

USAWC STRATEGY RESEARCH PROJECT

**The National Drug Control Strategy: Effectiveness of Eradication
in Colombia**

by

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ABSTRACT

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Daily, tons of cocaine make their way to U.S. shores, permeating every corner of our society and affecting millions. Tearing at the economic and moral fabric of this Nation, cocaine poses a major threat to our security. Among the Andean countries, Colombia's drug market poses the greatest threat to U.S. security, since ninety percent of the cocaine entering the United States originates or passes through Colombia. For decades, the United States has used eradication to disrupt the market – to eliminate a principal source of drugs illegally marketed in the United States. This SRP analyzes drug eradication efforts in Colombia in support of the National Drug Control Strategy (NDCS). It reviews the components of the strategy (ends, ways, and means), showing how they contribute to U.S. objectives. Finding that drug eradication alone fails to support the strategy, this SRP offers plausible reasons for this failure, examines the ill effects of the current policy, then recommends alternatives to strengthen the existing NDCS.

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THE NATIONAL DRUG CONTROL STRATEGY: EFFECTIVENESS OF ERADICATION IN COLOMBIA

The source of the most dangerous drugs threatening our nation is principally international. Few foreign threats are more costly to the U.S. economy. None does more damage to our national values and institutions and destroys more American lives. While most international threats are potential, the damage and violence caused by the drug trade are actual and persuasive. Drugs are a major threat to our national security.¹

– William J. Bennett

A THREAT TO U.S. NATIONAL SECURITY

Each day thousands of tons of narcotics illegally enter the United States by way of our road, rail, air, and harbor systems. Although the exact amount of illicit drugs entering the U.S. is unknown, one fact remains increasingly clear: Illegal drugs are finding their way into this country at an alarming rate, and they are wreaking havoc on American values. Indisputably, they pose a significant threat to our national security. Symptomatic of a pressing danger, the great volume of illicit drugs invading the United States is not limited or confined solely to our shores. Throughout the Western Hemisphere, the drug trade is transcending international borders threatening the democracy of sovereign states, and financing terrorist activities. More importantly, drugs are killing its victim's literally, socially, and economically.

Many of the drugs coming to the United States originate from South America and pass through a six million square mile transit zone that encompasses the Caribbean, the Gulf of Mexico, and the Eastern Pacific Ocean.² "Intelligence sources estimate that the annual cocaine flow through this zone each year is in excess of five hundred metric tons."³ Although many different types of imported and domestic drugs threaten the U.S., this SRP focuses specifically on cocaine and primarily on a notorious source country, Colombia. Among the Andean countries producing cocaine, Colombia's drug market poses the greatest threat to U.S. security, since "ninety percent of the cocaine entering the United States either originates or passes through Colombia."⁴

To rid our society of drugs and their devastating effects, one tactic of U.S. drug policy seeks to break foreign sources of supply; by means of eradicating crops that provide the raw materials of the drug trade. For decades, the United States has used eradication in source countries to disrupt the market. However, evidence suggests that the current drug eradication policy is ineffective. Eradication is designed to reduce supply. Ironically, reduction of supply increases demand by making drugs scarcer on the street – and more expensive! This SRP

analyzes drug eradication efforts in Colombia in support of the National Drug Control Strategy (NDCS). It reviews the components of the strategy (ends, ways, and means) and shows how they are intended to achieve U.S. strategic objectives. Finding that drug eradication alone fails to support the strategy, the SRP then offers plausible reasons for that failure, examines the ill effects of current policy, then recommends alternatives to strengthen the existing NDCS.

NATIONAL SECURITY STRATEGY

The tactic of eliminating foreign sources of supply directly supports the National Security Strategy since illicit drugs enter this country daily, affecting millions of Americans, tearing at the economic and moral fabric of this Nation. The current National Security Strategy (NSS), issued September 2002, focuses on championing aspirations for human dignity; strengthening alliances to defeat global terrorism; diffusing regional conflicts; preventing our enemies from threatening us and our allies; igniting global economic growth through free markets and free trade; opening societies and building democracies; developing main centers of global power; and transforming America's national security institutions to meet the twenty-first century.⁵ These eight core objectives provide the framework to enable the United States to further identify threats of a global, regional, and national nature. Interest determines policy. America's drug problem is exacerbated by international drug trafficking, which threatens three of the eight objectives. For several decades, U.S. presidents have attempted to counter this threat with the U.S. "war on drugs."

