO strengthening is critical to integrate conservation and development. The adopting of these safeguards, coupled with increased international assistance for integrated conservation and development, are the only options that will assure sustainable and equitable use of forest resources in developing countries.

V. Social and Environmental Impacts of Drug Enforcement Policies

Since the advent of the War on Drugs in the 1980s, drug production and related violence have increased and moved deeper into the Sierra. In the Baborigame region, three to four murders are committed each week, many victims are traditional leaders and their families. Police, military, drug traffickers, and “pistoleros” working for caciques are responsible for the violence. Despite eyewitness accounts, arrests have been rare in the Sierra. Federal, state, and local police are all corrupt. However, unprecedented cooperation between local communities, environmental and human rights activists, state and federal agencies is working to end this pattern of violence and destruction.

Illegal drugs have been grown in the Sierra Madre for over thirty years, but drug production and drug-related violence have increased dramatically since the advent of the “War on Drugs” in the 1980s. Increased drug enforcement efforts have pushed production into the most remote regions of the Sierra. The Sierra Madre has now become the second largest drug-producing region in the world. Power in the region is concentrated into perhaps a dozen major drug trafficking operations (trafficking between five and over one hundred tons of marijuana per year) who are loosely associated with hundreds of independent operators. Last year, five tons of opium and thousands of tons of marijuana were produced in the entire Sierra, which includes parts of Chihuahua, Durango, Sinoloa, and Sonora. Nine hundred kilos of opium were produced in the relatively accessible Guachochi region. The street value of these drugs is at least ten billion dollars annually.

According to the DEA, hundreds of millions of dollars in drug profits are used to buy influence each year, more than the annual profits of General Motors and Ford Motor Company combined. Police, military, judges, and local, state, and federal officials are corrupted. The helicopter forces formerly funded by the United States are one hundred percent corrupt. The vast majority of drug busts and destruction of plantations are set up by the major traffickers, whose interests are well protected. The majority of drug-related arrests are campesinos, many of whom had no choice but to grow drugs. Both Mexican and U.S. authorities buffer and falsify statistics to gain public support and justify funding for this ineffective campaign.

The Sierra Madre Program has been forced to deal with the drug-related violence in the Sierra because it is the most pressing problem of many communities. Formerly self sufficient and rich in traditional life, hundreds of Tarahumara families are now starving, landless, and extremely depressed. Only a handful of prosecutors and police are willing to pursue drug traffickers and destroy plantations. CASMAC has had some success against drug invaders in indigenous lands because of the appointment of human rights reformers, Teresa Jardí and later Alonzo Jardí, as federal prosecutors in Chihuahua. The other factor has been the relationship of trust and mutual respect between CASMAC and the traditional people.

Drug trafficking is the largest economic sector in the Sierra, and the environmental impacts of drug plantations are greater than logging in the most remote areas. Drug traffickers

randomly kill wildlife and have no respect for nature. Drug plantations are usually planted by outsiders, using slash-and-burn practices. The fires started by drug traffickers are extremely damaging because they are not managed. Increasingly, drug traffickers are invading the last remaining old-growth forests because these forests offer greater protection and have greater soil moisture to cultivate drugs. Plantations from over two hectares to less than one-tenth of a hectare are dispersed throughout the rugged mountains and canyons of the sierra, but production is concentrated in areas like Baborigame, Coloradas de la Virgen, and Cieneguilla, where extreme violence and corruption rule.

CASMAC has obtained an agreement with the Federal Attorney General and the traditional communities to keep protected areas free from drugs. Over one hundred hectares of plantations have been destroyed at request of the communities. However, the invasion of heavily armed groups of outsiders into community lands continues.

Approximately twenty years ago, innocent Tarahumara and Tepehuan people were given seeds and told to plant small plots of marijuana and opium which the caciques would trade for corn, staples, and money. The exchange became increasingly cash-oriented in time and the caciques became more demanding, often taking indigenous lands in the process. The caciques fortified their power by purchasing automatic weapons, vehicles, and barbed wire, by hiring gunmen, and by bribing police and military to protect their interests.

