The Honorable Daniel P. Moynihan
United States Senate

Dear Senator Moynihan:

This report is in response to your August 19, 1988, letter asking us to review the U.S.-supported anti-narcotics program in Burma. The program was suspended in September 1988, after the Burma Army violently suppressed antigovernment demonstrations.

The report focuses on factors that inhibited program effectiveness and presents issues that the Congress should consider if the political climate in Burma improves and the Department of State proposes reinstating the program. Because certain aspects of these issues are classified for national security purposes, we are also issuing a classified version of this report that contains additional details about the program.

As agreed with your office, unless you publicly announce its contents earlier, we plan no further distribution of this report until 15 days from the date of this letter. At that time, we will send copies to interested parties and make copies available to others upon request.

The report was prepared under the direction of Nancy R. Kingsbury, Director, Foreign Economic Assistance Issues. Other major contributors are listed in appendix II.

Sincerely yours,

Frank C. Conahan
Assistant Comptroller General
Executive Summary

Purpose
In 1988, Burma produced over 1,200 tons of raw opium, which is nearly half of the world's supply and 20 times more than is needed to supply U.S. heroin consumption. The United States has provided over $80 million in anti-narcotics assistance since 1974, but opium production has continued to expand. Senator Daniel P. Moynihan requested that GAO review the U.S. program to determine why reductions in opium production have not been achieved. GAO's review addressed three broad questions:

- Is the narcotics situation getting better or worse in Burma?
- Are improvements needed to make the assistance program more effective?
- Is the herbicide provided for aerial eradication causing undue health risks to the local population?

Background
The Department of State provides anti-narcotics assistance to foreign governments, under the Foreign Assistance Act of 1961, to reduce the flow of dangerous drugs into the United States. Initially, State provided Burma primarily helicopters and transport aircraft. In 1985, State began providing spray planes and herbicide for the aerial eradication of opium poppies. In September 1988, the United States suspended the anti-narcotics assistance program, as well as other assistance programs, after the Burma Army violently suppressed anti-government demonstrations.

Results in Brief
The factors that affect opium production in Burma are very complex; political, economic, and other forces have fostered increased narcotics production. GAO found that the Burmese government used resources inefficiently and did not implement several proposed safety precautions. Additionally, GAO found that State was not permitted to monitor the program in operation.

Although GAO believes that anti-narcotics programs are necessary and important, GAO also believes that such programs alone will not stop the flow of drugs. In Burma, enforcement efforts need to be coupled with political reforms and economic development before significant opium reductions can be expected. While the current political situation in Burma precludes restarting the program, if the political climate improves and the program is resumed in the future, improved control and monitoring procedures should be required.
**Executive Summary**

## Principal Findings

### Opium Production

**Increasing Despite Anti-Narcotics Assistance**

Between 1985 and 1988, Burma's estimated opium cultivation and yield increased dramatically. However, Burmese narcotics control efforts did not keep pace. Efforts to control opium production were hampered by the Burma Army's 40-year battle with a variety of ethnic and communist insurgent groups, some of which rely on the narcotics trade to finance their activities; economic underdevelopment in the growing regions; narcotics-related corruption; and general political unrest.

### Inefficient Program Implementation

GAO identified several inefficiencies in the way the Burmese government used U.S.-provided aerial eradication resources. Additionally, GAO found that State did not collect adequate data to determine if resources were used appropriately and if they contributed to anti-narcotics objectives.

### Safety Procedures Not Implemented

The long-term health effects of 2,4-D, the herbicide used for aerial eradication, are not well defined. However, the Burmese did not follow all of the recommended precautions to reduce potential health hazards, and did not allow State to adequately monitor spray operations. As a result, State could not accurately assess the program's safety. GAO was unable to confirm allegations of sickness or death resulting from the program.

### Enforcement Programs Unlikely to Succeed

The Burmese resisted State's suggestions to use eradication resources more efficiently. However, GAO concluded that, even if the Burmese agreed to pursue aerial eradication more aggressively, resource limitations and trafficker countermeasures would threaten the program's viability. GAO also concluded that eradication and enforcement efforts are unlikely to significantly reduce Burma's opium production unless they are combined with economic development in the growing regions and the political settlement of Burma's ethnic insurgencies.

### Despite Problems, State Sought Expanded Program

Despite the program's poor results, State believed that the program's operational inefficiencies would be corrected as the Burmese gained experience, and planned to provide additional enforcement assistance.
State suspended program assistance because of the Burmese government's suppression of civil unrest and currently does not plan to restart it. However, if the political climate in Burma improves, State may propose reinstating the program. In deliberating such a proposal, Congress should consider the program's inherent limitations. While the program has had symbolic benefits and resulted in some eradication and enforcement successes, its impact will be limited unless the Burmese government (1) seeks a political resolution to the ethnic insurgencies, (2) pursues policies that encourage development in the opium growing region, and (3) allows adequate monitoring to ensure that U.S.-provided resources are used efficiently and appropriately.

State agreed that many of the problems identified in the report exist, but pointed out that the program has resulted in the destruction and interdiction of opium and contributed to an international consensus against narcotics production and trafficking (see app. I). GAO agrees and modified its report to more explicitly recognize the program's benefits.

State said that GAO's report exaggerated the potential dangers of using the herbicide and reiterated that it is commercially available and has been widely used in the United States and abroad for many years. While there is some disagreement among experts as to the herbicide's long-term effects, they generally agree that health risks are minimized if it is applied properly. However, GAO found that State had no assurance that it was used correctly because the Burmese government did not implement all recommended safety precautions, or allow adequate program monitoring.

State also said that, because the current Burmese regime would do little to control drugs, it had no current plans to reinstate the program and that any future program will include greater control and monitoring.
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Abbreviations

BCP    Burma Communist Party
CER    Concise Environmental Review
EPA    Environmental Protection Agency
SUA    Shan United Army
Burma produces more illicit opium than any other country in the world. In 1988 Burma reportedly produced over 1,280 tons of opium—more than 20 times the estimated 60 tons needed to manufacture the heroin consumed annually in the United States.\(^1\) Burma’s estimated opium production increased nearly 270 percent between 1985 and 1988 despite U.S.-supported efforts to eradicate opium-producing poppies and to interdict raw and refined opium.

Under the Foreign Assistance Act of 1961, the Department of State provides anti-narcotics assistance to foreign governments. State’s Bureau of International Narcotics Matters is responsible for developing, coordinating, and implementing the overall U.S. international narcotics control strategy. State accomplishes its mission through diplomatic efforts and assisting host governments in crop control and interdiction, training foreign personnel, participating in international organizations, and providing technical assistance to reduce demand.

Since 1974, the United States has funded an anti-narcotics program in Burma and has provided over $80 million in assistance. In fiscal year 1988, State provided about $5 million in assistance to Burma for anti-narcotics efforts.

Since 1974, State has provided helicopters, fixed-wing transport aircraft, radios, and other equipment to the Burmese government for narcotics interdiction and manual eradication efforts. In 1985, the Burmese government agreed to conduct an aerial eradication program, which was initiated during the 1986 growing season.\(^2\) State has provided 5 Thrush spray aircraft, operations and maintenance support, pilot training, and herbicide for the aerial eradication program while continuing to support interdiction and manual eradication efforts.