First, the United States must "prevent our enemies from threatening us and our allies," thereby protecting our fundamental values, institutions, and people. Illegal drug consumption poses a threat to our values, institutions, and people. Drug abuse poses a significant threat to U.S. security because it profoundly affects the country's social and economic well being. Second, the United States seeks to "diffuse regional conflicts." Drug abuse and drug trafficking are destabilizing Latin American democracies, even causing regional instability. Much of Latin America is engulfed in local conflict because of the corrupting activities of drug traffickers and insurgent groups involved in drug trafficking. Third, the United States seeks to "open societies and build democracies." This objective is also challenged because drug trafficking undermines and corrupts democratic institutions. To diffuse these conflicts, the NSS offers a strategy to help the Andean countries reduce their economic dependence in the drug trade, defeat terrorists, and cut off the supply of drugs. The strategy also recognizes the linkage between the drug traffickers and insurgent groups whose operations are financed by the drug trade.⁶

U.S. INTEREST IN COLOMBIA

Latin America is an important region critical to U.S. vital interest and national security. The U.S. depends on its hemispheric neighbors in the south to maintain stability to allow us to focus our diplomatic efforts on Europe and Asia. To achieve this goal, U.S. policy seeks “the creation of a stable political environment that promotes the evolution of democratic governments and addresses the problems of social unrest in the region.”⁷ The problematic nature of Colombia's cocaine production threatens that goal. Not only does cocaine pose a threat to Colombia itself, it transcends contiguous borders throughout the Western Hemisphere, threatening us and our allies. Retired General Barry R. McCaffrey, Director of the National Drug Control Policy from 1996-2000, warned, “the problems affecting Colombia affect the entire Western Hemisphere.”⁸

Recognizing the need for stability in the region, in 1993, President Clinton issued Presidential Decision Directive 14, “the Andean Strategy,” which established counter-narcotics effort for the Andean Region. The Clinton plan emphasized greater balance between supply and demand strategies. Providing the first in a series of aid packages designed to disrupt Colombia's drug market, the directive was devised as an international response to the shared problem of drug abuse and drug trafficking. The strategy recognized the need for demand reduction in the United States as well as supply reduction in source countries. The Andean Strategy, which still guides U.S. counter-drug activities in Latin America, sets four principal objectives:

- Strengthening political commitment and institutional capability of the Andean governments to enable them to take the necessary steps to disrupt the drug market.
- Increasing the effectiveness of military and law enforcement activities against the cocaine industry in the Andes.
- Inflicting significant damage on the trafficking organizations, disrupting and dismantling their operations.
- Strengthening and diversifying the legitimate economies of the Andean nations.⁹

SOURCES OF COLOMBIA'S INSTABILITY

POLITICAL TURMOIL

Colombia's instability is the result of decades of economic, political, and social decline. Both a criminal drug economy and armed challengers, threaten the state's authority and sovereignty. Politically, Colombia has always been a weak state. A Presidential Republic, its

history has been marked by decades of governmental corruption and violence. Ruled by two political parties, Liberal and Conservative, Colombia's political struggle has erupted into civil wars and regional conflicts. The last conflict, known as La Violencia, was waged from 1948-1966, triggered by the assassination of Jorge Eliecer Gaitan, a leader of the Liberal party.¹⁰ The ensuing violence quickly spread throughout Colombia, claiming the lives of over 200,000 citizens. This civil unrest continued sporadically until the mid-1960s. Eventually, a Liberal-Conservative coalition government emerged; the two parties then shared power in an arrangement that focused more on economic issues than on political rivalries. This arrangement slowly restored confidence in the government and economy. However, modest economic growth, poverty, unemployment, and inequitable personal wealth soon left the nation vulnerable to drug trafficking and political conflict as attractive options. Following a short peaceful process from 1966 to 1974, a fierce counterinsurgency war broke out, pitting Colombian state forces and their paramilitary allies against two major guerrilla forces, the Revolutionary Armed Forces of Colombia (FARC) and the National Liberation Army (ELN). Capitalizing on desperate conditions and a political culture with no tolerance for dissent, these groups now challenge Colombia's government. Escalating violence and criminal activity, largely products of the drug trade, have destabilized all levels of government, weakening the nation to the point of near collapse. Lacking the ability to exercise complete jurisdiction over its territory due to years of regional autonomy, the governments' response has been to conciliate, negotiate, or ignore challenges – rather than to impose political authority.

ECONOMIC CRISIS

One of the more politically stable countries in Latin America, Colombia has enjoyed economic growth for much of the twentieth century. For decades, the mainstay of Colombia's economic growth and stability revolved around the growing, production, and exportation of coffee, which represented sixty percent of its exports. This all changed in the mid-1990s with the fall of coffee prices worldwide. Many farmers then sought alternative crops, mainly the cultivation of coca. Unofficially classified as Colombia's largest export, cocaine now accounts for roughly eight percent of the Gross Domestic Product (GDP). As many as 200,000 farmers now grow coca, cultivating some 81,400 tons. Although Colombia's economy grew at a rate of 3.5 percent of the GDP in the 1990's, income lost to the drug trade, failure to restructure foreign debt, an unemployment rate of twenty percent, and expenditures of four to nine percent of the Gross National Product (GNP) on combating a drug trafficking and an insurgency threat – all contributed to Colombia's economic decline.¹¹ To preclude further economic decline, President

