The Ohio Journal of ECONOMICS and POLITICS

Special Issue
The Cocaine Problem

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As a general rule, the paper should be no longer than thirty pages. Under special circumstances, substantially longer papers may be considered for publication in more than one part. Short notes of two or three pages are encouraged.

Mathematical notation, figures, and tables should be held to the minimum required for the presentation of the material. Authors with papers accepted for publication will be asked to supply camera-ready copy of all figures and maps.

Notes and references should be on separate pages rather than in the text. Consult this issue of the Ohio Journal of Economics and Politics for the style used in attribution of references.
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Preface

This special issue of the *The Ohio Journal of Economics and Politics* concentrates on one of the most important issues of our times. Cocaine is an industry with annual retail sales of $100 billion. It is a product which has devastated the lives and families of millions of persons.

Many people were involved in this *Special Issue*. The *catalyst* was Professor Julius A. Gylys. It was his determination and vision which gave me the idea to put the papers into a special issue. This had not been attempted before by *The Ohio Association of Economists and Political Scientists* ... I hope that it will be tried again in other areas. The editors of *The Ohio Journal of Economics and Politics*, Professor Thomas Flynn, Department of Political Science, Cleveland State University and Professor Joe Gallo, Professor of Economics, The University of Cincinnati deserve special mention. Under extremely tight deadlines, they managed to see the papers through the refereeing process. The quality of the *Journal* owes much to their efforts. Likewise, special mention should be made to Ernie Brass, Managing Editor of the *Journal*. Ernie saw that the *Journal* got through the press, billings were handled, and mailings were timely.

The *Ohio Journal of Economics and Politics* is now into its fourth volume. Credit for the *Journal* must go to all the Past Presidents of the OAEPS, other officers, and to the support of the membership. As we prepare for our 50'th anniversary, it is fitting that our first *Special Issue* be devoted to one of the most important social issues of our times.

Henry G. Rennie
Professor of Economics
Special Editor of the "Cocaine Issue"
*The Ohio Journal of Economics and Politics*
The University of Toledo
Adam Smith, the canny Scottish founder of modern economics, put forth the fundamental premise that *self-love is the governing principle in the intercourse of human society.*

It is not from the benevolence of the butcher, the brewer, or the baker, that we expect our dinner, but from their regard to their own interest. We address ourselves, not to their humanity but to their self-love, and never talk to them of our own necessities but of their advantages.

Society can set the parameters within which persons are allowed to act in their self-interest. Several of the articles in this volume are essentially different views on the values of these parameters and different ways of achieving the goals of society.

All the articles in this *Special Issue* of *The Ohio Journal of Economics and Politics* are concerned with one topic ... *cocaine.* Cocaine affects life ... the economics, politics, health, social welfare, criminal, planning and management of life. It affects every aspect of life whether you are user, pusher, or indirectly related to them.

I have organized this *Cocaine Issue* into four parts:

I. Economics.

II. Policy: Federal.

III. Policy: Prescriptions.

IV. Impact.

**Economics of the Cocaine Industry**

Cocaine trade is an industry. Annual retail sales of the cocaine industry surpass the gross national products of many countries. It is a mature industry with narrowing profit margins. Dr. Gylys analyzes the economics of the cocaine industry through the technique of supply and demand analysis. Demand for cocaine is a function of price, prohibitionist laws (which impose a cost in the forms of probability of arrest), protection, legal fees, morality, etc. Supply of cocaine is a function of price, law, normal profit, cost of factors of production such as land, labor, raw materials, etc. Implicit costs such as personal risk become part of profits to the entrepreneur. Dr. Gylys estimates this criminalization tax to be 71 to 80 percent of all costs.

Estimates of the supply of cocaine entering the United States are based on several sources...

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methods such as: (1) Extrapolations from land used for coca cultivation; (2) Estimates of seizures at U.S. borders. Estimates of the supply of cocaine are: 1976, 28,000 pounds; 1981, 30,000 pounds; 1985, 130,000 pounds; 1986, 275,000 pounds. The supply and demand for cocaine determines its price. The price of cocaine is estimated to be: 1982, $65,000 per kilogram; 1985, $30,000 per kilogram. In addition, the quality of the product, as measured by its purity, increased from 16% to 60%. It is not decreased demand which reduced the price of cocaine, but rather increased supply; however, substitutes for cocaine do exist. These substitutes both increase the supply and decrease the demand for one form of cocaine (such as crack) but increase the demand for all forms.

The vertical integration of cocaine production goes through five stages:4 As an example, let us start with land suitable for cultivation of coca leaves. Assume coca production of, for example, 425 kg. of leaves. This earns the local farmers relatively vast profits ($3,374 of income versus a family average income of $160 per year); Pasta production with a value added of $1,500 and a profit of $226; Refining with a value added of $2,000-$3,000; Wholesale with a value added of $25,000-$28,000; Retail with a value added of $165,000. The final retail sale is of a product which started at the coca level of $3,074 and finally retailed for $200,000.

**Federal Drug Abuse Policy**

Dr. Bollinger starts his paper with some sobering statistics on drug abuse in America.5 Drug abuse goes as far back as the early 1800’s. Cocaine first appeared in the United States in the 1880’s and was considered “safe, energizing and non-addictive”. It formed the base for Coca-Cola. The 18th Amendment, passed into law on 29 January 1919, instituted the era of “prohibition” of alcohol. This was repealed by the 21st Amendment in 1933. However, in 1937, Congress passed the Marihuana Tax Act. In 1965, Congress passed the National commission on Law Enforcement and Criminal Justice. The Drug Enforcement Administration was created in 1973. Other important legislation is referred to by Dr. Bollinger.6

As the drug problem has become both more pervasive and more serious in America, Congress has met it with legislation starting with the 1984 Comprehensive Crime Control Act. It passed the Federal Anti-Drug Abuse Act of 1988.

Dr. Wedding discusses the Federal Drug-Free Workplace Act of 1988.7 This Act requires all contractors or individuals receiving Federal contracts of $25,000 or more to certify to the contracting Federal agency that such contractor (employer) will provide a drug-free workplace.

Many employers in order to obtain certification as a drug-free workplace are requiring random urine testing of employees. This test is not 100% accurate, but is not an “invasive” test as is the more accurate blood testing. Nevertheless, random urine testing raises several legal issues such as: (1) *Constitutionality*: 4th Amendment (unreasonable seizure

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4 *ibid.*
5 Winfield S. Bollinger, “Federal Drug Abuse Policy: The Evolving Role of the National Government in the Criminal Justice System”.
6 *ibid.*

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III.
and search); 5th Amendment (self-incrimination); 14th Amendment (due process); (2) Contractual challenges by unions that it violates the union agreement with the employer; (3) Right of Privacy. The urine test, in addition to revealing information concerning drug use, also reveals other information about the employee.

Policy: Prescriptions.

Dr. Gylys in his second article in this volume analyzes the cocaine reduction policies in the producer countries.8 He is critical of the Bush administration’s policy of local law enforcement as both inefficient and ineffective. Dr. Gylys advocates a policy which is capital intensive rather than labor intensive. Capital intensive raids on crystallization labs rather than labor intensive law enforcement. Indeed, Dr. Gylys’ approach appears to being tried as witnessed by the recent arrest of General Noriega in Panama, and the war with the drug lords in Colombia. Thus, Dr. Gylys argues for a supply reduction rather than a demand reduction policy.

Drs. Roberts and Telljohann argue in their paper for a demand reduction policy.9 They are critical of the three phases to the historic supply reduction policies consisting of: (1) arrest and incarceration; (2) import restriction; (3) and export restrictions. They argue that these have been ineffective. In addition, they impose a high cost, both direct and indirect, on the U.S. legal system.

Drs. Roberts and Telljohann concentrate their paper on demand reduction policies as applied to the school system.10 They discuss scare tactics, recovering addict speeches, drug information programs, peer pressure, resistance efforts and “how to say no programs”.

Impact

Dr. Leons looks at the effect cocaine has had, not on the United States, but on a Bolivian Yungas community.11 The Yungas valleys of La Paz is one of two major coca growing areas of Bolivia. Coca accounts for 15% of the GDP of Bolivia, employing 17,000 farmers. The revolution in 1952 swept away the hacienda style and replaced it with many small farmers. In addition, significant U.S. aid built roadways and encouraged urbanization in the countryside.

By 1970 Bolivia had achieved self-sufficiency and became an exporter of agricultural products. In the village of San Calixto, 60.7% of the income comes from coca cultivation. The new capitalist system has created a new class of “rich”.