In September 1988, the United States suspended assistance to Burma because of the government’s suppression of public demonstrations for political and economic reforms. The suspension was reemphasized on March 1, 1989, when the President did not recertify Burma under provisions of the Anti-Drug Abuse Act of 1986 as a country that cooperates

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\(^1\) Based on the estimated amount of heroin imported into the United States in 1985, the latest year for which such estimates are available.

\(^2\) Poppy seasons, which run across two calendar years, from approximately September through March, will be identified in this report by the year in which they end (i.e., the 1986 season refers to the season ending in March 1986).
Chapter 1
Introduction

with U.S. anti-narcotics efforts, or that takes action to combat illicit narcotics activities. State hopes to reinstate the anti-narcotics assistance program in Burma as soon as the political situation stabilizes.

Objectives, Scope, and Methodology

Senator Daniel P. Moynihan requested us to follow up previous work\(^3\) on U.S. anti-narcotics assistance to Burma. Our review addressed three broad questions:

- Is the narcotics situation getting better or worse in Burma?
- Are improvements needed to make the assistance program more effective?
- Is the herbicide provided for aerial eradication causing undue health risks to the local population?

We discussed the narcotics situation in Burma and the assistance program’s effectiveness with responsible State officials in Washington, D.C., and obtained relevant documents from them. Because of the ongoing civil unrest, we did not visit Burma during the field portion of our review. However, the Chief of State’s Narcotics Assistance Unit for Burma and other U.S. Embassy officials responsible for the Burmese program had been relocated to Bangkok, Thailand, and were interviewed. We also interviewed U.S. Consulate officials responsible for monitoring drug trafficking activities near the Burma-Thai border in Chiang Mai, Thailand. In Washington, D.C., we interviewed the U.S. Ambassador to Burma.

We interviewed representatives and reviewed records of other U.S. government agencies knowledgeable about the program.

We discussed the health effects of the herbicide used in the Burmese eradication program with representatives of the Environmental Protection Agency (EPA), the National Cancer Institute, the National Institute of Environmental Health Sciences, and the Veterans Administration.

We also interviewed the Chairman, the Secretary for Foreign Affairs, and other representatives of the National Democratic Front, a coalition of ethnic minority groups from Burma. In addition, we interviewed academics, media representatives, and private citizens, in the United States and abroad, who lived or traveled in Burma, and were identified

by Senator Moynihan's staff or State officials as being particularly knowledgeable about Burma.

We reviewed applicable congressional reports and hearings and government, academic, public interest group, and media reports, studies and accounts related to the history and current affairs of Burma, the antinarcotics efforts there, and the health effects of the herbicide.

Our review was conducted between August 1988 and February 1989 in accordance with generally accepted government auditing standards.
Chapter 2

Political and Economic Factors Affect Burma’s Opium Production

Narcotics production in Burma takes place within a complex political and economic environment. Burma’s central government is battling various insurgent and trafficking groups and does not control most opium growing and refining areas. Other factors, including economic underdevelopment in the growing regions, corruption among government and military officials and, more recently, general political unrest, have also inhibited effective action against narcotics.

Efforts to control narcotics production in Burma have been hampered by the government’s 40-year battle with the Burma Communist Party (BCP) and ethnic insurgent groups. (See fig. 2.1.) The BCP controls most of the country’s opium cultivation, and refines and trafficks narcotics in competition with entrenched profit-oriented organizations. Some of the ethnic insurgents also use the narcotics trade to help finance their activities. Although the Burma Army has been unable to defeat the insurgents, the central government is not pursuing a negotiated settlement to halt the internal conflict.

Many of Burma’s insurgencies are based on centuries of animosity between ethnic Burmans and the various minority groups, which make up about 30 percent of the country’s total population. Relations between Burmans and minorities worsened after Burma became independent in 1948 and Burman-dominated central governments attempted to increase control over traditionally autonomous minority areas. The minority populations responded with a heightened sense of separate and distinct identity and a desire for political independence. This, in turn, led to military confrontation between the Burma Army and the more than 20 insurgent groups organized within the Karen, Kachin, Shan, Arakanese, and other ethnic populations.

The largest of the ethnic insurgent groups are the Karen National Union and the Kachin Independence Organization. While the Shan are one of the largest ethnic populations, their resistance effort remains divided among many smaller competing factions. In 1976, ten insurgent groups, including the Karen and Kachin, formed a loose coalition known as the National Democratic Front to better coordinate action against the central government. Initial demands, calling for independent countries, were set aside, and the coalition now seeks a federated, democratic Burma, with special protection for minority rights.
Chapter 2
Political and Economic Factors Affect
Burma's Opium Production

Figure 2.1: Opium-Growing and Insurgent Areas in Burma

Opium Growing Areas

Areas of Insurgent Activity

A  Karen
B  Karen, Mon
C  Karen, Shan, Other Groups
D  Shan, BCP, Other Groups
E  BCP, Kachin
F  Kachin, Naga
G  Arakanese
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In addition to the ethnic-based insurgencies, the central government is also challenged by the BCP. The BCP, formed in 1939, seeks to overthrow the central government and install a Marxist regime. Some observers believe that recent BCP recruits, drawn primarily from minority areas, do not share the same ideological commitment to Marxist principles as the group's aging leadership, but are instead attracted by general antigovernment sentiment and the BCP promises of self-determination and the equal treatment of all peoples in a federal union.

Early Trafficking Dominated by Criminal Gangs

Beginning in the early 1950s, the ongoing insurgencies and resulting political instability allowed Chinese criminal organizations to establish opium empires in Burma. Large numbers of Nationalist Chinese troops were driven by the Red Army into Burma's Shan State, where they took advantage of the lack of governmental control to establish bases for raids into China. To finance these operations, the troops forced hill tribe farmers to increase poppy cultivation, and organized an international transportation and marketing network for refined opium. Eventually, the Nationalist forces abandoned their political goals and developed into strictly profit-oriented trafficking organizations. One of these organizations, the 3rd Chinese Irregular Force, remains a major narcotics trafficking group in the Burma-Thai border region.

During the mid-1970s, another profit-oriented trafficking organization, the Shan United Army (SUA), began to challenge the Chinese groups for dominance of the narcotics trade. The SUA has reportedly become the largest trafficking organization on the Burma-Thai border. Although the SUA asserts that it is a nationalist movement seeking autonomy for the Shan people, the group reportedly focuses on narcotics refining and trafficking and does little to pursue its claimed political goals.

Increasing Involvement in Trafficking by Some Insurgents

Through most of the decades of insurgency against the Rangoon government, the major ethnic groups and the BCP had little direct role in or profit from the opium trade. However, in the late 1970s the BCP, in response to reduced financial assistance from China, began using opium refining and trafficking to finance its insurgency. Although the BCP had previously tried to eliminate opium cultivation in areas under its control, the group now controls nearly 80 percent of Burma's opium cultivation. The BCP, SUA, and 3rd Chinese Irregular Force dominate Burma's narcotics trade, but State reports that other insurgent groups have also become involved.
Insurgencies Expected to Continue

During our review, we found little indication that the insurgencies will soon end through military victory or a negotiated settlement. After 40 years of fighting, the Burma Army has been unable to defeat any of the insurgent groups, and the government cannot maintain administrative or military control over many areas of the country. While a military victory appears unlikely, the government has shown little willingness to pursue a political settlement on terms acceptable to the ethnic minorities. The Burmese government has not responded to suggestions by a U.S. congressional committee that it invite the United Nations to assist in resolving conflicts with the insurgents.

