

A REVIEW OF AID'S NARCOTICS CONTROL

DEVELOPMENT ASSISTANCE PROGRAM

AID EVALUATION SPECIAL STUDY NO. 29

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FOREWORD

The Center for Development Information and Evaluation (CDIE) has undertaken a review of AID's experience with narcotics control projects to identify from pertinent historical information the key factors and issues bearing on narcotics production and its control. Because AID's experience with narcotics control activities has been recent (most projects are still in the implementation stage), this study also examined projects initiated by the State Department's Bureau of International Narcotics Matters (INM) and the U.N. Fund for Drug Abuse and Control (UNFDAC). The review includes case studies for five countries--Turkey, Pakistan, Thailand, Peru, and Bolivia--and an analysis of key factors in narcotics control. A discussion on evaluation methodology is also provided to guide the examination of on-going narcotics control projects. The report was prepared under a contract with Checchi and Company.

SUMMARY

1. INTRODUCTION

The Agency for International Development (AID) has played a significant role in U.S. efforts to control the production and trade of illicit drugs in several source countries. It has undertaken three types of activities. First, to demonstrate to the host government the importance the United States places on the problem of narcotics control, AID has inserted into project agreements poppy/coca clauses, which deny assistance to areas growing narcotics crops. Second, in selected narcotics-growing areas, AID has launched both crop substitution and area development initiatives, which provide agricultural inputs and services to the farmers adversely affected by narcotics control efforts and improve the social and economic infrastructure to facilitate sustainable development. Third, AID has initiated public education programs to educate elite and middle-class groups in source countries about the harmful effects of narcotics production on their societies.

2. FINDINGS

Three major intervention strategies are employed in the narcotics control development assistance provided by AID, INM, and UNFDAC. These are crop substitution, negotiated assistance, and area development strategies. Crop substitution focuses primarily on the identification and introduction of crops to replace existing narcotics crops. Negotiated assistance, on the other hand, relies on the cooperation of the local elites and government officials to control narcotics production and provides limited development assistance to affected populations. Finally, the area development strategy, which is generally used by AID, involves multipronged development efforts for sustained long-term development of the area by creating new opportunities for income and employment. The study team concluded that this strategy is the most effective for narcotics control efforts of the three strategies reviewed.

Effective enforcement of the measures designed to control or prevent narcotics crops production is an essential requirement for project success. Only the strict enforcement of the law, which would raise the opportunity cost of narcotics production and marketing, can induce the farmers to take up alternative sources of income and employment.

Efforts to control the cultivation of narcotics crops through development face formidable problems arising from conditions such as the following:

- Inability or lack of host government commitment to formulate long-term narcotics control policies and programs
- High profitability of narcotics crops production relative to alternative sources of rural income and employment
- Difficulty of providing development assistance to and carrying out enforcement measures in remote, poorly accessible areas
- Faltering national economies, in which investment capital is attracted to the dollar-based narcotics trade and high rates of underemployment encourage farmers to cultivate narcotics crops on a cash basis
- Local cultural acceptance of narcotics products and their important medicinal, ritualistic, and exchange value
- Presence of powerful trafficking organizations and antigovernment groups that can threaten the safety of project staff and the beneficiaries

The analysis of the premises of AID narcotics policy revealed that these policies are not only conceptually sound but are also grounded in experience.

3. RECOMMENDATIONS

1. AID should continue to follow an area development strategy with multicomponent development projects or sets of projects with immediate and long-term impact. The aim of the projects is to generate alternative sources of income and provide other social and economic benefits for the farming communities in narcotics producing areas. Effective area development addressing narcotics control requires a multiprong approach linking public awareness, narcotics crop eradication, market interdiction, and income replacement.
2. Narcotics control area development initiatives should be designed as long-term endeavors (i.e., 10-15 years).

3. Greater attention should be given to sociocultural factors such as the traditional use of the narcotics crops, the socioeconomic background of the farmers, the noneconomic constraints on their behavior, and the cultural and social influences that can be used to discourage narcotics cultivation.
4. AID should consider adopting a flexible approach for narcotics control projects, by which management staff has freedom to plan its activities and respond to unexpected events.
5. Each narcotics control project funded by AID should have a separate unit for mobilizing the target population against illicit cultivation and trafficking of narcotics. Adequate funds should be provided to this unit and should be administered by a senior project official.
6. AID should initiate and support public education activities not only in the nations that are currently the major producers of the narcotics crops but also in those that may be future narcotics sources.
7. The existing law prohibiting AID from assisting police and other law enforcement agencies should not prevent its staff from establishing linkages with local law enforcement agencies and coordinating AID efforts with them.
8. Given the dearth of information on narcotics control assistance, AID should undertake midterm and terminal evaluations of its projects. Low-cost, innovative methods of data collection can be used for this purpose.

Finally, the review noted that the dimensions of worldwide illicit opium and coca leaf production are staggering and that AID, despite its best efforts, can make only a limited impact. For example, in the case of opium production, AID provides limited assistance to only two of the seven major source countries, Pakistan and Thailand. Even if all opium cultivation is eradicated in both countries, world opium supply would fall by no more than 6 percent. Control of coca production, however, presents a more optimistic picture. AID is operating in Bolivia and Peru, which accounted for about 90 percent of the total world production. As a result of its efforts, AID could have perceptible effects on total coca production. However, it is uncertain that these countries will be able to drastically curtail the cultivation and trafficking of coca easily or quickly. Given the magnitude of coca production, the strength of trafficking organizations, and the political and economic instabilities of both countries, it is unrealistic to expect a major reduction in coca production and trafficking over the next few years.

GLOSSARY

Agencies, Place Names, Terms

| | | |
|-------------------|---|---|
| <u>campesinos</u> | - | Small farmers |
| CORAH | - | Coca Control and Reduction Organization for the Upper Huallaga (Peru) |
| DEA | - | Drug enforcement Agency |
| DIRECO | - | Coca Reduction Directorate |
| FATAS | - | Federally Administered Tribal Areas (Pakistan) |
| GAO | - | Government Accounting Office |
| ha | - | hectares |
| INADE | - | National Development Institute (Peru) |
| INM | - | Bureau of International Narcotics Matters (State Department) |
| <u>kharif</u> | - | Summer cropping season |
| NWFP | - | Northwest Frontier Province |
| PATAS | - | Provincially Administered Tribal Areas (Pakistan) |
| PEAH | - | Special project Office for the Upper Huallaga (Peru) |
| PID | - | Project Identification Document |
| PNCB | - | Pakistan Narcotics Control Board |
| PP | - | Project Paper |
| <u>rabi</u> | - | Winter cropping season (Pakistan) |
| t | - | metric tons |
| U.N. | - | United Nations |
| UNAS | - | national Agrarian University of the Jungle (Peru) |
| UNFDAC | - | United Nations Fund for Drug Abuse and Control |

Project Acronyms by Country

Pakistan

- AOP - Agricultural Outreach Project (INM)
BADP - Buner Agricultural Development Project (UNFDAC)
MADP - Malakand Area Development Project (INM)
NWFADP - Northwest Frontier Area Development Project (AID)
TADP - Tribal Areas Development Project (AID)

Thailand

- CRCDP - Crop Replacement and Community Development Project (UNFDAC)
HAMP - Highland Agricultural Marketing and Production Project (UNFDAC)
MCWDP - Mae Chaem Watershed Development Project (AID)

Peru

- UHADP - Upper Huallaga Area Development Project (AID)

Bolivia

- ADCZP - Agricultural Development in the Coca Zones Project (AID)
CRDP - Chapare Regional Development Project (AID)

Narcotics Raw Materials and Illicit Final Products

| <u>Raw Materials</u> | <u>Final Products</u> |
|----------------------|---|
| Opium Poppy | Opium Gum Morphine Base Heroin Base |
| Coca Leaf | Coca Paste Cocaine |

1. INTRODUCTION

1.1 Objectives of the Study

The problem of illicit narcotics production and abuse is increasingly recognized as an international issue, adversely affecting both developed and developing countries. Its solution depends on concerted efforts both in this country and abroad. International efforts are necessary because a major proportion of narcotics consumed in the United States are produced abroad and illicitly imported. Table 1 provides 1983/1984 production estimates for opium and coca (the focus of this study) by major source countries and indicates the magnitude of the problem. In fact, statistics show that more than 90 percent of marijuana, cocaine, heroin, and related drugs consumed in the United States originate from foreign sources (see Figures 1 and 2). In addition, source countries are becoming more aware of the economic, social, and political costs to their own societies of narcotics production and local drug abuse.

The U.S. strategy for drug control assigns critical importance to the control of illicit production and trade of narcotics in the source countries. Three U.S. agencies participate in drug control and are active in international control efforts. The State Department's Bureau of International Narcotics Matters (INM) coordinates all such Government activities and takes a leadership role in the international arena. The Drug Enforcement Administration (DEA) provides technical assistance and support to foreign law enforcement officials and investigates international traffic in narcotics. The Agency for International Development (AID), which is prohibited by congressional mandate from becoming involved in law enforcement and police efforts, primarily focuses on the development dimension of the problem of narcotics control in those source nations in which it operates.

In recent years, AID has undertaken three types of activities to control the illicit production of narcotics crops. First, it has inserted into project agreements poppy/coca clauses, which deny its assistance to the areas and populations growing narcotics crops. These are designed to induce the source countries to initiate or strengthen narcotics control efforts.

Second, in select narcotics-growing areas, AID has launched comprehensive area development initiatives, which provide agricultural inputs and services to the farmers and strengthen infrastructures for long-term sustained development. Such projects are implemented on agreement with the host countries that the narcotics-cultivating farmers would not be allowed to grow narcotics crops once the project is underway, and in the event such crops were cultivated, that they would be destroyed. The main objectives of these projects are to provide farmers adversely

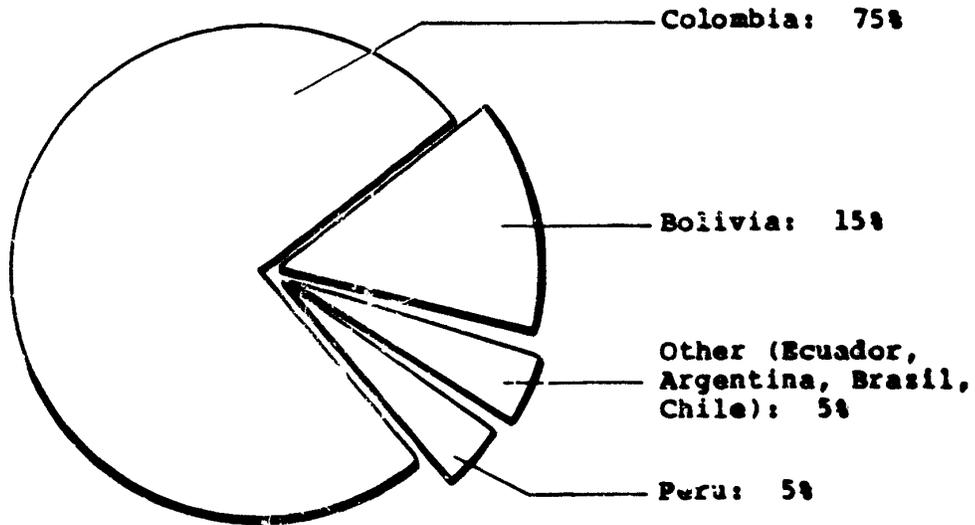
Table 1. Opium and Coca Leaf Production Estimates,
1983-1984

| Crop | 1986 (metric tons) | 1985 (metric tons) | 1984 (metric tons) | 1983 (metric tons) |
|-----------------------|-----------------------|-----------------------|-----------------------|------------------------|
| <u>Opium</u> | | | | |
| <u>Southwest Asia</u> | | | | |
| Afghanistan | 320- 420 | 300- 400 | 140- 180 | 400- 575 |
| Iran | 200- 400 | 200- 400 | 400- 600 | 400- 600 |
| Pakistan | 35- 65 | 40- 70 | 40- 50 | 45- 60 |
| Subtotal | 555- 885 | 540- 870 | 580- 830 | 845-1,235 |
| <u>Southeast Asia</u> | | | | |
| Burma | 532 | 424 | 534 | 500- 600 |
| Laos | 50- 100 | 160 | 30 | 35 |
| Thailand | 16- 36 | 36 | 41 | 35 |
| Subtotal | 598- 668 | 560 | 605 | 570- 670 |
| Mexico | 21- 45 | 21- 45 | 21 | 17 |
| Opium Total | <u>1,174-1,598</u> | <u>1,121-1,475</u> | <u>1,200-1,456</u> | <u>1,432-1,922</u> |
| <u>Coca Leaf</u> | | | | |
| <u>South America</u> | | | | |
| Bolivia | 32,000 | 32,000 | 49,200 | 25,000- 40,000 |
| Peru | 90,831 | 95,177 | 100,000 | 100,000 |
| Colombia | 1,422 | 2,422 | 895 | no estimate |
| Ecuador | 3,200 | 10,800 | 11,080 | 11,215 |
| Coca Leaf Total | <u>127,453</u> | <u>140,399</u> | <u>161,175</u> | <u>136,215-151,215</u> |

Note: All estimates are based on posteradication data but have not been discounted for loss, domestic consumption, or seizures.

Source: U.S. Department of State, Bureau of International Narcotics Matters, International Narcotics Control Strategy Report, 1986, p. 12.

Figure 1. Probable Sources of Cocaine Available in the United States, 1984 (percentage of total)

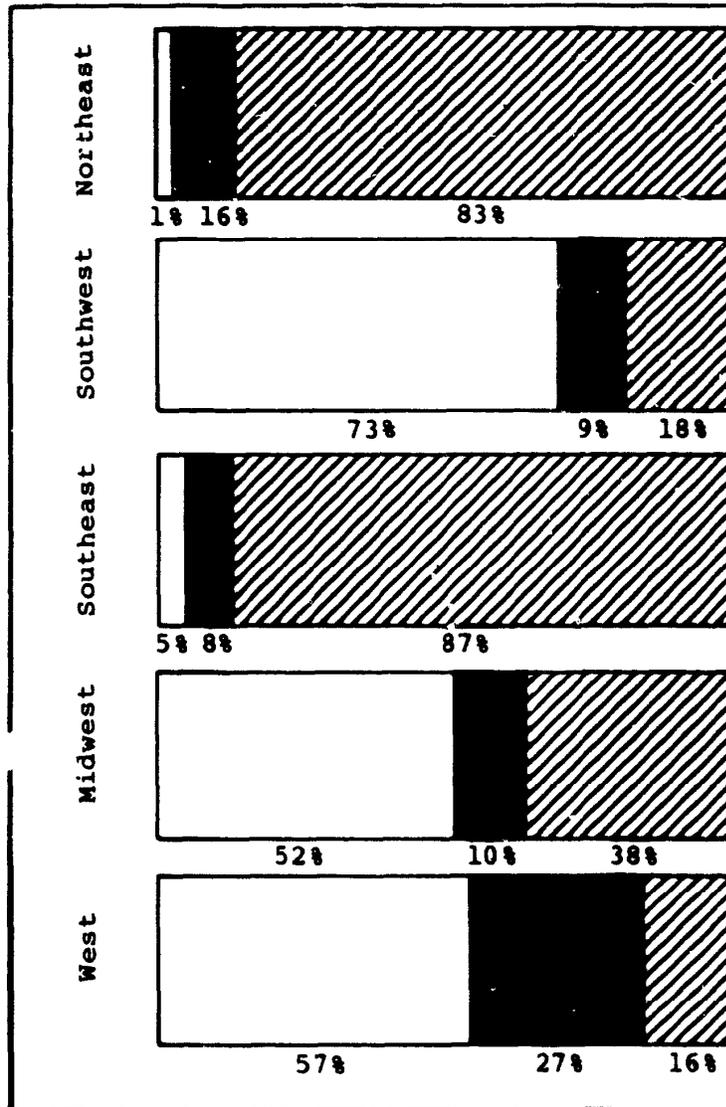


Note: These percentages are general estimates because it is difficult to trace drugs to their original source. Colombia may have been the source for at least 75 percent; the other countries may have been the sources for up to the percentages indicated.

Source: The National Narcotics Intelligence Consumers Committee, 1984.

Figure 2. Origin of Heroin Encountered in the United States, by Geographic Area, 1984

Mexican: □ Southeast Asian: ■ Southwest Asian: ▨



Note: These estimates were derived from Heroin Signature analysis.

Source: The National Narcotics Intelligence Consumers Committee, 1984.

affected by narcotics control efforts with alternative sources of income and employment and to promote the legitimacy of the host country government in the major narcotics-producing areas.

Third, AID has initiated and supported public education programs to inform the elite and middle-class groups in the source countries about the harmful effects of narcotics production on their societies.

Given the saliency of AID initiatives in the overall U.S. narcotics control strategy, its Center for Development Information and Evaluation (CDIE) commissioned an experience review of its development activities for narcotics control. More specifically, it asked the study team to focus on the following questions:

- What is the policy framework within which AID narcotics control efforts are carried out?
- What has been the experience of AID with its narcotics control projects? What are some of the factors that seem to affect their implementation and progress?
- What special conceptual and methodological issues relevant to the evaluation of such projects? What suitable data-collection strategies can be adopted this purpose?

This report is designed to initiate discussion of these questions. It is not an evaluation of AID efforts or of its specific projects. Such was not the intention of CDIE, much less of the team members. It is hoped, however, that the report will serve as a starting point for future examination of the role of AID in this important area and facilitate evaluations of countryspecific projects.

1.2 Research Methodology and Data Sources

To enhance the validity of the study and ensure a credible identification of the factors affecting narcotics control development assistance, the study team adopted a case study approach. Detailed case studies were prepared for five countries, which provided pertinent historical information on the nature and extent of illicit crop production, described intervention strategies adopted by host governments and donor agencies, and examined the composition and progress of narcotics control development assistance projects. Each country case study concludes with a discussion of factors that may influence efforts to control production of narcotics crops.

Two criteria were used to select countries for this review: (1) the country must be or have been a significant source of illicit opium or coca and (2) the country must be one in which AID

has supported at least one rural development project intended to identify and introduce new sources of revenue for farmers who give up illegal crops. Five countries satisfy these two criteria: Turkey, Pakistan, Thailand, Peru, and Bolivia.

Because AID experience with narcotics control activities is confined to six projects, all of which except one are still in the implementation stage, the study team also examined the narcotics control development projects initiated by INM in Pakistan and by the United Nations Fund for Drug Abuse and Control (UNFDAC) in both Pakistan and Thailand.

Public safety projects carried out by AID prior to 1976 are also not covered by this review. Typically, public safety projects were nationwide in scope and focused on law enforcement and customs improvements. Project funding specifically geared toward narcotics control was limited. AID discontinued its public safety work after 1975, and all responsibility for law enforcement assistance was shifted to INM in 1978. Because it is not anticipated that AID will have any future direct involvement in the law enforcement area, the lessons learned from its previous experience with public safety projects would be of limited usefulness to AID policy and program staff.

Three main sources of data have been used for this study. The first source of data was AID documents and records, although there was no significant body of research and documentation on this subject. Most of the narcotics control projects are recent, and no terminal or ex post evaluations are available to examine their effectiveness or impacts. Hence with the exception of one midterm evaluation, AID's data base was limited to project preparation reports, progress reports, and other memoranda.

Second, data were provided by reports and documents from various other agencies, including Senate and Congressional Committees, INM, the General Accounting Office, the Organization of American States, U.S. consulting firms, and UNFDAC. These sources proved the most valuable and enabled the study team to analyze the subject from a broader perspective.

Third, in-depth interviews were conducted with members of the academic community and with officials who had been involved in the design and implementation of narcotics projects. These interviews were designed to gain an insider's view of the narcotics control efforts. Because of the confidentiality of these interviews, the team has not attributed specific information to them.

1.3 Organization of the Study

This section considers the dimensions of worldwide illicit opium and coca leaf production and describes objectives, research methodology, and organization of the study.

Section 2, an overview of AID narcotics control policies and experience, is organized in three parts. Section 2.1 reviews U.S. international control strategy, the roles and responsibilities of its key Government agencies, and the premises and elements of AID current narcotics control policy. Section 2.2 part provides a summary of AID efforts to control illicit opium poppy and coca production in Turkey, Pakistan, Thailand, Peru, and Bolivia, while Section 2.3 focuses on the intervention strategies that have been used for these efforts.

Section 3 discusses the various factors, identified from the five country case studies, that can influence the outcome of narcotics control development assistance projects. Several issues are raised that need to be examined at policy and operational levels.

Section 4 identifies conceptual and methodological issues relevant to the evaluation of narcotics control projects.

Section 5 presents the study team's tentative findings and outlines directions for future action.

The appendixes contain detailed case studies of AID experience in Turkey, Pakistan, Thailand, Peru, and Bolivia.

As used in this report, the terms "crop substitution," "income replacement," and "area development" have specific meanings. Although the available literature tends to use these terms interchangeably and often inappropriately, this study adheres to the following definitions.

Crop substitution refers to those activities that focus exclusively on efforts to introduce new or improved crop varieties. To be fully substitutable~ a crop must provide equal or greater net economic returns relative to the illicit crop it is replacing, be culturally compatible with the local community, and adapt favorably to existing agroclimatic conditions. Typically, crops that have been introduced do not meet all three criteria.

Income replacement refers to any activity that can provide an alternative source of income to the farm family but that does not necessarily fully replace income lost by giving up illicit crop cultivation.

Finally, area development refers to a set of activities that aim to improve the overall quality of life of the target population. Typically, the construction of infrastructure and improvements in public services are included in this development strategy.

2. AID POLICY AND ACTIVITIES

2.1 U.S. Strategy and AID Policy Framework

2.1.1 Federal Strategy and Programs

The framework for the AID narcotics control policy is best considered against the backdrop of the 1984 Federal Strategy for Prevention of Drug Abuse and Drug Trafficking, which outlines a comprehensive strategy for addressing drug problems. This strategy has five interrelated components:

- International programs for curbing the availability of drugs from foreign nations
- Effective drug enforcement in the United States
- Education and prevention of drug use among school-age children
- Detoxification and treatment programs
- Diffusion of research on selected drugs

The importance of international control programs is highlighted by the fact that more than 90 percent of the marijuana, cocaine, heroin, and related drugs consumed in the United States are produced in other nations. The United States believes that unless these international supplies are drastically curtailed, efforts to control drug abuse in the United States will not be successful. Drug control efforts have two priorities: (1) controlling crop production in the source country through the destruction of illicit crop fields and the reduction of licit production to levels commensurate with legitimate needs and (2) preventing the export of illegal drugs from source or transshipment countries. In this context, the international component of the Federal Strategy calls on various Federal agencies to do the following:

- Encourage and assist source country governments to undertake narcotic crop control programs. Such programs should be designed to reduce the production of narcotic crops to the levels required for legitimate purposes.
- Eradicate illicit crops. The U.S. believes that although each source country has the responsibility for controlling crop production within its borders, multi-lateral and bilateral assistance also might be needed.
- Assist foreign governments in stopping domestic transportation and transnational shipment of illicit drugs.
- Develop innovative mutual assistance treaties with foreign governments to facilitate judicial actions against drug traffickers, seize assets derived from drug

trafficking, and institute banking procedures that cancel illicit drug transactions.

- Encourage other nations to support international narcotics control programs with financial and other resources, including development assistance linked to crop control and cooperative law enforcement efforts.
- Increase the effectiveness of international organizations involved in international drug control.

Although nine Federal agencies are involved in international narcotics control and enforcement, the major responsibilities are assigned to three agencies: the State Department's INM, DEA, and AID. Of the three, INM plays the most central role, as it is responsible for coordinating all U.S. international drug control efforts. INM activities include enlisting host government support for joint illicit narcotics control activities; providing assistance for pilot development projects designed to test the feasibility of income replacement, while helping to improve the host government's interdiction capability; participating in international organizations for increasing worldwide control efforts; and funding training programs conducted by DEA, U.S. Customs Service, and the Coast Guard for foreign personnel to strengthen interdiction and enforcement efforts.

DEA is the lead agency for drug law enforcement. It provides technical assistance and training to foreign drug law enforcement officials and promotes the collection and sharing of international narcotics data. It is especially concerned with the development of cases and investigative techniques needed for monitoring financial flows and money laundering.

In contrast to the role of DEA, AID (in cooperation with INM) provides development assistance to source countries to generate alternative sources of income and employment and improve living standards in narcotics-producing areas.

2.1.2 Current AID Policy Framework

AID has been active in the area of narcotics control since the late 1960s. Initially, its role was confined to providing public safety assistance to selected foreign governments. When INM was established in 1978, the State Department took over the narcotics-related law enforcement functions of AID.

Section 126 of the Foreign Assistance Act entitled "Development and Illicit Narcotics Production," also known as the Gilman Amendment, instructs AID to "give priority consideration to programs which would help reduce illicit narcotics cultivation by stimulating broader development opportunities." Given the Gilman Amendment and the Federal strategy, AID issued a Narcotics Policy

Determination Paper in 1982, which has since been expanded in several documents and public announcements by the AID Administrator.

Current AID policy is based on four premises. First, narcotics production is "in part a development problem by virtue of the fact that narcotics farmers are usually extremely poor and large-scale narcotics cultivation takes place only in developing countries" (Statement of the AID Administrator before the House Committee on Foreign Affairs, April 21, 1982). This statement implies that alternative income sources and improved social services must be provided to farmers and communities to wean them from the cultivation of illicit crops.

Second, in narcotics-producing areas, development assistance often requires long-term multifaceted agricultural and rural development initiatives. Such efforts should include "a complex set of activities such as finding a suitable mix of crops, ensuring free market incentives, encouraging appropriate host country pricing and marketing policies, providing needed infrastructure such as roads and irrigation systems, supporting development of rural industries, and assisting the host country in rural health care delivery and education activities" (AID Administrator's Cable to Mission Directors, 1982). These activities should not only effect sustainable economic development but also help to establish the host government's legitimacy in remote, tribal areas that produce narcotics crops.

Third, enforcement of a ban (or controls) on narcotics cultivation is the sine qua non for successful crop reduction efforts. Without effective enforcement, economic development activities will have little or no measurable impact on reducing illicit production.

Fourth, enforcement is the exclusive responsibility of the host governments. The various U.S. agencies can only exert pressure by providing host governments with technical and capital assistance.

The main elements of the AID 1982 Policy Determination Paper on Narcotics are

- To seek opportunities to design projects that provide economic alternatives to farmers in narcotics-growing areas.
- To secure assurances or agreements from the host country that narcotics production will not be permitted within a project area. Such agreements should provide for the termination of AID funding if the host country does not comply with its commitment. The intent is to ensure that AID development assistance does not contribute to an

increase in narcotics production or benefit those who are involved in it. To this end, AID has inserted poppy/coca clauses in selected project agreements.

- To urge U.N. special agencies, multilateral institutions, and other bilateral donors to channel economic assistance to narcotics-producing areas to discourage illicit narcotics cultivation.
- To work with other U.S. Federal agencies to collect, analyze, disseminate, and use information pertaining to its development activities directly related to the control of illicit narcotics. Such cooperation is required by the 1979 Interagency Agreement for Sharing Information.
- To support the involvement of the private voluntary agencies in developing alternative sources of income in narcotics-producing areas, where appropriate.

AID narcotics control policy is consistent with the Agency's overall role as the primary development assistance agency.

2.2 Summary of AID Worldwide Efforts

AID has provided narcotics control development assistance to Turkey, Pakistan, Thailand, Peru, and Bolivia. Table 2 presents a profile of these development assistance projects by country. The table provides information for six projects, two each in Pakistan and Bolivia, and one each in Peru and Thailand. Not included are three small projects initiated by AID in Thailand in the mid 1970s, because their scope was limited and they were discontinued after failing to produce results. In the case of Turkey, no projects are listed because AID assistance was an ad hoc grant to be used for several purposes. Although part of this grant was used for several drug control projects administered by the Turkish Government, AID funds were cut off before any progress was made.

Table 2 is followed by summaries of AID narcotics control development assistance activities by country. These summaries are based on the more comprehensive country case studies found in the appendixes.

2.2.1 Turkey

To comply with its obligation under the 1961 Single Convention on Narcotic Drugs, by 1971 the Turkish Government had restricted poppy cultivation to seven provinces. In June 1971, under pressure from the United States and with the promise of financial support, the Government enforced a crop ban in all remaining poppy-growing areas.