Andres Pastrama Arango developed "Plan Colombia," and requested U.S. assistance. Legislation signed into law by President Clinton in July 2000, approved a \$1.3 billion assistance package funding Colombia's strategy. President Arango's Colombian plan, developed with significant U.S. input, encouraged peace, economic prosperity, justice and human rights reform, as well as social development designed to curb cocaine production.¹²

HISTORICAL PERSPECTIVES

AMERICA'S DRUG PROBLEM

Since the early 1900s, drug abuse has been an escalating problem in the United States. Once considered purely a domestic problem dealt with by health and law enforcement officials, increased cocaine usage aroused government interest, then drug abuse came to the forefront as a domestic and international issue. Today the challenges are even greater. Drug abuse permeates every aspect of our society, afflicting the young and old, the rich and poor, the educated and disadvantaged, impacting inner cities, and rural and suburban neighborhoods alike. The United States has apparently and tragically developed an unquenchable desire and obsessive fascination with both legal and illegal drugs.

The U.S. government estimates that the cost of drug consumption to law enforcement and public health agencies exceeds \$67 billion each year.¹³ In 1998 alone, an estimated 13.6 million Americans twelve years of age and older had used illegal drugs.¹⁴ In a 2001 survey conducted by Princeton Survey Research Associates, a sampling of 1,513 adults surveyed nationwide revealed that 63 percent of respondents viewed drugs as a serious problem in this country, 37 percent viewed drugs in their neighborhoods as a serious problem, 52 percent favored government actions to stop illegal importation, and 74 percent believed we will never be able to stop drugs from entering the country. Unsurprisingly, 74 percent agreed that we are losing the war against drugs.¹⁵ A similar study conducted by the National League of Cities revealed that 53 percent of Americans are worried about drug use and cited use of illegal drugs as one of the greatest threats to America in the new millennium.

EVOLUTION OF COCAINE AS AN ILLICIT DRUG

The existence of coca dates as far back as 3000 B.C.; archeologists have discovered ancient line drawings on pottery in northwestern South America depicting coca chewing as a cultural activity prior to the rise of the Incan empire. By the 1400s, it was cultivated in large plantations by the Incas in Peru. For centuries, the Indians of Peru and other South American countries have chewed coca leaves.¹⁶ Considered to be a gift from the Gods, coca has been

used in religious rituals, burials, and for medicinal purposes. Today, it is used to by Andean villagers to combat the debilitating effects of high altitudes. The stimulating effects of the drug increase breathing, thereby increasing oxygen and enabling the user to perform laborious duties in the high altitudes of the region.

The coca plant, *Erythroxylon coca*, produces leaves that contain the chemical alkaloid cocaine and similar derivatives. The shrub grows to about 3 to 6 feet high, with straight branches and leaves that resemble tea leaves.¹⁷ A sturdy and hardy plant, it is resistant to drought and disease when grown in its natural habitat. Harvested about four times a year, the plant produces enormous yields throughout its 35-year life span. Originally isolated in 1855, cocaine was first used as a local anesthetic in minor surgery.¹⁸ Used by the inhabitants of Peru and Bolivia as a stimulant, the dried leaves, which contain cocaine and several other derivatives, were mixed with wood ash and chewed.

Before 1900, any American could sell a drug and claim it offered therapeutic benefits without medical proof. This changed after 1906 with the passage of the Pure Food and Drug Act, which required drug manufacturers to state the content, strength, and purity of each drug they produced. The Pure Food and Drug Act ended the practice of including morphine, cocaine, and heroin in drugs or food without the public's knowledge.¹⁹ Between 1885 and 1915, cocaine peaked in popularity. Many believed it was benign, even having therapeutic properties. One such product claiming to have such therapeutic properties was "Coca-Cola". Containing coca, the beverage was developed in 1886 by an Atlanta druggist. Sold in drug stores and labeled as a brain tonic, the original formula included extracts of the African kola nut and coca leaves, both strong stimulants. Consumed and enjoyed by millions, "Coca Cola" was one of thousands of exotic patent medicines sold in the late 1800s that actually contained traces of cocaine. Indeed, it offered a refreshing pause!

By 1915, however, anti-drug sentiment set in as cocaine use was associated with increased crime rates. Anti-use sentiment led to strong support for international drug control and popular support led to the Harrison Narcotics Act of 1914. Named after Representative Francis B. Harrison of New York State, it was probably the most important piece of congressional legislation introduced in the drug war, past and present. Responding to cocaine's growing popularity, the passage and enforcement of "the act provided for the registration of controllers with the Internal Revenue Service, calling for the taxation of those who sold, distributed, dispersed, or gave away coca leaves, their salts, derivatives and properties."²⁰ Despite this legislation, the popularity of cocaine steadily grew in America, peaking in the 1960s

and flourishing by the 1970s. Although cocaine was not a new epidemic to American history, it was estimated in the 1980s that as many as 9 million people were users of the drug.