Dr. Franckowiak also looks at the local impact of cocaine production. This time from the perspective of South America.12 The major South American producers and processor nations are Colombia, Peru, and Bolivia. Ecuador, located between producing and pro-

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8 Julius A. Gylys, “Analysis of the Cocaine Reduction Policies in the Producer Countries”.
10 ibid.
12 Eugene N. Franckowiak, “Local Impact of Cocaine Production in South America”. 

IV.
cessing nations has not succumbed to coca production because of vigilant government and citizen actions and because of the lucrative oil fields in the region. Dr. Franckowiak points out the enormous economic influence on jobs, income, and society of cocaine. Politically, coca production is legal in both Peru and Bolivia. One-third of the Chamber of Deputies is controlled by coca growers in Bolivia. Dr. Franckowiak concludes that whether supply reduction or demand reduction policies are instituted, they will require an international effort and will inevitably reduce the well being of Latin American countries.

If I may end this Foreword with another quote from Adam Smith [with my changes in brackets]:

He generally, indeed, neither intends to promote [hinder] the public interest, nor knows how much he is promoting [hindering] it. By preferring the support of domestic to that of foreign interest, he intends only his own security; and by directing that industry in such a manner as its produce may be of the greatest value, he intends his own gain, and he is in this, as in many other cases, led by an invisible hand to promote an end which was no part of his intention. Nor is it always the worse [better] for society that it was not part of it. By pursuing his own interest he frequently promotes [hinders] that of the society more effectually than when he really intends to promote [hinder] it. I have never known much good done by those who affected to trade for the public good.¹³

¹³ op. cit., p. 423.
Economic Analysis of the Cocaine Industry

Julius A. Gylys
Department of Economics
University of Toledo

During the last 20 years the illicit trade of cocaine has skyrocketed from a simple cottage industry into a giant international enterprise. The annual value of cocaine retail sales have surpassed those of the largest Fortune 500 companies and are hovering close to $100 billion per year. Cocaine imports have more than doubled since 1981, and the drug is being sold to increasing numbers of users at steadily declining prices. Once the drug of the wealthy, stereotypically consumed by members of the upper-middle class, cocaine network has now reached every geographic area of our country and all strata in the society. Continuously falling price has helped it to become the most popular illegal drug in America today. By the middle of 1980s around 22 million Americans have used cocaine, and every day 5,000 new individuals have been trying it for the first time, while consumption of all other illicit substances has either leveled off or even decreased. As cocaine use has spread from the suburbs and high-rise office buildings to the ghettos and streets of central cities, cocaine and crime have become synonymous. Also, in the international political scene its production and trafficking now ranks with illegal immigration and Communist insurgency as priority questions in U.S.-Latin American relations. But with all due apologies to the problems of domestic cocaine epidemic and growing international political complexities with the narcotics producing countries, this paper will primarily concentrate upon the economic analysis of the cocaine trade. The driving force in the cocaine industry, like any legitimate industry, is the profit motive. Illegality of the industry makes participation in it risky, and high risk is the fountainhead of the enormous profits. As the present U.S. markets are becoming increasingly saturated, one can classify cocaine trade as a mature industry, with, most probably, steadily narrowing profit margins. Also, cocaine trade, like all other business activity in the free world, is extremely sensitive to forces of supply and demand. A considerable amount of insight about the nature of this illegal industry will be derived with the help of this simple analytical tool. The bulk of the paper is devoted to the analysis of the industry’s vertical structure. The extrapolated value added at each stage of cocaine processing allows one to draw some conclusions not only about the degree of competitiveness but also about the nature of some of the production processes. But because of the industry’s illegality, data are scarce and undisputed information is frequently difficult to come by. Inevitably, some conclusions drawn in this paper rest on more tenuous foundations than others. The essay would be incomplete without some suggestions on how the growth trend of this highly complex “industrial conglomerate” may be reversed. The latter topic will be briefly addressed in the conclusionary part of the paper.

Supply and Demand for Cocaine

If cocaine were a legitimate commodity and the industry producing it were perfectly competitive in nature, then the intersection of supply and demand, just like for any other commodity, would determine its market price. What makes the cocaine industry unusual
is its illegitimacy which makes the nature of the determinants defining the position of supply and demand functions in price-quantity space different from that of a legal good. According to Wisotsky, black market supply and demand curves possess certain qualities that cannot be found in their legal counterparts and are worth examining in how they may relate to cocaine. There are two predominant factors that have an abating influence upon the demand for cocaine. Prohibitionist laws exert a negative effect upon demand predominantly because of possibilities of arrest. Even though every year about 300 to 400 million cocaine transactions take place, there are only several thousand arrests. Police agencies concentrate their efforts mostly on trafficking and dealing activities rather than on consumption aspects of the drug. Although the probability of arrest for use of cocaine is small, once caught the punishment is relatively severe even for possession of small quantities of this illegal substance. In addition to fear of arrest and prosecution, morality also exerts an influence upon demand for cocaine. Some refrain from consumption of illegal substances because of personal moral standards which may be rooted in either religious convictions or simple respect of the law. Others experience pleasure in defying the law and find prohibition an infringement upon their individual freedom. However, it would be safe to conclude that the net effect of morality and obedience of the law, just like fear of arrest, tend to reduce the aggregate demand to a level that is lower than it would be under free market conditions. The law exerts also a noticeable amount of influence upon the supply of cocaine. One minor cost for the suppliers is to be stigmatized by the prevailing American social attitudes as merchants of a substance that is not only hazardous to one’s health, but in some cases, even lethal. Even though it is an intangible cost, people who deal in cocaine must monetize it in order to disvalue such a reproach on their reputation. The more cognizant is the society about the “evils” of cocaine, the more profound is the stigma, and the greater will be the impetus for the supply to shift to the left. Since legal penalties for distributors are more severe than for the buyers, consequences of arrest for the former are higher than for the latter. Also, unlike users, sellers are popular targets of investigations and are subjected to greater risks. Consequently, in order for a seller to survive in the business, he is forced to incur a number of transactional costs whose origins may be traced either to the criminal justice system or the peculiar nature of competition inherent in the trade of cocaine. In the black market literature such transaction costs are referred to as criminalization tax and deserve closer examination. Avoidance of arrest and conviction requires the cost of concealment and evasion strategies, legal fees and bond costs, loss of inventory and private property seizures, and, frequently, the cost of bribing public officials. Since competition in an illegal industry does not manifest itself in product quality and price cuts only, there are additional costs of forceful inventory seizures by rival groups or corrupt police officers and robberies by individuals from outside and inside the industry. In the violent trade of cocaine the possibility of death is another real transaction cost that is reflected in the supply of cocaine. Even though risk calculations vary among rational profit-seeking industry participants and usually put a high risk premium on transaction costs of such nature, in the cocaine business all risks are monetized and included in the price of the final product. According to micro economic theory, all personal risks are considered to be implicit costs and become part of the cocaine entrepreneur’s profit. This criminalization tax is the minimum amount of money needed to cancel the risk of operating
outside the law and persuade the dealer to view the operation as profitable. Judging from the difference in prices of a kilo of cocaine in South America and Miami, the criminalization tax must be around 71 to 80 percent of all costs. Such high costs reduce the supply of cocaine, and, by restricting the quantity sold, make cocaine one of the most expensive drugs in the history of mankind.

The Increasing Supply

There are no accurate data on quantities of cocaine reaching U.S. markets. The National Narcotics Intelligence Consumers Committee (NNIC) and U.S. Customs provide us only with estimates that are based on extrapolation of their own separate intelligence information. It is impossible to judge which agency’s results are more accurate. The NNIC forecast is structured around information obtained from satellite surveillance activity in Peru, Bolivia, and Columbia over land used for coca cultivation. Since local consumption of coca leaves for chewing purposes and for export to worldwide markets for medical uses are the two known quantities, it is assumed that the remaining share of the harvest is for the production of illegal cocaine. Using reduction factor of 200:1 for coca leaf to coca paste and 2.5:1 for paste to cocaine hydrochloride, derivation of the annual illegal output destined to U.S. markets is readily extrapolated. U.S. Customs methodology centers around the total annual cocaine seizures in the processing of cargo and passengers across U.S. borders. Such activity is executed without any prior tips or intelligence information and in 1985 made up over 82 percent of all the cocaine seizures, yielding 36 percent of the total cocaine seized. The cold hit approach to interdiction is analized by Wisotsky to a net of uniform mesh; changes in the amount of cocaine caught by the net reflect real changes in the flow of cocaine across U.S. borders. Authorities estimate that seizures of random nature account for 10 percent of all the incoming cocaine. Judging from the average annual seizures of 49.9 pounds throughout the 1960s, the quantity reaching U.S. markets must have been relatively small. But by the end of 1960s, cocaine seizures started to take place at a much more precipitous rate. Using the U.S. Customs estimating technique, the supply of cocaine in U.S. rose from 28,000 to 38,000 pounds from 1976 to 1981, respectively. From 1985 to 1986 the amount smuggled increased from 130,000 pounds to 275,000 pounds. The seizure rate is still on a continuous upswing. Thus, given the constant size of the U.S. Customs staffing and no technical changes in seizure technique, annually increasing cocaine seizures in conjunction with the inherent random nature of cold hits suggest steadily increasing cocaine deliveries to U.S. markets. Fluctuations of cocaine retail prices as determined by supply and demand forces provide us with corroborative evidence that the supply of cocaine is on a continuous increase. Judging from the steady climbing retail prices between 1980 and 1982, demand for cocaine during that period must have been increasing at a faster rate than supply. For the next two years prices remained fairly constant and during the initial months of 1984 started its steady decline which is still continuing up to the present time. Even though during the 1980s the demand was on a continuous rise, plummeting prices offer evidence that the supply must have been increasing at a faster rate than the demand. A kilogram, which in 1982 fetched up to $65,000, brought as little as $30,000 in 1985, and in 1987 Miami wholesale kilo markets prices occasionally slipped even into the teens. During the declining price period the