Burma’s ethnic populations have suffered as a result of the ongoing warfare. For example, the Army forces civilians in insurgent-contested areas to serve as porters for military operations. These porters are systematically brutalized through overwork, lack of food and shelter, and are forced to participate in combat as screens or in mine-field clearing operations. Furthermore, Amnesty International recently reported a consistent pattern of unlawful killing, torture, rape, and other human-rights violations by the Burma Army against the ethnic population, none of which took place in the context of actual combat.

There have also been reports of abuses by the insurgent forces as well, including forced recruiting in villages and the impressment of porters. Such activities by insurgents, however, may be limited by their desire to maintain good relationship with local populations. The ethnic populations are reported to strongly support the political aims of the insurgents.

Economic Underdevelopment Limits Alternatives to Opium

While the trafficking groups encourage, and, in some cases, coerce farmers to grow opium poppy, economic underdevelopment in the growing regions complicates narcotics control efforts. The few existing roads in the opium growing areas are primitive and poorly maintained. According to individuals who have traveled within Burma, even if farmers wanted to grow other cash crops, they would be unable to get their agricultural products to market because of the inadequate transportation infrastructure. Although opium cultivation provides most farmers with little more than economic survival at a minimum subsistence level, without a development program or incentives to produce alternative commodities, opium is expected to remain the major cash crop in many areas.
Corruption Aids Narcotics Trafficking

In Burma, corruption facilitates illicit trafficking and makes effective action against narcotics difficult to sustain. While State reports that Burma has strong drug laws with harsh penalties, these laws have not eliminated narcotics-related corruption among government and military officials. As we reported in 1979,1 corruption nurtures and protects trafficking in many developing countries where drugs are produced, and can be the most important factor inhibiting drug control efforts. Corruption impairs the capability of governments to mount effective actions against traffickers and their organizations. Some government, police, judicial, and military officials profit from narcotics trafficking with impunity and, in some countries, wide-spread corruption exists within the principal unit empowered with narcotics enforcement.

Political Unrest Further Complicates Anti-Narcotics Efforts

During 1988, Burma's predominantly Burman urban population erupted in a series of unprecedented antigovernment demonstrations. According to government reports, these protests were sparked by 26 years of economic decline and political repression under Burma's military dictator, Ne Win. The government's costly counterinsurgency efforts, combined with economic policies, which emphasized centralization and allowed only limited foreign investment, had reduced Burma from one of the richest countries in Asia to a "Least Developed Country" status. Furthermore, State reported that although fighting against the ethnic groups in recent years took place only on a small scale in limited areas, Ne Win used the insurgency to justify control over the Burman populace through a security apparatus which allowed no dissent.

Although Ne Win eventually resigned, demonstrations organized by students continued to press the government for wide-ranging democracy and economic reform. Eventually the military, which State officials believe is still loyal to and controlled by Ne Win, seized power and suppressed demonstrations with a massive application of force. Troops throughout Burma opened fire on demonstrators without warning, killing hundreds and forcing many student leaders to seek refuge with the insurgents or in Thailand. While some students later accepted a government offer of amnesty and returned to the cities, some of those returning have reportedly been arrested.

As a result of the political unrest, much of Burma's police and military manpower is devoted to law enforcement activities in the cities, at the expense of anti-narcotics efforts. For example, the Burma Army was

1Gains Made In Controlling Illegal Drugs, Yet The Drug Trade Flourishes (GGD-80-4, Oct. 25, 1979).
reportedly forced to abandon positions it had recently seized along the Thai border, from which it had disrupted normal trafficking routes. According to State, government preoccupation with internal political problems, in all probability, will result in increased production and trafficking in Burma in the near term.
U.S. Assistance Has Not Reduced Opium Production

Despite 15 years of U.S. assistance for an anti-narcotics program, Burma's opium production has continued to increase. To some extent, operating inefficiencies and a lack of control over resources account for the program's poor results. But, even with program improvements, there is little indication that the Burmese can be provided with enough assistance to significantly reduce the narcotics trade through enforcement efforts. However, U.S. officials were generally pleased with the Burma program's results, and had planned to expand the level of U.S. assistance. U.S. officials also believed that, in addition to destroying and interdicting opium, the program contributed to developing an international consensus against narcotics production and trafficking.

Beginning in 1974, State has provided assistance to Burma in an attempt to reduce the amount of opium cultivated and refined. Most of the assistance has supported enforcement-based efforts by the Burma Army and Air Force. To support the interdiction of opium caravans and the destruction of refineries, State provided Burma 28 helicopters and 6 fixed-wing transport aircraft. State also provided five Thrush spray aircraft, herbicide, and pilot training for an aerial eradication program that the Burmese initiated during the 1986 growing season. One Thrush crashed and was destroyed during program operations.¹

Through the 1988 growing season, U.S.-provided enforcement assistance was not used effectively against opium production. The Burmese only eradicated areas that could be secured by the Army, and therefore, the program did not target most of the growing region. Operational inefficiencies prevented the Burmese from achieving their eradication targets in the more secure areas, and Burma's overall opium production has continued to increase. State did not collect data on the actual use of helicopters and transport aircraft, and it has been alleged that the Burmese use these assets for counterinsurgency operations at the expense of direct action against trafficking.

Increased opium production can be partly attributed to the Burmese government's inability to eradicate many growing areas controlled by insurgents. The Burmese did not spray poppy fields unless they had been secured by the Army. The BCP is heavily entrenched throughout

¹ According to U.S. officials, prior to 1986 the Burmese government was given title to all aircraft. Under new legislation (P.L. 99-570), State will retain title to any additional aircraft provided.
### Aerial Eradication Program Operated Inefficiently

Even in the relatively secure areas where the Burmese sprayed, several program inefficiencies have limited the program's impact.

- The Burmese eradicated only during part of each growing season. In 1987 and 1988, the Burmese started spraying too late in the season and ended the program too early. While increased insurgent activity reportedly forced an early cessation of the spray program in 1987, U.S. officials could not determine why the Burmese terminated the program early in 1988, or initiated spraying too late in both years.
- The Burmese did not allow U.S. instructors to provide all recommended pilot training. As originally agreed, State sent instructors to Burma to provide on-the-job training during an entire growing season. This training would have ensured that pilots had mastered the technical aspects of the eradication program. However, the Burmese did not allow the instructors to accompany the pilots on spray missions.
- The Burmese did not provide an adequate number of pilots to be trained for spray operations. In 1988, State requested that the Burmese provide eight additional pilots to replace those lost through promotion, rotation, and death. The Burmese initially resisted sending any pilots for training, although they did eventually send two.
- In eradication operations, spray planes are directed by spotter/control aircraft operating at higher altitudes. Originally, a Burma Air Force PC-6 (non-spray) aircraft was to have this role. However, the Burmese used the PC-6s for military purposes and, according to U.S. officials, often used a Thrush as a spotter, thereby reducing the number of aircraft available to spray.