THE "WAR ON DRUGS"

Throughout this period of resurgence, law enforcement efforts to combat drug abuse and drug trafficking were ineffective and disjointed. Finally, in 1971, President Nixon declared the "war on drugs" in an effort to combat the deleterious effects that drugs were having on the nation. Subsequently in 1973 the newly created Drug Enforcement Agency (DEA) centralized drug enforcement at the federal level. Although the creation of the DEA centralized the federal investigative and intelligence functions of counter-drug activities, coordination and cooperation activities among other agencies remained increasingly disjointed. The Reagan Administrations of the 1980s elevated the "war on drugs" giving it a higher priority. The Anti-Drug Abuse Act of 1986 authorized Congressional anti-drug funding of nearly four billion dollars. To coordinate this effort at the executive level, in 1988 President Reagan appointed a "drug czar," the director of the Office of National Drug Control Policy (ONDCP). Responsible for anti-drug activities of more than fifty federal agencies and programs, the Director reported directly to the President and formulated national strategies designed to carry out the government's anti-drug activities.

Since 1971, five administrations have supported the "war on drugs." Three decades later, we are still at war. The term "war on drugs" offers a rather poor metaphor for describing the social ills and economic problems that drugs present. War carries with it the connotation of military action marked by decisive engagements, discernable objectives, a victor, the defeated, and an end state. In the "war on drugs," however, there is no victor, no end state. Contrary to its denotation, it is not purely a military problem. As a "war" devoid of clear battle lines with no sworn enemy and no measurable outcome, it is often envisioned as un-winnable. The nation's anti-drug campaign is, however, a long-term initiative that includes all elements of national power: economic, political, the military, and other federal, state, and local government agencies.

Drug consumption is indeed a function of supply and demand. As long as the demand for drugs exists, suppliers will strive to meet demand. The best we can hope for is to reduce supply by chipping away at the source and reducing demand through prevention and treatment. The drug market can surely be disrupted by curtaining the supply. The purpose of the supply control program is to increase the price of cocaine with the expressed intent of reducing consumption.²¹ But the idealistic notion that a reduction in supply will reduce demand is a rather simplistic approach to a complex problem. The drug problem in this country is primarily a problem of demand, not supply. "The crux of the drug problem in the United States is the existence of five

million hard-core drug users, most of which are addicted to cocaine.”²² Accounting for only five percent of the world’s population, the U.S. consumes over sixty percent of the world’s illicit drugs.²³ As long as such incredible demand exists, cocaine suppliers, Colombian or otherwise, will somehow find a way to meet that demand.

What began as a response to a purely social problem has quickly evolved into a major social issue: a symptomatic problem that has fostered dramatic increases in crime and violence over the past thirty years. Today, drug related offenses account for the largest proportion of U.S. criminal activity. At every level, law enforcement agencies are fighting a so-called “war on drugs.” A study conducted by the National Center on Addiction and Substance Abuse at Colombia University, revealed that of the 1.7 million Americans incarcerated in prisons and jails, nearly eighty percent of them, some 1,360,000, were confined for drug-related offenses.²⁴

THE NATIONAL DRUG CONTROL STRATEGY

Developed to counter the aforementioned challenges and enhance American security, “the United States Drug Control Strategy takes a long-term holistic view of the nation’s drug problem and recognizes the devastating effects drug abuse has on the nation’s health and safety.”²⁵ Soon after President George W. Bush entered office, he promulgated his NDCS, which proclaims that “the first duty of government is to provide security for citizens.”²⁶ The overarching goal of the strategy is to protect Americans from the threats posed by illegal drugs. The strategy emphasizes a balance between efforts to reduce supply and demand and focuses on three core means: prevention and treatment (demand reduction) and disrupting the market (supply reduction).²⁷ Maintaining that no single solution can effectively deal with this multifaceted challenge, the strategy integrates prevention and treatment with law enforcement and interdiction efforts to reduce illegal drug use and availability in the United States by 50% by the year 2007 and to reduce the health and social consequences and trafficking by 25% over the same period.²⁸ To accomplish this daunting task, the ONDCP set several strategic goals:

- Educate and enable America’s youth to reject illegal drugs as well as alcohol and tobacco.
- Increase the safety of America’s citizens by substantially reducing drug-related crime and violence.
- Reduce health and social cost to the public of illegal drug use.
- Shield America’s air, land, and sea frontiers from the drug threat.
- Break foreign and domestic sources of supply.²⁹

The objective of the final goal, breaking foreign and domestic sources of supply, requires attempting to produce a net reduction in the worldwide cultivation of coca by eliminating illegal drug cultivation and production, by destroying drug-trafficking organizations, by interdicting drug shipments, by encouraging international cooperation, and thereby safeguarding democracy and human rights.³⁰ To achieve these ends, ONDCP plans to reduce the supply of drugs from source countries by denying smugglers the use of air and maritime routes and by eradicating illegal crops to disrupt the market.

DISRUPTING THE MARKET

The demand for drugs tends to vary with their price and availability. Disrupting the market relationship provides policymakers with a clear lever to reduce use.