3
purity of the drug in the retail market shot up from 16 percent to 60 percent which in effect cut the real price even to a lower level. A product's price decline could also be attributed to a decrease in demand. It is doubtful that this is the case with cocaine even though a recent National Institute of Drug Abuse study of high school students shows a 1.9% drop among those who have used cocaine in the previous month. A decrease in use by a subgroup of our society can be readily counterbalanced by increased consumption rates in other subgroups. Around 25 percent of our high school students tend to drop out. This is the subgroup of our young people that has a greater potential for drug abuse than any other group and it was not included in the survey. Cocaine abuse is becoming more intractable. During the last few years crack, a cheap but potent form of smokable cocaine, has become popular among inner-city population and its use seems to be intensifying. According to Washington, head of a New York treatment center, in 1987 more than 50 percent of his patients are cocaine smokers, up from about 20 percent a year ago. Such evidence suggests that the steady decline in cocaine price is attributable to a continuous rise in supply rather than decrease in demand. Since the steadily downward price trend is occurring in the face of annually increasing federal efforts to stem the flow of cocaine, the current glut of the drug suggests that its price is determined not so much by law enforcement's ability to restrict the supply as by the industry's capacity to produce ever-increasing amounts of this exotic substance.

Vertical View of the Production Process

Before cocaine is loaded on airplanes or ships to various U.S. destinations, it undergoes a complicated process of production that involves the cooperation of labor and entrepreneurial activities in several South American countries. The first stage in production of cocaine hydrochloride involves cultivation of coca leaves. Long before Western societies ever heard of cocaine, coca was and still is an integral ingredient in the lives of Peruvian and Bolivian peasants and Indians. The coca leaf has been masticated in the Andean communities since pre-Hispanic times. Today over several million peasants, located mostly in the highland areas, continue the practice of leaf chewing. Mastification fulfills the role of an all-purpose healing drug. It is a harmless practice that in essence combines the function of coffee, tobacco, aspirin and bicarbonate of soda in their society. Most coca cultivation 27 years ago was for such local consumption purposes. But with the rise of cocaine epidemic in U.S., it is now one of the few South American agricultural products whose role takes place in cash terms and allows the sellers to realize a substantial profit. Between 1986 and 1987 the production of coca rose by more than 10 percent in the three traditional coca-growing countries. Coca output in metric tons for Peru, Bolivia and Columbia have reached 121,000, 67,000 and 23,000 levels, respectively. A Bolivian farmer who cultivates a little over a hectare (2.47 acres) of coca leaf can earn the equivalent of several thousand to $10,000 a year. In relation to the Bolivian peasant national family income average of $160 per annum, that is a significant source of additional revenue. The rapidly rising price of coca effectively maintains the purchasing power of peasant households. This is not the case for other cash crops whose terms of trade have worsened during the past 15 years and especially during the hyperinflation of recent years. At the 1985 prices of $7.42 per kilo of dry leaves (see Table 1), it makes sense in Peruvian and Bolivian
growing regions for every peasant family to cultivate at least a small plot of coca bushes. In those countries small amounts of coca production is legal. But low and fluctuating prices of cash crops in the world markets have influenced the peasants to grow coca beyond domestic needs. Consequently, it is not uncommon for farmers to cultivate secret plots which are capable of producing at least 30 arrobas (348.8 kg) per year. Peruvian and Bolivian growers are responsible for 90 percent of the world’s coca output. On the eastern slopes of the Andes coca is a ubiquitous plant and entering into coca farming is easy. Since there is a huge number of mostly small growers who sell the crop to large numbers of coca paste producers, coca cultivation is close to a purely competitive activity, and the price is essentially determined by forces of supply and demand. The second stage of production involves the manufacture of coca paste.

Paste producing pits, operated by larger growers or independent entrepreneurs, are located right in the coca growing regions, because paste production is a weight-loss activity. Most pits have capacities to handle from 30 arrobas (348.8 kg) to 200 arrobas (2,772 kg) of leaves. Since 30 arrobas is less than the average yield from one hectare per picking, the required quantities to start up a batch of paste can be collected with little difficulty. Derivation of paste is a labor intensive activity that requires no basic skills. There is also a need for several locally or regionally available chemical ingredients, such as, kerosene, limestone and sulfuric acid. The integral part of the paste derivation process is performed by pisadores (leaf stompers) who work 12 hour night shifts stomping on leaves soaked in an acid solution in order to separate cocaine from the leaves. Pisadores are usually unemployed young male peasants or landless migrants who receive wages that are 8 to 12 times higher than those received from tending legal crops. In Bolivia’s upper Cochabamba Valley even local public employees, such as schoolteachers, have made a massive entry into the lucrative coca paste-making business. One Bolivian police report indicated that 70 percent of the schoolteachers in the region, whose monthly salaries in 1984 average $15 to $20, were working in cocaine-oriented activities. Paste-making requires only rudimentary infrastructure, no electricity and no large capital investments. That technology can be readily diffused to the rural grower-producer and throughout the small and medium-sized merchant population is evidenced from the recent proliferation of paste-making both in Chapare and the upper Cochabamba Valley. Since the process requires fixed proportions of chemicals, labor and leaves, output takes place a constant cost rate. Given the size of pit, doubling of output requires doubling of inputs. Because of cheap labor, low chemical prices and only moderate profit rate, value-added at this stage of the industry amounts to only $1,050 per 3.75 kg of paste. Absence of scale economies, large number of pits, easy entry, requirements of only rudimentary skills and low level of infrastructure make paste production a highly competitive activity. But pit operations are year-round activities and operators reap high incomes in relation to the national Peruvian and Bolivian standards. In any given paste-producing region, the patron (boss) makes most of the finished paste purchases. The actual transactions are made for him by corredores (runners) at a price determined by the monopsonistic market powers of the patron. The purchase price is additionally influenced by fluctuations in demand for cocaine and coca paste in international markets, bribes of local police, and distances to regional airfields. It is not clear, whether patrones are representatives of groups that control higher stages of production or are them-
selves subjects of monopsonistic domination. It is known, however, that there is a high
degree of cooperation and rapport between these middlemen and organizations controlling
higher echelons of production. Finished coca paste is usually flown on light aircraft from
mountain villages to Columbia for the next stage of processing.\textsuperscript{37} It consists of coca paste
conversion into cocaine base which is then crystallized into cocaine hydrochloride or the
final product. The latter two activities take place very often at the same location and will
simply be referred to as refining of coca paste. There is some information indicating that
stepped up Columbian law enforcement in 1984 prompted reallocation of some refining
activities to Bolivia and Peru.\textsuperscript{38} Intelligence data indicate that in the latter two countries
most refining is controlled or sponsored by Columbian groups.\textsuperscript{39} Even though there are
some independent vertically integrated indigenous operations, they are exceptions to the
prevailing Columbian dominance.\textsuperscript{40} Since from the technical point of view refinement is
the most complicated activity in the vertical structure of production and also requires
knowledge of international markets for procurement of precursor chemicals, it is controlled
by professionals from middle-class families or individuals who have gained middle-class sta-
tus based on their wealth earned in cocaine trade. E.g., in Bolivia refiners are frequently
owners of large cattle ranches and merchants engaged in legal export activities. Their nu-
merous economic interests extend into import houses, banks, car dealerships, retail stores
and money exchange houses.\textsuperscript{41} In Columbia most refiners are also traffickers or exporters
of cocaine hydrochloride to U.S. markets. Investment capital for cocaine activities came
from profits desired from earlier heavy involvement in illegal marijuana activities. Such
comparative advantages enabled the "elite" families to capture activities at the top of the
industry's vertical structure. Unlike paste production, refining activities require locations
with electrical installations and, because of the high value of the final product, adequate
security measures. Lower-class or middle-class houses in urban areas are common locations
of refining laboratories. At this stage of production there are certain difficulties in procur-
ing certain scarcer nonhuman and human inputs. Ether and acetone, which have to be
smuggled from abroad, and chemists, referred to as "cooks" frequently hired to run entire
refining operations, command relatively high prices. In smaller scale operations cooks may
be partners in business or chemists hired for a high salary on a part-time basis. Large-
scale refiners usually employ full-time professional chemists at annual salaries of $10,000
to $15,000, which are considerably higher than those of full-time Peruvian high school
chemistry teachers earning around $840 per annum.\textsuperscript{42} Since the salaries of the chemists
are relatively high, it makes sense to utilize such a scarce resource in a highly intensive
manner in order to spread the relatively high remuneration over the widest possible out-
put range. The more intensively is the chemist employed, ceteris paribus, the higher is
the output and the lower are the costs per unit of output due to economies of large scale
production. It stands to reason that crystallization is rarely performed with less than
three kilos of cocaine base, and it is not unusual to process 50 kilo batches at any one
time.\textsuperscript{43} Because large operations achieve lower unit costs than small operations, competi-
tion causes production to take place in a limited number of plants and the refining stage
of the industry can be readily classified as an oligopoly. Relatively high oligopoly profits,
steep salaries of the chemists and expensive precursor chemicals are the main reasons for
the relatively high value-added at this stage of production. Vertical integration of the first
three stages of production from coca farming to refining raises a possibility of pecuniary economies. As shown in Table 1, entrepreneurs who control all three stages of processing sell one kilo of pure cocaine for as low as $7,000. But independent refiners who buy coca paste from patrones end up selling the final product at $10,000 per kilo. Apparently vertical integration of the production stages is responsible for pecuniary economies of $3,000 per kilo of cocaine hydrochloride. Possibility of such savings corroborates reports of a movement toward greater vertical integration in Peruvian and Bolivian operations.44