Table 2. AID Development Assistance Projects
Related to Narcotics Control

| Project | Dates | As of 3/85 | | Intervention Type |
|--|---------------|--|-------------------|-------------------|
| | | Obliga- tions (in US\$ millions) | Expen- ditures | |
| <u>Pakistan^a</u> | | | | |
| Tribal Areas Development (0471) | 1982- 1987 | \$13.0 | \$ 0.9 | Crop Substitution |
| Northwest Frontier Area Development (0485) | 1983- 1989 | 12.0 | 1.7 | Area Development |
| <u>Thailand</u> | | | | |
| Mae Chaem Watershed Development (0294) | 1980- 1987 | 6.9 | 3.0 | Area Development |
| <u>Peru</u> | | | | |
| Upper Huallaga Area Development (0294) | 1981- 1987 | 18.0 | 9.5 | Area Development |
| <u>Bolivia</u> | | | | |
| Agricultural Development in Coca Zones (7271) | 1975- 1980 | 1.9 | 1.9 | Crop Substitution |
| Chapare Regional Development (0543) | 1983- 1988 | <u>10.6</u> | <u>0.5</u> | Area Development |
| Total | | \$62.4 | \$17.5 | |

^aIncludes only projects that are "directly" relevant to narcotics control. For definition of terms refer to Appendix B.

Source: AID, Office of Financial Management, 1985.

During the two growing seasons the ban was in effect, AID funds were used by the Government to compensate farmers who incurred financial losses. AID recognized that the compensation scheme was only a temporary measure to alleviate financial hardship and that a long-term solution required an economic and agricultural development program to permanently replace opium poppies as an income source. A joint Turkish/American Agricultural Team developed a program based on a series of projects to upgrade the local agricultural and livestock base. Although the team sought improvements in irrigation and marketing infrastructure and development of alternative employment programs where agricultural conditions were unfavorable for crops substitution, its strategy emphasized income replacement through crop substitution.

The planning for and implementation of development assistance activities was slow. Of the \$20.4 million pledged for income replacement, only \$3.2 million had been expended by 1974, when the poppy ban was revoked and AID suspended its assistance. Since then the Turkish Government has controlled poppy cultivation and opium gum production through an effective law enforcement program.

All available evidence indicates that the rigorous controls on poppy cultivation and opium gum production instituted in 1975 continue to be effective. Enforcement efforts are not expected to diminish in the future (U.S. Department of State 1985:217). Nevertheless, Turkey's location between the producing areas in Pakistan, Afghanistan, and Iran and consumers in Western Europe and the United States makes it an international transit point for illicit morphine base and heroin. Substantial quantities of illicit opium derivatives continue to pass through Turkey.

2.2.2 Pakistan

In recent years the Government of Pakistan has demonstrated an increasing commitment to curbing opium production and trafficking. In 1979, the Government promulgated the Prohibition (Enforcement of the Hadd) Order, which brought the drug laws of the country into conformity with the injunctions of Islam. In pursuance of the Enforcement of the Hadd, the Government also introduced a nationwide ban on opium poppy cultivation. With the assistance of AID, INM, and UNFDAC, the Pakistani Government has enforced this ban over the past few years.

Since 1981, AID has followed a two-pronged narcotics control strategy in Pakistan. First, projects have been initiated that will contribute directly to the socioeconomic development of areas where the Government of Pakistan is able to enforce its poppy ban. Second, 12 projects incorporated opium poppy clauses, which deny AID project benefits to poppy-growing farmers and communities, thus demonstrating the U.S. priority on narcotics control.

AID has begun two projects in Pakistan that are directly

relevant to narcotics control: the Tribal Areas Development Project and the Northwest Frontier Area Development Project. The former is a pilot project limited to the construction of basic infrastructure to facilitate increased Government presence and increased irrigated agricultural production. The latter involves a more comprehensive program of infrastructure building, agricultural and livestock development, and vocational training; it seeks to provide alternative sources of income and employment to rural inhabitants affected by the cultivation ban. Both projects require phased enforcement of the poppy ban and can significantly contribute to the further reduction of poppy cultivation. However, the extent to which a project area remains free of opium poppy will depend on both the effectiveness of the enforcement measures and the success of the development activities.

The current projects supported by AID, INM, and UNFDAC notwithstanding, residents of some of Pakistan's Federally Administered Tribal Areas continue to cultivate and traffic illicit drugs. To date, the Government of Pakistan has had limited authority to impose its jurisdiction in those areas to which earlier agreements had given considerable autonomy. The extent to which these remaining areas can be opened up for development assistance and eradication efforts will depend greatly on the success of current and future area development activities and the local populations' interest in participating in such programs.

2.2.3 Thailand

Opium poppy cultivation is limited to 11 provinces in northern Thailand. Cultivation is almost exclusively associated with five of the northern hilltribe groups, some of which brought this ancient agricultural practice with them as they migrated to Thailand from Tibet and southern China. Although opium has traditional medicinal, ritualistic, and exchange value among certain hilltribes, the commercialization of poppy as a cash crop during the past few decades has been largely a result of the growing inability of hilltribe villages to maintain rice self-sufficiency and an increased desire to purchase goods that cannot be produced locally.

Since the late 1960s, the Royal Thai Government has tried to improve the socioeconomic conditions of the hilltribes. Prior to that time, the Government had been concerned mainly with problems of border security and insurgency in the northern provinces, the principal issue being hilltribe loyalty to the larger Thai nation. Although poppy cultivation was made illegal in Thailand in the early 1950s, no action was taken then against hilltribe cultivation for fear that strict enforcement of the ban would alienate these tribal groups. More recently, Thailand, with the UNFDAC, has cautiously embraced a strategy of progressive reduction and eventual elimination of poppy cultivation in the hilltribe areas.

AID narcotics control strategy has changed over the past

decade from one of limited support of Royal Thai Government and UNFDAC programs to a more active role of addressing some of the underlying factors that encourage poppy cultivation. In the mid-1970s, AID began three projects intended to improve understanding of hilltribe development needs, but little progress was made and the projects were eventually discontinued. Another AID project, Hill Area Education, was designed as a pilot project to test a community-based education model. However, this project is of limited importance to illicit crop control efforts because it does not address the factors motivating farmers to grow poppies.

The Mae Chaem Watershed Development Project represents the first comprehensive AID area development project in a poppygrowing area of northern Thailand. This project seeks to improve the quality of life of the rural population while preserving and restoring environmental quality. This is to be achieved by registering and bringing new land into production; providing improved irrigation; establishing training, extension, research, credit, and marketing services; and establishing woodlots and constructing roads. However, the impact of MCWDP on overall Thai opium poppy eradication efforts is likely to be limited. Opium production in the Mae Chaem accounts for only a small fraction of total Thai production and only a few of the watershed's inhabitants are engaged in cultivation. The extent to which the project area will remain free of poppy will depend on whether the project is successful in addressing the underlying causes of poverty, thus satisfying the Government's preconditions for commercial poppy eradication.

2.2.4 Peru

In Peru, coca leaf has been used for ritual and medicinal purposes for 2,000 years. Current INM estimates of the total land under cultivation is about 100,000 hectares, producing 95,000 metric tons of coca leaf per year. Nearly half of the cocaine consumed in the United States is believed to originate in Peru.

Although in the past the Government of Peru set up agencies to address commercial coca leaf cultivation, they did not prove effective. Recent events, however, point to a growing Government effort to improve the situation and suggest that Peru may be entering a new phase in its efforts to control coca production and trade.

In 1981, AID initiated the Upper Huallaga Area Development Project in the country's major coca-growing region, with the understanding that Peru's INM-assisted enforcement agency (CORAH) would provide eradication assistance. The project is a comprehensive program of agricultural development, which includes adaptive research to determine the feasibility of alternative crops, land registration, and expansion of existing extension services, credit, marketing, and social services. The project calls for

phased enforcement of the coca cultivation ban. However, progress to date has not been encouraging; recent violence and security problems have inhibited project activities.

In 1984, AID funded a study to obtain information on the attitudes of local elites on drug issues and assess the feasibility of establishing a drug awareness and information agency. AID is now funding a public awareness campaign, which represents a new approach to the problem of narcotics production.

Effects of narcotics control efforts in the Upper Huallaga Valley on total national coca production are not likely to be significant. Peruvian land is eminently suited to coca leaf cultivation; this crop is now cultivated in almost every department in the country. A decrease in production in the Upper Huallaga Valley could be compensated for by increases in other areas unless control efforts occurred nationwide.

2.2.5 Bolivia

Until recently, the Government of Bolivia showed little commitment or capability in the enforcement area. In the early 1970s, several agencies were set up to introduce licensing schemes but were generally ineffective. Continued political instability and deteriorating economic conditions hampered the development of effective policies and actions to control production or trafficking. The military coup of 1980 resulted in the breakdown of U.S.-Bolivian relations and the interruption of AID development assistance. More recently, however, the Bolivian Government has begun to support AID development assistance efforts.

AID's narcotics control strategy for Bolivia has evolved from the initial mid-1970s phase that explored the feasibility of a coca substitution program by undertaking crop research activities, to a more ambitious recent attempt at a comprehensive area development project in Chapare, a major coca-producing region.

AID's first narcotics control initiative came in 1975 with the Agricultural Development in the Coca Zones Project. This pilot project sought to achieve agricultural diversification along with a reduction of illicit coca production and export. The attempt was premature because there was no agreement within the Bolivian Government that coca eradication was a national priority, nor was the Government capable of enforcing a narcotics control plan. Some crop research activities were completed under this project, but no crop eradication occurred.

The Chapare Regional Development Project, initiated in 1983, represents the first attempt by AID to undertake a major agro-forestry and agroindustry area development project in the primary coca-growing region of Bolivia. This comprehensive project provides increased opportunities in agricultural and forestry production,

agroindustry development, and improved government administration and institutional capacity. By diversifying and stimulating the agricultural sector, the project should lead to higher living standards for the general population. Project funding is dependent on an annual assessment by AID of whether the Bolivian Government is making an honest, concrete effort to reduce and control coca production. By the end of the project, a system should be in place to effectively reduce the amount of coca planted to a legally acceptable level. However, even if current narcotics control efforts in the Chapare are successful, the impact on total national coca production will be limited if increased enforcement in this area results in expanded cultivation elsewhere.

2.3 Project Intervention Strategies

AID is not the only donor agency to provide narcotics control development assistance; UNFDAC and INM also have furnished assistance.

UNFDAC's program in Thailand represented the first international effort to control opium poppy cultivation. In 1973, UNFDAC launched the Crop Replacement and Community Development Project, a pilot effort that explored the possibility of replacing poppy cultivation with substitute crops. On completion of CRCDP in 1980, UNFDAC initiated the Thai/U.N. Highland Agricultural Marketing and Production Project. This project was designed as the direct follow-on to the Crop Replacement and Community Development Project; its goal was to improve and expand activities that had proven particularly successful in agricultural production, marketing, credit, training, and community development. In Pakistan, UNFDAC undertook the Buner Agricultural Development Project, which was the first international effort in narcotics production control in that country. Launched in 1976, BADP focused on substitute crop identification, land and water resource development, and improved agricultural practices.

INM has funded two narcotics control development assistance projects in Pakistan: the Agricultural Outreach Project and the Malakand Area Development Project. Launched in 1981 and 1982, respectively, these projects operated in tandem to identify and introduce alternative replacement crops and improved farm practices, develop water resources, and construct roads and electric power lines.

The projects initiated by AID, INM, and UNFDAC reflect three broad intervention strategies. In the absence of commonly accepted terminology, these may be called "crop substitution," "area development," and "negotiated assistance" strategies. Project development strategies necessarily comprise elements to address key issues in project operations. In the following subsections, these narcotics control intervention strategies are discussed in terms of three criteria: the mix of project activities, the timing of

enforcement, and the activities selection process.

2.3.1 Crop Substitution

International narcotics control efforts have evolved from projects that almost exclusively emphasized the selection and introduction of substitute crops to those that embrace a more comprehensive area development approach. This evolution reflects the growing recognition that no single alternative crop or mix of crops can fully substitute for income lost by farmers who give up illicit crop cultivation.

Earlier narcotics control projects focused on a mix of activities that heavily favored the development of substitute crops. The best examples of crop substitution projects are UNFDAC's Buner Project in Pakistan and the Crop Replacement and Community Development and Highland Agricultural and Marketing Production Projects in Thailand. Other examples are the AID initiated Agricultural Development in the Coca Zones Project in Bolivia and the Tribal Areas Development Project in Pakistan.

The premise of crop substitution is that an alternative crop or mix of crops can be identified and substituted for opium poppy or coca plants. It is also assumed that these new crops, when accompanied by the necessary support services, are well adapted to local cultural practices and agroclimatic conditions and can provide a level of income equal to that of the crop being replaced.

The crop substitution approach generally involves the following components: (1) identification of several crops that appear to be biologically and socioeconomically promising, based on field observation and analysis; (2) introduction of the most promising crops in project areas; (3) selection of the most suitable crop or set of crops for each different category of farmers; (4) provision of the necessary extension and marketing services to farmers for the recommended crop or set of crops; and (5) provision of necessary inputs such as seeds, fertilizers, pesticides, and irrigation. A project need not undertake all these activities.

As originally formulated, the crop substitution strategy did not require host governments to enforce an illicit crop cultivation ban as a prerequisite to project implementation. Farmers receiving benefits were generally not required to destroy fields or discontinue future plantings. (The one exception to this was the Tribal Areas Development Project in Pakistan, the agreement for which contained a poppy clause for cessation of funding if poppy was discovered at project sites.) The premise was that farmers would voluntarily forego illicit crop cultivation once they were given the opportunity to grow equally profitable licit crops. Some documents referred to this as the "friendly persuasion" approach. Enforcement was not an integral part of overall project

implementation.

The activity selection process was largely performed by foreign and host country experts. These experts, who worked at local agricultural universities and field testing and demonstration sites, selected crops suited to the agroclimatic conditions of the project sites and that appeared to be economically viable. In no case was a sustained attempt made to involve local leaders or village members in the activities selection process.

2.3.2 Area Development

A second and more recent type of intervention strategy calls for the integrated development of an entire illicit crop-growing area. Such projects include the AID-supported Northwest Frontier Area Development Project in Pakistan, the Mae Chaem Watershed Development Project in Thailand, the Chapare Regional Development Project in Bolivia, and the Upper Huallaga Agricultural Development Project in Peru.

The premise of the area development strategy is that a comprehensive effort to develop alternative sources of income coupled with the provision of public services will improve the chances for long-term sustainability of a more diversified rural economy no longer dependent on illicit crops. The area development strategy provides for a wide mix of activities and services to improve the quality of rural life, which may include the following:

- Income Replacement Activities: Improved grain and vegetable varieties (staple or cash crops); improved livestock and forage grasses; introduction of new farming practices; introduction of sericulture and bee-keeping; development of new agribusiness; promotion of off-farm employment
- Infrastructure: Farm-to-market roads; electricity; irrigation canals and wells; land leveling and erosion control terraces; storage containers
- Public Services: Adaptive research, extension, marketing and credit services; public schools; health clinics; drinking water facilities

The area development strategy links the provision of development benefits with the progressive eradication of illicitly produced narcotics crops. Given the experience of earlier crop substitution efforts, project designers recognized that project benefits alone would not provide sufficient stimulus to farmers to forego illicit cultivation. Rather, it was feared that improved market access, agricultural inputs, or irrigation facilities might encourage poppy/coca leaf production.

A major design assumption of the Northwest Frontier Area Development Project was that the Government of Pakistan would enforce a cultivation ban; the project agreement incorporated a poppy clause that called for immediate termination of benefits if enforcement did not occur. A phased enforcement approach has been agreed on, whereby the delivery of development assistance to various project sites is coordinated with site-specific enforcement measures. In Thailand, the project design also calls for eradication of opium poppy cultivation. In Peru, the Upper Huallaga Valley project was designed to complement INM coca eradication efforts. In Bolivia, there is an understanding between the Government and AID that a certain area will be cleared of illicit coca by the time the Chapare project is completed.

The area development strategy as planned and implemented in Pakistan and Thailand identified potential subprojects by involving local leaders and villagers. Initially, the Northwest Frontier project in Pakistan technical assistance team found strong opposition to the project from local village leaders and council members who withheld approval of suggested activities. Eventually, however, groups of interested villagers stepped forward to accept responsibility, thus circumventing vested interests of the local elite. In Thailand, the Malakand Agency project interface teams live in the project villages. Their role is to coordinate action and improve communication between line agencies and the local population.

2.3.3 Negotiated Assistance

The negotiated assistance strategy is best illustrated by INM's Malakand Area Development and Agricultural Outreach Projects in Pakistan. The INM approach is more closely associated with crop substitution than with area development because of its focus on improving crop varieties and supporting related irrigation and land improvement activities. However, what distinguishes the negotiated assistance strategy is its clearly defined enforcement orientation. Equal or greater emphasis is placed on enforcement of the illicit crop ban than on the provision of alternate sources of income and employment for long-term sustained economic development of the affected area.

INM strategy in Pakistan was to establish a committee to review projects prepared by line agencies or district/union councils. Funds were transferred to the line agencies to undertake agreed-upon subproject activities. Local officials were consulted on what assistance they required to extend and enforce the poppy cultivation ban. Negotiations were then conducted with the local leaders to ensure their cooperation with enforcement measures in exchange for development activities. To the extent the local leaders were involved in project planning, they could influence the mix of development activities undertaken. Development activities began and local inhabitants were told they could no longer grow

poppies.

The target group for development activities was the entire farm population. Although efforts were made to channel assistance to areas or villages where poppy was grown most extensively, individual poppy farmers were not singled out for benefits because project staff thought that this might encourage other farmers to begin cultivating poppies in the hope of qualifying for development assistance.

The negotiated assistance strategy appears to have accomplished its objectives in Malakand at comparatively modest cost; however, it does not necessarily provide a long-term solution to the problems of poppy/coca farmers. The subprojects and activities were selected not on the basis of their potential for generating self-sustaining income or social value, but on the grounds of political expediency. As a result, there remains the possibility that as soon as enforcement slackens, farmers may return to growing poppies.

3. KEY FACTORS AND ISSUES

This section draws on a review of AID experience with narcotics control projects in five countries to identify factors that may influence the effectiveness of project interventions. Reference is made throughout to events and patterns that are explored more fully in the appendixes.

The major issues and factors are listed under four categories: enforcement issues, economic production and marketing issues, political issues, and cultural issues.

3.1 Enforcement Issues

The discussion of intervention strategies in Section 2.3 highlights the importance of effective enforcement measures. Although AID has no responsibility for enforcement--which remains the responsibility of the source country governments--other Federal agencies, particularly INM and DEA, do provide technical and financial assistance for enforcement activities.

The very word "enforcement" creates problems for agricultural or rural development specialists, who dislike the thought of confronting small farmers with guns and plowing up their poppy/coca fields. The study team observed that a major reason AID officials are reluctant to get involved in narcotics-related projects is that they appreciate that project success depends on the capability and will of the source government to enforce a ban on cultivation. Given the effort required to get a project approved and implemented, AID Missions are reluctant to discontinue long-term project activities because the host country government has failed to meet its enforcement obligations. Nevertheless, enforcement is

an integral part of any narcotics control effort and must be dealt with accordingly.

As a development agency, AID cannot be expected to undertake the actual enforcement. However, there must be a realistic enforcement plan accompanying the development work. Otherwise, development activities in a narcotics-producing area may result in increased cultivation of the illicit crop and a failure of the project's development objectives.

There are many factors to consider in addressing the enforcement issue. Each country must be analyzed separately and in most cases the situation will vary by project even within each country.

Turkey presents a unique example. Because of its perceived success, the AID effort in Turkey is often cited as a model project. This perception is misleading, however, because this success was mainly due to the capability and willingness of the Government of Turkey to enforce its ban on cultivation and only secondarily to AID involvement. Although the farmers bitterly complained, they also respected the Government's decision to ban poppy, and the Government enforcement agents in the villages were fully capable of implementing this decision. Poppy cultivation was banned before most of the AID-sponsored development projects were started. When the Government again allowed cultivation of poppies for legal purposes, it was still able to enforce its ban on illicit opium cultivation. After 10 years, there has been no evidence of heroin produced from Turkish opium.

No other poppy/coca-producing countries have been able to repeat what was accomplished in Turkey, although Pakistan represents a case experiencing considerable progress. The promulgation of the Hadd Ordinance in 1979 effected reductions in poppy acreage. Within 1 year, cultivation ceased in the irrigated settled areas and the Swat valley. A low price for opium and the option of growing other crops on irrigated lands facilitated crops substitution. In Buner, the Government was able to stop cultivation by arresting farmers and plowing up fields after an UNFDAC project (which had no enforcement component) had failed in its efforts to introduce substitute crops. In Malakand, fields were plowed up after farmers broke a promise to local officials not to plant poppies. With the Tribal Areas Development Project, after farmers failed to stop all illicit cultivation and AID indicated it would call a halt to project activities, the Government stepped in immediately to destroy the remaining poppy crops. In both cases, project areas were accessible and the Government had received authority by local groups to enforce a ban.

Future progress is likely to be slower, however, because the Pakistani Government does not yet have legal jurisdiction over the remaining tribal areas where poppy is still grown. Further, these

areas are rugged and isolated and the tribal groups are fiercely independent. Thus, whether poppy cultivation is completely eliminated within Pakistan's borders may depend on the remaining tribal groups' desire to receive the development assistance now available to other poppy-free tribal areas.

In Thailand, some eradication efforts have occurred on lands surrounding villages that have received substantial development assistance and that are located near major roads or settlements. The problem facing the Government is twofold. First, the highland region is extensive and the lack of properly maintained roads increases the region's isolation from the lowlands, thus hampering development activities. Second, the Government is concerned about security issues and believes that enforcement without a viable new farming system will drive the hilltribes into the arms of antigovernment groups.

The situation in Bolivia and Peru is similar to Thailand, although some differences exist. Unlike Pakistan and Thailand, the Governments of Peru and Bolivia have been confronted with a severe shortage of financial resources, national debt problems, slow gross national product growth and an inflation crisis. These South American countries also face the problem of controlling cultivation in vast, isolated regions with tropical vegetation. Unlike the other countries, Peru and Bolivia have wellorganized and financially powerful trafficking systems. Further, in Peru, deaths related to narcotics control have temporarily halted AID-funded activities.

Narcotics control efforts in several countries have caused violence and problems of staff safety. In Pakistan, Bolivia, and Peru there have been instances of violence and violent protests by the affected poppy/coca leaf farmers and drug traffickers. The most severe problems have occurred in Peru, where there have been more than 40 deaths, project officers have been attacked, and the safety of project personnel has been seriously threatened. The result has been a slowdown in project implementation. In Peru and Bolivia, the military was deployed in AID project areas. The violence in areas covered by the AID Northwest Frontier Area Development Project and INM's Malakand Area Development Project in Pakistan has been less severe; nevertheless, lives were lost and public property destroyed. Only Turkey was free of violent outbursts during the enforcement of the poppy ban, although in Thailand no overt violence can be attributed exclusively to ongoing narcotics control efforts.

Violent reactions from farmers and drug traffickers are to be expected. It is difficult for a project to immediately provide the poppy/coca leaf farmers with an equal or greater level of income from alternative activities. Often a segment of these populations has no alternative sources of income or employment. The problem is compounded by farmers' frequent failure to understand the rationale

for the government's action. Having cultivated poppy/coca leaf for a long time without experiencing an intolerable level of addiction, they are unable to empathize with the problems of drug addicts or law enforcement officials in New York or San Francisco, or even in Bangkok or Islamabad. Therefore, they see little legitimacy in either complete or partial narcotics control.

It is probable that AID involvement in narcotics control efforts will continue to produce violent episodes aimed at its staff, local project personnel, and cooperating farmers. AID must be prepared for such outbursts, especially if efforts are undertaken in remote areas.

3.2 Economic Production and Marketing Issues

A review of academic literature and U.N. and AID documents revealed that few serious studies have been made on the economics of poppy/opium and coca leaf/coca paste production and trade. The illicit black market nature of these goods makes attempts to uncover relevant economic data very difficult. The material that does exist is too general and relies heavily on field staff observation.

This section outlines issues that are directly relevant to the costs and returns of producing and marketing illicit crops relative to alternative agricultural goods. The current level of poppy/coca leaf production far exceeds the traditional needs of farmers. Because illicit crops are primarily grown as a cash crop to increase family income, this section examines why the cultivation of such crops has expanded so rapidly in the more remote and isolated areas of the five countries under study.

Farmers who cultivate either poppy or coca generally find them to be excellent cash crops because (1) they adapt well to the small farmers' risk adverse, diversified farming system; (2) they are highly profitable when compared with the next best alternative; and (3) reliable market access is available. These reasons are now developed further.

First, small farmers usually follow mixed cropping patterns. In Pakistan, wheat or poppy in the winter season is followed by maize in the summer. In Bolivia and Peru, the perennial coca bushes are planted with other food crops to supplement family income. These illicit crops can be grown under a wider variety of agroclimatic conditions than can most other cash crops. Coca is a very durable, extremely well-adapted plant and is less vulnerable to crop failure than most other plants grown in the Andean Region of South America. Poppy is also well adapted to poor soil conditions; it requires little care and although it is susceptible to lodging and inadequate rainfall, it is probably no more risky to produce than traditional subsistence crops.

Second, farmers will choose poppy/coca cultivation over alternative activities because of its high relative profitability. The results of a study in the Swabi-Gadoon area of Pakistan illustrate this point. Based on household-level data collected in the mid 1970s, average net profit per hectare of poppy was calculated at Rupees (Rs.) 8,079. Of crops that could be grown in place of poppy during the same season, sugarbeet produced the second highest net profit: an average of Rs.564 per hectare, or 7 percent of the return from poppy. Tobacco was the second highest revenue-earning crop, averaging Rs.1,859 net profit per hectare, or 23 percent of that returned by poppy; however, tobacco and poppy have different growing seasons in all but a few parts of the area. Income generated by poppy cultivation figured prominently in total household income. The study concluded that if poppy were completely replaced by wheat, average per household income from all sources would fall from Rs.33,354 to Rs.11,505, or by 66 percent. In the few villages where tobacco could completely replace poppy, average per household income from all sources would fall from Rs.27,229 to Rs.13,053, or by 52 percent (Government of Pakistan, Institute of Economic Studies, vol I, 1978:248).

In Peru and Bolivia, the evidence suggests that coca is the cash crop of choice because labor requirements are minimal and the plant can be harvested three to four times a year, thus providing the family with a continuous flow of income. Although cacao may in some cases yield a net profit per acre that is higher than that yielded by coca, the former is much more labor intensive. Because labor is the limiting factor to increased family income, coca therefore remains the preferred crop.

Only in Thailand is there evidence that alternative crops can realize higher net returns to labor than can opium poppies. Coffee, arabica, and certain fruits appear to be the most promising substitutes for poppy. They can be grown under similar agroclimatic conditions, and the hilltribes have shown a willingness to learn the new cultivation practices that these crops require.

The profitability of illicit crops relative to other agricultural activities is in part dependent on final product prices and the cost of inputs. Changes in relative prices can alter the situation dramatically. The future final product prices of replacement food crops and livestock products will be influenced by a complex set of factors that affect supply and demand, including price subsidy and food import policies; urban versus rural population growth rates; changes in income levels; and the adoption rate of new technology. In most developing countries, expected high growth rates in the domestic demand for food will continue to put upward pressure on food prices, because domestic food demand will grow at a higher rate relative to domestic food production (Mellor 1982:304). Among poorer developing countries, a high-income elasticity of demand for necessity goods combined with income and population growth increases the demand for grains and vegetables.

Among the remaining higher income developing countries, a high-income elasticity of demand for normal and luxury goods augments income and population growth to rapidly increase the demand for meat, coffee, and fruits. If governments allow prices to respond to market forces, it is more likely that a variety of replacement crops can provide farmers with adequate levels of income in the future.

What is the potential market price movement of opium and coca paste in the near future? Conventional wisdom suggests that the exceedingly large marketing margins characteristic of the illicit narcotics industry permit traders and processors to offer substantial price increases at the farm-gate level without cutting deeply into their profit margins. However, a ceiling on local prices will be set by supply and demand and conditions in the dominant regional market. For example, the potential for upward opium price movement in Thailand and Pakistan is constrained by supply and demand conditions in Burma, Afghanistan, and Iran, as the overwhelmingly dominant supply position of the three countries largely determines regional price levels.