- President George W. Bush

ERADICATION

One of the ways the U.S. disrupts drug flow is by eradicating the raw material of illegal drugs – a systematic means of manually or chemically destroying source plants. Advocated and used by the U.S. since 1925, eradication has been practiced throughout the Andes as a means to disrupt the flow of drugs in known source-country drug control efforts since the early 1970's.³¹ Targeting the crops of international suppliers of illegal drugs, forced eradication is carried out by cutting and pulling, burning, spraying manually or aerially, or by biological means.³² An important means supporting the U.S. drug strategy is to kill coca plants by spraying – which is a key tactic in President Bush's disruption strategy. The eradication program aerially sprays the herbicide glyphosate, commercially known as Round-Up, to destroy coca.

Developed by the Monsanto Corporation, the chemical was approved by the Environmental Protection Agency (EPA) in 1974, and re-certified in 1993 for use on various crops, forests, residential areas, and around aquatic areas.³³ Employed in the U.S. for decades, it is now being used to destroy Colombia's coca crops. The aerial spray mixture currently being used by the U.S.-supported program of eradication consists of three components: water, glyphosate, and two surfactants, either COSMO Flux-411F or COSMO-IN-D. These components are mixed together in the following percentages: 55 percent water, 44 percent glyphosate, and 1 percent Como-Flux 411F or Cosmo-In-D.³⁴ Since coca is a hardy, woody bush, the inclusion of the surfactant enhances the ability of the herbicide to penetrate the waxy leaf of the coca plant, eventually destroying it.

ERADICATION SUCCESSES AND FAILURES

The current policy of eradication is producing mixed results in our efforts to destroy coca plants. Failures occur for four reasons: the “balloon effect”; social and environmental impacts, the existence of drug traffickers and insurgency groups, and a constrained U.S. aid package. Ongoing chemical research seeks to improve eradication efforts. In March 2002, the CIA’s Crime and Narcotic Center and the Office of the National Drug Control Policy released the 2001 coca cultivation estimates for Colombia. Satellite imagery indicated that Colombia’s coca cultivation increased from 136,000 to 170,000 hectares in 2001- - 34,000 hectares more than in 2000.³⁵ Correspondingly in 1999, it was determined that despite the Colombian government’s efforts at fumigating 104,000 acres of coca, production had more than doubled since 1995.³⁶ Conversely, eradication efforts in Bolivia and Peru have been largely successful, with significant reductions between 1995 and 1999. During this time, coca production decreased in those two nations from 240 to 70 and 460 to 175 metric tons, respectively. However, continued crop cultivation in Colombia denies such success. In spite of eradication efforts, Colombia’s cultivation of coca has increased dramatically over the last decade, tripling from 230 in 1998 to 520 metric tons currently.³⁷

Although over 142,961 hectares were eradicated from 1992 to 1998, this only amounted to 32.4 percent of Colombia’s 440,693 hectare totals of coca. The degree to which the supply reduction strategy has failed may be best determined by examining the cost-to-benefit ratio. Between 1992 and 1998, approximately 1,897,359 liters of glyphosate were sprayed on Colombia’s coca fields at a cost of \$19,051,676. Combined with operational costs of \$22,354,164, the total eradication expenditures over this period amounted to \$41,405,840.³⁸ Combined with the additional \$625 million provided by the U.S. as part of “Plan Colombia” for aircraft, weapons, ammunition, and training, the total eradication program cost \$666,405,840. Overall, it cost the U.S. approximately \$4,661,452 to eradicate one hectare of coca. In spite of eradicating between 33.5 and 52.8 percent of Colombia’s coca fields in a few years, coca cultivation still increased in 1998 two and one-half times since 1992, suggesting that nearly a decade of funding was insufficient to achieve the stated objectives. The findings of a similar study conducted in 1994 by the Rand Corporation, concluded that eradication was 23 times more expensive than drug treatment programs.³⁹

THE “BALLOON EFFECT”

Theoretically, decreasing coca production will make cocaine scarce and more expensive, thereby decreasing usage. But current evidence suggests that successful eradication in Bolivia

and Peru led only to increased production in Colombia. “Once the world’s principal sources of coca, Bolivia and Peru lost their title to neighboring Colombia in the late 1990s after crop substitution programs began to take effect. A number of factors — including eradication, a drop in price, and the decision of Colombian traffickers to grow coca at home — helped both Bolivia and Peru reduce the overall amount of land used for coca by 70 percent since 1995.”⁴⁰ Colonel Joseph R. Nunez of the Strategic Studies Institute at the Army War College refers to this change as the “balloon effect.” Nunez theorizes that if you exert too much pressure in one area, this only causes instability in another, much like pressing on a balloon in one place only causing it to pop out elsewhere.⁴¹ Already, there are indications of border crossings of Colombian guerrilla and migrating farmers into Peru and Ecuador in response to counter-narcotics efforts in southern Colombia. Such displacements threaten other fragile democracies in the region. To prevent such migration and drug trafficking from moving across Colombia’s porous borders to its neighbors, Ecuador, Bolivia, Peru, Venezuela, Brazil and Panama, President Bush proposed an \$800 million Andean Regional Initiative to promote regional stability.⁴²