### Eradication Has Not Reduced Burma's Opium Production

As a result of the various limitations and inefficiencies, the eradication program has had little impact on opium production. During 1986, a "learning year" according to State, the Burmese sprayed approximately 13,000 acres of opium with three planes; in 1987 about 23,000 acres were sprayed. However, in 1988 only 26,000 acres were sprayed, despite...
two additional spray planes. U.S. officials could not explain the Burmese government's uneven support for the program, or its unwillingness to accept advice on how to improve the program.

According to U.S. officials, the eradication program has changed cultivation patterns in some sprayed areas. In response to the program, farmers have reportedly moved poppy cultivation to smaller, more remote fields, sometimes on steeper hills, to make their fields more difficult to detect and eradicate. Farmers are also reportedly devoting more of their fields to food crops in an effort to camouflage the opium poppy.

Despite these changes in some areas, Burma's overall opium production has increased since the spray program was initiated. Total acreage cultivated for opium poppy increased from an estimated 175,000 acres in 1985 to an estimated 290,000 acres in 1988. As a result of the increase in acreage cultivated and favorable weather conditions, Burma's estimated opium yield increased from 350 to 1,280 metric tons during the same period. Reportedly, farmers, in some cases encouraged by traffickers, simply expand their opium production to counter potential losses from the aerial eradication program. Furthermore, the BCP continues to support increasingly sophisticated and efficient opium cultivation in the regions under its control.

Enforcement Assistance Ineffective Against Traffickers, Not Monitored by State

Recent enforcement efforts by Burmese government have had little effect on narcotics trafficking. From 1984 to 1987, the Burma Army and police annually seized an average of about 1.5 metric tons of opium, less than 1 percent of total annual yield, and destroyed about five refineries. These actions did little to reduce Burmese opium trafficking.

Furthermore, we could not determine if U.S.-provided aircraft had been used to assist any of the reported opium or refinery seizures. Although State had established specific indicators to measure how U.S. assistance contributed to anti-narcotics objectives, including the amount of opiates seized in the attacks against trafficking organizations and the percentage of flight time each aircraft devoted to anti-narcotics activities, corresponding data were not collected for these indicators. U.S. officials told us that they had no additional information about the aircraft.

The Burmese also conduct manual eradication operations in the more secure areas. Manual efforts reportedly eradicated about 17,600 acres in 1987, but only 5,400 acres in 1988.
Chapter 3
U.S. Assistance Has Not Reduced Opium Production

The media and some individuals have alleged that the Burmese use helicopters and transport aircraft to support counterinsurgency activities at the expense of direct action against trafficking. U.S. officials told us that they believed that the Burmese generally used the equipment only for anti-narcotics operations. However, we do not believe that State has collected enough data to determine whether the Burmese used U.S.-provided equipment for counterinsurgency purposes.

Enforcement Programs Not Likely to Reduce Opium Production

While the Burmese used U.S.-provided assistance inefficiently, and may have used it for other than its intended purposes, correcting these problems and expanding enforcement efforts would not necessarily lead to significant opium reductions. For eradication and interdiction programs to be effective, the Burmese would need not only greater efficiency, but also many more resources than are currently available.

Expanded Eradication Program Unlikely to Overcome Trafficker Defenses, Burmese Reticence

We found little evidence to suggest that the Burmese could expand the aerial eradication program to effective levels. First, more planes and pilots would be needed to spray Burma's huge growing area. Even if the five planes already committed to the program operated efficiently, the Burmese would be able to spray only about 100,000 acres, approximately one-third of the area currently under cultivation. Assuming that grower countermeasures did not offset eradicated acreage, Burma would still have a growing area of nearly 200,000 acres, a larger area than was under cultivation in 1985 before aerial eradication began. The Burmese government has not yet demonstrated the necessary commitment to ensure efficient operation of the spray program.

To be effective, eradication must include the large insurgent-controlled growing areas. However, the attrition rate for pilots and aircraft may increase if the program expands to these areas. Insurgent groups purchase modern weapons on the international arms market, and could upgrade their capabilities to defend against the relatively vulnerable propeller-driven spray aircraft.

Sufficient Resources for Narcotics Interdiction Not Available

According to U.S. government reports, it would be difficult for the Burmese to sustain effective interdiction efforts against narcotics trafficking and refining. As we noted in our February 1988 report, the trafficking groups defend the opium cultivation and refining regions with weapons that are often superior to the Burma Army's equipment. The Army does not have sufficient mobility to operate effectively in the
remote areas where opium is grown and refined. As a result, opium reductions through increased enforcement efforts are unlikely in the near future.

U.S. government reports also suggest that action against traffickers is limited by the ongoing conflict between the Burma Army and the various insurgent groups. As we reported in 1988, there is some concern that the Burma Army cannot deal effectively with insurgency and narcotics control problems at the same time. In the past, insurgent offensives have forced the Burmese military to halt eradication and interdiction efforts, and have highlighted its lack of resources.

While recognizing that shortcomings and problems remained, U.S. officials were generally pleased with the Burmese enforcement efforts and, before civil unrest halted the program, sought to increase enforcement assistance. They believed that the Burmese efforts were resulting in the destruction and interdiction of significant amounts of opium, that the aerial eradication program could be expanded to insurgent-controlled areas without heavy aircraft attrition, and that enforcement efforts would significantly reduce Burma’s opium production. In addition to action against narcotics, State believed that the program also provided indirect political benefits to the United States.

U.S. officials described the 31,000 acres of opium poppy eradicated during the 1988 growing season as “a fantastic effort.” They acknowledged that the aerial eradication program required some improvements, including spraying in insurgent controlled areas, but expected such improvements to occur as the Burmese gained more experience with aerial eradication. In response to reports that U.S. assistance was being used for counterinsurgency activities, officials stated that the Burmese generally used the helicopters and transport aircraft only against opium trafficking and refining.

According to its 1988 International Narcotics Control Strategy Report, State expected the Burmese to achieve significant reductions in illicit drug production through expanded aerial eradication and increased enforcement activities. U.S. officials told us that proper spray techniques, such as flying fast and low, and the immediate abandonment of spray missions if ground fire is encountered, would limit aircraft losses against the insurgents’ current air defenses. They noted that aerial eradication involves some level of risk, even in secure areas, and that the
Chapter 3
U.S. Assistance Has Not Reduced Opium Production

Pilots they trained were willing to spray insurgent-controlled areas if allowed by their superiors. To encourage more aggressive spraying, they promised to replace any aircraft that were shot down or crashed during operations. State also gave the Burmese a helicopter specifically to rescue downed pilots.

State Saw Political Benefits From the Program

Some U.S. officials told us that the narcotics assistance program had increased contacts between U.S. and Burmese government officials and helped to improve bilateral relations. U.S. officials also suggested that the program served an important symbolic role and that it was important for the United States to demonstrate its resolve to fight opium at the source. The officials said that, by clearly indicating that the United States disapproves of opium production, enforcement programs may dissuade some farmers from planting poppy or expanding their fields. Some U.S. officials also stated that the program in Burma may have encouraged other countries, such as Pakistan, to accept anti-narcotics assistance.