The successful introduction of alternative crops is also influenced by the cost and availability of farm inputs. To realize the full potential income gains that improved crops varieties can produce, a program of low interest rate rural credit should accompany the development project. Unfortunately, in Bolivia and Peru, inflation and accompanying high nominal interest rates limit the availability of low-cost credit, and the lack of government-supported credit programs can undermine efforts to diversify the rural economy. On the other hand, illicit crop cultivation does not rely on institutional credit. Further, input demands are low, and if a farmer decides to increase yields through increased use of farm inputs, supplies are often available from traffickers.

Third, poppy/coca cultivation is often preferred to alternative cash cropping because market access exists and costs incurred by the farmer are negligible. In Pakistan and Thailand, traders travel to the farmer at harvest time to conclude transactions. In Peru and Bolivia, markets are held in the near vicinity of the farmer's property. Once the raw opium or coca products are extracted from the plant and properly wrapped, they store well and spoilage costs are low.

The marketing situation for replacement cash crops is entirely different. The physical isolation of illicit cropgrowing areas means that outside markets for new agricultural products may not be available. Governments are unable to open up transportation networks that provide year-round access to outside markets, nor do farmers have the organization or skills necessary to arrange for product marketing with wholesale businesses in distant urban areas.

The narcotics trafficking business currently flourishing

across the Andean Region of South America is partly the result of an increased preference for cocaine among U.S. upper-middle class drug consumers over the past decade. It is also due to the remarkable adaptability of trafficking organizations (largely based in Colombia) in successfully circumventing U.S. interdiction efforts. Furthermore, the weak domestic currencies of Peru and Bolivia have encouraged the flow of financial resources into U.S. currency-based investments in the narcotics trade.

The narcotics business itself offers several advantages to investors. First, the value of the investment becomes "locked in" to the strength of the U.S. dollar--as the U.S. dollar appreciates, so will the investment that is tied to the sale of the final product. Second, the final net value of the investment is relatively high because earnings are not taxed through the use of exchange control mechanisms, value-added or personal income tax, or other taxation forms; the value of an illegal exchange will remain unknown to the government revenue collection agency. If Bolivia or Peru could achieve an export surplus, their domestic currency would become stronger and the current high premium placed on black market exchanges would fall. These events in turn would act to reduce the demand for U.S. dollars and investment in the narcotics trade.

Illicit crop cultivation is a successful agricultural adaptation for subsistence farmers in remote regions where credit and access to markets for licit cash crops is partly or entirely lacking. Conditions of underemployment and low agricultural productivity further stimulate illicit crop production.

In Pakistan, an abundance of underemployed family members is available for the labor-intensive task of incising the poppy seed capsule during harvest. In the Northwest Frontier Area Development Project, the goal is to absorb excess labor through short-term construction work and longer term increases in alternative crop farming and off-site employment opportunities.

The case of Bolivia clearly highlights the relationships among rural unemployment, new land settlement, and the increased incidence of coca leaf cash cropping. In recent years, Bolivia's Chapare Valley has witnessed waves of new immigrant campesinos arriving as settlers. These more progressive farmers have adopted the use of fertilizers and other improved farming methods to grow coca leaf primarily as a cash crop.

In Thailand, the situation is somewhat different in that poppy cultivation is stimulated less by an abundance of underemployed labor than by low agricultural productivity and a lack of rice self-sufficiency. The Meo people hire the Shaw Karen people to help cultivate and harvest their poppy crop. The Shaw Karen laborers earn additional income to pay for their staple food needs until the new rice harvest is available. In the North, increasing population and a shrinking fertile land resource base limits new farming

opportunities and encourages the cultivation of small poppy plots where none had existed.

3.3 Political Factors

Several political considerations can constrain or enhance AID narcotics control efforts in the source countries. Among these factors are the structure and stability of the source government, source country perceptions of its narcotics-related problems, and the source country's strategic relationship with the United States.

To varying degrees, all political parties have to be responsive to the needs and aspirations of their electorates. In more open societies, various groups can mobilize themselves to effectively demand concessions from the government. For instance, in Turkey during the general elections of 1973, the major political parties had to give assurances to poppy farmers who objected to the total ban. The elected officials of Bolivia and Peru have often cited problems faced in implementing narcotics control programs given the organized opposition in key coca-producing areas. Such conditions place restraints on governmental action that are not experienced under more authoritarian political systems. In the tribal areas of Pakistan, for example, local Government of Pakistan officials keep local leaders and villagers hostage, releasing them only when the poppy crops have been eradicated or the planting season is over. Such practices would be more difficult to justify in a less authoritarian society.

Source country political stability is another factor that affects narcotics control efforts. The past experience of Bolivia exemplifies the situation in which a country's inability to institute a workable system of political succession can hamper the development of government policy to control narcotics production. Moreover, a succession of governments unacceptable to the United States can result in AID program delays, as was the case in Bolivia from 1980 to 1983.

In Turkey, Thailand, and (recently) Pakistan, the presence of a stable and forceful central government has helped ensure the long-term commitment required to tackle the narcotics cultivation problem. Although Thailand has been reluctant to enforce a cultivation ban, it has shown a long-term commitment to the socio-economic development of the northern highlands.

The perceptions of source country political elites about the U.S. narcotics problem and the dangers of domestic drug abuse are undoubtedly important variables, because they affect the perceived legitimacy of AID efforts and the level of national and local commitment to their implementation. In Turkey, political elites resisted the continuation of a total ban on poppy cultivation because they believed that the narcotics problem was an internal U.S. matter for which Turkish farmers should not suffer.

Conversely, in Pakistan, drug abuse is seen as a national problem threatening the social and political system and violating the tenets of Islam. Such perceptions have contributed to the genuine support in Pakistan of poppy control efforts. The cases of Peru and Bolivia seem to fall between these two extremes. Peruvian and Bolivian elites are realizing that continued largescale coca leaf cultivation can lead to serious drug abuse problems in their own countries and to a growing trafficker counterforce that poses a threat to political and economic institutions. Hence, there is increasing commitment to AID and INM activities.

The strategic relationship between the United States and a source country may also affect the nature and extent of the influence that U.S. Federal agencies have on that country's narcotics control policies and behavior. Generally, AID officials believe that the Agency has limited options. Extensive demands placed on source governments that are unable or unwilling to respond can result in the withdrawal of AID assistance, which be even more damaging to U.S. narcotics control efforts.

The above examples of the influence of political factors on narcotics control efforts raises an important issue to be considered by U.S. policymakers and AID field staff. Are developing country governments in a position to aggressively pursue AID-assisted narcotics control efforts without undermining their own legitimacy and effectiveness? This issue faces the Governments of Bolivia and Peru, which might face serious difficulties if they were to take more vigorous actions against coca farmers and traffickers.

3.4 Traditional/Cultural Factors

Narcotics crops have been grown for centuries in certain areas of Turkey, Thailand, Bolivia, and Peru. The cultivation of such crops is culturally accepted by the indigenous population and carries little social stigma except that youths may be criticized if they become addicted. Thus, recently introduced government narcotics laws and enforcement efforts have little cultural legitimacy, making enforcement difficult.

Traditional and familial ties between farmers and traders reinforces cultivation practices. In Pakistan, Bolivia, and Peru, traders are often neighbors or members of the same extended family. In Thailand, Haw Chinese traders live in hilltribe villages and have established close friendship and familial ties with producers. Such proximate ties often result in a complex system of rights and obligations between producers and traders. Although these linkages may be broken by enforcement measures coupled with the provision of new income opportunities, any strategy failing to address the problems of local traders may increase local resistance and thus face a greater chance of failure.

It is useful to summarize the traditional uses of opium poppy and coca leaf in Turkey, Thailand, Bolivia, and Peru, in assessing whether area development projects can overcome local resistance. In Turkey, poppy seed has traditionally been added to breads and porridges and its oil extracted for cooking; poppy straw has been collected for livestock feed and fuel. One advantage of Turkey's current Government-controlled licensing system is that poppy byproducts are largely still available to the local population. When the total ban was in effect, several projects were identified to replace the income lost by farmers through the sale or use of poppy crop byproducts. Sesame and sunflower were identified as replacement crops for the poppy seeds' use in food and for oil extraction. Forage and grain feeding programs were designed and more efficient energy sources were identified to replace the livestock feed and fuel value of poppy straw.

In Thailand, opium's medicinal, ritualistic, and currency/payment value among some of the hilltribe groups is a very old tradition. Area development programs can reduce tribal dependence on opium in several ways. Improved access to health care can reduce the need to use opium for medical purposes, and opium addict care facilities can reduce the growing addiction rate of tribal peoples. As the hilltribe culture becomes increasingly integrated into mainstream Thai society, ritual practices may change, thus reducing the demand for opium. Finally, the currency/payment value of opium will decline with the introduction of a cash economy based on the export of legal crops.

In Bolivia and Peru, the coca leaf was used for centuries as a cure for high-altitude sickness and weakness and as an appetite suppressant. The perpetuation of such traditional practices is symptomatic of poor health and diet. Area development programs can begin or strengthen a process to improve the overall agricultural base of rural communities. In situations where agroclimatic conditions are extremely severe, the solution will be resettlement to project areas for those whose standards of living cannot be improved through cost-effective means.

4. EVALUATION METHODOLOGY

This study indicates that an area development strategy that focuses on the development of both short- and long-term sustainable benefits can provide a foundation for the wide range of income replacement activities necessary to reduce an area's dependence on illicit cash crops. Because all of the more comprehensive narcotics-related efforts of AID can be described as area development initiatives, the criteria and methodology used by AID to evaluate rural area development projects are equally applicable to narcotics control activities. AID staff and consultants interviewed by the study team did not see a need to formulate a new set of evaluation standards or methodologies for such projects. However, narcotics control projects do confront a unique set of

circumstances that the evaluator must consider.

This section is divided into three parts. Section 4.1 contains a brief discussion of the context in which evaluations of narcotics control projects must take place. Section 4.2 focuses on four areas of inquiry that are of special concern to evaluators of such projects; Section 4.3 examines methods and problems of data collection for these four areas.

4.1 Evaluation Context

There are three conditions that complicate or limit the effectiveness of evaluations of narcotics control projects. First, the cause and effect relationship between project activities and the objective of controlling illicit crop production cannot be established unless project activities are accompanied by effective enforcement efforts of the host government. Illicit crop supply reduction is less dependent on the successful implementation of specific project activities than it is on the fulfillment of the enforcement commitment made by the host government. Therefore, the evaluator must try to determine the partial contribution project activities have made toward attaining the supply reduction objective, while assessing the critical role played by enforcement activities.

Second, narcotics control projects are politically sensitive, and there may be disagreement among involved parties--the United States as represented by AID, the host government, illicit crop-growing farmers, and the remaining members of the target group in the project area--on the scope of the problem and the means to address it. The perceived interests of these four major parties involved will not always be compatible. Each party tends to perceive the problem differently and harbors varying expectations about project effects and outcomes. This situation will complicate the evaluator's job of choosing performance criteria and producing a report that is satisfactory to all four parties.

Third, the statistical data for such variables as per hectare yields, area cultivated, or total production of illicit crops, which are required to assess the effects of the project, may not be readily available. Even when some data exist, their reliability and validity will remain suspect.

These three conditions will undoubtedly pose a challenge to the ingenuity and capabilities of the evaluator.

4.2 Special Areas of Inquiry

In addition to the above topics, the evaluator should pay special attention to the following four areas:

- Effects on illicit crop production

- Effects on target population
- Enforcement capability
- Project sustainability

4.2.1 Effects on Illicit Crop Production

It is important for the evaluator to examine and assess the effects of the project on illicit crop production. The focus should be on the overall effects of the entire range of project activities rather than on the causal relationship between each activity and changes in production. Although direct causal relationships are difficult to establish, each activity in a project package may be necessary to achieve the project's goal of an improved local economy no longer dependent on the commercial sale of illicit crops. In all probability, without AID development assistance no enforcement would have occurred. In fact, a major contribution of such projects is to provide an incentive for host governments to undertake enforcement measures. Moreover, these projects enhance the overall presence of the host government and thereby its enforcement capabilities in remote illicit cropgrowing areas. Finally, such projects, by promoting agricultural and rural development, open up new income and employment opportunities, which reduce the impact of income lost through enforcement of production controls. All such direct and indirect effects of the intervention should be considered when assessing project effects on illicit crop production.

The effects of these projects should be studied not only in the project area but also in the wider context of adjoining regions and other parts of the country. The experience of narcotics control projects suggests that in some cases the decline in project area production is offset by increased production elsewhere. For instance, in the Malakand District of Pakistan, enterprising farmers in areas adjacent to the project site took up poppy cultivation. In Thailand, farmers participating in development activities may cease cultivation in or near their villages; however, they may plant new poppy fields at some distance from their homes to avoid detection. In Peru, there is evidence that strict enforcement measures and the resulting counterviolence have induced some coca farmers to move out of the Upper Huallaga Valley into other regions so that they can continue to produce coca leaf. From the U.S. point of view, the illicit narcotics crop reduction objective of such development initiatives is defeated if the decline in production in a project area is offset by increases in other parts of the country.

It will be important to identify the cause of increased production outside the project area. If there has been out-migration of farmers from the project area, have these same farmers been responsible for increased production in other areas? Or, does this

increased production reflect successful efforts by traffickers to expand output by farmers already living in these other areas?

There seems to exist a general consensus among experts about the quantitative indicators that can be used to assess the effects of an intervention on illicit crop production. These are as follows:

- Hectares of illicit crop cultivated
- Hectares of illicit crop harvested
- Estimated illicit crop yield
- Hectares of illicit crop destroyed
- Number of farmers cultivating illicit crops
- Proportion of illicit crop farmers to the total farmer population

The utility of such indicators depends on the availability of relevant data and their validity and reliability. Because the available data on illicit crops are especially unreliable, extreme caution is necessary in using such information. Moreover, yields of illicit crops, like those of other agricultural crops, are subject to interseasonal variation in response to a wide range of exogenous factors. Hence, no analysis can be based on data on only a few agricultural seasons. Longitudinal data over a multiyear period are necessary to infer statistically valid generalizations.

Evaluators of narcotics control projects also need qualitative information to understand the relationship between project activities and illicit crop production, so that suitable recommendations can be made. In fact, evaluation teams may have to depend primarily on qualitative information because of the unreliable nature of quantitative data.

4.2.2 Effects on Target Population

AID narcotics control projects are designed to benefit all farmers in a project area, and therefore evaluators are likely to examine the project's effects on the entire farming population. Nevertheless, the main focus should be on a subset of the wider target population, namely, the illicit crop-growing farmers who are directly affected by enforcement efforts. In the event that other farmers who do not themselves grow illicit crops but who are involved in the processing and even trafficking of opium and coca leaf are adversely affected, their situation should also receive the evaluator's attention. In part, the success of a project depends on the extent to which the entire range of project activities can compensate for the income foregone by farmers once

they are no longer allowed to grow illicit cash crops. Unless a large segment of this group benefits substantially from project activities, the production control measures are likely to remain a constant source of conflict, and the government will continue to incur high surveillance and enforcement costs.

More specifically, the evaluator should try to assess project effects on income and employment, living standards, and physical security. A variety of questions can be posed. What proportion of the illicit crop-producing farmers have successfully diversified their income sources? How do their present net incomes compare with their past net incomes? Why do some farmers fail to participate in alternative income activities and what becomes of these farmers? What are the long-term prospects for farmers who do not participate? What is the net effect of new income opportunities and public services on the living standards of the illicit crop-growing farmers and their families? To what extent has the project succeeded in alleviating their problems? Has the income disparity between illicit crop-growing farmers and other area inhabitants changed, and in what direction? To what extent has the project contributed to increased tensions in the area? Has violence occurred and against whom was it directed?

4.2.3 Enforcement Capability

AID narcotics-related development assistance must be tightly coordinated with enforcement activities to achieve success. It is essential, therefore, that all enforcement efforts directly tied to such assistance be thoroughly assessed by the evaluator. In conducting this assessment, the evaluator should give attention to (1) the existing institutional enforcement capability of the host government; (2) the nature and effectiveness of the enforcement efforts to curb or ban illicit cultivation and trafficking; (3) the extent of cooperation and coordination between area development projects and enforcement agencies; (4) the problems and difficulties encountered; and (5) the progress made.

4.2.4 Project Sustainability

There was genuine apprehension among AID officials and participating consultants interviewed for this study that narcotics control activities were not sustainable over the long term. It was feared that once AID projects were completed, host governments would not continue to enforce the prohibition. Although government officials might continue to pay lip service to the importance of narcotics control, actual narcotics reduction measures would become ineffective through benign neglect. Given such pervasive concerns, the evaluator should attempt to realistically assess project sustainability. For this purpose, a distinction should be made between the development assistance and enforcement measures. It is important that the host government continue to support the credit and extension needs of the project area to sustain the process of

development and maintain the viability of alternative income sources. However, it is essential to address whether prohibition will continue to be effective. To this end, the evaluator should examine various macrolevel and farm-level factors that affect host government enforcement capability. These include the following:

- Political legitimacy and stability of the government
- Effectiveness of the law enforcement authorities in the area
- Popular perceptions about illicit crop cultivation and its impact on the society and the national economy
- Nature and extent of the economic opportunities made available by the project
- International narcotics crop demand, which affects farm-gate prices
- Social and cultural environment affecting farmer decision-making behavior

4.3 Data Collection Methods

All the sources of data and information that are normally used for evaluating rural area development projects must be considered. However, given the problems associated with gathering reliable information about illicit crops, more emphasis should be placed on nontraditional survey modes of data collection. It is not recommended that large-scale sample surveys be undertaken to assess the impacts of project activities on illicit crop-growing farmers. Such methods are very expensive and time-consuming. Moreover, the utility of the data generated may be limited. Useful information can be gathered through small, informal surveys, group meetings, or in-depth interviews.

The most appropriate survey modes of data collection include the following.

Key Informants. In rural and tribal areas, close interpersonal relationships are the norm, and strategically located individuals tend to have direct access to a wide range of information that cannot be secured easily through sample surveys or formal interviews. Such individuals can be approached informally for information on illicit crop production, standard of living effects, and farmer security. Key informants are not likely to disclose specific information about an individual or even a village, but they can provide a general picture sufficient for evaluation purposes. Local tribal or village chiefs, religious leaders, village elders, farmers, agricultural and extension workers, and local government functionaries can act as key informants.

It should be recognized that the information and opinions provided by these individuals may be biased; village officials may wish to paint a better picture to impress the funding agency, or village elders may try to protect their friends' interests. Because evaluators cannot control this, they should interview a cross-section of informants from different backgrounds, especially those who do not have a vested interest in the development assistance or enforcement efforts.

Group Meetings. Small, informal group meetings, especially with the illicit crop farmers, can be helpful in assessing farmer perceptions, attitudes, and behavior. Such meetings should be carefully planned and their venues well publicized in advance. A list of questions to be raised in meetings should be carefully prepared. Given the sensitive nature of such discussions and the potential divergence of individual views, both verbal and nonverbal behavior of those present should be observed and recorded. It is possible that group meetings can be manipulated by interested groups and parties. Those opposed to the prohibition may try to create the impression that the project has failed or that the majority is opposed to it. Such manipulations can undermine the objectivity of the information gathered.

Direct Observation and Field Visits. Although key informants and group meetings can provide insiders' perspectives, direct field observation is indispensable to gain objective information. Field visits to illicit crop-producing areas will give evaluators a better perspective of the problems and complexities involved in such development efforts. Spontaneous conversations with the farmers and other villagers can be very informative.

Aerial Surveys and Inspection. This method of data collection is necessary because illicit crops are usually grown in isolated, distant regions not easily accessible to ground transportation. Moreover, in many mountainous regions, the crops may not be visible from the ground. This method of data collection is especially useful when assessing changes in production in areas adjacent to the project site.

5. FINDINGS AND RECOMMENDATIONS

The objective of this study has been to review AID experience in narcotics control development assistance to identify a set of issues for policymakers and project implementation staff. This study was not designed as an evaluation or an in-depth investigation of field experience. Nevertheless, distinct findings and recommendations emerge from this review, which are discussed below.

5.1 Findings

5.1.1 Intervention Strategies

The review identified three major intervention strategies that are reflected in the narcotics control development assistance provided by AID, INM, and UNFDAC. These are crop substitution, negotiated assistance, and area development strategies.

The crop substitution strategy focuses primarily on the identification and introduction of substitute crops to replace the income lost because of narcotics control efforts. This strategy has been unsuccessful in introducing substitute crops and in controlling illicit cultivation, at least in the limited span of a typical development initiative. Viable substitute crops are difficult to identify given the generally unfavorable agroclimatic conditions and poorly developed infrastructures that characterize most remote poppy- and coca-growing areas. In many instances, there are no alternative crops that can be grown profitably. The farmers adversely affected by narcotics control thus require alternative sources of income and employment. Among the countries where this strategy has been used, Thailand represents the only case where a few substitute crops have shown potential for profitability relative to poppy production.

With its focus on enforcement and political expediency, the negotiated assistance strategy ensures that illicit crops will be eradicated during the life of the project. As carried out by INM in Pakistan, this approach relied heavily on host government staff participation in all phases of implementation. The advantages have been twofold: U.S. project costs remained low, and the commitment of local officials to maintain project support once U.S. funding ended was strengthened. However, because activities are identified in cooperation with local government officials and elites, project benefits may not meet the needs of the target farmers and may fail to effect long-term improvements in the rural economy.

The area development strategy that AID has followed is more likely to be successful over the long run. It comprehensively addresses the problem by undertaking a set of development activities that can contribute to a self-sustaining, diversified rural economy. Such projects or sets of projects in a designated area can include the supply of agricultural inputs and services, construction of physical infrastructure such as roads and irrigation systems, and provision of social services. This strategy recognizes that although illicit crop control is a prerequisite to project success, farmers' resistance can be minimized if the project can deliver immediate and long-term benefits to coincide with phased enforcement measures.

5.1.2 Critical Role of Enforcement

Effective enforcement measures designed to control or prevent narcotics crops production are an essential requirement for the

success of any project. Because of the crops lucrative nature, the farmers will not give up illicit cultivation on their own. By raising the opportunity costs of production and marketing of narcotics crops, strict enforcement of the law, however, can induce them to take up alternative sources of income and employment.

The experience of AID and other agencies also suggests that some violent reaction against a total ban or control is to be expected from the farmers growing narcotics crops and from drug traffickers. Violent episodes have occurred in Pakistan, Peru, and Bolivia, posing a threat to the security of the project staff, local officials, and cooperative farmers.

5.1.3 Environmental Factors Affecting Narcotics Projects' Implementation

The review also indicates that the success of narcotics projects is likely to depend on a set of factors and circumstances that are often beyond the control of project management or AID personnel. These can be classified under three general categories.

The primary set of factors is the simple economics of narcotics crops cultivation. Often, opium poppy and coca plants are well suited to the existing agroeconomic conditions and provide much higher returns on investments or net profits per unit of land and capital than do alternative crops. In many instances, these are the only cash crops that the farmers can grow with little risk and marketing effort. The farmers have a high economic incentive to cultivate narcotics crops. Their livelihood is thus severely threatened by narcotics control projects.

In addition, macrolevel economic conditions, such as high inflation, weak domestic currency, rampant poverty, and unemployment often contribute to an environment unfavorable to the implementation of AID projects.

Second, several political conditions constrain or enhance AID narcotics control efforts in the source countries. The structure and stability of the political system affects the government's ability to develop and maintain an effective longterm narcotics policy and system of control. Also, the strategic relationship between the United States and the source country can determine the nature and extent of the leverage that the United States can exercise on narcotics control policies and actions. Finally, the host country elites' perceptions of illicit drugs significantly affect the level of national commitment to control programs. As long as the elites perceive the drug problem as largely a domestic problem of the United States, there is little likelihood of AID achieving results from narcotics control and area development activities.

Third, traditional cultural factors affect the outcome of

narcotics control projects. In areas where narcotics crops have been grown for centuries, the cultivation of such crops is culturally accepted, and recently introduced government narcotics laws and enforcement efforts have limited cultural legitimacy. Familial linkages between farmers and traders can reinforce this pattern and increase local resistance to outside interference. Illicit crops also serve various purposes in the local economy and culture. Byproducts are used for human and animal consumption, food preparation, and energy needs; opium and coca have important medicinal and ritualistic value; and opium is used as a form of payment and exchange. Narcotics control projects should be designed to respond (at least in part) to new needs that may arise if all cultivation is prohibited. A compromise may involve allowing limited production of narcotics crops for local use while banning all cash cropping.

A final set of factors, incorporating elements of all the above, becomes important when projects are carried out in tribal and remote areas of developing countries. The isolated nature of these areas makes it difficult and expensive to locate illegal poppy/coca plots, provide supporting services, and establish the government presence needed to carry out enforcement measures. Further difficulties may be created by the limited resource base that is characteristic of many of these areas, by the desire of tribal populations for political and cultural autonomy, and by their history of supporting insurgency movements that may derive financial support from involvement in the illicit narcotics

Given the above constraints, AID can only expect limited success from its projects, at least in the short run.

5.1.4 Policy Framework

Current AID policies and efforts, according to the information presented in this review, are consistent with the overall U.S. Strategy for the Prevention of Drug Abuse and Drug Trafficking.

AID policy is based on four basic premises enunciated by the AID Administrator before the House Committee On Foreign Affairs on April 21, 1982. (1) The production of narcotics is in part a development problem in that narcotics are grown in developing countries by poor farmers who need alternative sources of income and support to be weaned from the cultivation of illicit crops. (2) Development in narcotics-producing areas often requires multifaceted agricultural and rural development initiatives on a long-term, sustained basis. (3) Enforcement of a ban (or control) on narcotics cultivation is the sine qua non for successful crop reduction efforts. (4) Enforcement is the exclusive responsibility of the host governments. AID and other Federal agencies can only pressure them and provide technical and capital assistance.

The study shows that these basic premises are not only con-

ceptually sound but are also grounded in experience. There is nothing in AID experience that indicates the need for reexamination or reformulation of the premises of the current policy.

5.1.5 Limited Impact of AID Efforts

AID, in cooperation with the other Federal agencies, can make only a limited impact on the cultivation of opium poppy and coca. Afghanistan, Burma, Iran, Laos, Mexico, Pakistan, and Thailand accounted for 1,388-1,568 metric tons of opium in 1984 (U.S. Department of State 1985:4). AID is presently providing assistance to only Pakistan and Thailand. Even if AID efforts in these countries are totally successful and the source governments are somehow able to prevent illicit production, world production of opium based on the 1984 estimates would fall by no more than 6.25 percent (if the production remained constant in other countries). There is no reason to believe that other countries would be willing to cooperate with the United States unless there are domestic compulsions to follow such a course.

Control of coca leaf production, however, is more encouraging because Bolivia, Peru, and Colombia produce about 99 percent of the total output. Therefore, if AID projects in Peru and Bolivia succeed, and if production remains constant in other source countries, there would be a perceptible reduction in the world output of coca. However, this scenario is unlikely to materialize in the foreseeable future. Historically, neither Bolivia nor Peru have shown the capability for effectively implementing comprehensive illicit coca eradication efforts. Although both Governments recently have shown a growing awareness of the problem and have tried to control illicit cultivation and trafficking, given the magnitude of coca production, the strength and resources of trafficking organizations, the historical political instability of both Governments, and their deteriorating economic situations, it is unrealistic to expect a major reduction in the production and trafficking of coca over the next few years.

5.2 Recommendations

5.2.1 Reliance on Area Development

This review has indicated that area development is the most suitable strategy for AID's narcotics control development assistance. UNFDAC and the Organization of American States also have come to this conclusion after experimenting with crop substitution. Effective area development addressing narcotics control, however, requires a multiprong approach linking public awareness, narcotics crop eradication, market interdiction, and income replacement.

5.2.2 Longer Time Horizon

The solution to the illicit cultivation problem requires the structural transformation of the rural economies in areas where a large proportion of the farmers are engaged in narcotics production. Unless long-term, sustainable opportunities for alternative sources of income and employment are created, farmers will likely revert to narcotics production. Narcotics control area development initiatives should be designed as 10-15 year endeavors.