SOCIAL IMPACTS: EXPANSION, DISPLACEMENT, AND MIGRATION

The balloon effects of eradication thus lead to expansion of coca agriculture, displacement of crops, and migration of certain populations. First, eradication promotes coca expansion. Even though eradication may succeed in reducing coca cultivation in select areas, farmers elsewhere who have successfully maintained their plantations serve as examples of success; their success entices other farmers to relocate or expand their operations into adjacent areas.⁴³ In 1998, Colombia President Andres Pastrana Arango, declared that U.S. - backed aerial eradication efforts in Colombia were ineffective. He asserted the policy was pressing peasants deeper into the jungle. Since most of the growing region is characterized by inaccessibility, mountainous terrain, and limited road networks, driving growers deeper into the jungle only makes eradication efforts increasingly difficult.

Second, eradication promotes crop displacement. Designed to destroy illicit crop areas, eradication manages only to temporarily halt production. It fails to affect crop cycles, thereby promoting crop displacement. Displacement occurs when fumigation forces growers to migrate to less accessible areas, usually in more dense areas of the jungle. There they fell trees, slash and burn existing vegetation, and then resume planting. First established in the 1970s, this agrarian deforestation was practiced heavily in Colombia by cannabis growers. Following successful eradication efforts, growers simply shifted growing from the lowlands to the highlands in an attempt to elude future sprayings. Now employed by coca farmers,

displacement is responsible for destroying much of Colombia's rainforest, which upsets the ecological balance. Thus new illicit crops are planted to replace those that have been eradicated. The Colombian Ministry of Foreign Affairs estimated that displacement coca plantations have destroyed between 160,000 and 240,000 hectares of tropical jungle in the Andean basin – thirty percent of Colombia's annual deforestation.⁴⁴

Third, eradication leads to migration. Deprived of their only means of income, many of the peasants and the temporary workforce hired to harvest coca leaves, are forced to migrate either to urban centers or other rural areas. Forced to move into provincial urban slums, many succumb to inhumane living conditions, unemployment, and poverty. In a meeting between Colombian human rights and refugee NGO's, the U.S. State Department estimated that as many as 150,000 persons would be displaced as eradication intensified in southern Colombia.⁴⁵

EFFECTS OF ERADICATION ON THE ENVIRONMENT

Concerns involving pollution and the unknown long-term affects of spraying on the environment and ecosystem have led to considerable controversy. Of major concern is the precise formulation of the sprayed substance. Applied at a rate of 2.53 gallons per acre, glyphosate has successfully destroyed marijuana; this rate was deemed environmentally safe by the EPA. The coca bush however is more resilient, requiring dosages of 10.41 liters to be increased to 13.47 liters per hectare.⁴⁶ Even at these higher doses, EPA testing of glyphosate has indicated that it is not persistent to the soil, does not build up with repeated use, and is biologically degraded by the soil. Furthermore, because it bonds so tightly with the soil, there is a low probability that it will percolate into water tables, thereby affecting drinking water.⁴⁷ However, there exists a high probability for contamination of surface water as a result of runoff water. But many environmentalists contend that glyphosate is having much more severe effects on the environment and the ecosystem than the EPA admits. Indeed, evidence suggests that spraying with glyphosate, a broad-spectrum herbicide, severely affects and indiscriminately kills plants and food crops such as banana, yucca, maize, and papaya. Additionally, eating such affected crops and drinking contaminated water may further lead to temporary illnesses, such as vomiting, diarrhea, nausea, and headaches, as well as other possible unknown long-term health affects.⁴⁸

One of the gravest environmentalist concerns is the severe damage eradication poses to the *cananguchales*, small oasis's in open Amazon terrain and a strategic component of the Amazon ecosystem. Permanent pools of water surrounded by palm trees, the *cananguchales* play host to a wide range of animals and birds while serving as drinking spots for cattle and wild

animals.⁴⁹ Situated at lower points in the terrain, they are susceptible to chemical spraying from nearby fields. Although uncertainty and disagreement persist about exactly how the chemical is finding its way into the ecosystem, many of the palms trees are losing their absorbent properties, causing the *cananguchales* to dry out and the surrounding vegetation and the micro-ecosystem to perish.⁵⁰