The suspension of assistance was a setback for U.S. relations with the Burmese government, according to U.S. officials, but it may have improved the U.S. image within Burma's minority areas. We were told that the minorities viewed U.S. assistance to Burma as a collaboration with the Burmese government's brutal counterinsurgency campaign. As a result, the assistance program reportedly generated anti-American sentiment among the various ethnic groups. National Democratic Front officials, representing many of these minority groups, told us that they were grateful that the United States had suspended assistance to the military regime.

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3Given the numerous reports of human rights abuses by the Burmese Army, we attempted to determine if such abuses were inflicted by ground troops securing opium fields for the aerial eradication program. State could provide no specific information about the activities of military units during eradication efforts.
Chapter 4

Health Effects of the Spray Program

The aerial eradication program has been criticized for causing adverse health effects. Although there are concerns and uncertainties within the scientific community about the long-term health effects of the spraying, risks are minimized if the herbicide is applied properly. State's environmental review of the program included procedures to minimize the potential health effects of the herbicide, but these procedures were not followed, and State had little basis for judging the safety of the program. We were unable to confirm allegations of sickness or death resulting from the program.

Long-Term Health Effects Are Unknown

The herbicide used for aerial eradication is a chemical called 2, 4-Dichlorophenoxyacetic acid, or 2,4-D. There is concern about the chemical's effects on humans, even though it has been used both commercially and by homeowners throughout the United States and abroad for over 40 years. Exposure to or ingestion of large amounts of 2,4-D can result in sickness or death, and there is some evidence that extended exposure may cause cancer.

Health Studies Controversial, Inconclusive

The Environmental Protection Agency (EPA) classifies 2,4-D as having relatively low toxicity, and a World Health Organization standard\(^1\) indicates that, at the application rates planned by State, a 150-pound person could eat about 3.3 ounces of vegetables contaminated with 2,4-D each day without ill effects. However, according to EPA's Pesticide Fact Sheet, there have been reports of sickness caused by accidental poisoning with 2,4-D. In addition, deaths resulting from the consumption of large doses of 2,4-D have been reported.

EPA cannot classify 2,4-D with regard to human carcinogenicity because the available data are not adequate. Although 2,4-D has been in use for over 40 years, older studies did not follow currently accepted test and measurement standards, and some 2,4-D formulations have not been studied. Questions about the long-term effects of 2,4-D were raised by a 1986 National Cancer Institute study of farmers in Kansas that associated 2,4-D with a six-fold increase in the occurrence of non-Hodgkin lymphoma, a form of cancer, among those who used it over an extended period. However, the official who headed the study said that some researchers had concerns about the study's methodology. The study had

\(^1\)The World Health Organization has established an acceptable daily intake (the estimated maximum amount that could be consumed every day of a person's life without harmful side effects) of 0.3 milligrams of 2,4-D per kilogram of body weight.
relied on people's memory about how they handled 2,4-D over a 20-year period and did not consider whether other factors could have contributed to the cancer.

According to the official, a similar 1988 study of farmers in Nebraska also associated 2,4-D with an increased incidence of cancer but was not as statistically significant as the Kansas study. Because of questions about the adequacy of these studies, and because other studies did not show a correlation between 2,4-D and an increased incidence of cancer, the National Cancer Institute is conducting additional research on the long-term effects of the herbicide. However, it will be several years before the results of this research are available.

On the other hand, the Council for Agricultural Science and Technology reported that 2,4-D, as it is generally used, does not represent a significant human health threat. The Council cautioned, however, that 2,4-D should be used carefully and that the reports of possible carcinogenic effects should serve to increase scientific vigilance and investigation into the issue.

Before the spray program started, State contracted for a Concise Environmental Review (CER) which recommended ways to reduce 2,4-D’s potential health problems. The CER included operational procedures to reduce exposure to the spray, and recommended that State closely monitor the program. However, the Burmese did not implement all of the recommended safety precautions and did not allow State to directly monitor spray operations. As a result, State had little basis for judging the overall safety of the eradication program.

Recognizing the potential health hazards of aerial eradication, the CER recommended that State ensure that the Burmese conduct spray operations according to EPA guidelines and commonly accepted professional standards. According to the CER, State should develop a mutually agreeable system with the Burmese to (1) monitor the operation and results of the program, including a program to test the soil in the area sprayed; (2) avoid direct spraying of populated areas, food crops, and water supplies; and (3) warn the people in the area before beginning the spraying operations. The CER stated that State officials should closely monitor the pilots, and the spray program from implementation through its conclusion, and determine the program’s effects on human health.
Chapter 4
Health Effects of the Spray Program

The CER noted that the opium growing areas of Burma have inadequate facilities for fresh water and sanitation disposal, and that there is a high incidence of gastrointestinal diseases and chronic respiratory diseases among the Burmese population, which could make them more susceptible to the hazardous effects of the herbicide. The CER further stated that, although neither the poppy growers in Burma nor their food crops or livestock were likely to be exposed to dangerous quantities of the herbicide at the planned application rates, precautions should be taken because of the potential dangers of 2,4-D.

However, the precautions and monitoring envisioned by the CER were not implemented. The Burmese did not allow State to closely monitor pilot performance or to monitor the spray program from implementation through its conclusion. State officials were rarely permitted to visit the parts of the country where the spraying operations are conducted, and therefore, could not determine the effects on human health. Officials said that the soil sampling aspect of the program had not been implemented, and that a public information campaign to inform villagers about safety precautions had been discontinued. U.S. officials agreed that the few occasions that they were permitted to observe program operations may not have been representative of normal operations.

Little Assurance of Program Safety

Although recommended safeguards and monitoring were not implemented, U.S. officials believe the Burmese generally conducted the program appropriately. Officials stated that they monitored the program through reports received from the Burmese on how the program was being conducted and relied on informants and other intelligence information to cross-check the accuracy of this information. However, given the uncertainties about the health hazards of 2,4-D, the limited program monitoring, and the abandonment of recommended safety precautions, there was not a good basis for assessing the program’s safety.

Critics Alleged Spray Program Caused Sickness and Death

Critics have reported that the aerial eradication program caused adverse health effects and that people and animals have become sick or died after some poppy fields were sprayed. We discussed the spray program with a number of the critics, including reporters, concerned individuals, and representatives of the National Democratic Front. However, from the information that they provided, we could not confirm that anyone actually had become sick or died as a result of the program. Several of the critics told us that their information came from secondhand and thirdhand accounts.
In February 1988, one individual traveled into areas of Burma that had been sprayed. According to the interviewer's records, villagers claimed that the spray program had caused some people to become ill and had killed some animals. The interviewer stated that these stories could not be confirmed, and that the truth about health problems is difficult to separate from local folklore. However, villagers' descriptions of the spray's effects, including dizziness and vomiting, were generally consistent with the known effects of 2,4-D exposure. In addition, the interviewer stated that villagers were unable to take the health precautions recommended by EPA to limit exposure to 2,4-D, and would be expected to have lower tolerances because of inadequate sanitary facilities and poor living conditions.

U.S. officials said that they were aware of the allegations that the herbicide had adversely affected the populace. They said they were skeptical about the villagers' stories because the interviewer's visit to Burma had been arranged by a major drug trafficking organization. Officials believed that accounts of the problems had been staged as propaganda against the eradication program.