This time frame will require that projects are planned with several phases, each phase building on the experience, insights, and progress gained in the preceding one. The first phase, lasting between 3 to 4 years, can be a learning phase to gain a better understanding of the narcotics cultivation, trafficking, and socioeconomic environment and to design suitable strategies. During this period, several immediate impact development activities are also necessary to gain local support and participation.

Careful attention needs to be given to the sustainability of the benefits and inputs being provided to the farmers adversely affected by narcotics control efforts. Several questions should be considered at the planning stage. (1) What benefits and services need to be provided to the narcotics farmers for their economic rehabilitation? (2) How long should these be provided? (3) What is the magnitude of the technical and financial resources needed? (4) How will the needed resources be raised? (Obviously, all the burden cannot be shared by AID.)

5.2.3 Greater Attention to Sociocultural Factors

Narcotics cultivation is also related to sociocultural factors and conditions. Hence, greater attention should be given to them in designing narcotics control projects. The following areas should be considered at the project design stage.

Traditional use of the narcotics crop and byproducts in the society. For example, the case study of Turkey shows that the total prohibition of poppy cultivation encountered serious resistance from the farmers because of the widespread and diversified uses of poppy seeds, flowers, and straws by the local populations.

The socioeconomic background of the farmers' growing narcotics crops. It is important to distinguish between the marginal farmers who grow small amounts of narcotics crops primarily for domestic consumption or to raise some cash and the holders who grow such crops for commercial purposes and have close ties with drug traffickers. Different approaches might be needed for dealing with these two categories of farmers.

The sociocultural constraints on farmers' behavior. In some tribal communities, the major decisions about narcotics production

are made not by the individual farmer but by larger social groups. In such cases, group approaches can be more effective.

Cultural and social factors that can be used to influence the behavior of the narcotics crops farmers. Pakistan, for example, is using Islamic injunctions against narcotics for mobilizing public opinion against their use and production.

5.2.4 Flexibility of Project Design

The past experience of area development projects indicates that the blueprint approach to project design is not functional for several reasons. There is usually a paucity of valid, reliable information at the time of project preparation; hence, the design can be faulty. Moreover, some of the premises on which specific project components are based can be erroneous, thus undermining the success of the initiative. Further, projects are implemented in a dynamic environment; a rigid, inflexible design can stifle the initiative and creativity of the management staff. As a result, it is now increasingly recognized that an evolutionary rather than a blueprint approach to project design is more suitable for area development interventions.

AID might consider adopting a flexible approach for narcotics control area development projects by which the management staff enjoys considerable freedom to plan its activities and respond to unexpected events. The program strategy for the area can outline the general framework, identify the types of activities that can be undertaken, and allocate appropriate funds. The details for each activity should be worked out by the management staff in the field. For example, if the staff believes that given the illicit crop eradication efforts carried out by the enforcement agencies, some immediate, short-term activities such as provision for credit, supply of seeds or fertilizers for food crops, or the creation of employment opportunities through community work programs are needed, it should be able to initiate these activities within the general guidelines issued by the AID Mission in the country.

5.2.5 Unit for Community Involvement

The involvement of the local community in narcotics control initiatives in the area can significantly contribute to project success. One of the reasons for the success of the INM-supported Malakand Area Development and Agricultural Outreach Projects in Pakistan has been the direct involvement of community leaders who could exert peer pressure on the poppy-growing farmers.

Each narcotics control development project funded by AID should have a separate unit for mobilizing the rural population against illicit cultivation and trafficking of narcotics. Adequate funds should be provided for this unit, which should be administered by a senior project official. This unit can undertake

several activities. It can educate local populations about the harmful effects of narcotics through mass media campaigns. It also can establish close linkages with the local leaders and officials to win their support for the program. Finally, it should be able to alert authorities to the problems and difficulties faced by the farmers adversely affected by narcotics eradication efforts and suggest suitable, practical solutions.

5.2.6 Public Education Programs

One of the major impediments to narcotics control efforts in several source countries is that neither their elites nor the general population see narcotics cultivation as their problem. Instead, they often regard it as a domestic problem of the United States and other affluent nations and therefore should be solved by them internally.

The case studies presented in this review suggest that significant progress towards narcotics control has been made in only those countries where such perceptions about the narcotics production and trafficking have changed because of a better understanding of the harmful effect within the country of narcotics production and trafficking. The current efforts of AID to increase awareness of the drug abuse problem in several Caribbean and Latin American countries are very timely. This study team believes that such efforts should be strengthened on a long-term, sustained basis. AID should initiate, encourage, and support public education activities not only in the nations that are currently the major producers of narcotics crops but also in the countries that can become potential sources in the future. Such efforts should be targeted to reach a cross-section of the political elites, educators, journalists, religious leaders, and medical practitioners.

AID, in cooperation with other Federal agencies, should be able to systematically document and disseminate information about the adverse effects of narcotics in the source countries. It should stress factors such as the threat to national security; the drain on national budgetary resources and earnings; encouragement of political corruption by drug traffickers; destruction of the social fabric of society; and growth of drug abuse among the young population. AID should appeal to the enlightened selfinterests as well as the international commitments of the existing or potential source nations.

5.2.7 Cooperation With Law Enforcement Agencies

AID is prohibited by law from assisting police and other law enforcement agencies and has been extremely cautious in dealing with them. However, the existing law should not prevent AID field staff and the project personnel from establishing linkages with the local law enforcement agencies and coordinating their efforts with them. The success of one approach depends on the capability and

commitment of the other. Close coordination is also important between AID and INM in Washington and in the field.

5.2.8 Evaluation of Narcotics Projects

Two suggestions can be made. First, in-depth midterm and terminal evaluations of narcotics projects should be undertaken to assess their overall effectiveness and impacts. These evaluations should be comprehensive and be conducted by multidisciplinary teams. Wherever possible, the staff of INM or other specialized agencies should be involved in these evaluations to gain a wider perspective.

Second, because of the difficulties involved in obtaining reliable information on illicit crop production from farmers or other area inhabitants who might have some vested interest in this activity, large-scale sample surveys seem inappropriate for assessing project effects and impacts. More emphasis should be given to other techniques for data collection such as the use of key informants, group meetings, direct observation, and informal surveys. Aerial surveys and inspections can complement information gathered through the above sources. Evaluators should try to get an insider's perspective of the progress made and the problems involved in narcotics control efforts.

APPENDIX A

OPIUM POPPY CULTIVATION CONTROL IN TURKEY

1. INTRODUCTION

The 1985 "International Narcotics Control Strategy Report" states, "All available evidence indicates that the Government of Turkey has successfully eliminated illicit poppy cultivation... The remarkable success of this poppy control program is unique in the world." (U.S. Department of State 1985:217). The effect of this success is that Turkey is no longer a source of illicit opium for the U.S. heroin market.

By promising to provide economic and technical assistance to the Turkish Government, the Agency for International Development (AID) participated in the efforts-leading to the 1971 ban on opium poppy cultivation. This appendix describes the efforts and achievements in Turkey, and presents significant findings from this experience.

2. TURKISH BAN ON OPIUM POPPY CULTIVATION IN 1971

Although opium poppy cultivation in Turkey has been traced as far back as 1900 B.C., it became a major commercial activity only in the present century as a result of the growing demand for morphine, codeine, and other opium derivatives. In the 1950s, 42 of Turkey's 67 provinces were cultivating poppies. Turkey was permitted by United Nations (UN) conventions to produce opium for the licit market.

Turkish opium was universally preferred because of its high morphine content, which ranged from 9 to 14 percent. Beginning in the 1960s, a portion of the opium produced was diverted into illicit channels because of the higher prices paid by the narcotics traffickers who channeled heroin to western markets. This illicit diversion was accomplished by licensed farmers understanding opium gum yields and selling this undeclared amount to the illicit markets. The major trading network for Turkey's illicit opium and its derivatives was controlled by Turkish, French, and U.S. traffickers. About "80% of the illicit heroin entering the U.S. in the mid 1960s came from opium diverted from Turkish products" (GAO Report B-125085, 1974:36).¹

¹This figure has been disputed and may indeed be too high. It is perhaps more accurate to say the Turkish opium supplied 80 percent of the east coast and Midwest heroin markets.

In pursuance of its obligation under the 1961 U.N. Single Convention on Narcotic Drugs and because of intense U.S. pressure, Turkey began reducing the number of provinces in which opium poppy could be grown.

As shown in Table A-1, by 1971 opium poppy cultivation was restricted to only seven provinces of the Western Anatolian Region, including Afyon, Burdur, Isparta, Kutahya, Denizli, and four counties in Konya. Historically, these were major poppy-producing areas in which "40% of the farmers with land grew poppy. The income from poppy production...[formed]...a large part of the total cash earnings of these farmers, and provided them with the working capital and savings" (Cabinet Committee on International Narcotics Control 1972:A2).

Prior to issuing the 1971 ban on all poppy cultivation, the Turkish Government initiated several measures for improving the collection of opium gum. These included "a 66% increase in the price government purchasers paid for the gum, an increase in the number of collection points in the seven poppy-growing provinces, cash payment when the farmers turned in the gum...and the initiation of a vigorous radio and press campaign publicizing these benefits and the penalties for non-compliance" (ibid:A1-A2).

Table A-1. Estimated Turkish Opium Poppy Production, 1967-1971

Source: Cabinet Committee on International Narcotics Control, 1972, p. A4.

The political context leading to the June 1971 ban is significant. Turkish military commanders seized power in March 1971

and established control nationwide. The new Government was anxious to improve Turkish relations with the United States, and perceived a ban on opium poppies as an opportunity to respond to U.S. pressures and concerns. Thus, the Turkish Government took the unpopular step of banning all remaining opium poppy cultivation. In return, Turkey expected to earn U.S. economic and military assistance and goodwill.

Since the Government by law was required to announce cultivation decisions 1 year before implementation, the decree confirmed that four provinces would be allowed to cultivate opium poppies during the 1971-1972 growing season. However, the Government made it clear that a total ban would apply thereafter.

3. AID ASSISTANCE EFFORTS

The United States reacted favorably to Turkey's policy and pledged \$35.7 million in economic assistance to be channeled through AID. Of this total, \$15 million were to compensate Turkey for loss of foreign exchange; \$20.4 million were for development activities; and \$0.3 million were for the control and collection of the last opium poppy crop. Table A-2 details the amounts of assistance pledged, obligated, released, and actually expended on the program.

As indicated in Table A-2, AID pledged \$15 million over 3-4 years to compensate Turkey for the loss of foreign exchange that would have been earned from the sale of licit opium gum to pharmaceutical firms. The Turkish Government decided to use these funds to compensate the farmers who would have grown opium poppy.

The compensation to affected farmers was designed to cover "not only licit sales, but also the value of secondary and tertiary by-products (seeds, edible oils, animal feed, and fuel) of the poppy plant" (Brown 1973:11). The farmers received compensation on the basis of receipts for the delivery of their produce to the State Soil Produce Office in 1971. The Turkish Government paid \$2.2 million and \$5.4 million to opium poppy farmers in 1972 and 1973, respectively.

According to all available accounts, the compensation scheme worked smoothly. Although there were the usual complaints about bureaucratic delays or alleged corruption, such events are unavoidable in such a program. The smooth operation of the scheme is evident from the fact that about 61,000 farmers were paid compensation, whereas only 2,300 eligible farmers did not collect their compensation. Most of the latter cases involved farmers who either did not have receipts for 1971 sales or did not apply for compensation.

Table A-2. Status of AID Ad Hoc Grant to Turkey, 1973 (in millions of U.S. dollars)

AID recognized that compensation was only a temporary solution to the problems faced by poppy-growing farmers. The longterm solution was to begin a program of economic and agricultural development, thereby creating additional employment and income for farmers. Hence, a U.S. Department of Agriculture Mission was sent to Turkey in October 1971 to work with local officials "to assess the potential for improving agricultural output and associated agroindustries and to help outline specific programs and policy recommendations" (Joint Turkish/American Agricultural Mission 1971). In preparation for the arrival of this Mission, Turkish officials prepared two reports: an inventory of the socioeconomic and physical resource characteristics of the region, and an analysis of the importance of the opium trade for the Turkish economy.

The Joint Turkish/American Agricultural Mission completed its study in November 1971 and prepared a report entitled "Improving Farm Income in the Poppy Region." It recommended "a comprehensive program for economic development which covered soil and water practices, marketing services, processing facilities, and institutions and infrastructure required to support a series of agricultural enterprises" (ibid).

The Mission made three major recommendations. First, it estimated that average wheat yields could be increased by more than 50 percent by using improved varieties and agricultural practices. Therefore, it recommended that with increases in

wheat yields some of the land being used for wheat should be used to produce feed grains, oil seeds, and forages for supporting the livestock industry.

Second, the Mission observed that only 6 percent of the cultivated land was irrigated and recommended that irrigation facilities be increased from 153,000 to 584,000 hectares (ha). It stressed that an increase in irrigation facilities would support the production or expansion of several cash crops such as fruits, drybeans, sugarbeets, sunflowers, and lentils.

Third, the Mission recommended that some of the cultivated land should become forests or grazing lands because of its extremely low productive potential for agriculture. For the villages surrounded by this type of land, it recommended "immediate programs which would provide supplemental employment through public works projects, cottage industries or relocation to areas where there are more employment opportunities" (ibid:2).

Some members of the Mission returned in February 1972 to work with the Interministerial Committee appointed by the Government of Turkey. This joint team reviewed the recommendations of the 1971 Mission and selected the following areas designing and implementing an action program for immediate effect.

Irrigation. Small irrigation projects should be supported. The team believed that 36 small surface irrigation facilities and 20 small groundwater projects could be developed in 1972. Other projects should be scheduled for the subsequent years.

Livestock Production. Emphasis should be placed on reducing animal numbers and increasing feed and forage production. The ongoing programs in livestock fattening and poultry production should be used as models for expansion.

Oil Seeds. Sunflower cultivation should be expanded to 4,500 ha, which would significantly enhance the income of the growers. Adaptive research on sunflower and rapeseed should begin immediately.

Marketing in Agroindustry, Fruits, and Vegetables. There should be increased planting of fruit trees and an expansion of vegetable crops. It was also recommended that in areas where marketing facilities and skills were inadequate, farmer market training programs, assembly center surveys and market news services should be undertaken. Studies should also be made on agroindustries.

Wheat, Feed Grain, and Forages. A major effort in wheat production and a minor project in forage crops should be implemented. Efforts should be made to provide high-yielding varieties of

seeds, fertilizers, and pesticides, sufficient credit, and improved extension services. Research on water conservation and improved cultural practices should be encouraged.

Villages With No Viable Alternative Crops. Such villages should be identified and alternative employment programs be developed.

The Turkish Interministerial Committee examined each proposal individually. The projects found suitable were later sent to the AID narcotics officer for sanctioning of the necessary funds.

The implementation record of the crop and income replacement development activities was slow. This is evident from Table A-3, which shows that only \$5.3 million were transferred to the Turkish Government, of which only \$3.2 million were spent by 1974, when the opium poppy ban was revoked and AID suspended its assistance.

A General Accounting Office (GAO) report described the implementation of income-generation projects as "slow," citing that "Two basic reasons are given for the slow progress of the agricultural program. First, a good management system for selecting, evaluating, approving and administering projects is still being developed; second, Turkey has recently undergone several changes in leadership." (GAO, Report B-125085, 1974:39-42).

Little is known about the fate of these development projects, although the G-0 report did refer to the progress of two small irrigation and sunflower and forage planting projects, and knowledgeable U.S. officials indicate that many of the proposed development projects did materialize despite the suspension of the AID funds. It is quite possible that these projects were planned, proposed, and funded by the various Government departments.

4. ENFORCEMENT OF THE OPIUM POPPY BAN

From 1972 to 1974, Turkey successfully enforced the ban on opium poppy cultivation. There is no evidence that Turkish opium was available to drug traffickers during the enforcement period, except that obtained from reserves.

Several factors contributed to the successful enforcement of the ban. First, the country was under a military regime dedicated to imposing national discipline. Civil liberties were drastically curtailed and both the poppy farmers and the traffickers were reluctant to violate Government regulations.

Table A-3 Crop and Income Replacement Projects Funded by the U.S. Grant, 1972-1974 (in U.S. dollars)

Second, the enforcement responsibilities rested with the Jandarma, a paramilitary force responsible for maintaining internal security. The Jandarma were not averse to using strong-arm tactics in dealing with offenders. The effectiveness of the Turkish court system was never tested because farmers complied with the ban.

Third, Turkey possessed a well-entrenched civil bureaucracy that was effective at the local level. The Turkish Parliament had enacted a licensing law in 1971 that strengthened the Government's authority over the cultivation and sale of poppy by providing an improved basis for licensing, controlling, and collecting the final crop and imposing stiffer penalties on those who failed to comply. Licenses were issued only to those farmers who completed the required applications and provided information about the location of their farms, the number of hectares planted and the amount of opium to be produced. Careful verification of this information significantly reduced the possibility of farmers' understating their yields.

The cumulative effect of these three interrelated factors was the effective enforcement of the ban.

5. REVOCATION OF THE BAN

Despite its obvious success, the Turkish Government lifted the ban in July 1974 for several reasons. The ban was unpopular with the opium poppy farmers, who suffered in several ways and did not significantly benefit from the situation because of the slow progress of the development projects. Poppy-derived products were widely used by farmers for food, vegetable oil, animal feed, and even fuel. Thus, the ban deprived them not only of their cash income, but also of some highly valued byproducts.

Some farmers regarded the compensation as inadequate and were doubtful that they would continue to receive it. Moreover, traditional opium poppy farmers who had not grown any poppies in 1971-1972 or who had not sold any opium gum to the Government were ineligible for compensation. Of more importance, there was a significant difference between the prices of opium in legal and in illicit markets. For those farmers accustomed to selling some of their opium gum illicitly, the compensation formula did not cover their losses. Finally, the oil processors who earned their livelihood by crushing poppy seeds suffered most from the ban. They were not compensated in any way and thus became resentful and embittered.

The election in late 1973 enabled the affected farmers to articulate their grievances and mobilize support for the abolition of the total ban. The political parties, irrespective of their ideological orientations, exploited the issue and promised to resolve it. As a GAO report states:

The ban issue eventually became one of the main themes of political candidates, particularly those on the local level vying for the votes of Turkish farmers in the 1973 election. Before his election victory as Prime Minister, Bulent Ecevit promised to review the ban; but he made no promise to lift it.

After the election, pressure for rescinding the ban increased" (GAO, Report B-173123, 1974:1).

Furthermore, the Government believed it was making a huge sacrifice for the United States without receiving reciprocal benefits. When the ban was introduced, it was expected that the United States would provide massive development aid for the seven provinces. Turkish officials estimated that \$400 million were needed for transforming the "poppy-growing region into modern, profitable agricultural/livestock areas." The United States, on

the other hand, viewed the development effort as primarily a Turkish responsibility; it was willing to provide some financial aid but did not want to fund the entire development program. Little attempt was made to scale down the proposed Turkish development program or to narrow the differences between the two governments. As Brown observed, "...what the Turks wanted was still a far cry from the \$35 million pledged in 1971, and the mistrust generated by this gap grew as time went by" (Brown 1974:13).

Turkish officials were also embittered because the United States was encouraging India to increase its opium production to meet the world shortage of opium for pharmaceutical purposes. Thus, they believed that India and other opium producing countries were benefiting at their expense.

There was also a major psychological factor that is often overlooked: the opium poppy ban came to be associated with the military regime. The civilian Government did not feel any "obligation to maintain the ban since the ban was imposed by a military-backed government and not a democratically-elected government" (GAO, Report B-173123, 1974:1). Lifting the ban, therefore, was perceived as undoing a past wrong.

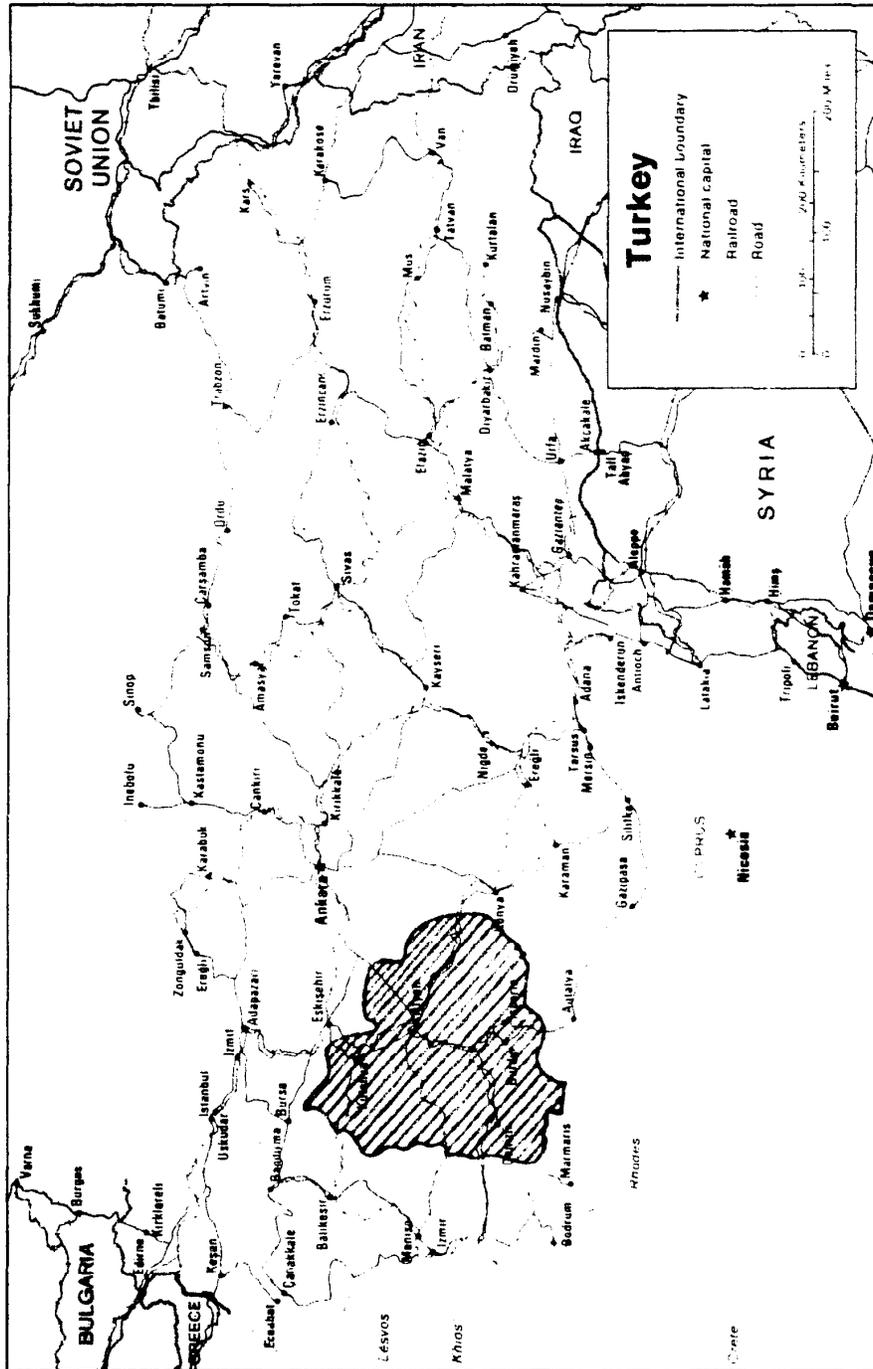
In place of a total ban, the Government introduced poppy straw cultivation in 1975. Under this system, which still operates today, the farmers are allowed to grow opium poppy (see map), but are obliged to sell the straw to the Government. Thus, they cannot produce opium gum for illicit markets. All the growers are licensed and the cultivation of more than a licensed amount of land can result in punishment, including the loss of the license and even a jail term. The Government collects the poppy straw, stores it in warehouses, and extracts the morphine concentrate through an industrial chemical process. Recently, Turkey established a sophisticated plant at Bolvadin where poppy is processed into concentrate for pharmaceutical purposes.

6. PRESENT SITUATION

The lifting of the ban caused much bitterness and frustration in the United States. It was believed that Turkey had not kept its commitment. AID, therefore, suspended all narcotics-related assistance. There was widespread concern that Turkey would again become a major source country for illicit opium derivatives and that the gains made during the previous 3 years would be lost.

All evidence indicates that these apprehensions were unfounded. Turkey has succeeded in controlling the illicit production of opium by maintaining an environment of strict enforce-

The Licit Opium Poppy Cultivation Area in Turkey, 1985



Base 505579 (A07470) 4 80

Note: Shaded area corresponds to area of illicit cultivation in the early 1970s; cultivation was banned from 1972-1974. In 1975, the ban was revoked, and the area has since reverted to controlled licit production.

Source: U.S. Department of State, Bureau of International Narcotics Matters, 1985.

ment. "The rigorous controls on poppy cultivation and opium gum production instituted in 1975 continue to be effective" (U.S. Department of State 1985:217).

The Jandarma monitors opium production to ensure that only licensed amounts are cultivated. The Turkish National Police operates against narcotic traffic throughout Turkey and has 1,300 specialized narcotics investigators (U.S. Congress, House Select Committee on Narcotics Abuse and Control, 1984:1790). Both the Jandarma and the police have received extensive U.S. assistance in training, equipment, and even direct grants. In 1980, the United States "contributed about \$800,000 to the TNP and Jandarma for narcotics control efforts and each year since then about \$1 million. Indeed, U.S. assistance is credited with helping Turkish authorities seize significant quantities of illicit narcotics destined for Western Europe and North America" (ibid:179).

Although Turkey is no longer a source country of illicit opium, it remains a transit country for illicit narcotics flowing from the East; however, there are no estimates of the quantities of morphine base and heroin that pass through Turkey each year.

7. TENTATIVE FINDINGS

The case of Turkey undoubtedly proves that the control of illicit cultivation of opium poppy is possible. More importantly, it helps us to identify a set of conditions that have contributed to the success of national control efforts.

7.1 Regional Integration Within the National Mainstream

A precondition for success is the integration of the opium poppy-growing regions into the national mainstream. In Turkey, these areas are culturally, ethnically, economically, and politically fully integrated. The Government not only has a visible presence, but also enjoys political and cultural legitimacy. This situation contrasts sharply with conditions existing in other opium poppy-growing countries such as Burma, Pakistan, and Thailand, where national minorities involved in the cultivation of opium poppy and its derivatives live in isolated regions and have varying degrees of political and economic autonomy. In the latter cases, governmental intervention may be perceived by local groups as political and economic interference.

7.2 The Presence of Effective Administrative and Enforcement Agencies at the Local Level

It is important that effective administrative machinery exist at the local level. Turkey has a long tradition of civilian bureaucracy capable of assuming administrative and developmental functions. It was the presence of this bureaucracy that made it possible for the Government to keep records on poppy farmers, areas cultivated, and yields, thus reducing the possibility of opium leakage to illicit markets. Moreover, the presence of the Jandarma, who monitor poppy farmers and apprehend offenders, is widely "felt" in poppy-growing areas. Thus, the belief persists that the offending farmers are likely to be apprehended and their licenses revoked. The regulations for opium poppy cultivation are taken seriously by the local inhabitants.

7.3 The Minor Economic Importance of Opium in the Local Economy

Another precondition for success is that opium poppy constitute only a minor part of the country's total agricultural production and be grown on only a small portion of each farmer's total acreage--around 0.5 ha of an average holding of 5 ha (Bro 1974:5). Thus, control efforts do not affect the majority of the farming population. Even the poppy farmers themselves are not significantly affected, as they can sell their produce to the Government at a higher price than they received before the initiation of controls. Hence, the government does not encounter organized opposition to the continuation of controls.

7.4 The Government's Recognition of the Desirability for Cultivation Control

A national consensus for continued strict enforcement of controls on opium poppy cultivation is a factor contributing to success. Under this scenario, current control measures are not a matter of public controversy, and the political and economic elites realize that it is in the national interest to restrict the production and trafficking of illicit opium.

7.5 A Total Ban on Opium Poppy Cultivation in a Traditional Opium-Grown Society Is Difficult for an Elected Government To Sustain

The Turkish experience also illustrates the limitations placed on a popularly elected government regarding intervention in private affairs. It was not a coincidence that the total ban was introduced by a nonparty military Government and was later revoked because of public pressure on the popularly elected Government.