DRUG TRAFFICKERS, INSURGENTS AND A PARAMILITARY THREAT

Another reason for Colombia's increased coca production, despite eradication efforts, involves the activities of drug traffickers. Two insurgent groups – the Revolutionary Armed Forces of Colombia (FARC), the National Liberation Army (ELN) – along with the United Self-Defense Forces of Colombia (AUC), a paramilitary organization, support their terroristic activities by protecting growers and trafficking drugs. This “Hobbesian Trinity” engages in murder, kidnapping, corruption, extortion, and attacks on citizens and government officials.⁵¹ They traffic, cultivate, process, and transport coca. They routinely engage in terror to promulgate the drug trade. Finally, they pose a significant threat to Colombia's democracy, prosperity, and security. Since 1992, the FARC, ELN, and AUC have been responsible for terrorist attacks that have resulted in 3,000 deaths, 2,856 kidnappings (including the kidnapping of 51 U.S. citizens), and bombings. They have wreaked in \$500 million damage in lost revenues and destruction of Colombia's petroleum infrastructure.⁵² Located throughout the country's agricultural centers, these groups have expanded their control at the local levels of government in municipalities, townships, and rural areas. They control as many as 622 of Colombia's approximate 1050 total municipalities,⁵³ including much of the coffee-growing region. Their presence in the municipalities has increased from 2 percent in 1985 to 71 percent in 1995.⁵⁴ Given Colombia's history of decentralized government and lack of jurisdiction in these areas, former governed municipalities regressed to occupied encampments. Colombian rebel narcoterrorists block elections, murder officials, and instill fear in the local populace. Townships once controlled by these groups soon become sources of support for logistical and financial operations in promoting the drug trade. Additionally, the very presence of these groups hinders eradication efforts. Protecting the drug trade, they routinely fire on spraying aircraft and continuously attack those charged with crop destruction. Their ultimate goal, however, is to exercise political control over the state. Drugs, terror, and territorial control are but a means to that end.

A CONSTRAINED U.S. AID PACKAGE

In addition to “Plan Colombia” funding, Colombia has also received an emergency supplemental appropriations of \$642.3 million from the U.S. government for military and police assistance to aid in interdicting supply routes assist with manual and herbicide coca eradication. Colombia has as well received \$218 million in economic and social assistance.⁵⁵ Since the program began in 2001, the U.S. has provided Colombia with 76 helicopters for the Colombian National Police and army to use in reaching areas previously considered inaccessible. This support for Colombia does not come without restrictions, however. As part of President Clinton’s support for “Plan Colombia,” one of the restrictions imposed in the legislation prohibited the use of military equipment and appropriated funding for counter-insurgency efforts. Recognizing Colombia’s poor human rights record, the legislation created firewalls that limited its use to a purely counter-narcotics role. This restriction limited Colombia’s eradication efforts and precluded the use of U.S equipment against the insurgents.

THE SEARCH FOR ALTERNATIVE HERBICIDES

A July 2000 State Department fact sheet outlined negotiations between Colombia and the United Nations for use of more potent herbicides to eradicate coca cultivation. The proposed herbicide was fusarium oxysporum. Significantly more lethal than glyphosate, fusarium oxysporum is a fungus derived from molecular genetic manipulations involving fungal proteins. The herbicide destroys the coca plant by dissolving plant cell membranes. To date, the U.S. has allocated \$3 million to help the U.N. fund testing of the herbicide; the USDA and DEA are conducting independent research into the chemicals’ effectiveness and potential environmental effects.⁵⁶ Although epidemiology testing is incomplete and inconclusive, a 1995 study conducted in Hawaii on a coca field using fusarium oxysporum reported successful field testing with significant kill rates for coca.⁵⁷ Although future success or failure is difficult to project, at issue is whether fusarium oxysporum will prove more effective than glyphosate at destroying coca, while lessening the potential environmental and ecological effects. Or does this improvement simply encourage throwing good money after bad money? That is, will more effective crop eradication really contribute anything significantly to U.S. anti-drug efforts?

POLICY REVIEW

Current evidence regarding eradication as a means in disrupting the sources of Colombia’s drug market clearly indicates that eradication does not effectively reduce the supply of cocaine arriving at U.S. drug markets. Art Lykke’s three-legged strategic stool helps explain this failed policy. According to Lykke, if any leg of the stool – in this case, prevention, treatment,