** Trafficking and Wholesaling **

Entry into the refining-trafficking segment of the industry is difficult. Because of the huge amounts of money involved and the need of protection from law enforcement organizations and even rival exporters, the smuggling of cocaine has become an intricately organized activity. It is controlled primarily by a network of Columbian organizations operating the supply lines from South America, via Caribean transhipment points, to American wholesale market.45 The origins of Columbian involvement in cocaine trade are traceable to the influx of Cuban citizens and elements of Cuban Mafia to South Florida after the Castro revolution in the early 1960s.46 By 1965 the Colombians were the sole suppliers of cocaine to Cubans, and Cubans were in charge of a trafficking and wholesaling monopoly in U.S. markets.47 Transformation of the haphazard cocaine cottage industry started to take place once Florida’s Cuban Mafia factions’ marketing efforts began to spill out beyond the boundaries of the local Cuban community. It is most likely that once the Colombians learned about the enormous profits at the wholesale stage of the industry, the strict division of labor between the two ethnic groups came to an abrupt end. According to Table 1, value-added at the wholesaling stage is $25,000 to $28,000 which is, with the exception of retailing, higher than at any other stage of the business. Forward integration of the wholesaling immediately allowed the Colombians to reap vastly higher profits which they prudently plowed back into new capital acquisitions. By 1978 the Colombians became the dominant traffickers and cocaine wholesalers in the Miami market.48 At the present time Columbian groups are the largest, most sophisticated organizations at the trafficking end of the business. Traditional control of the first two production stages in Bolivia and Peru is the main factor allowing them to establish their virtually undisputed domination of the market. Nevertheless, Cuban Mafia kept on challenging their new competitors in bloody confrontations until 1981, the year that marked the peaking of Miami-area drug-related homicide rates, dubbed by local police as the "cocaine wars."49 Currently the cocaine wholesale activity throughout the entire U.S. is in Columbian hands.50 The newly earned profits are carefully managed by financial experts familiar with international banking.51 They are responsible for laundering, banking and investing of drug monies, and, most importantly, for assuming that a portion of the profit is returned to Columbia for reinvestment purposes.52 It is very likely that a vast share of the newly-acquired profits were invested into sophisticated air delivery systems, and currently around 62 percent of the Columbian cocaine is exported by private aircraft,53 a rise from 45 percent in 1978.54 Since pilot service is a scarce and indivisible resource that commands high wages, in order to reap benefits of size economies in air transport, it is essential for traffickers to maximize the shipment load in relation to range. The newly acquired planes, such as the Piper,
Aztec, Piper Navajo, and the Cessna 400 series, are precisely the ones that can provide the optimum balance between range and cargo capacity.

They have the capability to transport a ton of cocaine over a range of about 1,800 miles and stay airborne for 11 hours with standard fuel systems. In order to decrease risks of interdiction, traffickers also invested into advanced communication devices, such as, communication scramblers and encrypting devices. Interception of smugglers' radio transmissions is virtually impossible now because only someone with a receiver coded to the particular frequency can decipher the message. Also, all kinds of other high quality electronic equipment was purchased to insure safer deliveries. E.g., in order to land without lights on rural landing strips, night vision goggles are now frequently used which are capable of intensifying any available light by a factor of 50,000. Radar altimeters and long-range navigation instruments are some of the other specialized devices now in use by traffickers. Since vertical integration has allowed replacement of Cubans with Colombian employees, the risk factor was diminished even further. According to a Miami private investigator, D'Azevedo, one of the things Colombians learned was that with Cubans there were many informants. Hoping to receive high degree of loyalty in exchange from their own nationals, Colombians introduced a generous wage rate and a set of fringe benefits that included continuing support to employees' families in cases of arrest or imprisonment. However, any breach of the secrecy code became punishable by death. Whenever retribution cannot be taken directly on an informant, it is carried out in Columbia against some family member. By wreaking vengeance quickly and with no quarter given, the Columbian organization provide themselves "insurance" against violators of the secrecy code. For Colombians the takeover of wholesaling established two highly desirable results. Firstly, it created a new source of profits which were prudently plowed back into highly efficient capital equipment. Secondly, forward integration produced an "invocation" of employee loyalty. Both benefits, by decreasing risk of operation, have increased profitability and are the main reasons for continuously increasing cocaine shipments to U.S. markets. Any discussion of Columbian involvement in the cocaine trade would be remiss without a mention of the organizational structure of the Columbian refining-trafficking activities. In brief, the structure can be characterized as a cooperative arrangement of several cartels. The vast majority of cocaine smuggled into U.S. comes from 10 to 20 regional cartels that are run and staffed by Colombians only. A typical cartel is headed by an individual who is usually well-known to the drug enforcement community. Members are blood relatives or life-long friends of the leaders, frequently people who grew up in the same village or the same area as the head of the organization. Many of the cartels are believed to have financial resources of several billion dollars and, by using some of the profits to provide health care and education, they have built up a considerable public support system for their illegal activities. Even though most of the cartels are independent trafficking and/or refining organizations, they frequently collaborate in specific smuggling ventures. Rank and file personnel, technicians and specialized equipment are switched around among cartels as needs of specific operations dictate. Such cooperative arrangements not only promote efficient utilization of expensive capital but also full employment of specialized human resources. Pablo Escobar Gaviria, Gonzalo Rodriguez Gacha, Jorge Luis Ochoa Vesquez and his two brothers, Juan David and Fabio, are the most successful and influential organizers of such collusive
arrangements. The above individuals started their cocaine operations around the city of Medellin and are frequently referred to as the Medellin Cartel. So when one reads in the press that a Columbian cartel is responsible for 80 percent of the cocaine shipments to U.S. markets, the credit should actually accrue to several cartel organizations that are in various cooperative agreements under the leadership of these men. Collusion among cartels provides numerous benefits, such as, division of labor, full employment of specialized resources, full capacity of high-valued capital, wide selection of smuggling and processing equipment, and control over price and quality of the final product. Thus the ultimate force behind collusive arrangements is maximization of profit. Any type of grand scale collusion in the cocaine retail markets is an economic impossibility. Annual retail cocaine transactions number in the tens of millions in thousands of regional and subregional markets. Inability to exert control over large numbers of dealers is probably the main reason why Columbians have not displayed any desire to get involved in the last stage of industry. Risk and adulteration of cocaine hydrochloride with cheap ingredients are the basic sources of high profit. With the arrival of crack, a highly addictive cocaine derivative, retail market opened up to armies of small dealers. They convert powdered cocaine into smokable form by a simple process and sell it at high profit. The competition among sellers is intense and frequently results into violent “turf” wars. Violent attempts by newcomers to capture markets from the more established organizations compounds the risks to excessively high levels and provides one of the main reasons for the high value-added at the retailing level of the industry.