One problem with a total ban on poppy cultivation is that it can impose sacrifices on those segments of the population who cannot appreciate the rationale for it. Turkish farmers who earned significant income from poppy production did not understand why they should forego this income for the sake of U.S. addicts, who would still procure heroin from any available source. There was little empathy among the farmers for the domestic problems of the United States. The problem was further compounded because the growers were not fully convinced of the harmful effects of opium in their own society.

Politicians in a pluralist system are bound to remain sensitive to the real or perceived grievances of the poppy farmers affected by a total ban. To the extent that control of illicit poppy cultivation does not involve as much economic hardship as does total prohibition, the former is more likely to be agreeable to the political parties.

A caveat is perhaps necessary at this stage. In cases in which the percentage of poppy farmers is small relative to the total population and they are widely scattered, these farmers are likely to have relatively little influence on political decisionmaking. One reason why Turkey succeeded earlier in reducing the number of provinces in which poppy could be grown was that the proportion of farmers cultivating poppy was relatively small in each instance. Often they were marginal farmers who grew poppy along with other agricultural crops or on land which had little alternative agricultural potential.

7.6 The Limitations of Crop Substitution and the Difficulty of Providing Alternative Sources of Income Within a Limited Time Frame

The case of Turkey illustrates the limitations of the crop substitution strategy. The Joint U.S./Turkish Agricultural Mission soon realized that in many opium poppy-growing areas, no agricultural crops could be grown. Moreover, in most cases, other crops were not as lucrative as poppy. Even when cash crops

of equal value to farmers could be identified, there remained the problem of providing farmers with the necessary inputs such as seeds, fertilizers and pesticides, credit, extension advice, access to roads, and transport and marketing services. The Mission, therefore, recommended general programs of agricultural and economic development that would create additional sources of income and employment, rather than focusing on crop substitution measures alone.

The case of Turkey also shows that even when specific development schemes for opium poppy-growing areas are designed, approved, and funded by the host government or by AID, it is difficult to implement them immediately. Certainly the Turkish Government could impose a total cultivation ban more readily than it could provide alternative income opportunities. The pace of project implementation was slow in Turkey; it is doubtful if another country would have fared better.

7.7 The Source Countries for Illicit Opium and its Derivatives Destined for Overseas Markets Can Change Rapidly and Be Replaced by New Source Countries

The experience in Turkey demonstrates that the overall effects of the opium poppy ban and subsequent control measures on the supply of illicit opium derivatives destined for the U.S. market was at best temporary. Mexico soon replaced Turkey as the main supplier, thus depriving the United States of a tangible long-term reduction in supply from Turkish efforts. As the Select Committee Report observes:

From mid 1972 through all of 1973, there was a dramatic decrease in the availability of Turkish white heroin in the U.S. By late 1973, supplies of Mexico brown heroin spread thinly over the entire U.S. in an effort to fill the vacuum...criminal organizations in Mexico scrambled widely to increase illicit opium production and heroin manufactured for smuggling to the U.S. to take advantage of the shortage that had developed following the demise of the French Connection. The supplies of Mexican brown heroin progressively increased in 1974 through 1976 (U.S. Congress, House Select Committee on Narcotics Abuse and Control, 1984:8).

Interestingly, when the Joint U.S.-Mexico efforts succeeded in curbing the trafficking of heroin from Mexico, Southeast and Southwest Asia filled the vacuum. These experiences further indicate the need for (1) international cooperation in narcotics control and trafficking and (2) for consumer countries to work together if a greater reduction of narcotics supply is to be made.

APPENDIX B

OPIUM POPPY CULTIVATION CONTROL IN PAKISTAN

1. INTRODUCTION

Unlike Turkey, the cultivation of opium poppy as a major crop is of recent origin in Pakistan. Prior to its emergence as a separate nation in 1947, the geographical area presently known as Pakistan depended on the opium supplied by the Government Opium Monoply off British India in Gazipur (U.S. Congress, House Select Committee on Narcotics Abuse and Control, 1984:153). After 1947, Pakistan established its own monopoly to license and purchase opium, and imported an average of 168 metric tons (t) production did not exceed 10 t per year until the mid-1950s. The supply of Indian opium was curtailed in 1955 as a result of India's ratification of the 1953 Opium Protocol, which prohibited international sale for quasi-medical purposes.

After partition and the curtailment of Indian imports, Pakistan's domestic opium production failed to meet the demand of the opium processing plant in Lahore and off licensed opium vendors. In response, licensed farmers cultivated more land than they were legally allowed to, and many unlicensed farmers became involved. Unlicensed farmers living in the Federally Administered Tribal Areas (FATAs) also increased production. The resulting increase in domestic opium production was partly consumed in Pakistan and partly exported to Iran and Afghanistan to supply addicts in those countries. The successful efforts beginning in 1971-1972 to control illicit opium production in Turkey generated additional demand for opium produced in Pakistan. Finally, the Soviet Union's occupation of Afghanistan in 1979 cause much of the opium produced in Afghanistan to flow into Pakistan for further distribution and processing.

The cumulative effect of these developments spanning 20 years was that by the late 1970s, Pakistan (which used to import opium for domestic consumption) became a net exporter and "a primary source of opium for the heroin entering western markets" (U.S. Department of State 1985:138). Furthermore, beginning in the late 1970s, heroin processing labs were set up in Pakistan near the Afghanistan border to facilitate trafficking efforts to directly supply western markets.

In response to high price levels in spring of 1978, pakistan's opium poppy growers produced a record crop derange the 1978-1979 growing season, estimated at 80 t and involving more than 34,000 hectares (ha). The combined impact of lower prices, unfavorable weather conditions, and more effective enforcement

measures in settled and selected merged areas, reduced the 1979-1980 crop to an estimated 100 t. As a result of continued low prices and the effect of development projects linked to enforcement, the estimated 1982/1983 planted area fell to 3,000 ha, which was sufficient to produce 75 t. The total production in 1985 was between 40 and 70 t according to the most recent information gathered by INM (U.S. Department of State 1985:261).

By the 1980s Pakistan had become a net importer of opium and heroin. Because of falling domestic poppy cultivation and increasing drug abuse, domestic production no longer meets the domestic demand. Smuggled raw opium from Afghanistan exceeds domestic production. At present, the problems related to trafficking and smuggling have been a greater concern to officials than has been cultivation.

2. THE GOVERNMENT OF PAKISTAN'S BAN ON OPIUM POPPY CULTIVATION

The Government of Pakistan ratified the 1953 Opium Protocol and the 1961 Single Convention on Narcotic Drugs. In 1973, it also established the Pakistan Narcotics Control Board (PNCB) to coordinate, supervise, and execute Government policy on narcotic matters. The PNCB has not established an effective record of promoting Government narcotics control policy. It has been described as weak and has paid little attention to provincial level government problems.

In 1979, the Government of Pakistan promulgated the Prohibition (Enforcement of Hadd) Order, which brought the drug laws of the country into conformity with the injunctions of Islam. This move facilitated prosecution of drug users and traffickers. In pursuance of the Enforcement of Hadd, the Government also introduced a ban on the cultivation of poppy throughout the country and took steps to enforce it in a phased manner.

The Pakistani Government has increasingly shown that it is committed to curbing opium production and trafficking. There are at least three important factors that seem to have affected the government's policies and behavior. First, the country has had an opium addiction problem for some time and more recently has begun to face a more serious drug abuse problem. There is evidence that the use of heroin is becoming fashionable among many segments of the population. "The heroin addicts alone are counted at more than 100,000...and the main victims of drug abuse are the youth of Pakistan falling in the age group of 15-30 years" (Government of Pakistan 1984:10). The drug addicts are often the children of the political and economic elites, a fact which has generated concern among influential elements in the Government. Drug abuse is less of a problem in the Northwest Frontier Province (NWFP), where poppy is grown (see map). There

is also apprehension among military officials that drug addiction may spread to the military ranks.

Second, the Government is vigorously promoting Islamization, with its strong injunction against intoxication. The institutionalization of Islamic ideology has generated an awareness off the harmful effects off narcotics and has created pressures on Government officials to strictly enforce national policies.

Third, beginning in the early 1980s, U.S. efforts in Pakistan seem to be having some visible impact on national policies and programs. Recently, the United States took the lead in promotion international donor agency cooperation on narcotics control through the Pakistan Aid Consortium.

As a result of these three factors, narcotics control is perceived by the Pakistani Government as a serious domestic problem.

3. AID NARCOTICS CONTROL STRATEGY

The political climate in Pakistan was not favorable to AID narcotics control policy in 1981-1982. With the exception of the leverage acquired through the \$3.2 billion military and economic assistance package in 1981, AID's subsequent actions were undertaken without the whole-hearted support of the Government of Pakistan. The following 2 years witnessed the evolution of a more supportive policy environment, with Pakistan's realization of the extent of the domestic drug problem.

Since 1981, AID has followed a narcotics control strategy comprising two components: (1) denying the benefits of AID projects to poppy-growing farmers and village communities; and (2) assisting the farmers and communities affected by narcotics control efforts by initiating programs of agricultural and rural area development.

3.1 Denial of Benefits--The Opium Poppy Clauses

One obvious problem with development activities in rural areas is that they can benefit poppy and non-poppy farmers equally and can, unless accompanied by enforcement, have the unintended effect of benefiting poppy farmers. Roads constructed in remote areas can be used to market opium and heroin; programs to provide production inputs and construct irrigation canals can improve existing poppy yields and open new areas up for poppy cultivation.

Major Illicit Opium Poppy Cultivation Areas in Northwestern Pakistan, 1982



Source: U.S. Department of State, Bureau of International Narcotics Matters, 1982.

AID has tried to address this problem by inserting "poppy clauses" in its project agreements. As "currently structured, poppy clauses deny project benefits to areas in which poppy is grown, and provide for the termination of activities (and possible government of Pakistan reimbursement of AID funds) if poppy cultivation begins in areas which are receiving...AID assistance" (USAID, Recommendations for a Revised Narcotics Strategy for USAID/Pakistan, 1982:23). The majority of AID projects that have a poppy clause are in Pakistan.

In addition to denying project benefits, this clause component of the AID narcotics control strategy has two other implicit objectives: (1) to encourage local government authorities or village communities to exert pressure on poppy cultivators to cease production so that they can be eligible to receive AID assistance and (2) to strengthen the will of the Government of Pakistan to maintain its ban on poppy cultivation for the duration of the project.

A study team sent by AID to Pakistan has expressed doubts about the overall effects of poppy clauses.

Our assessment...indicates that the special provision placed on AID projects will not have a significant impact on poppy cultivation. If the problem centers on areas which produce opium for the lack of other alternatives or lack of sufficient government presence to allow enforcement, then the denial of the AID funded benefits to those areas will not constitute a solution. (Emphasis in the original) (ibid).

A general limitation of the poppy clause provision should be noted. Once a project is completed, the Pakistani Government is under no obligation to deny the use of project-funded roads, canals, institutional facilities, or equipment to poppy-growing farmers and communities. The poppy clauses have validity only during the life of the project, although it is possible that if poppies are found growing again in the completed project site, AID may exert pressure on the Pakistani officials to comply with the spirit of the clause.

Despite its obvious limitations, the value of this special provision should not be underestimated. Poppy clauses demonstrate the commitment of AID to the problem of narcotics cultivation control and provide leverage in dealing with the Government of Pakistan. Moreover, although it has not been documented, the denial of benefits could provide an incentive to village and community leaders to eradicate poppy cultivation so that they too could benefit from development projects.

Table B-1 lists the AID projects in Pakistan that have poppy clauses. As of March 1985, total AID expenditure including both

loans and grants for poppy clause projects amounted to \$174.9 million.

To interpret Table B-1, it is useful to define the terms "relevant," "indirectly relevant," and "none" in terms of AID narcotics control efforts. For the purpose of this report, relevant projects are those intended to reduce poppy cultivation within the project area. Sites are selected to include poppygrowing areas, and the poppy clause ensures Government eradication action if necessary. Projects or project components are considered indirectly relevant if (1) there is a chance that future AID activities may be undertaken in poppy-producing areas, thus potentially enhancing poppy cultivation, or (2) there is a chance that planned research will yield information that could potentially enhance future income replacement efforts in poppygrowing areas. Finally, those projects or project components that are not relevant involve national-level activities whose impact is so remote that it is not practical to consider them relevant from an analytical standpoint.

3.2 AID Development Assistance Efforts in Poppy-Growing Areas

The second and more important element of the AID narcotics control strategy in Pakistan is its direct contribution to the socioeconomic development of areas where the poppy ban can be enforced. In Pakistan, poppy is cultivated only in the Northwest Frontier Province (NWFP) which is of strategic importance to the Government of Pakistan because of its location on the borders of Afghanistan and the Soviet Union.

AID has initiated two development projects in the NWFP, which have direct implications for poppy crop control. The first, the Tribal Areas Development Project (TADP), is essentially a pilot project. Although little poppy is currently grown in the areas covered by the project, TADP is expected to provide useful experience and insight to AID and the Pakistani Government for undertaking similar work in other poppy-growing tribal areas. The second project, recently renamed the Northwest Frontier Area Development Project (NWFADP), involves a comprehensive program of agricultural and livestock development, infrastructure building, and vocational training, with the aim of providing alternative sources of income and employment for rural inhabitants affected by the ban.

As of March 1984, total expenditure for these two projects came to \$2.6 million, or about 7 percent of the AID portfolio for Pakistan.

Table B-1. AID Projects in Pakistan That Have an Opium Poppy Clause

| Project Name Project Number Duration | Total AID Obligations as of 3/85 ^a | Project Purpose | Project Components | Relevance of Component to USAID Narcotics Control Efforts |
|--|---|--|---|---|
| Agricultural Research 391-0296 FY 1982-1985 | 11.2 | Develop agricultural research capability to remove production bottlenecks | <ol style="list-style-type: none"> 1) Strengthen National Agricultural Research Council 2) Construct and furnish National Agricultural Research Center 3) Strengthen research program | 1-3) None; national-level activities |
| On-Farm Water Management, Phase II 391-0413 FY 1982-1987 | 18.4 | Establish public and private sector capability to plan and deliver water management services | <ol style="list-style-type: none"> 1) Reimburse GOP for water course improvements made during Phase I 2) Strengthen institutions responsible for the design and construction of water works 3) Initiate a pilot program for all project areas under which approximately 80 water courses will be improved | <ol style="list-style-type: none"> 1-2) None; national-level activities 3) Indirectly relevant--poppies are generally not grown in the areas; no civil works will be undertaken in areas where poppy cultivation is sighted |
| Agricultural Commodities and Equipment 391-0468 FY 1982-1987 | 10.0 | Stimulate growth in the agriculture sector through the commodity import program | <ol style="list-style-type: none"> 1) Provide agricultural inputs 2) Provide agricultural machinery and commodities for use on or near the farm (i.e., light machinery, tools, rice mills) 3) Provide agricultural equipment and infrastructure to public or semipublic bodies that provide services to the agriculture sector (i.e., heavy machinery for canal and road construction) | <ol style="list-style-type: none"> 1) Indirectly relevant--once inputs enter the distribution system, control over final destination is limited; however, poppy cultivation is not a heavy user of chemical fertilizers or pesticides 2) Indirectly relevant--once inputs enter the distribution system control over final destination is limited; however, poppy cultivation is not mechanized 3) Indirectly relevant--poppies are not grown on the lands serviced by the canal irrigation system; however, public infrastructure will not be provided to regions where poppies are grown |

Table B-1. AID Projects in Pakistan That Have an Opium Poppy Clause (cont.)

| Project Name Project Number Duration | Total AID Obligations as of 3/85 ^a | Project Purpose | Project Components | Relevance of Component to USAID Narcotics Control Efforts |
|--|---|--|--|--|
| Tribal Areas Development 391-0471 FY 1982-1987 | 13.0 | Strengthen public institution capability to implement development programs in Tribal Areas; construct basic infrastructure to support continued development | <ol style="list-style-type: none"> 1) Support water resource development 2) Support road construction 3) Provide a fund to support a flexible response in financing a wide range of small, self-help projects | 1-3) Relevant--no activities will be undertaken in principal poppy growing areas; project will help USAID learn how to work with tribal leadership to combine development with enforcement; areas are carefully selected to ensure their inclusion within the GDP Special Development Plan |
| Irrigation Systems Management 391-0467 FY 1983-1989 | 49.9 | Increase the capabilities of institutions involved in irrigation planning, design, research, operation and maintenance; effect policy changes needed for proper management | <ol style="list-style-type: none"> 1) Rehabilitate existing canals 2) Improve institutions that manage and provide technical skills 3) Provide planning, research, technical and training assistance 4) Undertake feasibility studies and pilot project for Command Water Management | 1-4) None; poppies are not grown on the lands serviced by the Indus River Irrigation System |
| Rural Electrification 391-0473 FY 1983-1989 | 37.0 | Expand electrical service to rural areas; improve rural area access to that service; overcome a shortfall in electrical generating capacity | <ol style="list-style-type: none"> 1) Provide institutional support 2) Provide training 3) Provide distribution system energy loss reduction program 4) Strengthen main power generation network 5) Expand rural distribution system | <ol style="list-style-type: none"> 1) None; national-level activities 5) Indirectly relevant; sites selected for provision of lines and services will exclude those areas where poppies are grown |
| Energy Planning and Development 391-0478 FY 1983-1985 | 18.0 | Formulate and implement programs to assess, develop, and use indigenous energy resources; and increase efficiency of energy use | <ol style="list-style-type: none"> 1) Assist in national energy planning and manpower development 2) Provide technical assistance, training and commodities to develop coal reserves 3) Develop an energy conservation program, and assess and develop renewable energy technologies | 1-3) None; national-level activities |

Table B-1. AID Projects in Pakistan That Have an Opium Poppy Clause (cont.)

| Project Name Project Number Duration | Total AID Obligations as of 3/85 ^a | Project Purpose | Project Components | Relevance of Component to USAID Narcotics Control Efforts |
|---|---|---|--|--|
| Forestry Planning and Development 391-0481 FY 1983-1989 | 10.0 | Strengthen institutional capability at all levels to design, implement, and evaluate policies and programs to increase fuel wood and timber production; demonstrate the feasibility of producing tree crops on privately owned lands | <ol style="list-style-type: none"> 1) Assist with institutional and manpower development 2) Develop a long-range farm and energy forestry research program 3) Assist in the design and implementation of activities to expand farm and energy tree crop management | <ol style="list-style-type: none"> 1-2) None, national-level activities 3) Indirectly relevant--sites selected for field activities will exclude poppy-growing areas; this project can indirectly support the NWF Area Development Project (391-0485), because it will provide information on legitimate income-generating activities |
| Northwest Frontier (NWF) Area Development (formerly known as Gadoon-Amazai Area) 391-0485 FY 1983-1989 | 12.0 | Change area economy from one based primarily on poppy cultivation to a diversified agricultural and non-agricultural system with strong ties to national economy to facilitate Government enforcement efforts toward poppy cultivation and narcotics production | <p>Phase I: Provide Immediate Benefits</p> <ol style="list-style-type: none"> 1) Develop local council schemes 2) Construct one major road 3) Provide agricultural field activities focusing on field trials and provision of seeds for winter wheat <p>Phase II: Expansion of Phase I</p> <ol style="list-style-type: none"> 4) Provide physical infrastructure; roads, water and electricity 5) Develop dryland agriculture, watershed management, irrigation and agricultural marketing 6) Develop off-farm employment training and basic education and school construction | <ol style="list-style-type: none"> 1-6) Relevant--the project is located in a known major, poppy-producing area; this integrated rural development project, if successful, can serve as a model for the coordination of development and enforcement programs, which could be replicated in other areas as part of the GOP's Special Development Program for Opium Poppy Growing Areas |
| Baluchistan Area Development 391-0479 FY 1984-1989 | 11.1 | Accelerate integration of Makran Division into socioeconomic mainstream of country by providing improved infrastructure and strengthened government institutions | <ol style="list-style-type: none"> 1) Provide road construction, upgrading and maintenance 2) Provide water sector improvements 3) Improve planning, management and human resources of local government agencies | <ol style="list-style-type: none"> 1-3) None; the region is not known as a poppy production region |

Table B-1. AID Projects in Pakistan That Have an Opium Poppy Clause (cont.)

| Project Name Project Number Duration | Total AID Obligations as of 3/85 ^a | Project Purpose | Project Components | Relevance of Component to USAID Narcotics Control Efforts |
|---|---|---|--|--|
| Energy Commodities and Equipment 391-0486 FY 1984-1989 | 10.0 | Use the commodity import program to contribute to energy production from indigenous resources and to energy conservation to support the Government's Sixth 5-Year Energy Plan | Imported commodities will fall into the following categories: 1) Energy conservation and fuel industries 2) Electrical power for all sectors 3) Coal mining and processing 4) Renewable energy 5) Oil and gas operation and development | 1-5) None; national-level activities |
| Management of Agricultural Research and Technology 391-0489 FY 1984-1989 | 10.0 | Strengthen performance of national agricultural research system to generate and disseminate relevant agricultural technology to farmers; continue of the Agricultural Research Project (391-0296) | 1) Strengthen research management and administration especially at the provincial level 2) Improve information transfer 3) Improve training for the Agricultural Research Network 4) Conduct arid zone research | 1-3) Indirectly relevant--however, research directed toward increasing wheat and maize productivity, improving farming systems and new technology can indirectly support the MWF Area Development Project (391-0485), because it will provide information on legitimate income-generating activities |
| Rural Roads N/A FY 1985-1989 | N/A | PID was approved; PP is expected by 8/85; likely that a poppy clause will be incorporated | Not Available | Unknown |

^aTotal obligations include both loan and grant assistance and are expressed in US\$ millions.

Source: Project Assistance and Activities, March 1985, Office of Financial Management, AID, Washington.

3.2.1 The Tribal Areas Development Project

TADP, which was initiated in 1982, incorporated several subprojects for implementation in Federally Administered Tribal Areas (FATAs). The FATAs encompass nearly two million people scattered in isolated villages across 10,000 square miles of generally arid valleys and mountains. Tribal families depend heavily on subsistence agriculture, livestock, and remittances from family members employed in other parts of the country and throughout the Middle East. Basic health and education services and public roads and irrigation works remain well below national standards. The tribes have negotiated special treaty obligations with the Central Government that give them considerable internal autonomy. There are seven federally administered areas known as Tribal Agencies in Pakistan, all of which are located in the NWFP.²

The goal of TADP is to accelerate the integration of the Tribal Areas into the socioeconomic mainstream of Pakistan and improve the quality of life for tribal inhabitants. The purpose of the project is (1) to strengthen the capability of Government institutions to implement development programs in the Tribal Areas and (2) to construct basic infrastructure (roads and irrigation works) to support the continued development of the region (USAID, PP, Project No. 391-0471, 1982:1).

TADP has three major components: (1) water resource development, which includes rehabilitation and extension of an irrigation scheme at Bara; provision of groundwater investigations and increased tubewell efficiency; and construction of small-scale

²Some background on the various political subdivisions within the NWFP is needed. "Settled" areas are those that were under direct British administration before Independence, and are now under direct administrative and political jurisdiction of the Government of Pakistan. "Merged" areas are those which were ruled by traditional tribal leaders during the British colonial period. After Independence, the Government of Pakistan concluded agreements with these rulers, whereby their territories were placed under Central Government control. Some federal laws still are not being applied in parts of merged areas. "Tribal" areas are those over which the British did not exercise any authority and that are now known as the FATAs and Provincially Administered Tribal Areas (PATAs). The Government of Pakistan has concluded agreements that give considerable autonomy for local affairs to these tribal areas. In general, a decreasing administrative presence and ability to enforce Central Government law occurs as one moves from PATA to FATA lands.

irrigation systems; (2) construction of about 125 kilometers of new gravel roads; and (3) a Supplementary Development Fund designed to finance self-help development projects such as construction of schools, health facilities, meat cooling plants, flood control structures, and irrigation ditches.

USAID/Islamabad recommended an Economic Support Fund grant of \$15 million for TADP to be used from 1982 to 1987. As of March 1985, \$13 million was obligated and actual expenditures amounted to \$.9 million.

TADP is relevant to AID narcotics control efforts for two reasons. First, it "is a development project ... in an area in which some poppies are grown and it will eliminate this production in the areas of the project focus". Second, it is expected that the project will indicate "potential directions for future poppy control activities" in the Tribal Areas of the NWFP (ibid:83). Project designers excluded from TADP target areas those Tribal Agencies that are the major producers of opium poppy, because they recognized the Government's inability to enforce the poppy ban in those agencies. Thus, no project activities were planned for Bajaur and Mohmand Agencies.

Since its inception, TADP has encountered various administrative and bureaucratic delays. However, it has made progress, and some of its subprojects have moved from the identification into the construction phase.

Poppy eradication occurred with one of the subprojects, the Bara Irrigation Scheme in Khyber Agency. This scheme, which involves construction and rehabilitation of canals and embankments, was selected because the area is relatively accessible and the Government had already prepared development plans for it. Furthermore, key officials verified that poppy was not a main cash crop and that the local demand for development assistance was strong. After approval of the scheme, construction work was delayed because of cumbersome Government administrative procedures. When the subproject was finally cleared in April 1984, poppy was discovered at the site and AID project authorities insisted on its eradication. The Government sent officials to meet with the poppy farmers and local leaders. After considerable negotiations and a verbal assurance that the costs of inputs would be reimbursed to the farmers, all poppy was destroyed and construction work began. Construction was stopped in the spring of 1985, although it is not known if this new delay had anything to do with the narcotics eradication issue.

Two other TADP subprojects that can improve Central Government presence in these isolated areas are the construction of roads and provision of social facilities. Construction is proceeding on the Sadd-Margham Road and additional road sites are being identified.

The project has also reached the point of

identifying other subprojects for school buildings and drinking water facilities in Kurran and Khyber Agencies. Several subprojects also have been identified in South Waziristan Agency.

3.2.2 The Northwest Frontier Area Development Project

NWFADP is the first AID-funded project in Pakistan that provides for a wide range of development activities in a major poppy-producing area. Whereas TADP was designed as a pilot project, NWFADP is an area development project that is attempting to diversify the local economy. The project began in 1983.

Given its physical resource and population endowments, the site is an unlikely candidate for a project were it not a poppy-growing area. "It presents a stark picture of steep, barren hillsides, with narrow, rock-walled terraces clinging to the slopes which surround scattered, densely-packed villages" (USAID, PP, Project No. 391-0485, 1983:18). Best available estimates indicate a total population in the project area of 116,000 and a cultivated area of 12,146 ha. The low cultivated land:person ratio of 0.11 ha indicates an acute shortage of agricultural land (ibid:19).

Dryland agriculture remains the mainstay of the local economy, with remittances from family members working outside the project area providing the second major source of income. The year is divided into two cropping seasons: the rabi (winter) and kharif (summer) seasons. The major rabi crops are poppy, wheat, barley, and sugarbeet, whereas the principal kharif crops are maize, tobacco, and sugarcane. The principal rotation pattern is wheat or poppy in the winter followed by maize (weather permitting) during the summer. Even though all locally produced grain is consumed, the area must still import 80 percent of its staple food needs (ibid:20).

A mid-1970s study by the Institute of Economic Studies, NWFP, University of Peshawar cited both economic and noneconomic factors that encouraged the cultivation of poppy in the SwabiGadoon area. It concluded that cultivation was primarily motivated by the huge profitability of the crop. Based on the 1975-1976 season, the net profit per acre of poppy averaged Rupees (Rs.) 19,954. Sugarbeet yielded the next highest per acre net profit of any other rabi crop, averaging Rs.1,393, or 6.98 percent of that earned by an acre devoted to poppy. After poppy, the next most profitable crop was tobacco, which earned Rs.4,592, or only 23 percent of that yielded by poppy. However, because tobacco is a kharif crop, it can replace poppy in only a very limited area. Poppy is economically important for its contribution to farmers' total income from crops only and total income from all sources. During 1975-1976, of the total income from all

crops, 88 percent was derived from poppy. Of the farmers' total income from all sources, poppy accounted for 68 percent (Government of Pakistan, Institute of Economic Studies, 1978:I, 248). Clearly the economic inducements to cultivate poppy are great.