In the mid-1980s, the Mexican government, with support from the CIA, sponsored Operation Condor, a massive anti-drug military campaign in which Chilean secret police were brought into the Sierra to boost enforcement and eliminate corruption. During Operation Condor, the Chilean police and Mexican military were responsible for numerous human rights violations, including torture and murder, against indigenous people and selected drug traffickers. During this operation, Alejandro Fontes, the drug trafficking cacique from Coloradas de la Virgen, became the Chief of the State Judicial Police. He was shot down and killed in a plane loaded with drugs by the military. Shortly thereafter, another famous drug trafficker known as Atilano was captured and tortured by Operation Condor. He was forced to fly his private plane under heavy guard to Sinaloa for further interrogation. During the flight, he crashed his plane into a military escort plane, killing everyone aboard both planes. This incident and human rights protests ended Operation Condor.

After Operation Condor, Artemio Fontes, Alejandro Fontes's brother, became the most powerful drug trafficker in the Guadalupe y Calvo district. He attempted to virtually enslave the Tarahumara in Coloradas by forcing them to grow drugs instead of corn. The Tarahumara began to refuse to grow drugs and the Fontes family responded with a campaign of terror that left thirty-five dead in Coloradas between 1991 and 1993. Many Tarahumara people have fled Coloradas and those who remain are increasingly isolated and fearful. Edwin Bustillos and his staff have been the sole outside supporters of this community since 1991. All other government agencies have abandoned the area.

The Sierra Madre Program is attempting to mitigate some of the worst cases of drug-related repression against indigenous communities and their forests. The federal and state attorney generals are helpful, but unable to do much unless CASMAC brings a case to them. CASMAC has been able to work in this way because of a division of power in the Sierra, which isolates Fontes and some of the worst offenders. The CASMAC staff have intimate knowledge of drug operations in the project areas; however, only the worst cases of human rights and environmental destruction are being pursued. Drug eradication is not a program objective, but a result of pressing needs in the communities. Isolation of the worst cases may reduce or eliminate drug production in some communities, but no program is capable of halting drug production and its impact in the Sierra.

As human and indigenous rights are restored, the indigenous communities will have more power to control drug production in the Sierra. Therefore, CASMAC and PGR are proceeding at considerable risk to prosecute the Fontes family and a few other cases of extreme repression. CASMAC has also decided to protect Pino Gordo which is extremely vulnerable to invading drug traffickers. Without outside support, Pino Gordo is at risk of becoming like Coloradas de la Virgen.

The war on drugs creates a tragic distraction from the real problems of poverty, environmental destruction, and injustice in the Sierra. Both the demand for drugs in the United States and the unilateral and bilateral policies against drug production are responsible for the tragedies unfolding in the Sierra. Unfortunately, the demand for drugs and these policies will be a reality for the foreseeable future. The Federal Attorney General, CASMAC, and many others understand the unstoppable cycle of drug corruption, violence and repression in the Sierra. The greatest achievement that we can foresee is to prosecute the worst violators and hope that others operate more peacefully.

The traditional Tepehuan and Tarahumara have told us that drugs are the death of their people. They do not use drugs but they are caught between extreme poverty, invading drug gangs, and corrupt law enforcement. The campaign against drugs has not offered one ounce of support for these people. The DEA has informed us that they have no interest in human rights and the State Department has offered no support. The Sierra Madre Program has found a handful of partners in the PGR, but the opposition is armed with hundreds of millions of dollars and an arsenal of automatic weapons.

We urge the Appropriations Committee to consider establishing programs to help the victims of the campaign against drugs. Emergency funding is desperately needed for starving families in Coloradas de la Virgen and other communities. We urge Congress to fund demand reduction programs, programs to stimulate alternative economies, and conservation programs in drug-producing areas. Communities have asked for this assistance.

Drug eradication efforts, like multilateral development projects, are stymied by bureaucratic problems, poor communication, corruption, and other inefficiencies. However, the

problems are related to market systems. It is impossible to stop the market forces at work in the drug industry. Drug eradication efforts fail to recognize the seduction of market forces and run contrary to government philosophies advocating free trade. Hundreds of millions of dollars annually would be required to significantly reduce (but not eliminate) drug production in the Sierra Madre of Chihuahua, let alone the rest of Mexico and Latin America. However, additional funding alone will not resolve the problems because of the inefficiencies and corruption in the military and police forces in Mexico.