Conclusion

Every year U.S. markets are being swamped with continuously increasing quantities of cocaine. The formidable industry spanning two continents is now more efficient and better organized than ever before. Steadily falling cocaine price gives ample support to the intelligence data that supply is increasing faster than demand. So far all government’s efforts to decrease the supply has failed. But even if interdiction efforts were to succeed in holding the supply constant or even decrease it by some marginal amount, consumption in U.S. markets would not change significantly. No matter what the illegal substance is, as long as its demand for a substantial number of consumers is relatively inelastic, there always will be a black market for such a product. The criminal justice system has less control over cocaine industry than any other form of illegal activity. The industry’s vertical structure encompasses several countries and is painstakingly complex. Infiltration into organizational structures is virtually impossible because, with the exception of the pilots, only relatives and old acquaintances are allowed to fill the ranks of the organizational structures. Production starts in remote jungle regions governed by corrupt local officials and threads itself through several South American countries into the North American continent, despite the herculean efforts of U.S. law enforcement operations and those of numerous other governments. What makes cocaine control even more difficult is that when it reaches U.S. markets, it is consumed in a free society by people who, more often than not, are law-abiding individuals. Jim Smith, Florida’s Attorney General, points out, “I don’t believe traditional law enforcement can ever effectively deal with the problem . . . . Unless we get to the point where we have a military standing shoulder to shoulder around over
coastline, I don’t think we will get it done with traditional law enforcement methods. Because cocaine is one of the most harmful and corruptive force in our society, Washington has an obligation to fight it. So far supply reduction policies have failed to stop the growth of industry. In light of the enormous amounts of resources allocated to supply-reduction strategies, one cannot help but experience a high degree of frustration with the current enforcement approach and its hapless results. We know that the attack on the supply side alone will not eliminate the scourge of cocaine. To the chagrin of many, Washington seems almost unaware that there is also a demand side to the problem. So long as there is demand for cocaine, supply will find its way into the market. But unlike the youth of 1970s, there are some recent signs that drug education can reach a very important segment of our young population. The 1.9 percent decline in cocaine use among high school seniors is an indication that drug education has the power to influence demand. A reallocation of a substantial amount of resources to a systematic and thorough educational and drug awareness programs aimed at our young people holds considerable amount of promise. From the political perspective, it is a solution that is less attractive than the supply side approach because its results will become apparent only in the long run. Granted, as of now we do not know exactly what effect massive educational program will have on demand. What we already do know is that there is no quick fix to the problem and the attack on the industry solely from the supply side has reaped only meager results. It is time to try a two- pronged approach that will address both the supply and demand sides of the industry.
ENDNOTES


6. Drug Enforcement administration, Offender Based Transaction System, Case Level Arrest by Drug, 1982 (report provided by the DEA Office of Public Information).


8. See Table 1.


26. Strug, op. cit., p. 73.


32. Ibid.


34. Ibid., p. 124.

35. Ibid., p. 127.


43. Wisotsky, op. cit., p. 1328.
46. President's Commission on Organized Crime, op. cit., p. 77.
47. Hearings To Create a Select Committee on Narcotics Abuse and Control Before House Committee on Rules and Administration, 96th Congress, 2nd Session, 1980, p. 70; also Penney Lernoux, "The Miami Connection," The Nation, Feb. 18, 1984, p. 186.
52. Hearing IV, op. cit., p. 130.
55. Hearing IV, op. cit., p. 663.
57. Ibid.
59. Office of Technology Assessment, op. cit., p. 28.
60. Office of Technology Assessment, op. cit., p. 29.


Table 1

Stages of Production and Value Added for One Kilo of Cocaine Hydrochloride, 1985

I. Coca growing, 425 kg. of leaves
   Cultivation costs: negligible
   Sold at: $3,374 (at $7.94/kg)
   Value added: approximately equivalent to selling price
   Profit: approximately equivalent to selling price

II. Pasta production, 3.75 kg of coca paste
    Production costs: $3,524
    Sold at: $3,750
    Value added: $1,050
    Profit: $226

III. Refining (production of c. base and c. hydrochloride), 1 kg. of cocaine hydrochloride, 95-98% pure
     Production costs: $5,000
     Sold at: $7,000-$10,000
     Value added: $2,000-$5,000
     Profit: $2,000-$5,000

IV. Wholesale, 1 kg. of cocaine hydrochloride, 95-98% purity, New York City
    Sold at: $35,000
    Value added: $25,000-$28,000
    Profit: approximately equivalent to value added

V. Retail, 2 kg. of cocaine hydrochloride, adulterated to 50% purity
   Sold at: $200,000 (at $100/gr)
   Value added: $165,000
   Profit: approximately equivalent to value added

Sources:

Raw data from Edmundo Morales, Studying Coca and Cocaine Production in the Peruvian Amazon, U.S. National Institute on Drug Abuse, New York City, N.Y.; for wholesale and retail prices, New York City Police Department, New York City, N.Y.

Organizations that control the first three stages of production sell at $7,000. Refiners who buy the paste from middlemen sell at $10,000.
Federal Drug Abuse Policy: The Evolving Role of the National Government in the Criminal Justice System

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Introduction

Congress, in its declared policy to create a Drug Free America by 1995, provided disconcerting statistics as to the extent and impact of drug abuse in the United States in 1988. According to legislative findings:

(1) approximately 37 million Americans used an illegal drug in the past year, including 6 million who used cocaine;
(2) half of all high school seniors have used drugs at least once, 25% monthly;
(3) 25% of all AIDS victims acquired the disease through intravenous drug use;
(4) over 30,000 people were admitted to emergency rooms in 1986 with drug-related problems—over 10,000 because of cocaine;
(5) drug abuse is prevalent in the workplace, with one in ten American workers impaired by substance abuse;
(6) the cost to the economy is estimated at $100,000,000,000 annually;
(7) drug abuse is accountable for the surge in crime, with eight of ten men arrested in New York testing positive for cocaine use;
(8) spending for law enforcement and treatment has increased between 100% and 400%.
(9) seizures of cocaine are up from 1.7 tons in 1981 to 70 tons in 1987;
(10) convictions have doubled and prison terms have dramatically increased to the largest in the nation’s history, yet the system can’t handle it.1

To amplify the above figures, the National Drug Institute reported a rise in cocaine deaths from 470 in 1984, to 1,582 in 1988, and an increase in illness from 7,155 in 1984 to 39,657 in 1988. The newly-created Office of National Drug Control Policy revealed that as many as 100,000 “cocaine babies” are born each year.2

Against this background, the administration through the office of William Bennett, newly appointed “Drug Czar,” published the National Drug Control Strategy as mandated by the 1988 Drug Abuse Act. The thrust of the document was announced by President Bush in a major policy speech on September 5, in which the drug problem was portrayed as the “nation’s toughest domestic challenge” and the Administration’s plan as “one that will bring us all together” for an assault against drugs “on every front”.3 This newly-minted strategy is the culmination of several years of legislative effort and initiates what promises to be a long, complex, and politically abrasive interaction between the legislature and...
executive, on the one hand, and federal, state, and local agencies on the other. Whether or not the nation unites under this plan is more a statement of hope than it is of fact.

The purpose of this paper is to provide a broad historical overview of what could be described as an incremental evolution of federal drug policy, focusing on the key stages of development against the background of changing and accelerating drug abuse patterns. Attention will focus on the coincidence of federal drug initiatives with the expanding national police presence in the overall criminal justice process, historically a state and local matter. The broad analysis will narrow down to an examination of the three most recent comprehensive legislative programs, the 1984 Comprehensive Crime Control Act; the 1986 Drug Abuse Act and the 1988 Drug Abuse Act. The 1989 White House Drug Abuse Strategy recently announced is an outgrowth of these legislative programs. Owing to the scope of this evolution and the magnitude of the legislation involved—each of these bills is over 700 pages in length and covers a myriad of topics—this analysis can at best be cursory, focusing on selected salient features of each period and of each program.

The Early Years

Drug abuse in America is not a new phenomenon. Opium and morphine consumption have been chronicled as far back as the early 1800s. Owing to the absence of state regulation, on the one hand, and constitutional restrictions on the exercise of federal police powers growing out of the 10th Amendment, on the other, drug use was virtually free of any legal restraint. As a result, a variety of drugs were readily available at the corner store, and, as was testified to before a Congressional Committee, “the country reached a level of opium consumption in the mid-1890s which is arguably the highest per capita level in our history.”