The study concluded that the main noneconomic factors influencing poppy cultivation were legal and local administrative inadequacies of the Government's poppy licensing system. Licenses are issued yearly to a restricted number of farmers, and cultivation is limited to a specified total area. In 1978, the maximum punishment for cultivation without a license was 2 years imprisonment and/or or a fine of Rs.2,000. The study team believed that this was too lenient to dissuade unlicensed farmers. Furthermore, the law was not strictly enforced. Areas not conveniently accessible to officials were rarely visited. Furthermore, evidence suggested that violations occur throughout the area because local officials found it profitable to ignore the situation. Finally, in cases in which farmers were convicted, maximum penalties were never imposed and fines were usually limited to Rs.200-300 (ibid:250).

The NWFADP area is located between Islamabad and Peshawar and includes three district regions: Gadoon in Mardan District, Hazara Amazai in Abbottabad District, and Swat Amazai in Swat District. The project location is classified as a settled area, giving the Central Government the authority to enforce its ban on poppy cultivation.

The project goal "is the eradication of opium poppy production within a process of rapid socio-economic development. The project goal recognizes the interrelationship between permanent eradication of opium poppy cultivation and the integration of the remote, poppy-producing areas into the national economy and the mainstream ... in Pakistan." The purpose of the project "is to change ... the area economy from one based primarily on poppy cultivation to a diversified agricultural and non-agricultural system with strong ties to the national economy, which will ... complement the government's enforcement effort with respect to poppy cultivation and narcotics production" (USAID, PP, Project No. 391-0485, 1983:36).

The project, which is ambitious in its scope of work and schedule of implementation, was designed to be implemented in two phases. During Phase 1, the project will focus on the rapid delivery of highly visible project benefits including the construction of a road, crop field trials, and the provision of seed for winter wheat. During Phase 2, the project will expand to its full potential by (1) providing roads, water, and infrastructure; (2) developing dryland agriculture through the introduction of new crops; (3) improving watershed and irrigation management practices and marketing opportunities; (4) improving livestock and rangeland management practices; and (5) developing basic edu-

cation, school buildings, and employment opportunities for local inhabitants outside the area.

USAID/Islamabad originally recommended an Economic Support Fund grant of \$20 million to NWFADP for 5 years, which was amended 1 year later to \$30 million to cover from 1983 to 1989 (ibid:1; USAID/Pakistan, Project Review Report, Project No. 391-0485, 1985:1). As of March 1985, \$12 million was obligated and total actual expenditures amounted to \$1.7 million.

NWFADP is important to AID overall opium eradication efforts because Gadoon-Amazai has been a major poppy-producing area for the past several years. During the 1982/1983 crop year, it was estimated "that Gadoon-Amazai harvested close to 6,000 acres of poppy...." Thus, "Gadoon-Amazai accounts for 48% of the total poppy acreage in Pakistan" (USAID, PP, Project No. 391-0485, 1983:13).

Project development activities are designed to be coordinated with a phased poppy eradication enforcement plan. The majority of poppy cultivation occurs in the upper elevations of the project area; however, it is harder to provide benefits to farmers living high up on the mountain slopes than it is to those in the lower lying valleys. Therefore, a phased enforcement approach is being undertaken by banning cultivation first in the low-lying lands and later extending the ban to higher elevations.

An area development approach is being followed to provide a wide range of benefits to the entire local population. Special attention will focus on providing benefits to poppy farmers. The project is also expected to improve Central Government presence in and access to this remote area to facilitate Government enforcement capability by improving Government extension services and building access roads.

One interesting feature of the project is its provision of off-farm vocational training and job placement. The project plans to train 4,320 people in basic trades and 1,080 in advanced trades, with the goal of finding jobs for 80 percent of the trainees within 3 months of course completion (Development Alternatives, Inc. 1984). Vocational training is a crucial element to the project's strategy because of the limited potential for agriculture and the need for alternative employment opportunities. The importance of training was demonstrated when village leaders in NWFADP areas demanded that the Government of Pakistan assure them an increased quota for jobs in the Persian Gulf and a U.S. Green Card for each affected family.

The major share of implementation responsibilities rests with the government of the NWFP, and the offices of line departments at the district and local levels. AID and technical assistance contractor staff provide advisory assistance by working directly with line agency officials.

The current reports indicate that the project has made satisfactory progress, especially with its agroforestry activities. It has arranged pilot demonstrations for new varieties of subsistence and cash crops and has established field demonstration stations for disseminating information on the improved varieties of crops and new agricultural practices.

NWFADP has provided high-yield wheat seed packages. The improved variety of wheat could provide a partial substitute for poppy in two ways: (1) for those farmers who rely on poppy as a cash crop to buy wheat and maize, more acreage can be devoted to the high-yielding varieties to meet subsistence needs and promote self-sufficiency; and (2) for those farmers who rely on poppy as a cash crop to supplement family income for other needs, the higher economic returns of new wheat varieties will mean improved family incomes if surpluses are sold on the open market. A costbenefit study done by the project indicates that the new wheat varieties achieve higher net benefits than did the traditional wheat variety (St. Andre 1984:11).

Of immediate impact, construction subprojects will provide new income to families. Cash crops are being introduced as intermediate-run replacements for poppy income. The implementation progress of these subprojects indicates that the identified crops can partially replace income lost within 3-4 years. Especially promising crops appear to be tomatoes and potatoes, for which a local demand exists. Further, their market prices are high enough to make them attractive to the farmers. The project has also started implementing subprojects for fruit and mulberry trees, bee-keeping, and rangeland improvement crops. Their long-term effects will likely be felt only after 5-6 years.

AID officials are optimistic about NWFADP achieving its stated objectives. There are several grounds for optimism. First, the price of opium continues to remain low and, therefore, poppy growing is not as remunerative as it used to be. Second, local narcotics traffickers are not dependent on the opium produced in the project area. Hence, their opposition to the project is not as strong as it otherwise might be. Third, poppy cultivation is not the sole source of income for local farmers. Indeed, large-scale poppy cultivation did not begin until the mid-1960s. Finally, village and community leaders recognize that the successful implementation of the project can confer short-and long-term benefits and could pave the way for sustained economic growth.

4. THE U.S. STATE DEPARTMENT AND UNITED NATIONS-FUNDED PROJECTS

In addition to the two AID-funded narcotics control projects, both the U.S. State Department's Bureau of International Narcotics Matters (INM) and the United Nations Fund for Drug Abuse and Control (UNFDAC) have funded similar projects in Pakistan.

4.1 The Malakand Area Development and Agricultural Outreach Projects

INM responded to the Government of Pakistan's effort to eradicate poppy by undertaking two initiatives: the Agricultural Outreach Project (AOP) and the Malakand Area Development Project (MADP). Started in 1981 and 1982, respectively, AOP and MADP were designed to provide development assistance for poppy eradication in Malakand Agency, one of the Provincially Administered Tribal Areas (PATAs). In 1981, Malakand Agency accounted for 7 percent of the total production of opium in Pakistan (U.S. Department of State 1981:4). As of fiscal year 1985, total proposed obligations reached \$5.4 and \$1.5 million for MADP and AOP, respectively (U.S. Department of State, 1985).

Malakand Agency, located in NWFP along the Swat River, encompasses 368 square miles and has a total population of 185,000. The population is concentrated in the southern irrigated areas, whereas the isolated and sparsely populated northern portion comprises largely deforested, mountainous areas and rainfed interior valleys. MADP focuses on the poorer northern portion, which has long been neglected by Government development programs. Wheat and maize are primarily cultivated as subsistence crops, and rapeseed and poppy are the dominant cash crops of the rural economy. In some basins, the sole cash crop is opium poppy.

MADP's primary goal "is suppression of poppy cultivation. For maximum impact, the site selected should, therefore, be in an area of intensive poppy cultivation where early enforcement of the ban is assured" (U.S. Department of State 1981:3). MADP activities focus on infrastructure development (i.e., the extension of roads and electrical power lines), reforestation, and water resource development. AOP was designed to complement MADP to provide a more complete area development program for Malakand by introducing improved varieties of traditional crops, improved farming practices, and new fruit cash crops.

MADP strategy incorporates an enforcement approach to illicit crop cultivation control; the primary concern is with the effective enforcement of the ban rather than the provision of

alternative sources of income for poppy-growing farmers and the community. In this respect, it is somewhat different from the TADP and NWFADP strategies, with their emphasis on the development of the areas adversely affected by the poppy ban. MADP is consistent with INM efforts to strengthen the Central Government's ability to enforce the ban. At every stage, Government line agencies were consulted on what development resources they required to extend and enforce the cultivation ban. The legal status of PATA lands allowed officials greater freedom to rapidly apply Central Government prohibition laws. The Government of Pakistan intends to enforce the ban as long as the whole area receives development assistance.

Rather than targeting poppy farmers as the primary project beneficiaries, MADP specifically widened the target group to include all residents within the project area. "It was agreed that, whenever possible, the people of the area should benefit as a group so that it did not appear as though the project was designed to help only poppy growers" (Samuelson 1984:7). The project relied heavily on local leadership. Village leaders, union council members, and district council members were consulted in selecting and approving subprojects.

Unlike AID, INM undertook MADP with only minimal funding by reducing the use of foreign technical advisers and directly placing responsibility for subproject identification, approval, and implementation with line agencies, provincial political agents, and the Pakistan Narcotics Control Board (PNCB). Project implementation funds were channeled directly through PNCB to the line agencies. Only during the early stages, when project identification feasibility studies were carried out, were U.S. technical advisers brought in. Otherwise, all project funds were directly spent on project activities.

MADP and AOP have made significant progress with poppy eradication. It was necessary to use force and plow up opium poppy fields in the 1982/1983 and 1983/1984 growing seasons. "The 1983 harvest included 536 acres of opium poppy. Of this, 150 acres of advanced crops were destroyed by bulldozers, leaving a remaining 367 acres. In November of 1983, the government plowed an additional 400 acres of newly planted opium poppies. This was done in the face of opposition by the farmers and required the military assistance of 600 troops. An armed guard was placed on each tractor" (U.S. Congress, House Select Committee on Narcotics Abuse and Control, 1984:168). The army was called in because when the first fields were plowed in late 1983, a group of farmers broke into a field station and burned several project vehicles. From 1982 to 1984, local government officials occasionally held farmers hostage. When villagers arrived to demand their release, they were told that the prisoners could not be released until the villagers gave up planting poppies. After negotiating, hostages were released, even though villagers were allowed to plant pop-

pies for an additional season. During this period, one farmer was killed by a Government employee. As resistance was broken down, farmers began to realize the Government's commitment to poppy eradication and progress became easier. As of spring 1985, it was confirmed that poppy cultivation has completely stopped (U.S. Department of State, International Narcotics Control Strategy Report, 1985:209).

Both MADP and AOP have made progress in the areas of infrastructure development and agroforestry activities. Besides providing long-term benefits to the area, construction work was begun to make heavy use of local labor, thus conferring immediate benefits. The Kulangi-Agra Road is nearing completion and startup funds were released for 32.8 kilometers of feeder roads. Schools and power lines are also under construction. Open surface wells, lift irrigation schemes and drinking water facilities are in different stages of completion. Tree nurseries were established and reforestation activities are continuing. By 1984, new high-yielding crops were-planted on 521 hectares and released to farmers, 22,400 fruit trees were released to farmers, and land leveling work was completed on 44 hectares. Vehicles and farmequipment were released to local government Department of Agriculture staff (U.S. Department of State, MADP/AOP Sub-Project Status Report, 1984).

Despite progress, some farmers affected by the enforcement of the poppy ban are not entirely satisfied. "Their complaint that they have been left to fend for themselves is genuine" (Samuelson 1984:17). The careful use of remaining project funds will be critical to ensure that poppy farmers in the area feel satisfied that something is being done for them.

It is too early to estimate and assess the effects of TADP, NWFADP, and MADP/AOP on the cultivation of poppy. However, poppy is being eradicated in the project areas as stipulated in the project agreements. An INM report notes:

Officials of Pakistan's Northwest Frontier Province eradicated poppy being cultivated in two AID project areas (the Gadoon Region and the Bara Tribal Area) and in the INM Malakand project area during 1984, in fulfillment of the enforcement agreements and poppy clauses applicable to these areas. Having advised farmers in the Malakand, Dir and Gadoon-Amazai areas that opium cultivation will not be allowed in the 1984/85 growing season, the PNCB estimates that opium production will decline by 2,300 acres in 1985 (U.S. Department of State 1985:205).

Thus, it appears that TADP, NWFADP, and MADP/AOP will contribute to the reduction of poppy cultivation in the country. However, the extent to which project areas remain free of poppy

in the long run will depend on continued enforcement and the success of development initiatives undertaken during the life of the projects.

4.2 The Buner Agricultural Development Project

UNFDAC's Buner Agricultural Development Project (BADP) was the first major poppy control project in Pakistan. Launched in 1976, it adopted the crop substitution strategy. The Buner subdivision of Swat District in NWFP was selected because it accounted for an estimated 30 percent of the total opium crop in Pakistan.

An estimated 38,000 families live in the Buner subdivision, with a total population of 190,000 individuals engaged primarily in agriculture. The major rabi crops are wheat, barley, poppy, oilseed, tobacco, and vegetables. The major kharif crops are maize and legumes. A 1974 survey indicated that the majority of land was rainfed, 60 percent of which was tenant farmed (Albrecht 1976:81). Poor soil quality and an unpredictable climate combined with traditional agricultural practices result in low agricultural yields and productivity. When the project began, poppy was the main cash crop for subsistence farmers, who cultivated it in addition to wheat and maize.

BADP's goal is to provide "the people with an opportunity to achieve an acceptable income and standard of living without the recourse to poppy" (Mulder 1984:3). The project seeks to accomplish this by developing land and water resources and facilitating the adoption of new and better agricultural practices.

The project followed a "friendly persuasion" strategy similar to that used in UNFDAC's Highland Agricultural Marketing and Production Project in Thailand, which was based on the premise that farmers would give up poppy growing when more lucrative, alternative crops are available and without the need for Government enforcement. Hence, during the initial stage, BADP organized field trials for such diverse crops as saffron, mint, medicinal oil crops, groundnuts, garlic, potatoes, and tea. The results were not encouraging. None of the tested crops were suited to the existing agroclimatic conditions. The friendly persuasion strategy was unsuccessful: no poppies were eliminated.

The project focus, therefore, shifted to high-yielding varieties of wheat and maize, the traditional varieties of which are widely grown as subsistence crops in the area. Currently, BADP is promoting these new high-yielding varieties of wheat and maize and the cultivation of sugarcane and tobacco as cash crops in irrigated areas.

As a result of Government of Pakistan enforcement efforts in 1982, the total elimination of poppies in the BADP area was achieved. The Government did not immediately enforce the ban;

rather it allowed farmers a period of adjustment.

To a limited extent, the project facilitated poppy eradication efforts by easing the transition from a poppy-dependent system to a more diversified agricultural system. A recent review of the project states:

The project can justly take credit for softening the financial blow which the resultant loss of income from poppy cultivation entailed. This would have been particularly acute in the case of small farmers who constitute more than 70% of the agricultural producers in Buner area. In addition, the raising of the farmers' hope for better future prospects from the project's development activities helped to prevent a bitter confrontation between the rural population and the law enforcement agencies (Bruce 1984 :11) .

When evaluated for its activities, BADP has achieved only limited success. Despite an \$8 million investment, its impact on agricultural production and the population's standard of living is questionable. Although BADP focused on irrigation and land leveling, only 216 ha were irrigated and about 405 ha leveled by the end of 1984 (Government of Pakistan, Federal Ministry for Economic Cooperation, 1984:3). This achievement is insignificant, given "that the whole area consists of 54,656 ha of cultivated land of which 15% to 20% could be irrigated. The efficiency of all irrigation schemes is limited because secondary channels and systems have not yet been completed." (ibid). Although precise figures are unavailable, only a very small portion of the land needing leveling has received attention. In addition, the progress of the other project components (credit, horticulture, livestock, roads, and provision for drinking water) has not been impressive. BADP has entered a new phase, however, and has formulated more realistic and comprehensive plans for the agricultural development.

In conclusion, BADP highlights the ineffectiveness of a crop substitution strategy based on voluntary participation and the decisive role enforcement must play in effective narcotics control programs.

5. TENTATIVE FINDINGS

5.1 Critical Need for Enforcement

The experience of Pakistan clearly indicates that Government enforcement of a cultivation ban is critical to the success of such projects. Farmers will not voluntarily give up a lucrative commercial crop. This point is forcefully stated in a report on the INM-funded Malakand project (MADP).

There is little chance that development efforts and friendly persuasion alone will eliminate opium poppies. It should be accepted that it may be necessary to forcefully destroy opium poppies, arrest or imprison those who resist or defy the government and continue to grow or promote the growing of poppies. As unpleasant as that may seem to the development specialist, it is my belief that it must be accepted by both governments. This was accepted in the case of the Malakand project and it proved necessary to use force, and plow up opium fields in both the 1982/1983 and 1983/1984 seasons. (Samuelson 1984:6).

MADP was not the only project that required physical force to eliminate poppy cultivation. Throughout Pakistan, the Government has had to resort to force or the threat of force to effect compliance with the ban on poppy cultivation.

An alternative to the use of threat of force is the friendly persuasion approach. Best illustrated by the Buner project, its strategy is to provide farmers with alternative crops or income sources in the hope that they will voluntarily give up poppy cultivation. However, the Buner experience clearly demonstrates that farmers are likely to accept project benefits while continuing to grow poppies. Only when the Government stepped in to enforce the ban was poppy cultivation eradicated in the project area.

5.2 Limitations of the Crop Substitution Approach

A crop must pass three tests to be an effective substitute: (1) it must compare favorably with poppy in its ability to grow under the same agro-economic conditions; (2) it must provide a similar magnitude and certainty of returns to land, labor, and capital over time; and (3) it must be socially acceptable to local cultural practices. The designers of all the projects supported by AID and INM recognized that no single crop or mix of crops would be able to meet this criteria in the immediate future.

at least. Hence, they planned a wider variety of development activities.

The Northwest Frontier Area Development Project (NWFADP) represents the most comprehensive attempt to promote integrated rural development. It not only seeks to increase the yields of traditional food crops and promote new cash crops, but also attempts to improve livestock, range management practices, physical infrastructure, and public services. Moreover, because the area has limited potential for agricultural development, NWFADP plans to introduce vocational training for outside employment to facilitate out-migration and increase family income through remittances from family members.

5.3 Coordination of Enforcement With Development Assistance in the Tribal Areas

The design and implementation of the Tribal Areas Development Project (TADP) highlights the problems involved in enforcing the poppy ban while undertaking development activities in the Tribal Areas. Having historically maintained their political and economic autonomy, tribal groups are not favorably disposed to the extension of federal authority.

The TADP planning team was advised by the Pakistani Government to proceed cautiously; however, the team was told that it could plan activities for the two major Federally Administered Tribal Areas (FATA) poppy-growing areas, Bajaur and Mohmand. The Special Development and Enforcement Plan, prepared by the Government of Pakistan for multilateral funding, also recognized the enforcement problem and called for innovative solutions. It noted that, "FATAs present special problems that call for innovative solutions to the end of poppy cultivation. While the government will continue to persuade tribal groups within FATAs to end opium production, an enforcement plan directly tied to development initiatives may not be appropriate in the early stages of activity" (Government of Pakistan 1983:1).

The pace of enforcement in tribal areas is likely to be slow; the approach to enforcement should be quite flexible. The limited experience gained from TADP indicates the need for an enforcement model based on persuasion, negotiations, active encouragement, education, warning, and enforcement. This model is best described in the SDEP: "Information will be disseminated on the harmful effects of drug addiction. As development benefits for local areas can be arranged, negotiations will be conducted with local leaders to agree to self-enforcement of the poppy ban. In the event intransigent groups insist on planting poppy, the method of applying effective enforcement measures has been well established, with temporary detentions used to prevent planting,

and field destruction used to prevent harvesting." (ibid:11-12). Thus, the Government of Pakistan's policy of enforcing a ban can not be unilaterally imposed in FATA lands. Under such conditions, enforcement is likely to proceed only on an ad hoc basis, otherwise, violent reactions may result.

In addition, TADP's implementation has highlighted distinctive features of the Tribal Areas that can pose problems for narcotics control development assistance.

First, tribals tend to participate in development activities on the basis of immediate tangible benefits. "They see projects as a source of income, through labor, contracts, getting permission to carry out projects in some areas, and in some cases, as a source of permanent jobs with income (i.e., caretakers of well sites developed by the government)" (Scott 1982).

Second, "Such basic competition between families built into the fabric of the social structure to assume anything other than uncooperativeness" (ibid). There exists a strongly traditional system of patronage, which makes an approach based on local broad participation tenuous at best.

The limited experience of AID projects shows that careful consideration should be given not only to the magnitude and type of the benefits, but also to their timing. This will minimize the hardships imposed on poppy farmers due to the implementation of the ban. Accounts of both AID projects indicate that timely benefits had not always reached the affected farmers, who were indignant at having given up poppy cultivation for nothing in return. For example, in the case of TADP, the implementation delay of watercourse work in the Bara Irrigation Scheme generated considerable resentment among the local population. "The general feeling among the tribal people is that they went along with the poppy cultivation request and 'for what'" (Herndon 1984). Although this scheme is only a minor component of TADP and involved a small number of poppy farmers, the consequences of such delays could be disastrous for large development projects seeking to curb poppy cultivation.

Experience indicates that enforcement measures can be undertaken more rapidly than can the delivery of development assistance benefits. It is, therefore, important to ensure that the mix of subprojects selected will provide both short and longterm benefits to the target group. Hiring local labor for various construction works and providing seed and inputs after demonstrating appropriate agricultural practices are two common methods of providing immediate benefits. Marketing new cash crops, harvesting fruit trees, improving public utilities, upgrading range management techniques, and facilitating off-farm employment can produce longer term impacts. The eventual success of the poppy eradication process depends on the viability of the diversified economy created as a

result of project intervention.

5.4 Involvement of Local Leadership and Selection of Target Groups for Development Assistance

The experience of Pakistan does not indicate criteria to be used when selecting the project target group or the extent of local leadership involvement. However, two general observations can be made on the basis of the experience in Pakistan.

First, to identify potential subprojects, one expeditious method involves identifying and involving local village leaders and council members. This method seems to have worked well with MADP. However, a problem characteristic of illicit crop eradication projects is that local elites may be unwilling to cooperate. For instance, during the initial stage, the NWFADP technical assistance team found strong opposition to its project. Local village and council leaders withheld approval of suggested activities. Eventually, however, as the team proposed development activities, groups of interested villagers accepted responsibility. Thus, "the use of an informal 'project committee' enabled the grant to be made in a union council in which the dominant faction had appeared unwilling to accept the project..." (Development Alternatives, Inc. 1983:5). The experience demonstrates that even in highly paternalistic societies, the existing authority structures can be bypassed by winning the cooperation of those groups whose interests may not be represented by local leaders.

Second, the decision about the group to be targeted for development assistance can be approached in two ways. One approach is to simply make benefits available to the entire farming population. Another approach is to provide benefits primarily to poppy farmers, the rationale being that those who may lose the most from a ban should be compensated. Those who favor the former approach note that illicit crop cultivation is illegal and those engaged in the activity should not be favored. Further, the proponents of this approach argue that the eradication objective can be further complicated if the project seeks only to confer benefits on illicit crop farmers, because others will be tempted to take up farming those crops in hopes of qualifying for development assistance. The latter approach is primarily grounded in the fairness issue. Those who cultivate a crop that is clearly accepted by the local society should not suddenly be forced to suffer a significant loss of income and security without being given alternative income sources. The latter approach is more clearly equity "neutral"--the income distribution before and after intervention would remain relatively unchanged. The decision to adopt a particular approach for a given project should be based on the enforcement situation, postproject income distribution goals, and the type of activities feasible.

In undertaking MADP, INM took the view that poppy farmers were engaged in an illegal activity and should be afforded no special consideration. To the extent that poppy farmers did not participate in or were bypassed by the project, their incomes declined. Conversely, NWFADP is being implemented on the premise that special attention should be given to poppy farmers. Hence, efforts are underway to develop alternative subsistence and cash crops to meet their needs.

5.5 Additional Findings

Experts agree that several factors have contributed to the relative success of narcotics control efforts in Pakistan.

First, the Government of Pakistan perceives narcotics production as not only a problem of the United States, but also as a domestic problem. This perception contributes to genuine commitment to enforce the ban and whole-hearted support for AID efforts.

Second, massive U.S. economic and military assistance may have given U.S. agencies a special leverage to influence Government of Pakistan policies and actions.

Third, even though the impact of Islamic ideology on the narcotics issue is difficult to assess, it has probably created a climate favorable to narcotics control efforts.

Finally, the price for raw opium has remained relatively low during the past few years, making poppy growing and trafficking less financially attractive. Therefore, farmers are more willing to give up poppy cultivation in return for development assistance.

APPENDIX C

OPIUM POPPY CULTIVATION CONTROL IN THAILAND

1. INTRODUCTION

Opium poppies are grown in 11 provinces in northern Thailand (see map). In 1983, an estimated 73 percent of the total cultivated area (about 5,000 hectares [ha]) fell within the two provinces of Chiangmai and Chiangrai. In 1984, the cultivated area increased to roughly 7,900 ha producing an estimated 42 metric tons (t) of raw opium (USAID, Strategy Statement, Thailand 1985:64). While opium poppy cultivation increased from 7,900 ha in 1984 to 9,654 ha in 1985, gross production fell to 36 t in 1985 as a result of unfavorable weather conditions and increased eradication efforts by the Royal Thai Government (U.S. Department of State 1985:211). Thailand, like Laos, is a marginal producer of opium in the Golden Triangle. Over the past several years, Thailand and Laos each supplied roughly 30-40 t annually (compared with Burma's 550-650 t), or about 10 percent of the total regional supply. Thailand's domestic opium consumption is estimated at some 35 t per year; therefore, little Thai opium escapes to supply Western markets. However, the most important aspect of the narcotics problem in Thailand in terms of its impact on U.S. markets is Thailand's role as a transit country for heroin refined in Burma. Accordingly, Thai efforts in law enforcement and improved border security have increased the risks of heroin transshipment through Thailand, and recent evidence suggests that trafficking patterns are shifting to avoid Thai territory (ibid.:175).

2. THE TRADITIONAL ROLE OF OPIUM IN THE HIGHLANDS OF NORTHERN THAILAND

The present demographic distribution of various peoples in the hill country of northern Thailand is the result of the gradual migration southward by groups from Tibet and China. This semimountainous region provides a home and/or livelihood for roughly 750,000 people, about 400,000 of which are members of one of the traditional hilltribes (Walker 1980:135). These "hill people" lead a seminomadic existence, often crossing the borders into Burma and Laos, and dominate the higher elevations between 800 to 2,000 meters. Settled in the narrow upland valleys are at least 250,000 lowland Thais. These traditionally plains-dwelling, irrigated-rice farmers have relocated more recently due to economic necessity brought about by the lack of arable farmland in the larger lowland valleys. Another recent addition to the traditional population in the northern hills is the Yunnanese

Chinese, known locally as the "Haw Chinese," who probably number about 10,000 (ibid). The Haw have long carried goods along the ancient trade routes between southern China and Southeast Asia.