U.S. government officials from Rangoon said that they had made inquiries regarding reports of the spray program causing adverse health effects, but had not received credible evidence to substantiate the allegations. They said they had received only one unconfirmed report about a woman who had become ill after the spraying. Officials also pointed out that Burmese troops are in the area when the spraying takes place and also may be exposed to the herbicide, but that they had reported no illnesses.

From the information provided by the critics and the U.S. officials, we could not confirm that people actually had become sick from the spraying program. However, we found that the chance of accidental ingestion of 2,4-D may be increasing. According to numerous reports, Burmese farmers traditionally intersperse food crops with opium, a practice we also observed in Thailand's opium growing region. In response to the aerial eradication program, observers report that farmers increasingly use food crops to camouflage opium fields. If these fields are sprayed, there is a greater chance that villagers, if uninformed about the health risks of 2,4-D, will ingest these crops, or feed them to their animals.
Without a political settlement of the various insurgencies, opium trafficking is likely to become further entrenched in Burma. Even if such a settlement were achieved, enforcement actions would need to be combined with economic development to achieve long-term narcotics reductions. State’s enforcement-based assistance does not encourage a settlement, and does not address the economic problems.

In 1979, we reported\(^1\) that the social, economic, and political realities of drug-growing countries make it difficult to prevent cultivation of illicit crops and stop trafficking at the sources. The report noted that most producing nations present problems that are too complex for a predominantly law enforcement approach to be effective in reducing drug supplies. The results of the Burma program demonstrate the continued validity of this conclusion.

The largest and most complex problem in Burma is the ongoing conflict between the central government and the various ethnic populations. The lack of government control of the border regions has helped trafficking organizations to flourish, and insurgents groups have become increasingly involved in narcotics trafficking to finance their activities. It is possible that the political motives of some insurgents may eventually dissipate, as happened with the Nationalist Chinese, leaving Burma with additional well-armed, battle-hardened opium gangs. Therefore, it appears that the longer the insurgencies continue, the more intractable Burma’s opium problem is likely to become.

While ongoing insurgencies help to further entrench narcotics trafficking in Burma, they also complicate Burma’s severe economic problems which help foster opium production and make narcotics-related corruption difficult to combat. The insurgencies consume government resources needed for economic revitalization and discourage outside investment that could provide Burmese farmers with alternatives to opium cultivation. After 40 years of fighting, there is little indication that the insurgencies can be resolved militarily. Therefore, a political settlement with the insurgents may be needed before long-term narcotics reductions can be achieved.

While a political settlement of the insurgencies appears to be a needed step, a settlement alone cannot be expected to immediately “solve” the opium problem in Burma. First of all, well-armed, profit-oriented groups would remain in Burma and, after a political settlement, some insurgents

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\(^1\)Gains Made In Controlling Illegal Drugs, Yet The Drug Trade Flourishes (GGD-80-4, Oct. 25, 1979).
who have gained experience in the drug trade might join them or compete against them. Secondly, the lack of transportation infrastructure will remain a major impediment to the introduction of alternative crops in much of the growing region. As we reported in 1979, rural development sufficient to shift farmers away from opium production requires many skills, expertise, and money; if it is ever successful, success will only come after years or decades. However, a political settlement may help foster the cooperative relationship between the central government and the ethnic populations that would be needed to address these problems.

Effective action against narcotics must combine eradication and enforcement against criminal trafficking with economic assistance. Our 1979 report concluded that eradication programs alone would not produce long-term, sustainable narcotics reductions, and that any successes are likely to be temporary unless actions are taken to provide growers with an alternative source of income. Furthermore, the Burmese government, by failing to implement recommended safety precautions or allow adequate monitoring of the aerial eradication program, did not ensure that the local population was protected as fully as possible from the long-term health risks of 2,4-D.

Several U.S. officials noted that in Thailand, decades of rural development in the opium growing regions, combined with crop substitution programs, poppy eradication, and other enforcement efforts, resulted in the elimination of almost 90 percent of the opium crop in the past 10 years. Much of the success of the Thai program is attributed to economic assistance from international donors, and a desire by the central government to improve relations with the ethnic minorities involved in Thailand’s opium cultivation.

State suspended program assistance because of the Burmese government’s suppression of civil unrest and does not plan to reinstate it unless the political situation improves. However, if the political climate does improve, State may propose to restart the program. In deliberating such a proposal, Congress should consider the program’s inherent limitations. While the program has had symbolic benefits and resulted in the destruction and interdiction of opium, its impact will be limited unless the Burmese government (1) seeks a political resolution to the ethnic insurgencies, (2) pursues policies that encourage development in the opium growing region, and (3) allows adequate monitoring to ensure that U.S.-provided resources are used efficiently and appropriately.
State agreed that many of the problems identified in the report exist, but pointed out that the program has resulted in the destruction and interdiction of opium and has contributed to an international consensus against narcotics production and trafficking. We modified the report to clarify that we recognize the necessity and importance of anti-narcotics enforcement programs. However, our review showed that such efforts alone are unlikely to stop the flow of drugs from Burma. Enforcement efforts need to be coupled with a political settlement and development of the opium growing areas of Burma. In the absence of such an approach, opium trafficking is likely to become further entrenched.

State noted that the weather played a major role in Burma's increased opium production. We revised the report to recognize that weather is a factor in opium yields. However, we also point out that the increase in opium cultivation from 175,000 acres in 1985 to 290,000 acres in 1988 was another major factor in the increased yields.

State expressed the view that our report exaggerated the potential dangers of using the herbicide 2,4-D. We modified the report to recognize that some experts believe that the herbicide is not a significant human health hazard, and we pointed out that we could not confirm reports of sickness or death from the spray. However, we found that other experts are concerned about the herbicide's long-term effects, and that 2,4-D is toxic. We also recognize that the health risks are minimized if 2,4-D is applied properly, but found that there are no assurances that it was used correctly because the Burmese government did not implement all recommended safety precautions, or allow adequate program monitoring.

State also said no current plans are underway to reinstate the program and that any future program will include greater control and operational monitoring. We agree that control and monitoring procedures should be strengthened if the program is resumed.

State's detailed comments and our responses are in appendix I.
Appendix I
Comments From the Department of State

Note: GAO comments supplementing those in the report text appear at the end of this appendix.

Dear Mr. Conahan:

I am replying to your letter of May 10, 1989 to the Secretary which forwarded copies of the draft report entitled "Drug Control: Enforcement Efforts in Burma are Not Effective" (GAO Code 472179) for review and comment.

The enclosed comments on this report were prepared by the Bureau of International Narcotics Matters.

We appreciate the opportunity to review and comment on the draft report.

Sincerely,

Roger B. Feldman

Enclosure:

As Stated.