Cocaine first appeared on U.S. markets in the 1880s, and if taken in moderation was considered safe, energizing and non-addictive. It was a principal ingredient in several medications, formed the base for coca-cola, and was readily available even through mail order houses. Its addictive and potentially health-threatening effects first became evident among the young in the nation’s largest slums, stimulating opposition and pressure for reform. State regulatory laws were enacted in New York and Illinois in 1912, and in 1914 the federal government, in the Harrison Anti-Narcotic Act, entered the field. Law enforcement was introduced and opiates were banned throughout the United States. Cocaine use tailed off during the thirties and virtually disappeared for two decades. The first cocaine epidemic was history.

With the “receding danger” of drugs, government attention shifted to the problem of alcohol abuse. Under pressure from a variety of organized interests and many states, Congress proposed the 18th Amendment “prohibiting the manufacture, sale, or transportation of intoxicating liquors and its import or export anywhere in the U.S.” The Amendment was ratified into law January 29, 1919, and was immediately followed by the Volstead Act one year later giving the federal government unprecedented police powers throughout the states. The experience of thirteen years of prohibition provides a foretaste of what can occur when enforcement policy and social culture or practice collide: “Bootlegging, corrupt law-enforcement, and general disregard for the amendment impaired respect for the entire Constitution. The noble experiment demonstrated that it is almost impossible to
regulate personal conduct by legal machinery when the law is contrary to the mores of large segments on the country.” Prohibition was repealed by the 21st Amendment in 1933. Ironically, as the federal government was removing itself from alcohol regulation, in 1937 Congress passed the Marihuana Tax Act bringing regulation back into the drug environment. As prohibition nurtured the first structures of organized crime, drug regulation was to provide a basis for its growth.

Preoccupation with drugs did not re-emerge until after World War II. Heroin was the drug of choice and its use spread so rapidly that in 1954 Congress passed the Narcotics Control Act, thus beginning a legislative response focusing on expanded law enforcement and increasingly severe mandatory sentencing as the principal line of defense against drug traffickers. Drug abuse reached such visible levels that in 1962 the White House convened a major Conference on Narcotic and Drug Abuse, the findings of which presaged the massive entry of the federal government that was to occur in the next decade. Conference findings, then, read like today’s urgent headlines: drugs were sapping our national strength; cartels were uncontrollable; interdiction efforts were unsuccessful; the urban underclass were chief victims; profits were enormous and corruption rampant; and finally the criminal justice system was burdened and unequal to the task.

The National Commission and the LEAA Era

The consequence of accelerating drug use and associated crime and the failure of law enforcement to impact it led President Lyndon Johnson in 1965 to establish the National Commission on Law Enforcement and Criminal Justice which over the succeeding years was to produce the most comprehensive examination of crime and the administration of criminal justice in the nation’s history. The enormous amount of data generated by Commission studies was to greatly influence public policy, and called for further and massive action by the federal government. Ironically, for all its attention to drug abuse, the Commission had only the following to report on cocaine in particular: “This drug is included as a narcotic under federal law and other laws, but unlike opiates, it is a powerful stimulant and does not create tolerance or physical dependence. It is derived from the leaves of the cocoa plant cultivated extensively in Latin America. At present it is not the major drug of abuse it once was.”

The ramifications of Commission findings moved Congress to pass a major omnibus crime bill, The Safe Streets and Communities Act of 1968, thus propelling the federal government into virtually every aspect of criminal justice at all levels. The Act was augmented in 1970 by the Law Enforcement Administration Act which established LEAA within the Justice Department as the new overseer of federal policy. Between 1970 and 1978, when LEAA was abolished, the federal government would inject over $8 billion into the war on crime. A critical feature of the bill was to encourage state and local governments to establish sophisticated planning mechanisms for the purpose of long-term policy formulation within prescribed federal guidelines. Through these state and local structures the money was to flow. In Ohio, federal grants stimulated a first comprehensive plan for drug abuse leading to the growth of methadone clinics, and the establishment of a variety of treatment centers throughout the state. In law enforcement, federal dollars led to the establishment of interdepartmental task forces—known as metro drug units—which fostered cooperation
at a regional level among law enforcement agencies and encouraged emphasis on targeting mid to upper level drug traffickers.\textsuperscript{7}

A significant responsibility of the Administrator of LEAA was to appoint a Commission, drawn from state and local government, industry, and the private sector, to formulate comprehensive justice standards and goals for dealing with crime reduction at all levels of government. In 1973 the National Advisory Commission on Criminal Justice Standards and Goals produced the first of many volumes, \textit{A National Strategy to Reduce Crime}. The commission approach was to serve as a prototype for criminal justice planning for the next decade and is a model for the current drug strategy. Specifically, the Commission was to formulate operational and quantifiable standards across the spectrum of criminal justice and drug abuse agencies to provide a framework within which state and local planning agencies could define their objectives. The standards thus articulated were to be incorporated into regional plans as a basis for funding, and to serve as a model for policy across the nation.

In the drug area, the Commission recognized the need for a comprehensive approach to treatment including crisis intervention, methadone treatment, therapeutic communities, and drug treatment by antagonist agents that block the effects of heroin. The Commission also recognized the need for drug abuse prevention and educational programs in the schools (more extensive than the current “Just Say No” approach). Abuse and prevention, treatment and rehabilitation, were to be coordinated through a central state agency and local agencies which together worked with the Special Action Office of Drug Abuse Prevention, at the national level. Compulsory treatment of addicts through parole, probation, delayed prosecution, and civil commitment was also involved as an integral part of the treatment structure. With the extinction of LEAA in 1978, many of the planning and treatment mechanisms were already in place.\textsuperscript{8}

\textbf{Developing Federal Policy}

Apart from these major national efforts, Congress through the 1970s provided much additional legislation to confront the growing drug situation. In 1973 Congress created the Drug Enforcement Administration (DEA) under the Attorney General to bring about more comprehensive and coordinated enforcement efforts at the national level. DEA, referred to by skeptics as “Don’t Expect Anything”, was handed the unenviable responsibility of coordinating the many disparate federal agencies that have drug enforcement responsibilities, especially the FBI, AFT, Customs, Coast Guard, and the Border Patrol. In addition, DEA was to interact with state and local task force units. Turf rivalries among law enforcement agencies are legendary and DEA faced a difficult task establishing itself as a central authority in the drug enforcement field.

Some additional statutes of importance are listed below: 1970 Organized Crime Control Act: First established RICO (Racketeer Influenced and Corrupt Organizations Act) which provides the basis for government seizure of proceeds from organized crime and drug trafficking.

1971 Bank Secrecy Act: Established the first reporting requirements for domestic and international currency transactions.

1971 Comprehensive Drug Abuse Prevention and Control Act: Unified under
one title the Controlled Substances Act and the Controlled Substance Import and Export Act.


1982 Controlled Substance Registration Act: Covered pharmacy robbery and brought this field under reporting requirements.


With the arrival of the Reagan Administration, the rhetoric declaring war on drugs became more pronounced and political. In 1983, President Reagan announced creation of 13 regional Organized Crime Drug Enforcement Task Forces, placed under the spiritual direction of then Vice President George Bush. Funded at a level of $127 million dollars, and encompassing some 1200 U.S. attorneys and investigative agents, these units were to deal specifically with drug interdiction and investigation of high level drug trafficking operations. Participating agencies included the U.S. Attorneys Office, DEA, FBI, Customs, AFT, IRS, Coast Guard, and the U.S. Marshall’s Office. Local law enforcement agencies were involved when necessary. The task force groups worked out of 13 regional offices each headed up by a U.S. attorney. At the time, most interdiction activity took place in Miami and along the east coast. Whether this approach was successful was ultimately a political question, but all parties concerned agreed that the amount of drugs seized was but a small percentage of what was entering the country and that a yet more comprehensive strategy was needed to impact the drug trade.\(^9\)

First Effort at Massive Reform

In 1984, Congress sought to articulate and aggregate past efforts in the criminal justice and drug enforcement environment and so undertook the most massive and comprehensive examination of the federal role in the justice system to date. The first of three critical statutory programs to emerge, the 1984 Comprehensive Crime Control Act, contains the most significant series of changes ever enacted at one time and was to be the forerunner of the two omnibus drug bills to follow.

In terms of the broader criminal justice system, the Act dealt with a redefinition of the balance between the rights of the accused, the focal point of the previous two decades, and the rights of society, clearly a focal point of the newly emerging conservative agenda. Specifically, the Act allows judges for the first time to detain allegedly dangerous defendants before trial to protect the community (a principle known as preventive detention); revised federal sentencing procedures by providing for higher mandatory sentences; abolished federal parole; restricted plea bargaining; and seriously curtailed the use of the insanity defense.