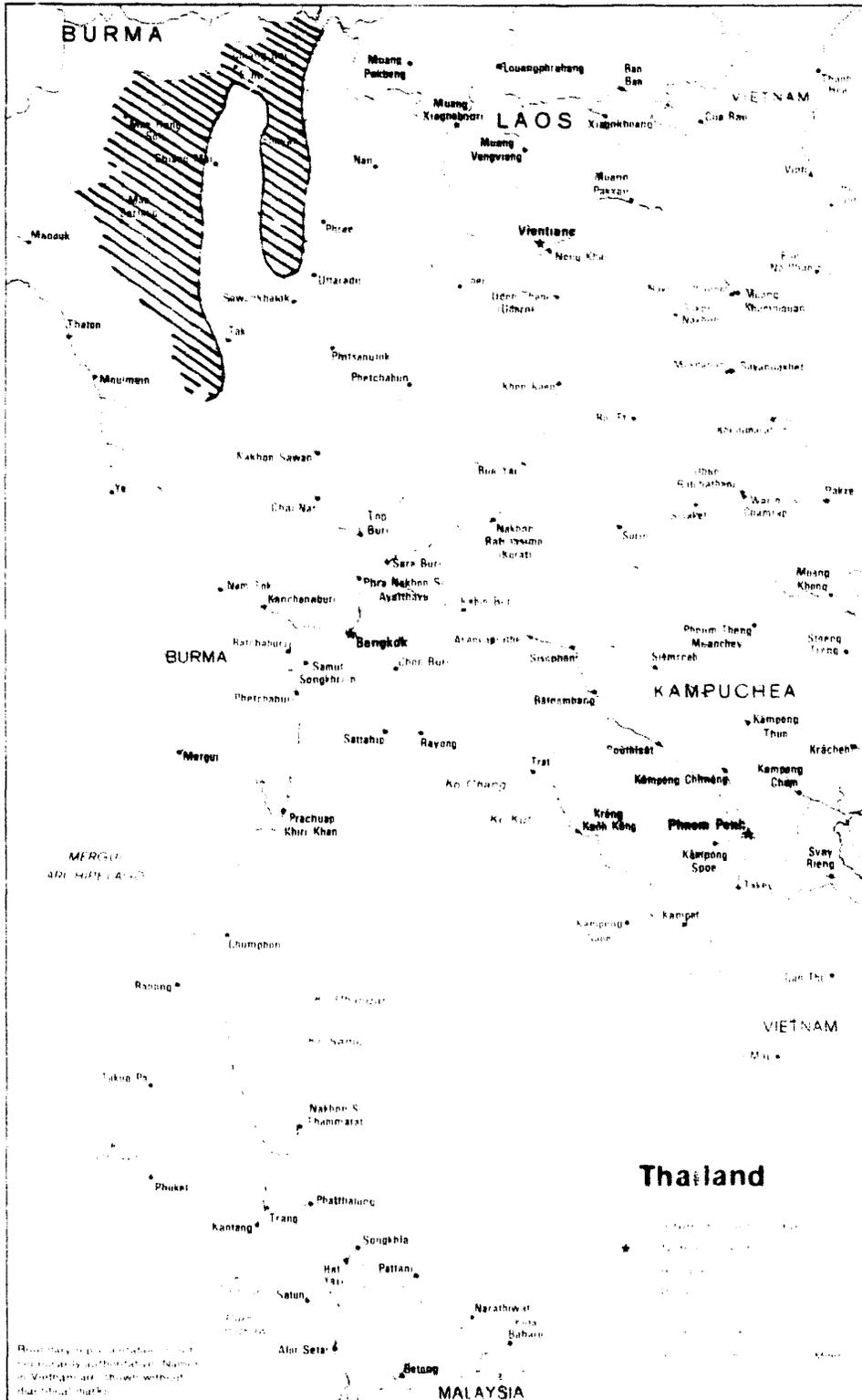
The hilltribes are heterogeneous, divided by language and dialect, sociocultural traditions, and widely divergent histories of residence in the Thai kingdom. The principal opium-poppy-cultivating tribal groups are the Meo, Yao, Lahu, Lisa, and Akha. These five groups account for less than a quarter of the northern uplands inhabitants. The Meo are known as the most sophisticated poppy cultivators, often contracting the Shaw Karen to work in their fields.

Opium serves three major functions in traditional hilltribe culture. First, it has a useful medical role as a potent natural pain killer, and the hilltribes administer it for a wide range of illnesses. Second, opium functions as a transethnic, transnational, consumable currency throughout the highland areas of Southeast Asia. It is used both as a medium of exchange and payment. Ideally, all currencies "should have dependable and stable exchange value, universal acceptance, low energy transfer requirements, no danger of value loss through physical deterioration and be easily divisible. Opium meets most of these requirements, although there are fairly wide fluctuations in its value" (Feingold 1981:152). Opium's use as a medium of exchange has grown as the hilltribes increasingly seek goods produced in the lowlands. Modern commodities such as radios, clothing, guns, and other items not produced locally are sold by the Haw and lowland Thais. Because the cash economy is quite limited, the hilltribes often barter with locally produced goods, namely, opium and handmade crafts. Opium is also used as a medium of payment to settle certain commercial and ritual obligations, or it may function as a form of agricultural wage payment.

More recently, opium poppy has increasingly functioned as a cash crop in the highland economy because the region is no longer self-sufficient in staple food stuffs. To maintain their families at a subsistence level, the hilltribes must supplement family income by growing poppy or by "selling" their labor to other farmers who cultivate larger tracts of opium poppy.

To highlight the growing importance of opium poppy as a cash crop, it is useful to briefly describe the hilltribes' agricultural farming system. There are two major categories of swiddener among the hilltribes: "pioneer" and "established." The pioneer swidders are farmers who, under ideal conditions, fell large portions of climax forestland each year. They clear a plot of trees, burn, and plant for a few seasons before abandoning the plot and moving on. All of the five previously mentioned hilltribes belong to this category and will plant poppy in addition to dryland rice, maize, and a few vegetable crops. Unfortunately, a greatly increased hill population has denuded large

Major Illicit Opium Poppy Cultivation Area in Thailand, 1985



Note: Shaded areas represent general poppy cultivation areas, not specific sites.

Source: U.S. Department of State, Bureau of International Narcotics Matters, 1985.

forested areas, thus depleting soil fertility and increasing erosion. Farmers return to old clearings or to the use of the same swiddens more frequently than their better judgment condones. One of the ironies of this alarming cycle is that the crop best suited to low soil fertility is the opium poppy. As soil fertility declines, many communities eventually increase opium production so that they will have cash to purchase the rice they need but can no longer produce in sufficient quantities (Walker 1980:140).

The established swiddeners, largely made up of the Shaw Karen, cultivate their crops on land cleared from well-fallowed secondary vegetation. The Shaw Karen have no tradition of poppy cultivation, and have always favored the gentler gradients and occasional upland valley for constructing irrigated rice terraces to supplement their swiddens. They are masters of soil conservation, and some have been able to remain in the same location for decades. However, these established farmers have also been affected by increasing land scarcity, forcing them to return too soon to fields in fallow. Some farmers exhaust their rice supplies several months before the new harvest and must borrow at local moneylender's high interest rates. The resulting falling paddy yields have forced some to take up poppy cultivation. More commonly, their response is to seek wage work. Some travel down to the lowland valleys and become farm workers, others are hired by the pioneer farmers, particularly the Meo, who because of falling paddy yields are attempting to increase their opium yields. Because poppy is a labor-intensive crop, there is evidence of Meo choosing new settlement areas specifically for the proximity and availability of Shaw Karen labor (Walker 1980:141).

Some hilltribe communities, especially the Meo, have integrated opium production into their economic, social, and cultural lives; however, evidence indicates that increasing opium production is largely a consequence of recent environmental change.

3. THE ROYAL THAI GOVERNMENT'S OPIUM POPPY CONTROL STRATEGY

The Royal Thai Government's response to the problem of poppy cultivation reflects several concerns. First, the hilltribes are traditionally cautious and tribals in the past have been exploited by those Thai in a position to exercise political or economic leverage. Furthermore, the hilltribes believe that their culture is being threatened. Especially in recent years, with the growing scarcity of agricultural land in the lower northern valleys, lowland Thai farmers have progressively moved up the hillsides to cultivate land near tribal villages. Second, since the 1950s, communist insurgents and other antigovernment groups have operated in the remote northern and northeastern regions of Thailand. The Government is concerned that it continue to make progress in

disarming such groups and securing Thai border areas. Third, some hilltribes' slash and burn agricultural practices cause erosion. Finally, the Government is acutely aware of its high domestic heroin abuse rate and to a lesser extent the problem of hilltribe opium addiction.

Given these concerns, Thailand has embraced a policy that requires a cautious movement toward progressive reduction and eventual elimination of poppy cultivation. The Thai Government has stressed crop substitution combined with a program of friendly persuasion. The Royal Thai Government position is that viable income alternatives must be found and accepted by the hilltribes before plans for eradication can move forward. Government fears that if the hilltribes are pushed too fast by a poorly organized program, they will become alienated and the Government's long-term plans to integrate these peoples into the Thai nation and draw them away from insurgent influences will fail (ibid 1984:137). Once viable alternative crops become well-established and improved extension and social services are available, the Government is likely to enforce a ban on all commercial cultivation. It is likely that Thai authorities will continue to allow villages to grow a limited amount of poppy for the needs of local addicts in the intermediate run until methods are found for coping with the opium addiction problem of the hilltribes.

In the face of a growing drug problem at home, the Thai Government has shown a greater awareness of the problem of opium production and an increased commitment to poppy eradication initiatives. It has been engaged in formulating a plan to phase out commercial poppy cultivation and to provide assistance to the drug addicts.

4. ACTIONS UNDERTAKEN BY THE ROYAL THAI GOVERNMENT AND THE UNITED NATIONS

Until the late 1960s, the Thai hilltribes were largely ignored. Some resettlement work was undertaken, and the Thai Border Control Police carried out limited education and basic health work. In 1967, the Royal Hilltribe Development Project was established, followed in 1972 by the United Nations/Thai Programme for Drug Abuse Control. In 1973, the United Nations Fund for Drug Abuse Control (UNFDAC) launched the Crop Replacement and Community Development Project (CRCDP), a pilot effort designed to explore the possibility of replacing poppy cultivation with viable substitute crops combined with community development activities (United Nations, Terminal Report 1984:2). Upon the completion of the CRCDP in 1980, UNFDAC initiated the Thai/UN Highland Agricultural Marketing and Production (HAMP) project. The HAMP project was designed as the direct followup to the

CRCDP, and its goal was to "pursue, improve, extend and expand activities which had proven particularly successful in agricultural extension/production, marketing, credit, training and community development" (ibid:5). The HAMP project was to end in 1984; however, activities were extended to allow a smooth transition of project functions to the appropriate Thai Government agencies.

UNFDAC's program in Thailand represents the oldest and most extensive effort to control opium poppy cultivation. Although project documents stress the comprehensive development nature of the two projects, the major emphasis of both was on crop substitution. The major results and findings of the UNFDAC-funded program are described below.

4.1 Introduction of Substitute Crops

A total of 836 crop varieties were tested. The majority were found unsuitable for either agroclimatic, cultural, or economic reasons. Perhaps the projects' major failing is that they did not focus on a few viable crops for mass coverage. Red kidney beans, potatoes, and a few other cool-climate vegetables produced the greatest short-term benefits. In the long run, coffee arabica has the greatest potential as an income-substitution crop; however, fruit trees also have considerable potential (ibid:41-42). The HAMP project has clearly demonstrated (given recent price relationships) that coffee, kidney beans, and potatoes provide an equal or greater net income than opium poppy. A major finding of the UNFDAC experience is that, "the lack of rice self-sufficiency among the hilltribes has played an important role in the amount of opium grown. If rice self-sufficiency is attained, less poppy would be produced" (United Nations, HAMP Phase II, 1984:18). Thus, it is essential that future crop development activities focus on the introduction of improved upland rice, wheat, and corn varieties.

4.2 Thai Citizenship and Land Ownership Registration

Receiving citizenship and legal rights to land use are of great importance to Thai tribal people. Without citizenship, they are not eligible for certain Government services. Agricultural land scarcity is a growing problem in the highlands, and there is increasing appreciation among the hilltribes of the need to secure ownership of land.

4.3 Enforcement

"It was observed from the reaction of tribal people in the project that crop replacement is not fully effective unless laws preventing poppy growing are enforced" (ibid:47). Ad hoc threats were found to be ineffective. When fields were destroyed or villages were raided for opium, the response in the short run was positive; villagers renewed their participation in activities and poppy cultivation was reduced in subsequent years.

To effect a reduction in poppy cultivation, it is essential that enforcement efforts be undertaken in areas that have benefited from project assistance. This has not occurred to the extent possible in the project areas. Police enforcement operations were primarily responsible for reductions in poppy acreage. One example of this can be cited. Between 1980 and 1984 in the HAMP villages, opium production fell in three project areas by 26.3 percent, but poppy area cultivated fell by only 6.1 percent. Looking at the three areas individually, Pakthang reduced poppy area cultivation by 13.4 percent, Mae San by 70 percent, but Som Poy increased area cultivation by 32.8 percent (United Nations, Terminal Report, 1984:49). The story behind Som Poy is illustrative of the need for enforcement. In the seven-village project area of Som Poy, the village of Pha Klouy accounted for 80 percent of the area's total cultivated area. Until 1984, Pha Klouy refused to participate in the HAMP project; however, in 1984 police operations resulted in one arrest and the seizure of opium. As a result, the villagers requested replacement crop seed and extension support, and they agreed to reduce the poppy cultivation area by 33.3 percent each year beginning in 1984 (ibid:50).

UNFDAC is currently phasing out its narcotics control program in Thailand, and the responsibility for these efforts is being transferred to relevant Government departments. Although the Government is likely to continue to receive financial assistance, future success will depend on the Government's ability to provide extension services, improve marketing channels, extend credit to stimulate community development, rationalize its forestlands policy, and increase its enforcement presence.

5. AID NARCOTICS CONTROL STRATEGY AND ACTIVITIES

The history of AID's opium control efforts in northern Thailand indicates that the Agency's narcotics control strategy has changed over the last decade. From a strategy of limited support of ongoing Royal Thai Government and UNFDAC socioeconomic development and crop substitution projects, AID has shifted to a more active role in directly undertaking an area development pro-

ject addressing some of the underlying factors that encourage poppy cultivation.

During the mid-1970s, three projects were undertaken to complement and enhance the ongoing efforts of the Royal Thai Government and UNFDAC: Hilltribe Preserved Foods (493-0248), Highland Development (493-0241), and Highland Agricultural Research Station (493-0252). These projects were designed to (1) collect baseline data to assist development planning, identify poppy fields, and support counterinsurgency efforts; (2) conduct basic research on alternative crops; and, (3) support a pilot fruit and vegetable cannery scheme to broaden hilltribe marketing opportunities. A terminal audit report reviewed the achievements of all three projects and noted that "progress to date had been disappointing." All projects were either behind schedule or had been canceled in part (USAID, Audit Report, 1975:2). Bureaucratic delays, commodity shipment problems, difficulties in project site selection, and failure of the Thai Army Supreme Command to clear aerial photography survey work all contributed to a lack of progress. The three projects were active from 1973-1975. Most of the funds were deobligated and actual expenditures were limited to \$152,000. Very little was accomplished, and their impact was negligible when compared with the multimillion dollar Royal Thai Government and UNFDAC projects spread over more than a decade.

A fourth project, Hill Area Education (493-0297), was initiated in 1980 and is to run through 1986. As of March 1985, \$1.6 million were obligated and \$1.3 million were expended. The project is a pilot effort to improve the quality of life of hilltribe people in the remote areas of northern Thailand. It provides for the development and testing of a community-based education model and includes staff development, curriculum and materials development, and strengthening of administration. As of March 1985, "project activities were generally progressing satisfactorily, with the majority of planned activities nearing completion" (USAID, Project Implementation Report, Project No. 493-0297, 1985). This project represents a useful albeit limited attempt to supplement larger scale Royal Thai Government and UNFDAC efforts in the highland areas. It has the potential of enhancing ongoing efforts to upgrade the educational level of hilltribe groups and ease their transition into the larger Thai nation, thus indirectly facilitating Government opium crop reduction efforts. However, this type of development assistance does not address the fundamental economic and food self-sufficiency factors that motivate some hilltribes to cultivate poppy as a cash crop.

The USDA has also played a role in enhancing Royal Thai Government and UNFDAC programs. Throughout the 1970s, USDA funded a number of agroeconomic studies at Thai universities and the Hilltribe Research Institute with the objective of identifying viable

crops to replace the opium poppy. Experiments were undertaken with a wide range of vegetable crops. Furthermore, many exotic species were tested, including medicinal and ornamental plants.

Since 1980, AID has played a more active role by directly undertaking an area development project which addresses some of the causes of low-productivity agriculture in the highlands of northern Thailand.

5.1 The Mae Chaem Watershed Development Project

Initiated in 1980, the Mae Chaem Watershed Development Project (MCWDP) represents AID's first attempt to undertake a major agricultural development and watershed protection project in a poppy-growing area of northern Thailand. The Mae Chaem Watershed is located in a hilly to semimountainous area, with a scarcity of agricultural land in the narrow upland valleys. The majority of the 40,000 inhabitants in the 4,200 square kilometer project area belong to two ethnic groups: Shaw Karen (48 percent) and Thai (45 percent) (USAID, Project Paper, Project No. 493-0294, 1980:4). Nearly half the population exists below the rice subsistence level. An examination of the major causes of poverty and environmental deterioration indicates that land scarcity, low agricultural productivity, and limited access to socioeconomic services lie at the root of these problems.

The project goal is to raise the quality of life of the rural population through increased income and improved access to Government services while preserving and restoring environmental quality (ibid:11). The MCWDP seeks to accomplish its goal by providing assistance in three major areas. First, the project will increase rice and cash crop production both extensively and intensively by identifying, registering, and bringing into production new irrigated and rainfed cropland and providing additional irrigation resources. Second, the project will establish agricultural and social service support by supplying training, extension, research, credit, and marketing services. Third, the project will undertake environmental protection measures by working to improve fire control capability, improve erosion control for roads, and introduce village woodlots.

Planned obligations of \$10 million in grant funds were authorized for the 7-year period 1980-87 (ibid:7). As of March 1985, \$6.9 million were obligated and total actual expenditures amounted to \$3.0 million.

The immediate value of the MCWDP to Thai opium poppy eradication efforts is limited. It is the only project in USAID/Bangkok's portfolio which contains a poppy clause. When the project was conceived, "one of the main factors contributing

its selection was the presumed high level of opium poppy cultivation at higher elevations in the watershed. Subsequent surveys indicated that opium production in the Mae Chaem represents only a small fraction of the total output of northern Thailand, and only a few of the watershed's inhabitants are engaged in opium poppy cultivation" (ibid:9). The MCWDP does not specifically target the opium poppy pioneer farmers; instead, it provides benefits to all area inhabitants. To the extent the Shaw Karen become self-sufficient in rice, they will be less likely to sell their labor to poppy-growing farmers. It is not clear whether pioneer farmers will be encouraged to settle on upland valley farmland. Currently available project documents do not indicate whether an attempt is being made to distinguish among various hilltribe groups, their different development needs, and the appropriate project activities which might reduce individual village reliance on poppy as a cash crop. Of special interest to certain hilltribe groups is the chance to receive citizenship and land ownership titles. Both are extremely important for improving their access to Government services. To the extent that the project directly addresses the underlying causes of poverty in different villages and attempts to increase land ownership security, it may satisfy the Royal Thai Government's preconditions for commercial poppy eradication.

Project development activities are designed to coordinate with a ban on poppy cultivation. The poppy ban will be easy to monitor for hilltribe holdings located in the project area. However, for tribal farmlands located at some distance from the project area, the use of project credit and inputs will be extremely difficult to monitor. "Interface teams" live directly in the project villages, and their role is to coordinate action and improve communication between line agencies and the local population. Their presence may improve project monitoring, but the attempt to deny benefits may be difficult to implement (Roth 1983:170).

As of March 1985, the USAID/Bangkok Mission indicated that the project was proceeding on schedule (USAID, Project Implementation Report, Project No. 493-0297, 1985). Land terracing, weirs, and roads are being constructed. Community forestry work is underway, and land use certificates have been issued to 17 percent of the target population (ibid). There is no indication that poppy eradication has yet occurred.

6. TENTATIVE FINDINGS

Some concluding remarks follow regarding the opium poppy-growing hilltribe region and the Royal Thai Government and UNFDAC narcotics control efforts.

6.1 Substituting Cash Crops for Opium Poppies

Thailand may be in a unique position because it appears that there are substitute cash crops that can generate profits equal to or greater than poppies. Coffee, kidney beans, and fruit are the most likely candidates. Assuming the opium/substitute crop price ratio remains fairly constant in the foreseeable future, the economic attractiveness of these crops will remain. This assumption may not hold, however, given the notoriously unstable nature of opium prices in Thailand. To the extent that Burma continues to overwhelmingly dominate the region's supply for the foreseeable future (a not unrealistic scenario, given the extremely intractable political issues involved in the Burmese opium trade), a successful supply reduction effort in Thailand will not significantly effect Thai opium prices if trade across the border continues.

6.2 Rice Self-Sufficiency and the Commercialization of Opium Poppy

The hilltribes are currently unable to meet their own basic food consumption requirements. The factors that contribute to and reinforce this condition are the growing agricultural land scarcity due to population growth, the deterioration of land quality resulting from hilltribe shifting agricultural practices, and the use of low-yielding upland rice varieties. To maintain minimum subsistence levels, hilltribe farmers often sell their labor to poppy-growing farmers or grow poppies themselves to offset debts incurred from borrowing to buy additional rice. The key to reducing commercial opium poppy cultivation is to upgrade the region's agricultural base. The attainment of this objective involves three interrelated tasks. First, upland rice and maize productivity must be increased to achieve basic food selfsufficiency. Second, substitute cash crops must be introduced to provide additional income. Third, environmentally destructive swidden agricultural practices must be adapted, and those communities which require additional land must be resettled.

6.3 The Critical Need for Enforcement

To effect a reduction in poppy cultivation, it is essential that enforcement efforts be undertaken in areas that have benefitted from project assistance. The experience gained through UNFDAC-funded projects demonstrates this point. Some villages that received project benefits refused to give up poppy cultivation; others simply refused to participate in any program. Attitudes changed as soon as the Government moved to destroy crops and confiscate opium.

6.4 Ethnicity and Insurgency in the Highland Region

Ethnicity issues and insurgency slow the pace with which the Royal Thai Government can carry out eradication efforts. Given the tensions that exist between the hilltribes and the lowland Thai and the presence of anti-government groups, the Government is inclined to make every effort possible to ensure the proper functioning of narcotics control schemes before a cultivation ban is enforced. While the presence of insurgents tends to limit effective action, it is also a stimulus to the Royal Thai Government to provide services to the hilltribes in order to ensure their loyalty to the Thai nation.

6.5 Government Stability and Concern Over Domestic Drug Abuse

With the exception of popular political unrest in the mid-1970s, the Royal Thai Government has enjoyed a high degree of political stability. It is evident that an elite-dominated, Bangkok-centered bias in Thai's development process exists and has effectively limited Government resources to the highlands of northern Thailand. Still, development assistance to the hilltribes has enjoyed continual support since the late 1960s. In recent years, a growing drug abuse problem centered in Bangkok and growing Government awareness of this problem have increasingly focused the Government's attention on narcotics supply control.

APPENDIX D

COCA PLANT CULTIVATION CONTROL IN PERU

1. INTRODUCTION

The coca bush is one of the oldest cultivated plants in Peru and the coca leaf has been used for ritual and medicinal purposes for the past 2,000 years. Inca nobility and priestly classes were known to chew coca leaf. After the conquest of Peru by the Spaniards, its consumption became more widespread among the common people. The Peruvian mining boom in the 16th century saw a rapid expansion in the use of coca leaf among the mine workers, a practice encouraged by the mine owners to mask the effects of fatigue, hunger, and high altitude sickness.

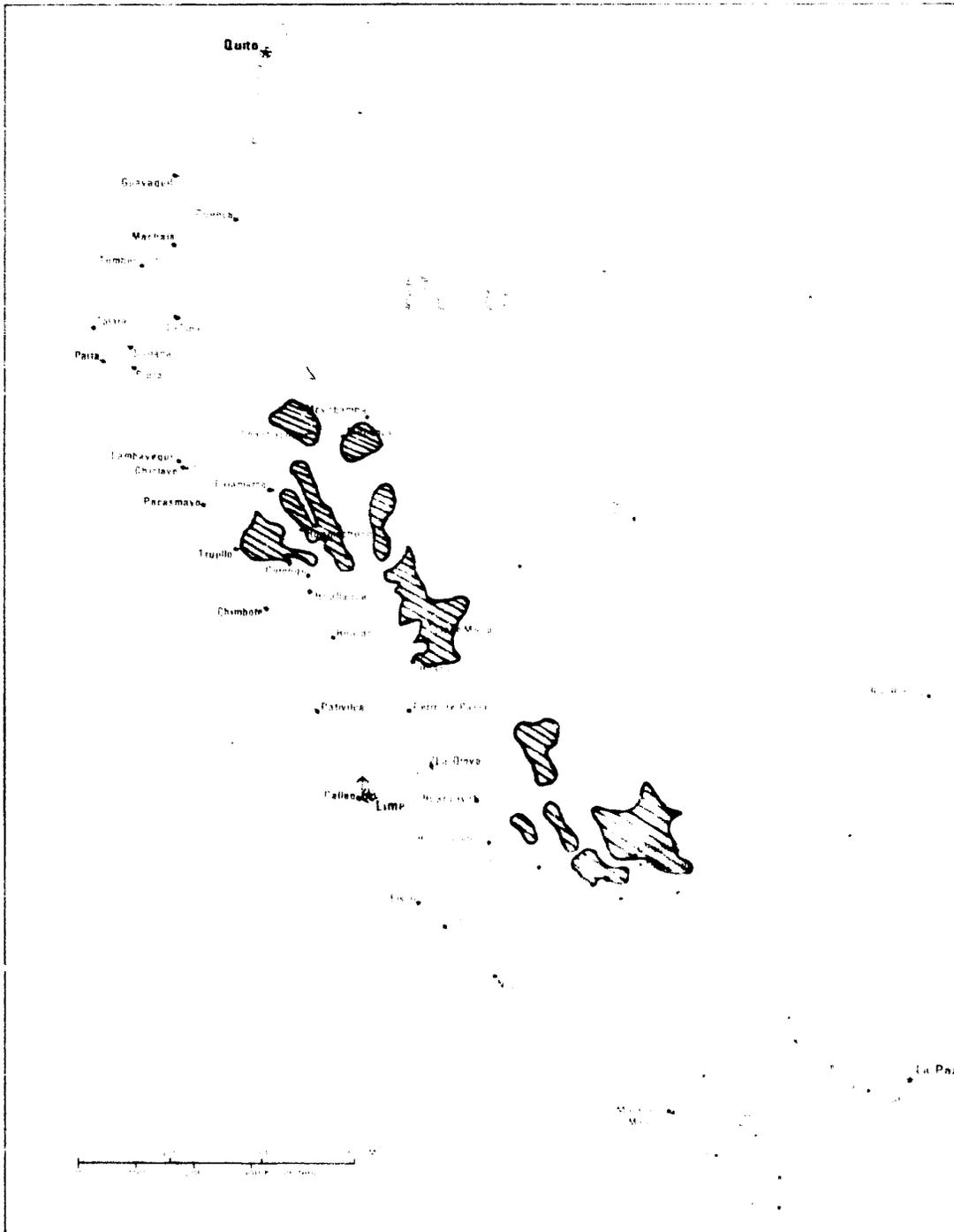
By the 19th century, coca production had become a major industry in Peru and was successfully meeting growing international demands. The United States was a major importer of Peruvian coca, and the U.S. pharmaceutical industry was enthusiastic about its uses. It was only in the early part of the 20th century that the harmful effects of cocaine were fully appreciated by the medical community and its use was drastically curtailed in the United States. As a result of this increased concern, international narcotics conventions held in 1925 and 1931 limited the manufacturing and international trade of coca leaf and its derivatives to the pharmaceutical industry. By 1931, illicit trafficking of coca from Peru had completely disappeared, and the annual production of coca leaf fell to around 10,000 metric tons (t), where it remained into the 1960s.

Peru ratified the Single Convention on Narcotic Drugs of 1961 in July 1964. As provided for by this convention, the state-owned monopoly, Empresa Nacional de la Coca, was created to control coca leaf movement from producer to consumer and keep a register of all legal production. However, the Government did little to discourage coca leaf chewing practices, as called for under the convention.

In 1978, the Peruvian Government enacted Decree Law 22095, which prohibited new cultivation of coca and closed the registry of legally licensed growers at 25,000, cultivating 18,000 hectares (ha) of land. Subsequent laws increased penalties for violations and gave the Guardia Civil additional enforcement responsibility.

Current estimates of total land under cultivation range from 60,000 to 135,000 ha (see map). The reason for this variation in estimated cultivated area is because coca is grown in remote, tropical rainforest areas that often hinder U.S.-assisted aerial

Major Illicit Coca Leaf Cultivation Areas in Peru, 1985



Note: Shaded areas represent current best estimates of cultivation sites.