United States Department of State

Comptroller

Washington, D.C. 20520

June 20, 1989

Mr. Frank C. Conahan,
Assistant Comptroller General,
National Security and International Affairs Division,
U.S. General Accounting Office,
Washington, D.C.
June 19, 1989

GAO DRAFT REPORT ON NARCOTICS CONTROL EFFORTS IN BURMA

Department of State Comments

The Department welcomes this opportunity to comment on the substance of the draft GAO report prepared at the request of Senator Daniel Moynihan. It should be noted that the USG narcotics control program, along with all other U.S. assistance programs in Burma, ceased to operate in September 1988 when the Burmese authorities suppressed popular unrest through the use of force against their own citizens. While the Department recognizes and agrees with many of the problems the report sets forth, we do not agree with the report's general conclusion that narcotics programs in an imperfect situation, especially in an environment as difficult as Burma, are not worthwhile. We have effective programs in a number of countries in Asia and Latin America that are destroying thousands of tons of narcotics raw materials and intercepting large shipments of drugs on route to the United States. Several of these programs employ chemical eradication, using commercially-available herbicides in wide use in this country and elsewhere for many years. We believe it is important to create an international consensus that production and trafficking of illegal narcotics is a world-wide problem and that all efforts must be employed to control and eventually eliminate it.

The Department believes that the control of illicit production, by eradication, interdiction and other programs, can be efficient and cost effective. Two generations of study and research demonstrate that the nexus of socio/economic predisposition, demographics and easy availability are the critical factors producing high rates of drug abuse prevalence. Only a balanced program, dealing with all facets of the problem is likely to produce desired results. Control at the source, coupled with demand reduction, treatment, and law enforcement efforts, form the strategy used throughout the world and in the U.S. in the fight against illegal narcotics.

In the report several conclusions are drawn relating to the U.S. and Burmese efforts at the control of illicit production and refining of opium.

The report states that opium production and trafficking have increased regardless of narcotics control efforts promoted by the Burmese authorities with U.S. assistance. Opium production in Burma has traditionally been most affected by weather. Efforts of traffickers to increase production and efforts of the government to control production have been highly dependent on this factor.

Information on opium production and trafficking in Burma is available from a variety of sources, including the Department's International Narcotics Control Strategy Report (INCSR) produced annually for the U.S. Congress. The Department has not minimized the impact of Burma's vast opium production on the global market. Our control programs date from
1974 and demonstrate longstanding concern over the size of the crop and the increase in trafficking that began in the early 1980's. To confront Burma's growing importance in opium production and refining, more technically effective and cost efficient aerial eradication efforts were begun.

According to the INCSR, during the last three years of eradication (1986-1988), the Burmese destroyed over 42,000 hectares (approximately 400 metric tons) of opium using both aerial and manual means. At a raw opium to refined heroin ratio of 10:1, the amount eradicated would equal 40 metric tons of heroin (40,000 kg). Current U.S. wholesale prices of heroin range from $60,000 to $180,000 per kilogram. During these years, the cost to the USG of our assistance program was $20.7 million; the potential wholesale value of product eliminated was from $2.4 billion to $7.2 billion.

Increased Burmese opium production results from expanding worldwide demand and burgeoning drug use in producer countries and their immediate neighbors. The greed of producing/trafficking groups to earn hard currency is the driving force behind demand expansion. Insurgent groups have little ideological content in drug producing regions today and the "nationalist" activities of major opium producing groups are minimal at best. These activities are regularly overstated by their sympathizers. U.S. policies on opium enforcement have been driven by our national interest - the reduction of heroin availability in the U.S. market, particularly in our great cities where heroin use may again be on the rise.

The report states that U.S. supported programs were not effectively monitored and were not effectively carried out by the host government. In Burma, the ineffectiveness and authoritarian nature of the government, the armed insurgencies and lack of government flexibility on negotiations, and the lack of will on the part of the authorities to commit their own resources, are all longstanding problems.

Although the host government never fully implemented the aerial spray program and did not provide accurate reports or allow free access, the program produced extensive results. The eradication effort, coupled with large scale interdiction efforts such as the "Mohin" operations, was a destabilizing factor to the production and refining of illicit narcotics by insurgent trafficking organizations. U.S. source information had repeatedly reported the shifting of growing patterns from eradicated areas. The interdiction operations against refineries and trafficking caravans were successful to the point of frustrating and harassing traffickers.

The Department was concerned from the inception of the support program to Burma about our limited influence over the activities of Burmese government organizations using equipment and commodities provided through bilateral assistance. The Burmese have been very suspicious of alliances and of any appearance of bilateral involvement, particularly with the United States, that seemed to compromise Burmese neutrality. To enable the program to begin at all, a decision was made to create a totally "Burmese program". Burmese government sensitivities regarding internal affairs, and the security of individuals and equipment, led it to limit the
involvement of U.S. personnel with U.S. provided aircraft. U.S. officials were never satisfied with the lack of efficient means of verification of the program and the lack of access to operational areas. We did see the advantage, however, of involving ourselves in the situation with the prospect of resolving these problems.

We had seen a relaxation of Burmese attitudes in recent years, but we agree that much more was required to conduct appropriate program oversight. These facts were brought out in an earlier GAO study produced in February 1988, which recommended stronger procedural controls and more focused goals and objectives for the program. Implementation of that recommendation, including a testing program for an inflight verification system for spray operations and improved crop survey and analysis programs, was getting underway when assistance was cut off in September 1988.

Since 1974 when the program began in Burma, no USG policy maker has labored under the illusion that the program has lived up to its full potential, especially in its timing and short duration in several seasons. It was felt, however, that the Burmese had made some gains and that U.S. counter-narcotics interests would benefit by beginning a program to fight heroin production in the largest opium producing country.

We do not believe the report's section on the use of herbicides, particularly the chemical 2,4-D, used for decades in the U.S. in many phases of food-producing agriculture, presents a balanced picture. Inferences in the report are based on hearsay reports provided by sources hostile to the use of chemicals. Reporting on the spray program from representatives of the NDF, insurgent drug traffickers, is not new and is unsubstantiated. The reports used to bolster this conclusion are countered by other reports which show that the herbicide has been used safely for years throughout the world in general agriculture, including agricultural spraying in Burma.

In the report several specific findings are put forward:

1. That production increased regardless of U.S. and Burmese efforts and that no amount of resources applied to narcotics control in Burma, whether for enforcement or eradication, could succeed. This aspect of the report has been covered above and the Department agrees that production has increased. We emphasize, however, that factors beyond either the control of the Burmese government or the opium producers, such as weather and climate, are vital to the increase in production. We also emphasize the fact that to have had no control program in place would have allowed even more illicit narcotics to have been produced and trafficked in Burma.

2. That the programs which were underway in Burma before the aid cut-off were poorly implemented. The Department agrees that the program could have been implemented in a more efficient manner. Steps had been underway to improve monitoring and control of the use of U.S. provided assistance and to gain more cooperation from the host government.

3. That the herbicides used are potentially harmful to health in Burma and that the Burmese used the herbicides unsafely. The Department finds that the report is exaggerated in this conclusion. We have no substantiated reports of harm done to individuals by the use of the herbicides in crop control in Burma.
Appendix I
Comments From the Department of State

The report makes the following conclusions. The Department would like to resume an aggressive control program, despite GAO's conclusion that enforcement programs in Burma cannot succeed; and, that the way to end opium production and trafficking in Burma is a political solution to the country's longstanding insurgency that allows non-Burman ethnic groups autonomy within Burma, provides major funding for development of opium producing regions, and permits U.S. on-site monitoring of all programs - a long-term solution infeasible in any foreseeable future.