Of immediate concern in the drug enforcement area, several titles of the Act deal specifically with civil and criminal forfeiture; currency transaction reporting; penalty increases for drug trafficking; aviation drug trafficking; and organizational considerations in drug management. The principal element in the forfeiture provision allowed for both civil and criminal forfeiture in all felony drug cases, including real property and tangible and intangible personal property. The government was thus able to seize proceeds, profits,
and property tied to illegal drug trafficking. In addition, the bill continued the process of greatly increasing maximum terms of imprisonment and fines for violations of the Controlled Substances Act, for example raising to 20 years in prison and $250,000 in fines the sentence for convictions involving one kilogram of cocaine, 500 grams of PCP, or five grams of LSD. Penalties were doubled for drug recidivists, and increasing penalties were added for cultivating controlled substances on federal land or violating drug laws in or near schools.

In order to improve government effectiveness to detect and deter the laundering of money associated with organized drug activity, and to prohibit the transporting of monetary instruments in and out of the country, all transactions involving $10,000 or more, whether by banks or other international commerce, were now to be reported to the government for scrutiny. Failure to comply carried civil penalties up to $10,000 and prison terms up to five years. Additionally, Customs agents were provided greater authority to stop and search, without warrants, any vehicle, vessel, or aircraft suspected of transporting monetary instruments illegally. Also, the federal Aviation Act was amended to provide for the revocation of pilots’ licenses and owners’ certificates where aircraft were used to facilitate the commission of a state or federal felony related to controlled substances. Flying without a license or in an uncertified aircraft became a federal offense with considerable penalty and forfeiture sanctions.

One final note, as a prelude to the national debate soon to follow, Chapter XIII of the Bill enacted the National Narcotics Act of 1984, which, among other things, created a new cabinet level board to develop government wide drug enforcement programs and to coordinate the efforts of the various agencies engaged in enforcement. As early as 1983, proposals were put forward to create a “Drug Czar” to coordinate overall policy, but political opposition from the Reagan Administration led instead to the creation of the National Enforcement Policy Board, chaired by the Attorney General and which included the Secretaries of State, Treasury, Defense, Transportation, Health and Human Services, and the Directors of OMB and the CIA. The Board was to be the principal source of strategy, program evaluation, and coordination of drug-related enforcement activity. The Attorney General clearly seemed to emerge as the visible administrative head of drug policy in the nation.10

**The 1986 Omnibus Drug Bill**

No sooner was the 1984 Bill enacted when the drug picture in America began to change radically. Cocaine use had been gradually increasing throughout the 1970s, but because of cost was largely confined to the more adventurous, upper classes…the so-called ”beautiful people.” This was to change. As The Economist described: “In those days it was foolish fashion for bankers and bond-salesmen who sniffed it through $100 bills after dinner while boasting of their good connections. Now it can be sold unadulterated at $10 or less for a cheap ten-minute thrill amid murder and mayhem in America’s slums.” The price for a kilo of cocaine fell from $60,000 in 1980 to as low as $10,000 in 1988 and thus cocaine ceased to be the exclusive drug of choice among “yuppies” and in its more dangerous street form—crack—was available to one and all.11

The issue gained political momentum throughout the summer of 1986 spurred by the
publicity over the cocaine-related deaths of two highly-visible athletes, Len Bias, University of Maryland basketball star, and Cleveland Browns football player Don Rogers. President Reagan stirred public concern with a nationally-televised speech calling for “mobilization” in what was hoped to be the final stage in our national strategy to eradicate drug abuse. Responding to the growth of voter concern over drug abuse, Congress went to the drawing boards and on October 17, cleared the most massive anti-drug measure ever enacted, the 1986 Drug Abuse Bill.

The product of literally a dozen standing committees in the House, including among others, Foreign Affairs, Government Operations, Ways and Means and the Judiciary, the measure took on gigantic political overtones with virtually every law enforcement and treatment agency in Washington seeking its cut of what promised to be massive appropriations. The debate intensified over focus and perspective: supply side v. demand side; law enforcement v. treatment; international eradication and interdiction v. domestic enforcement and education. In a Bill which promised to attack the drug problem for the first time in a comprehensive manner and from all angles, these inherent ideological conflicts would ultimately have to be worked out in the distribution of money. The initial dollar sign placed on the Act was $1.7 billion dollars for FY 1987. To provide some sense of the scope of the act and the intent of Congress to fund all of the bases, the money allocation broke down as follows: $500 million for drug interdiction; $275 million for drug enforcement; $230 million for grants to state and local law enforcement agencies; $241 million for rehabilitation and treatment; and $200 million for drug abuse education and prevention. Truly comprehensive, but, nevertheless, approximately two-thirds of the money was eventually earmarked for supply side activities.¹²

The mass public support generated by the crisis of drugs, bolstered the mood to further pursue the conservative agenda articulated in the 1984 Crime Control Bill. The 1986 Bill provided an intensified forum for change that hitherto remained only dormant. The center of dispute was on the following key items: a) centralized control over drug management; b) introduction back into federal law of some version of the death penalty; c) if not total abandonment then at least significant limitation on the application of the exclusionary rule in drug search cases; d) major use of the military, not only for drug interdiction efforts, but also in the search and arrest of drug traffickers; e) and to cap the agenda, wholesale application of drug testing in both the public and private sectors. These issues were fiercely contested right to the final days before passage of the bill, and because of a fundamental lack of consensus between both parties in both chambers, final resolution was postponed for another time in the interest of achieving at least some kind of immediate program for the nation.

Despite postponement and compromise regarding the above-mentioned politically-charged agenda, the 1986 bill nevertheless made sweeping changes in federal policy, beyond the infusion of billions of dollars of appropriations. Use of the military in the formal stages of arrest was deferred, but Congress was generous in providing millions of dollars in direct military grants, equipment, training and maintenance personnel to Latin countries, and pointed to the success of U.S.-Bolivian joint operations, which, among other things, involved U.S. military personnel in eradication efforts in that country. Along the lines of increasing law enforcement involvement in foreign countries, the legislation altered the
"Mansfield Amendment", which hitherto prohibited U.S. enforcement agents from even being present at narcotics arrests outside the U.S. Under the new provisions, agents would be permitted to be present if they were assisting foreign counterparts in joint arrest operations. In addition, U.S. officers could take "direct action" to protect themselves, other U.S. personnel, and members of the public in foreign countries if they perceived serious threats to life or safety.

Further, in order to encourage those countries with large drug production, such as Bolivia, Peru, and Mexico, to take steps on their own behalf to discourage supply activity, Congress required the withholding of U.S. assistance to any nation determined to be lacking in efforts toward reducing illicit drug trafficking. In addition, the President was required to defer preferential trade to those countries and to develop whatever strategies deemed appropriate to maintain pressure even so far as to withholding our support and that of any allies for third world loans through international banks. The bill provides the President with authority to "certify" those countries which the executive feels made a reasonable though unsuccessful effort to go after suppliers or where vital national interests might override the drug concern. Congress would then review this process within thirty days with the power to "de-certify". Obviously, as in the case of Mexico, where Congress and the President clashed on the issue of continued aid, the certification process creates the potential for ongoing conflict between the two branches concerning drugs and other international interests.

One final note on the international dimension, Congress established a joint United States-Bahama drug interdiction task force (referred to as Op-Bat) and authorized $15 million for its implementation—$9 million for three pursuit helicopters, $1 million for communications, and $45 million for planning construction of a drug interdiction docking facility in the Bahamas. It is known that a high percentage of drug trafficking occurs by way of air drops from Columbia into the Caribbean Sea, where the cocaine is picked up by boat and distributed from bases in the Bahamas to the Florida coast. Op-Bat involves DEA, Customs and the Coast Guard working with Bahamian authorities, to interdict this activity, but its "jointness" has been strained from time to time by natural interdepartmental rivalries.

On the domestic side, Congress continued the process of stiffening penalties across the board for violations of the Controlled Substances Act, not only for big dealers but also for mid- to low-level traffickers, and even casual users. Although the death penalty provision was dropped, mandatory life in prison was a certainty for major traffickers in instances where loss of life occurred as a result of drug activity. Illustrative of the harshness of sentencing, first offenders convicted of trafficking with as little as five kilos of cocaine or one kilo of heroin could face minimum mandatory sentences of up to five years, coupled with fines up to $4 million. For second offenders this penalty structure doubles. First convictions involving 500 grams of cocaine or five grams of "crack" could net mandatory five-year terms and up to $2 million in fines. Owners or operators of "crack houses" faced twenty-year terms and $500,000 fines.