Source: U.S. Department of State, Bureau of International Narcotics Matters, 1985.

photography surveys. The State Department's Bureau of International Narcotics Matters (INM) currently estimates a total cultivated area of 100,000 ha, producing 90,831 t of coca leaf in 1986 (U.S. Department of State 1986:144).

There is general agreement that roughly 14,000 t of coca leaf are used for domestic chewing and other legitimate purposes. "The remainder of the coca leaf is converted to basic cocaine paste, cocaine base or cocaine hydrochloride and enters the illegal drug market" (USAID, PID, Project No. 493-0294, 1985:1). Nearly half of the cocaine consumed in the United States is believed to originate in Peru.

2. THE U.S. NARCOTICS CONTROL STRATEGY

The United States has adopted both short and long-term strategies for controlling coca production and trafficking in Peru. The short-term strategy involves controlling the illicit trafficking in coca derivatives, whereas the long-term strategy is to reduce the production of coca to a level just sufficient to meet domestic needs and legal export requirements.

Through its various agencies the United States has provided technical and economic assistance to Peru for (1) drug enforcement and eradication of illegal coca crops, (2) area development activities focusing on crop replacement in coca-producing regions, and (3) public education on narcotics. INM and the Drug Enforcement Agency (DEA) have focused on the first type of assistance; the Agency for International Development (AID) has concerned itself with the latter two.

By fiscal year 1984, the United States had "spent a total of \$11.6 million assisting the Peruvian narcotics control program" (U.S. Department of State, Profile Paper n.d.:2). INM and DEA are assisting the Peruvian Government in improving its enforcement and eradication capabilities. They are enhancing operations and intelligence coordination among the various Peruvian narcotics enforcement agencies. INM is also directly involved in coca eradication efforts in the Upper Huallaga Valley, where AID is currently involved.

AID narcotics control efforts are concentrated on an agricultural area development project in the Upper Huallaga Valley, a major coca-producing region. This project is being implemented in close cooperation with the INM-supported Coca Control and Reduction Organization for the Upper Huallaga (CORAH). AID also has initiated a project for narcotics awareness to educate the elites and middle classes on the harmful effects of drug abuse. A \$4 million project beginning in 1986 will represent the first major attempt by AID both to inform the public of the drug problem and to lobby for increased enforcement efforts.

3. AID NARCOTICS CONTROL EFFORTS

The Upper Huallaga Area Development Project (UHADP) represents the first effort by AID to directly address the problem of coca leaf cultivation in Peru. With this project, AID has moved directly into a comprehensive area development effort with no prior narcotics control project experience in the country. AID is relying on INM assistance in monitoring and ensuring that progress is being made toward the eradication of coca leaf. In addition to supporting an area development project, AID is currently planning a public drug awareness project that will focus on Peru's domestic narcotics problem. This effort is part of a country strategy to increase national-level support for U.S. narcotics control efforts.

3.1 The Upper Huallaga Area Development Project

UHADP, which began in 1981, is the first AID-funded project in Peru to provide a wide range of development activities in a major coca leaf-producing area. It is a comprehensive initiative attempting to improve the agricultural base of the local economy.

The Upper Huallaga Valley region is the largest cocaproducing area in the world. It is estimated that between 20,000 and 30,000 t of coca leaf are produced in the region each year. Most of the coca bushes are grown in acidic soils on the steep slopes of the valley. Although some coca leaf is cultivated on the valley floor, many farmers have abandoned lands there to clear forestland and plant coca bushes higher up.

After undertaking field research, the project designers concluded that there was no viable substitute crop that could provide the same returns to land, labor, and capital as had coca. Hence, they elected not to pursue a simple strategy of crop substitution. "There will be very little substitution of crops on areas planted to coca as the poor soils on which coca flourish are not suited to the production of other crops. The majority of the coca-producing area will be returned to forest and natural vegetative cover" (USAID, PID, Project No. 527-0244, 1980:8).

The project approach is essentially based on the concept of relative risk and potential gain. The premise is that by increasing the risk (and thus the cost) associated with coca leaf cultivation, farmers have an incentive to allocate more resources to replacement crops. An effective eradication program and an improvement in enforcement capabilities will increase the level of risk associated with coca production, thereby making alternatives more attractive. The project is designed to create new economic opportunities by providing agricultural inputs, credit,

access to markets, new technology, and the growth of agro-industries.

Obligations were authorized not to exceed \$18 million in grant and loan funds over the 1981-1987 period. As of March 1985, the full \$18 million was obligated and total actual expenditures amounted to \$9 . 5 million . The project implements its assistance program through various agencies and is administered by the Special Project Office (PEAH), which operates under the National Development Institute (INADE). Project activities include adaptive research to determine the agronomic, economic and socioagricultural feasibility of alternative crops; expansion and reorganization of the existing extension services; short- and medium-term loans; expansion of the National Agrarian University of the Jungle (UNAS) to train agricultural scientists; support of farm production services; improvement in and development of local communication facilities; provision of potable water and sanitation systems; and provision of improved health services .

Two general observations can be made about the project. First, the entire farm population in the project area is eligible to participate. The project does not distinguish between coca and non-coca farmers; it provides assistance to all area farmers, even though some may not be directly affected by coca eradication efforts. Second, only two of the project's activities (credit and extension) are designed to directly help farmers in the medium term. The remaining activities will confer long-term benefits.

Coca eradication efforts are being carried out in connection with INM-assisted CORAH. INM has committed \$15 million to CORAH over 5 years and has provided extensive technical and commodity assistance. CORAH is using various manual eradication techniques such as cutting/burning or digging the roots of coca bushes. Although the planned eradication program in the project area did not begin until 1983, "more than 3,000 ha. of coca were eradicated in 1984, the most successful coca eradication effort in any country so far" (U.S. Department of State 1985:112). CORAH seeks to eradicate 6,000 ha during 1985; INM officials are confident that this target can be achieved.

The available reports on UHADP indicate that although some progress has occurred, the overall performance of the project is not encouraging. The project started behind schedule and did not make any progress until 1982. Since 1983, growing security problems have made it unsafe and difficult for Government agencies and PEAH to carry out field work with any degree of success. A series of killings directed at project personnel and farmers have resulted in a major setback. The March 1985 progress report notes that it has not been possible to generate "any real interest in the cultivation of cash crops such as rice, cacao, tea,

and maize" among farmers. The level of maize production has drastically decreased in the last 2 years, as have the production of tea and the demand for credit to support these and other activities. Plantings of new varieties of rainfed and irrigated rice have marginally increased but only in areas where these crops are not in direct competition for land with coca bushes. The project is not succeeding in increasing the production of other cash crops to provide farmers with an alternative to coca cultivation.

According to a study team of the Committee on Foreign Affairs, the project has not directly benefitted the farmers who were directly affected by eradication efforts.

Although \$9 million of AID's \$18 million contribution to the project have been expended, it is unclear who has benefitted from the agricultural credit and extension services provided thus far, since there is no unified record-keeping system between PEAH, the banks making the loans, and CORAH. The Study Mission was unable to establish definitively that it is even possible for farmers whose coca bushes have been eradicated to receive loans under the program, due to a "Catch-22" situation whereby farmers must have land titles to obtain loans, but land titles cannot be given to farmers who grow coca. The credit component has not been attractive in any case, since under Peruvian law loans can only be made at commercial interest rates. The Study Mission was also unable to determine whether any of the farmers whose coca fields were eradicated have received the \$350 cash payment per ha. that is promised under the program. (U.S. Congress, House Committee on Foreign Affairs, 1985:22).

The above findings have been disputed by the AID Bureau for Latin America and the Caribbean, which has suggested that despite slow progress, project benefits are reaching the targeted farmers.

Even if current narcotics control efforts in the Upper Huallaga Valley are successful, the impact on total national coca bush cultivation will be marginal. Peruvian land is eminently suited to coca, which is now grown in almost every department in the country. Therefore, a decrease in the Upper Huallaga Valley can be compensated for by increases in other areas unless similar control efforts are made nationwide. This point was stressed by the House Select Committee on Narcotics Abuse and Control.

This committee has had serious reservations on the feasibility of programs that concentrate on a single sector of coca leaf production in Peru and the Upper Huallaga Valley, when that sector, albeit an important one, is one of six. Unless coca is gradually elimi-

nated in the other five sectors simultaneously, they will meet any decreases that occur in the Upper Huallaga Valley (U.S. Congress, House Select Committee on Narcotics Abuse and Control, 1984:25).

4. AID NARCOTICS AWARENESS EFFORTS

In addition to its UHADP efforts, AID has focused on increasing narcotics awareness in Peruvian society. In 1984, it funded a study designed to (1) analyze public awareness of issues related to drug problems; (2) examine measures for improving this awareness through information diffusion, education, and consciousness raising; and (3) examine the feasibility of establishing a private, nonprofit Peruvian agency for this purpose.

Major findings of the study that are directly relevant to AID include the following:

- The elites give a low priority to the drug problem within the context of overall development priorities. "In any ranking of problems, drug abuse and drug traffic are at the bottom rather than the top of the list. They are of lesser weight than problems such as social needs, unemployment, terrorism and the general economic situation" (Development Associates 1985:33).
- Issues of coca production and trafficking are of little or no concern to the elites. Not a single respondent "mentioned coca production as a problem" and drug trafficking was mentioned by less than 20 percent of the respondents (ibid:34). Indeed, "none indicated the ready availability of coca paste as a problem or a cause of drug use and abuse" (ibid). Evidently, the elites did not see a connection between drug use and the cultivation and trafficking of coca.
- The elites regard the breakdown of the family as the single most important cause of the drug problem. This was followed by peer pressures and the general social environment.
- Respondents see education as the best solution to the problem. However, a smaller sample from the slums and shanty settlements regard the "betterment of the social condition" as a permanent solution to the problem.

The study verifies the low priority that the elites place on drug abuse and commercial coca leaf cultivation and trafficking. This attitude is the result of the traditional acceptance of coca leaf cultivation, the past low rates of more serious drug addic-

tion, and the overwhelming concern for the continuing national economic crisis.

AID followed up on these study findings and recommendations by proposing a "Drug Education and Public Awareness Program" for Peru. The major purpose of the program is "to establish and make operational a private, non-profit Peruvian drug education and information center that would be directed and managed by highlevel Peruvians." The proposed center would educate people about the dangers that drugs present to Peru and would lobby the political leadership and other opinion leaders "for more aggressive implementation of the country's drug enforcement, coca eradication and crop replacement programs and laws." A grant of \$4.0 million was proposed to establish this education and information center (USAID, PID, Project No. 527-0288, 1985:1).

5. TENTATIVE FINDINGS

5.1 Profitability of Coca Cultivation

UHADP faces one major hurdle: the sheer profitability of coca production. There is no crop or mix of crops that can generate the returns, labor, and capital that coca does in the Upper Huallaga Valley. Agro-climatic conditions are favorable for coca; moreover, coca is grown on sloping areas where other crops cannot usually be grown. It requires little care and can be harvested four times a year, thus providing a continuous income stream.

AID recently estimated that a Peruvian farmer can earn approximately \$2,300 per ha by growing coca, as opposed to \$1,500 earned cultivating coffee or \$4,300³ earned cultivating labor-intensive cacao (ibid:2). Those coca farmers who convert their leaf to basic cocaine paste realize even higher profits. However, it should be emphasized that the high profits realized from the cocaine trade generally are not captured by the farmers.

Given this situation, the economics of the coca trade work against AID narcotics control efforts. No rational farmer will willingly give up coca cultivation unless the degree and certainty of risks involved are very high. Even if eradication efforts are carried out in the project area, there is no guarantee that

³These estimates refer to returns to land only. Cacao farming is far more labor-intensive than the cultivation of coca, and a family cannot maintain as high an income growing cacao as it can with coca.

farmers will not replant coca, if not in the present area, than elsewhere.

5.2 Problems of Violence and Security

One problem overlooked by project planners is the potential for violent reactions by the coca farmers and traffickers to a narcotics control intervention and the consequent threat to the life and security of project personnel and participating farmers. With UHADP, this problem has become serious and has adversely affected project implementation. Since 1983, the project has encountered widespread violence and terrorism. The worst victims of this violence were CORAH workers who were directly involved in coca eradication efforts. As the most recent progress report observes

The murder of 19 CORAH workers in their quarters at night during the month of November 1984 caused a major reduction of project field-based activities....An already bad situation was worsened by a series of incidents beginning in late January with the systematic blocking of the minor highway between Nuevo Progreso and Aucayacu, and the killing of 15 farm laborers (including women and children) was followed by a series of killings which to date have accounted for the lives of over 50 campesinos and their families. Some victims, known to have close links to PEAH, were murdered in a particularly violent manner, suggesting that the killing may have been carried out to discourage local farmers from cooperating with the project (USAID, Project Status Report, March 1985).

In fact, there have been numerous instances of violence, including an attack on the project guesthouse bridge linking Tingo Maria to the airport and a radio station in early 1985. Much of the reported violence between February and March took place in the area where new coca eradication efforts were being launched (ibid:60).

The effects of this violence on AID staff were predictable. It has undermined morale and expatriate staff were removed from the project sites. The Peruvian civil officials who have remained in the project area, are concerned about their safety and are losing their enthusiasm and initiative. AID officials believe that an increasing number of farmers are unwilling to cooperate with the project out of fear of violence. In fact, a recent project report notes that, "farmers are now migrating out of the zone in large numbers leaving their lands and farms" (ibid:60). Outside agribusiness entrepreneurs, whom the project had hoped to attract, are also discouraged by the much publicized

acts of violence. "Very few outside investors are willing to invest in the Upper Huallaga Valley's short or long-term future while the security situation continues to worsen" (ibid:6).

In retrospect, it is surprising that the violence problem was not anticipated by either INM or AID. Project designers overlooked the likelihood that when the interests of organized narcotics traffickers and local farmers were threatened, they would resort to violence and endanger the lives of project staff and participating farmers.

5.3 Perceptions of Peruvian Elites Regarding the Drug Abuse Issue

There is a general feeling in Peru that coca trafficking is essentially a U.S. problem. AID recently funded a study in Peru on national perceptions and attitudes regarding drug issues. As noted by the study team, "A common perception held by many of the individuals contacted in the course of this study is that narcotics trafficking and cocaine problems are in the province of U.S. problems and interests and do not really concern Peruvian interests. Furthermore, it is held that an end in the U.S. consumption and demand for cocaine would virtually eliminate Peru's problems with coca" (Development Alternatives, Inc. 1985:16). This belief indeed poses a barrier to effective Peruvian Government-sponsored law enforcement and the implementation of coca reduction efforts. Until Peruvian elites view the abuse of drugs, especially cocaine, as a domestic problem, not much can be achieved by AID or INM.

Several factors are gradually changing this attitude. First, the country now has a visible coca paste use problem. There are an estimated 156,000 users of cocaine products in Peru and the domestic consumption of cocaine hydrochloride has increased. Second, the political effects of uncontrolled coca cultivation and trafficking are being felt nationwide. "The financial resources of the drug traffickers have enabled them to build empires seemingly outside of legal jurisdictions with enough clout to purchase the loyalty of many officials charged with law enforcement.... There are localities governed entirely by drug traffickers...[where] the drug traffickers' desires are law, and almost the whole population is linked in one way or another to the production or sale of drugs derived from coca" (ibid:20). In many localities a new stratification system has been created based on wealth obtained through the commercial coca industry. Moreover, the enormous paramilitary resources available to the large traffickers, who are often based outside the country, have created a concern for national security. That these traffickers can violate the airspace of the country with impunity has reminded the elites of the Government ineffectiveness.

The above-mentioned factors should influence the future attitudes of Peruvian elites about the drug problem. However, until such changes occur, current attitudes will continue to hinder AID and INM coca reduction efforts.

5.4 Coordination of Enforcement and Development Assistance Efforts

As mentioned earlier, the AID area development project was designed to complement INM's coca eradication efforts in the Upper Huallaga Valley. The underlying assumption was that AID and INM would coordinate their activities. The INM-supported CORAH would eradicate illegal coca production, while the AID sponsoring agency, PEAH, paved the way for economic recovery by creating new income opportunities for affected farmers.

The available evidence suggests that PEAH and CORAH have not been able to coordinate their efforts at the local level. This is readily acknowledged by AID's staff, although there is disagreement about the reasons for this problem. There are several contributing factors.

First, AID and INM have fundamental differences in their bureaucratic ethos and staff orientation. The former is essentially a development agency and its staff has expertise in overseas development. AID personnel tend to view the problem of narcotics control from a long-term development perspective and give priority to economic and social factors that affect coca production. INM has a narcotics control orientation and its staff is experienced in enforcement work. They tend to have a short-term perspective and believe enforcement must begin early in the project. These different attitudes can sometimes create barriers to cooperation and coordination efforts.

Second, the operational procedures of the two projects are not always compatible. "CORAH can deal with farmers on a onetime individual basis to eradicate their coca plantings, whereas PEAH is not designed nor organized to deal with farmers on a one-to-one basis. PEAH activities depend on organized systems to deliver several coordinated inputs to farmers by areas or zones on a continuous and sustained basis" (USAID, Project Status Report, 1985:75). The UHADP target group is not limited to the coca farmers but includes the entire population. Hence, PEAH is often not in a position to provide immediate assistance to the farmers whose coca crops have been destroyed and who need replacement assistance--coca is often grown in areas where other crops cannot be cultivated. Thus, many farmers who are directly affected by crop eradication cannot be immediately helped by PEAH (U.S. Congress, House Committee on Foreign Affairs, 1985:22).

Third, there is a security dimension. In the present atmosphere of violence, AID staff is especially concerned about being openly identified with enforcement and eradication efforts. Close, visible coordination between PEAH and CORAH, they fear, might further erode their legitimacy in the public eye and make them more vulnerable to terrorists' and narcotics traffickers' attacks. Such a cautious attitude is criticized by INM personnel, who sometimes believe that AID is shirking its responsibility.

APPENDIX E

COCA PLANT CULTIVATION CONTROL IN BOLIVIA

1. INTRODUCTION

In Bolivia, as in Peru, the coca bush has been cultivated for at least 2,000 years. It has been traditionally chewed as a mild stimulant to overcome fatigue associated with high altitude. It also serves as an appetite suppressant. During the early part of this century, mining companies provided it gratis to workers to relieve weariness.

Over the past decade, Bolivia has witnessed an increase in the cultivation of coca (see map) and the refining and trafficking of illicit coca products. By the late 1970s, Bolivian coca paste was being supplied to international markets via Colombia, where most of it was processed. Since 1980, there has been a trend toward local processing. Production figures for 1985 vary widely; however, INM estimated that roughly 32,000 metric tons (t) were produced that year. Because domestic annual consumption is roughly 15,000 t, this means that 50 percent of total production was available for foreign markets. It is estimated that "coca leaf produced in Bolivia is...responsible for 45 percent of the cocaine entering the U.S." (U.S. Congress, House Select Committee on Narcotics Abuse and Control, 1984:46). From 1977 to 1981, coca production in Bolivia increased by roughly 78 percent (ibid:50). There is ample evidence to indicate that illicit manufacture of coca paste is increasing as a result of traditional farmers expanding their production and newly arrived farmers starting up in areas where traditional coca leaf cultivation had never occurred. The Colombians proved to be aggressive developers of coca sources in Bolivia: beginning in the mid 1970s, they began changing the Chapare region from a marginal producer to its present position of producing as much as 80 percent of total Bolivian coca production (ibid:48). Growing U.S. demand coupled with well-organized trafficking organizations and lack of employment opportunities are largely responsible for the growing illicit production and trade of coca leaf.

2. BOLIVIAN GOVERNMENT ACTIONS

Although Bolivia ratified the Narcotics Control Conventions of 1912, 1926, and 1946, it did not ratify the Single Convention of 1961 until 1976. Under these conventions, Bolivia is obligated to control the legal import, export, manufacture, and distribution of coca products, to limit their use to medical purposes, and to suppress illicit traffic (ibid:47). In the past,

Major Illicit Coca Leaf Cultivation Areas in Bolivia, 1985



Note: Shaded areas represent current best estimates of cultivation sites.

Source: U.S. Department of State, Bureau of International Narcotics Matters, 1985.

the Government of Bolivia has shown little commitment or capability to effectively reduce the growing illicit commercial market. Although several agencies have been set up since the early 1970s to oversee narcotics control activities and introduce licensing schemes, most have been ineffective. Political instability and a series of coups have hampered the evolution of effective policies and actions to control production.

In July 1980, a military regime seized power. Because of the regime's cool relations with the United States and its close links to cocaine traffickers, the United States withdrew support. The United States refused to recognize the new leadership, broke diplomatic and military ties, cut economic aid, and suspended its development assistance program. In 1981, the U.S. House Committee on Banking, Finance, and Urban Affairs considered an amendment "directing the U.S. executive directors at the World Bank and the Inter-American Development Bank to oppose assistance to Bolivia because of official complicity in the illegal cocaine traffic from that country" (U.S. Congress, House Subcommittee on International Development Institutions and Finance, 1981:1). Although such action was never taken it would have represented the first instance of an application of the 1972 Rangel Amendment. In August 1981, a series of political shake-ups began that lasted until a new government was formed in October 1983. This ended the sharp break in U.S.-Bolivian narcotics control efforts.

The Government that came to power in 1983, like its predecessors, has publicly committed itself to reform. However, unlike its predecessors, it has acted on its commitment. In May 1985, the Bolivian Government issued a comprehensive narcotics law that laid the legal basis for implementing the bilateral agreements. The new Government of President Paz Estenssoro reorganized the Coca Reduction Directorate (DIRECO). In support of an AID area development project in the Chapare region, the Bolivian Government is undertaking law enforcement activities and plans are underway to begin a phased coca plant eradication and licensing system. In an effort to increase Government presence and establish law and order in the Chapare region, a police team devoted to apprehending narcotics violators has successfully been operating since 1983. In addition, a 150-person mobile rural patrol unit destroyed major cocaine processing factories in 1984.

3. AID NARCOTICS CONTROL STRATEGY

The AID narcotics control program in Bolivia has operated under the very unfavorable set of political circumstances discussed above. AID has undertaken two projects directly related to the reduction of illicit coca leaf production: the Agricultural Development in the Coca Zones Project (ADCZP) and the Chapare Regional Development Project (CRDP). AID strategy has

evolved from an initial phase that explored the feasibility of a coca substitution program by undertaking several research activities to a more ambitious attempt at a comprehensive area development project in a major coca-producing region.

AID recognizes two complicating factors that its overall strategy must address. First, because complete eradication is inappropriate, an enforceable system of licensing must be identified. Second, the coca bush is extremely well adapted and thrives throughout the upper elevations of South America. The bush is well known to farmers, it is easy to grow on poor soils and steep slopes, and it provides profits to farmers that no other crops can match. It is the cash crop of preference throughout the entire region. Given this situation, enforcement is absolutely necessary to achieve supply reductions.

3.1 The Agricultural Development in the Coca Zones Project

The first narcotics control development initiative by AID came in 1975 with ADCZP. This \$1.9 million project was completed in 1980. "The goal of this pilot...was to achieve an overall government program for diversification of agricultural production...while a program to minimize illegal production, export, and use of coca was developed" (USAID, PP, Project No. 511-1-995727-1, 1976:2). To achieve these objectives, a series of studies were planned to investigate the economic, social, and cultural aspects of production and marketing. Additional studies were planned in agronomic and economic research on alternative agricultural production.

A 1979 audit report of ADCZP found little reason to believe that the project goals would be achieved. The audit report stated that, "although current thinking...was that the project would be completed in 1983...we had little confidence in even this revised estimate. To develop, test and prove that alternative crops...can produce returns competitive with returns available from coca leaf appears a truly long-range unpredictable objective" (GAO 1979:4). Some studies clarified the viability of substitute crops; however, no program to reduce coca leaf production was ever developed. Given the lack of Government commitment and the overly optimistic goals established, the project could not possibly achieve its goals.

3.2 The Chapare Regional Development Project

Initiated in 1983, CRDP represents the first attempt by AID to undertake a major agroforestry and agroindustry development project in the primary coca-growing region of Bolivia.

The project area is located within a vast subtropical rain-forest in central Bolivia, comprising roughly 422,000 hectares (ha) and 12,000 farm families. Erosion, excessive moisture due to seasonal flooding, rapid loss of fertility via leaching, bad drainage, acidity, and lack of organic matter are the main factors limiting alternative crops. Typical agricultural practices involve clearing land, planting annual crops, and soon thereafter planting perennial crops. Coca, with 35,000 ha planted, is the most extensively grown annual crop, followed by rice. The majority of inhabitants are recent arrivals from other areas. These campesinos are not prosperous; however, they have experienced improvements in their living standards as a result of the coca boom. The region is seriously lacking in public and social infrastructure. Farmers in the area tend to be more progressive than the traditional campesino. In project design-related research, they repeatedly expressed a strong desire to participate in project activities (USAID, PP, Project No. 511-0543, 1983:11).

The project goal is to stimulate balanced economic development and an enhanced standard of living by increasing private sector agroindustry participation and increasing the availability of public services. The project seeks to accomplish this by providing assistance in three related areas: agricultural and forestry production, agribusiness development, and project administration/institutional development (ibid:25).

Planned obligations were authorized not to exceed \$14.4 million in grant and loan funds from 1983 to 1988 (ibid:1). As of March 1985, \$10.6 million was obligated and total actual expenditures amounted to \$.5 million.

The importance of CRDP to the AID overall coca eradication efforts is potentially significant. Although CRDP does not contain a coca clause in the sense that poppy clauses are used in Pakistan, project funding is still dependent on an annual AID assessment of whether the Bolivian Government is making a concerted effort to reduce and control the production of coca. The objective of the project and its associated coca control program is to reduce in a phased manner illicit coca cultivation by 20,000 ha within 5 years (Project Paper: 1983:20). It is hoped that by the end of the project, a system will be in place to effectively reduce the amount of coca planted to legally acceptable levels. There is an indication that, "considerable momentum has been achieved since the project become operational in 1984" (USAID, Quarterly Project Implementation Report, Project No. 511-0543, 1983:1). Because the project is still relatively new few activities have yet been undertaken, and there is no evidence to date of any crop eradication.

4. TENTATIVE FINDINGS

4.1 Cultural and Economic Considerations Relevant to Coca Supply Reduction

The traditional use and cultivation of coca has an ancient history. Personal use of this crop is culturally accepted among the Indian population and its cultivation is not perceived as an illegal activity. However, its cultivation as a cash crop destined for international markets is a relatively new phenomenon. Given the current national economic crisis and limited employment opportunities, the cultivation of coca as a cash crop affords the most promising opportunity that farmers have to improve their standard of living. Indeed, no other crop offers such high returns to labor, nor is it likely that a viable alternative can be found in the near future. The suitability of most of the alternative crops thus far-identified is constrained by their lower profitability and limited markets. To provide an alternative economic base, it will be essential to diversify the area economy into other nonagricultural employment opportunities.

4.2 Geographical Limitations to the Effective Monitoring and Control of Coca Leaf Cultivation

The potential for expanding coca cultivation in Bolivia is practically unlimited. The region is vast, and the coca bush is well adapted to a wide range in elevation. The country is heavily forested, making aerial identification of commercial cultivation difficult, and large areas are virtually tractless, making ground survey exceedingly difficult.

4.3 The Political Environment and the Bolivian Government's Enforcement Capability

AID narcotics control efforts were forced to function in a political environment that until recently has made failure virtually inevitable. Political instability and a general unwillingness to place a high priority on the problem of an expanding coca cash crop economy best characterizes the history of events. Not until September 1985 did the Bolivian Government begin an eradication program. Its capability is limited because it is still establishing a presence in coca-producing areas. This situation is likely to change given the Government's interest in working with AID rural development efforts, and indications that coca paste abuse is becoming a growing domestic problem.

4.4 The Need for Enforced Eradication

The AID rural development initiative can only succeed when the Government of Bolivia begins to effectively implement eradication activities. Enforcement is problematic, and although Bolivia has not yet experienced the violence that Peru has, such a counterforce may still yet surface from traffickers and farmers intent on undermining U.S./Bolivian Government efforts. In any event, successful control over production, similar to the success witnessed in Turkey, probably remains a very distant goal.

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