The Department has implemented programs in countries and regions where it was known at the outset that optimum results might not be achieved. A more important question is whether or not the U.S. should provide any assistance in difficult political environments and if not, what are the policy alternatives? If the alternative is to provide assistance and produce some results, as happened in Burma, then we must ensure in the future that the programs are monitored more efficiently.

The Department agrees that the preferred means of meeting the challenge of opium production in Burma would be introduction of the alternative crop and infrastructure strategies employed in countries like Thailand and Pakistan. In Northern Thailand, however, the central government can exert some effective control over the land and people within its own borders. In Burma, this has never been true. Short of an all-out victory by the Burmese over the ethnic insurgents and drug warlords, an accommodation to insurgent demands, or a negotiated settlement between Rangoon and the ethnic insurgents, the U.S. and other victim nations must seek somehow to reduce opium production, refining and trafficking that flourishes in the Golden Triangle.

Since we have no effective access to or leverage on Burma at present, the near-term prospects for narcotics control in Burma and the Golden Triangle as a whole are not good. Trafficking groups are growing stronger and more independent as the regime in Rangoon shifts attention to the control of central Burma and major cities. In the past, the military and police in outlying areas could at least organize some narcotics control efforts. At present, and for the foreseeable future, narcotics as a business will be free-wheeling. We have indications of large increases in production and refining, and the growing use of alternative routes to the West and through India and China.

The Department believes that currently, even with U.S. provided assets back in place, the Burmese regime would do little to control drugs. We therefore have no plans at present to reinstitute the program. What is necessary now is to find alternative programs that can control a problem that otherwise is growing unfettered. In the event that conditions in Burma change sufficiently to allow us to consider restarting a narcotics control program, we will ensure that preconditions regarding control and monitoring of operations are met.
GAO Response

1. State interpreted the report's overall message as being that narcotics programs are not worthwhile. This was not our intention; we recognize that anti-narcotics programs are necessary and important. We modified the report to clarify our conclusions that (1) enforcement efforts alone will not stop the flow of drugs from Burma, (2) enforcement needs to be coupled with a political settlement and development of the opium growing areas of Burma, and (3) in the absence of such an approach, opium trafficking is likely to become further entrenched.

2. State said that only a balanced program—control at the source, coupled with demand reduction, treatment, and law enforcement efforts—is likely to produce results. We agree.

3. State said that opium production in Burma traditionally has been most affected by the weather. We agree that weather is a factor in opium yields and have revised the report to recognize this. However, we believe that the increase in opium cultivation from 175,000 acres to 290,000 acres between 1985 and 1988 is also a major factor. (Note: State's comments discuss opium cultivation and eradication in terms of hectares. There are 2.47 acres in one hectare.)

4. According to State, insurgent groups have "little ideological content in drug producing regions today and the nationalist activities of major opium producing groups are minimal at best." We agree with State's characterization of the major opium traffickers. However, we found clear distinctions between the major trafficking groups, such as the SUA and 3rd Chinese Irregular Force, and the various long-standing antigovernment insurgencies, many of which are based on historical animosity between Burmans and various ethnic minority groups. The information we reviewed suggests that for decades, none of the major insurgent groups had any reported involvement in the narcotics trade, and some groups actively opposed it. Since the late 1970s, some insurgent groups, most notably the BCP, have increasingly used opium to support their activities.

We agree that program effectiveness was reduced by the Burmese government's inefficiency, its lack of will to commit resources, and its unwillingness to allow adequate monitoring. We also agree that any long-term solution requires greater government flexibility on negotiations with the insurgents.

5. State pointed out that large-scale interdiction efforts have destabilized production and refining of illicit narcotics. We found that, while
individual operations may have harassed traffickers. From 1984 to 1987 opium seizures averaged about 1.5 metric tons per year, less than 1 percent of the total annual yield, and that about five refineries were destroyed each year. Opium production has continued to increase during this period.

Although the eradication efforts have resulted in the shift of some opium cultivation to other areas, these areas are reportedly further outside the Burmese government's control and, consequently, are "safe" from eradication efforts. As noted previously, the total acres cultivated increased by about 115,000 acres between 1985 and 1988.

6. State said that Burmese attitudes have limited the program since its inception. We agree that political and economic concerns of the Burmese government, combined with corruption among government and military officials, have limited the overall effectiveness of the antinarcotics program. Unless the Burmese government's attitudes change, the effectiveness of any U.S.-sponsored narcotics control program will be undermined.

7. State said that the report section on the use of herbicides does not present a balanced picture. We modified the report to recognize that some experts believe that 2,4-D is not a significant human health hazard. We also state that reports by program critics regarding health problems could not be confirmed, and that 2,4-D has been used extensively for years.

We reported that some scientists are concerned about its use because adequate studies of 2,4-D's long-term health effects have not been conducted. We note that exposure to, or ingestion of, large amounts of the herbicide can result in sickness and/or death, and that the monitoring plan and proposed safety precautions developed by State have not been implemented. We also note that farmers in Burma traditionally plant food crops with the opium poppies, that this practice is increasingly being used to camouflage opium cultivation, and that the chances of accidental exposure increase when these fields are sprayed with the herbicide. Finally, we reported that efforts to inform farmers of the potential dangers of consuming vegetables that were sprayed with 2,4-D had been outlined in State's Concise Environmental Review, but had not been implemented.
8. State said that one of the report findings is that "no amount of resources applied to narcotics control in Burma, whether for enforcement or eradication, could succeed." As noted previously, our intention was to identify the factors that limit the program's success and not to imply that the program had no benefits. We pointed out, however, that the unwillingness of the Burmese to provide a sufficient number of pilots, combined with the drug traffickers' air defenses, made expansion of the eradication program to effective levels unlikely. We also noted that the Burmese government, limited by economic and political factors as well as corruption, had not demonstrated the necessary commitment to ensure the efficient use of resources against narcotics.

State emphasized that weather and climate are vital to the increase in production. We agree that these are important factors, but believe that the increased acreage of opium cultivated is also a major factor in the increase in production.

9. State said that the conclusions of the report chapter on the use of herbicides are exaggerated and that they had no substantiated reports of harm caused by the herbicide. As noted previously, we modified the report to recognize that some experts believe that 2,4-D is not a significant human health hazard. We state that we could not confirm reports of sickness or death from the spray. However, we also note that some experts are concerned about the herbicide's long-term effects and that it is toxic. We also state that the risks are minimized if 2,4-D is applied properly, but there are no assurances that it was used correctly because the Burmese government has not implemented all recommended safety precautions, and does not allow adequate program monitoring.

10. State notes that narcotics control in Burma is a complex and problematic issue, and raises the question of "whether or not the U.S. should provide any assistance in difficult political environments and if not, what are the policy alternatives?" We agree that policy options are limited.

11. State also states that currently, the Burmese regime would do little to control drugs, and therefore it, has no present plans to reinstate the program. State also notes that, if conditions change and the program can be restarted, it will ensure that preconditions regarding control and monitoring of operations are met. We agree that the political climate in Burma needs to stabilize before the program can be restarted. We also support State's intention to condition the program's resumption on implementation of controls and monitoring procedures.
Appendix II

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