and disruption is out of balance, the policy will probably fail unless adjustments are made to the unbalanced leg.⁵⁸ This may be the case with respect to eradication as a tool for disrupting Colombia's drug market. While the strategic legs of prevention and treatment may remain relatively steady, the leg of disruption is wobbly, at best. Further, Clausewitz's theory of centers of gravity (COG) may provide the strategic instrument for revising the strategy. According to Clausewitz, the COG identifies those characteristics, capabilities, or sources of power from which a military force derives its freedom of action, physical strength, or will to fight. We need to accurately identify the center of gravity of Colombia's drug problem. We can then concentrate all elements of U.S. national power – economic, political, informational, and the military – to force our will to curtail the drug supply on the traffickers. Clausewitz advises us, if possible, to identify a single, most critical COG.⁵⁹ Although there may be more than one COG with respect to Colombia's drug problem, I believe these non-state actors, the drug traffickers, insurgents, and paramilitary groups are the strategic Colombian COG. Deriving their power from coca production, these groups exercise control over the populace and limit the government's effort to establish legitimate political and economic solutions. As long as these non-state actors exist in Colombia, eradication will be a futile tactic. Similarly, as long as farmers receive more for producing coca than they would for other cash crops, the stool will remain unbalanced. If it falls over, Colombia's democracy may tumble as well. Charles Rangel, Chairman of the House Select Committee on Narcotics Abuse and Control, asserted that, "If Colombia falls to the drug cartels, the other, smaller, less stable nations in the region would become targets. It is conceivable that we would one day find ourselves in an island of democracy in a sea of narcopolitical rule, a prospect as bad as being surrounded by communist regimes."⁶⁰ Marked by instability, internal conflict, and desperate for humanitarian assistance, Colombia exhibits all the elements characteristic of a failing state. To prevent this, U.S. policy should support Colombia in combating drug cultivation and in eliminating the insurgents. "While there is no exclusively military solution, counterinsurgency operations remain a key element to solving Colombia's violence problems."⁶¹ However, Colombia may not be willing to undertake such action. They may regard their drug policy failure as a means to strategically and economically succeed. That is, they may stand to gain more in having the problem continue than in eliminating the problem.

RECOMMENDATIONS

The U.S. should discontinue eradication as a tool to disrupt the drug market and focus instead on the true causes for Colombia's drug production. At issue is Colombia's success as a sovereign state. To prevent Colombia's possible failure as a sovereign state and reduce the

possibility of narcopolitical rule, there the U.S. should revise its policy. To achieve balance and right the stool of strategy, U.S. policy alternatives should focus on getting at the causal links behind Colombia's drug production. First, the U.S. should increase the aid package currently being supplied to Colombia in support of "Plan Colombia," and remove all restrictions imposed on the use of such funds. Restrictions limiting how funding and equipment is employed severely limit Colombia's military actions, reinforcing the insurgent's belief that they are untouchable. Second, in addition to collateral counter-drug activities, surrogate Special Operation Forces (SOF) should conduct Foreign Internal Defense missions to assist the Colombian military and police in taking back control of the municipalities and townships occupied by insurgent groups. By regaining the towns and presenting a military presence and balance throughout the country, the government will reestablish political control, regain the confidence of their citizens, ameliorate the crisis, and may end the conflict by convincing insurgent groups to seek a peaceable solution. Additionally, the U.S. government should press Colombia to dismantle its paramilitary groups, calling for the detention and prosecution of individuals found collaborating or practicing human rights violations. Third, the U.S. should support replacement of coca cultivation with an alternative crop program. Replacing coca with alternative crops accomplishes two objectives: It enables Colombia's citizens to economically succeed and eliminates the economic source of these non-state actors' power and reason for existence. To ensure success, farmers must be able to earn as much, if not more than they received growing coca. Since replacing coca with another cash crop may prove difficult, the plan may require government subsidies to compensate farmers, making alternative crop cultivation a viable option. Fourth, assist Colombia in building their infrastructure, primarily their roads and bridges. More and better roads and bridges will not only connect the country economically, socially, and politically, but it will afford the military and police unconstrained geographic maneuver and responsive access, promoting law and order and ensuring security.

CONCLUSION

America's drug problem is not so much a function of supply as it is of demand. Attempts to disrupt Colombia's drug market with eradication have proven to be unsuccessful in disrupting supply or reducing demand. A short-term solution to a long-term problem, aerial spraying fails to permanently affect the illegal crop cycle. It is linked, if not responsible, for migration, deforestation, and displacement. Linked also to environmental and ecological devastation, aerial spraying is indiscriminately destroying legitimate crops and plants; it kills birds, mammals, and aquatic life and perhaps injures humans in the region. Currently, eradication accounts for

the greatest share of U.S. support in reducing Colombia's drug production. But crop eradication ignores the root of the problem, Colombia's stability. If anything, current policy actions are contributing to that instability. Drug trafficking and abuse are formidable problems that disrupt social, economic, and political systems. If the United States is to break Colombia's drug market, it must do so by disrupting the synergies of the underground criminal drug economy and of the armed insurgents that threaten the state's authority. The confluence of these factors has so exacerbated problems in Colombian society that the potential exists for the loss of a central government, economic deterioration, social disintegration and other conditions leading to Colombia's demise as a nation. To prevent this, U.S. policy should support Colombia's efforts to strengthen itself economically, politically, and militarily. U.S. policy should discontinue support of eradication efforts in Colombia and focus on strengthening the Colombian government with a substantive unconstrained aid package, assist Colombia's military in eliminating the insurgent threat – regaining territorial control of its country, provide alternative economic opportunities to coca growers, and assist in building Colombia's infrastructure. Investing in Colombia is clearly in U.S. interest. Expenditures in solving Colombia's drug problem may promote regional stability and help offset the \$67 billion the U.S. spends each year to combat the effects of illicit drugs here at home.

WORD COUNT= 6,886

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