Let it be recognized that the most effective campaign in the history of the Sierra is being conducted by an environmental program with zero funding for drug interdiction, by volunteers with a realistic and neutral position towards the drug industry. In the past year we have destroyed over one hundred hectares of drug plantations in cooperation with the PGR and federal police. These plantations would have otherwise been protected or ignored by the police and military. Large plantations are easy to find for those who want to look. Our conclusion is that the millions of dollars spent on drug interdiction in the Sierra is a complete waste of money and does nothing to reduce the quantity of drugs grown and entering the U.S. Nor has it significantly increased the street value of drugs in the U.S. Fortunately, U.S. tax money no longer supports Mexican enforcement efforts, but Mexico can ill afford the waste.

The Sierra Madre Program is committed to justice, rural development and conservation. We have placed our lives on the line to defend communities who have been attacked by drug traffickers and abused by law enforcers. We plead for assistance and more enlightened policies from our government. We would gladly assist the committee staff in planning the most effective use of assistance to mitigate the impacts of drug production and enforcement in the Sierra.

VI. Conclusion

Maintaining nongovernmental grassroots support networks in the Sierra Madre is absolutely critical for sustainable and equitable development to occur. Technical assistance and community training are necessary to help communities and the local forest industry adapt to changing market and political conditions. NAFTA coupled with the reforms taking place in Mexico present both opportunities and perils for indigenous communities. The Sierra Madre program is poised to ensure that these communities have the opportunity to find a balance between conservation and development, between traditional culture and the changing needs of their societies.

Prior to the Sierra Madre Program, virtually no foreign assistance entered the region to mitigate the devastating environmental and social impacts of logging, drug trafficking, and drug enforcement efforts. Past development efforts and policies (both government and nongovernmental) in the region have failed for two basic reasons:

1) Programs are usually planned by outsiders with little experience in the region. Inability to communicate with traditional people leads to programs that do not address the needs and interests of the community. Individuals in the community are often enticed into working for a salary and other benefits, but community involvement is superficial. Technologies introduced are often not appropriate for local social, environmental, and economic conditions. The pace of planning and implementation is usually too fast for local cultures to adapt.

2) Support for the programs has been unstable. Local managerial and institutional capacity has never been developed to sustain the programs. Many programs started by foreign individuals or organizations failed as soon as these supporters withdrew. Until recently, there were no organizations working in the region to support integrated conservation and development. Most secular programs in the area emphasize health care and social services and fail to address the root problems. Consequently, there are few alternatives to government programs and a lack of infrastructure to support pilot programs in the region.

The World Bank Forestry Development Program failed for all of the above reasons and others. However, with a stronger nongovernmental infrastructure to meet the pressing needs of the indigenous communities, it is possible that larger scale development efforts could improve the quality of life for all cultures and species in the Sierra. The coalitions being built between the Sierra Madre Program and various state and federal agencies demonstrate the possibilities. These coalitions, which are closely monitored by the communities, ensure that resources are not wasted by corruption and mismanagement.

The principle reasons for “underdevelopment” and exploitation in the Sierra are the lack of impartial justice and the lack of a strong nongovernmental grassroots support infrastructure. As long as illegal drugs remain the most influential economic and political force in the region, justice will continue to be a problem. However, the Sierra Madre Program has made tremendous

strides towards improving justice through better community organization and laws that respect indigenous autonomy.

There is a great need to sustain and expand the Sierra Madre Program. We are beginning to receive support from public and private sources in Mexico, the United States, and Europe. We ask Congress to fulfill the obligations made during the NAFTA debates and increase conservation assistance for Mexico. Continued support from the Biodiversity Support Program is essential to sustain the security and capacity of our staff and volunteers. Specifically, we request that Congress double the funding for the USAID/Biodiversity Support Program in northern Mexico and increase funding for the InterAmerican Foundation to expand into northern Mexico. We also request Congress to appropriate emergency aid for the victims of drug-related violence in the Sierra. We would be happy to discuss these proposals with your staff. Thank you for your consideration.