To discourage use, a major preoccupation especially with the administration, for the first time even simple possession of small amounts of a controlled substance, the so-called "zero tolerance" concept, could cost an offender as much as $5,000 and the prospect of a
ninety day jail term. Additional provisions of the bill included five-year terms for selling to minors or using minors under 14 years of age in drug transactions; life sentences for principal organizers of major networks; and the triggering of enhanced penalties under the “armed criminal career” provisions of the 1984 Act for serious drug offenses. Specifically going after money launderers, penalties for violation of reporting requirements were raised to 20 years and $500,000 in fines. One last note of interest, while drug testing was reserved for further study, owing to a recent spate of accidents involving common carriers, Congress devoted a large section of the bill to arming the Secretary of Transportation with tools to better regulate vehicles moving in interstate commerce, especially trucks and buses. The statute provides penalties up to five years and $10,000 in fines for operating a common-carrier while under the influence of alcohol or drugs. The Transportation Department was to issue regulations requiring close monitoring and information sharing of safety and drug records of commercial operators. License suspension procedures were tightened, including full revocation, based on this information, both for first offenders and for habitual offenders.

On the “demand reduction” side, Congress authorized $241 million for alcohol and drug abuse treatment and rehabilitation, and $200 million in FY 1987, followed by $250 million in subsequent years, for “drug free schools.” The grant money was to be distributed to operational agencies in the states on the basis of 45% population and 55% need, however that was to be determined. The education money was earmarked for the development of drug abuse awareness programs in the school system from the top down. Seventy percent of these funds were to be distributed by state education agencies, and 30%, as discretionary funds through the governor’s offices, were to go to public and private non-profit organizations to foster development of community-based drug and alcohol abuse prevention programs.

Finally, the bill revitalized the planning and grant distribution structures established and then dismantled during the LEAA era, by authorizing $230 million in funding for three years beginning with FY 1987 to the states for state and local drug enforcement efforts. The states were required to match the federal grant money on the basis of a 25%-75% split: for every state dollar, there would be three federal dollars available. The money was to be distributed on the basis of 80% population, and 20% discretion by the Bureau of Justice Assistance within the Justice Department. BJA assumed many of the functions of the old LEAA. The grants were earmarked for local governments, through the states, to meet the pressing needs caused by increased law enforcement in police, courts, and corrections. Local governments, however, lost their bid to by-pass state bureaucracies while having the money allocated directly to the areas most in need.

As a prologue, between February and December 1987, the Select Committee on Narcotics Abuse and Control (the Rangel Committee) conducted oversight hearings on the implementation of the bill. During the course of these hearings, the Select Committee examined all aspects of the omnibus drug law, including provisions relating to education and grants to the states for law enforcement. It is noteworthy that for all the emphasis placed on enforcement by the administration, within one year the Reagan budget for FY 1988 completely eliminated the $230 million in grant money designated for the states for law enforcement. In addition, despite Nancy Reagan’s activity and commitment to “saying no to drugs”, the education allocation for drug free schools was reduced by 60 percent from
$250 million to $100 million for the next two years. This lack of commitment provoked Congress, Republicans and Democrats alike, to rebuke the President for “not putting the money where his mouth is.”\textsuperscript{14}

The 1988 Omnibus Drug Bill

Even after passage of so sweeping a legislative program as the 1986 Drug Abuse Act, almost immediately, both political parties in Congress set out to confront those large policy matters left unresolved in the earlier debate. A Senate Democratic task force under the guidance of Senators Daniel Moynihan and Sam Nunn, and a Republican task force under the direction of Senator Robert Dole, each produced reports in the summer of 1988 that were to precipitate still another massive drug legislation effort. The old divisions once again surfaced. The Democrats called for an additional $3 billion in spending; creation of a national “Drug Czar” to coordinate all aspects of the drug problem not just law enforcement; and a balance of expenditures and emphasis away from enforcement and toward treatment and education. The Republicans continued to encourage stiffer penalties, including once again a death sentence provision; significantly harsher treatment of users; creation of an international drug strike force with increasing use of the U.S. military; more drug testing; and finally additional tightening of the “certification” process to encourage large drug trafficking nations to get more serious about their own efforts.\textsuperscript{15}

After a summer of debate, the 1988 Anti-Drug Abuse Act (PL 100-690) a ten title, 758 page document, was passed, 346-11 in the House and by voice vote in the Senate. The vote was taken in late October and became law November 18, 1988. The Act continues and expands many of the provisions established by the 1986 Act. As a compromise between the two reports, Congress ultimately provided for additional expenditures of $2.7 billion, raising the total money spent on drug control to approximately $5.5 billion for FY 1989. Of the $2.7 billion of new money, however, Congress was able to appropriate only $991 million owing to Gramm-Rudman restrictions: not a very auspicious start for so promising a commitment. Of the funds thus provided about 56\% were earmarked once again for supply side activities and 44\% for demand reduction efforts. Because of the scope and length of the Bill, a summary examination of the salient aspects of the ten titles and the policy ramifications is provided below.\textsuperscript{16}

The most significant change brought about by the 1988 Act is contained in Title I, which finally creates the “Office of National Drug Control Policy” whose Director would in effort be the long sought after “drug czar.” The Director would be a Cabinet-level officer with authority, through two Deputy Directors, to manage both supply reduction and demand reduction programs. The key initial responsibility of the Director was to be preparation of a national strategy within 180 days of a confirmation, outlining administration policy toward implementing the legislative scheme. William Bennett was appointed Director in March 1989, and given the absence of a clear policy veto, must find ways to influence, cajole, and coordinate the activities of a myriad of federal agencies with wide powers and independent mentalities. The new Office replaces the Drug Enforcement Policy Board, created by the 1984 Act and formally chaired by the Attorney General, and places Bennett in the unenviable position of having to fill Richard Thornburgh’s shoes regarding law enforcement policy coordination. In addition, how far the new Office will be able to

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\textsuperscript{14} Bennett, 1989.

\textsuperscript{15} These provisions were adopted in PL 100-690.

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affect our international policy and the State Department remains problematical.

Perhaps the second most significant change in the Act finally provides for a federal death penalty, long sought after as the cornerstone of the new conservative agenda. Under the statute the death penalty will be available, but not required, for “any person engaging in, or working in furtherance of a continuing criminal enterprise”, or “convicted of distribution of major quantities of drugs under the Controlled Substance Act, who intentionally kills, or counsels, commands, induces or causes the intentional killing of an individual.” The Statute also allows the death penalty for killings of law enforcement officers if the killing was related to the investigation of a drug felony activity. Thus the death penalty is tied to murders committed within the framework of drug trafficking offenses. As a compromise, death penalty opponents were able to extract limits: for the first time, adequate defense services are to be made available to all indigents facing execution, and the penalty would also not be available for those under 18 years of age or those who are mentally retarded.

Considering the long history of ever increasing penalties for trafficking with only limited success, drug negotiators in Congress and in the administration opted for leveraging the up-scale user as a key ingredient in stymieing the drug trade. Title V of the new Act accomplished this in a variety of ways: by obviously increasing the sanctions for even casual possession of small amounts of a controlled substance; under the Drug Free Workplace Act, by requiring employers who are recipients of federal contracts or grants to institute forms of testing and treatment; by easing eviction procedures in public housing projects where it can be shown that tenants or their companions have engaged in drug-related activity; by compelling education authorities to step up drug awareness programs and curriculum development; and finally by denial of a variety of federal benefits to traffickers and users alike. Under the Statute, for example, the Justice Department can assess civil penalties up to $10,000 in fines for “personal use” amounts of drugs aimed squarely at the middle class user. As a hedge, however, a defendant may seek an administrative hearing with "de novo" judicial review to follow, which places the burden of proof on the government. Regarding loss of benefits, these might be grants, contracts, loans or licenses, but do not include retirement, welfare, social security or other like entitlements. The degree of benefit loss would be left to the discretion of the courts after judicial process.

Two remaining observations can be made of the 1988 Bill that are of interest: the statute contains the potential for a far-reaching regulatory scheme, and it addresses the relationship between intravenous drug abuse and AIDS. Specifically, regarding regulation, the statute: a) provides a new structure of procedures to control the production and distribution of a variety of precursor chemicals necessary to manufacture cocaine, placing upon the nation’s chemical companies stringent reporting requirements; b) introduced provisions designed to improve aircraft registration, certification of pilots, and the processing of repair and alteration forms to assist in the interdiction of drug trafficking through the air; c) strengthened requirements on banks to obtain information and identification of large money traders; increased the control over electronic transfers, and moved to establish a system of international money control and information sharing systems; d) it “revised” income tax regulations so as to increase the types of violations that could fall within the “predicate” offenses necessary to trigger RICO statutes.
In the drug treatment area, not only was increased funding made available for treatment and rehabilitation, especially aimed at intravenous drug users, but a triggering mechanism was included that provided emergency money when states reached 90% of their treatment capacity. Special emphasis was placed on programs which gave a priority to treatment of individuals affected with the etiologic agent for AIDS. No funds, however, were to be used for the distribution of sterile needles or the bleach necessary to cleanse needles already in use.

Prologue

Implementation of the legislative programs thus outlined is an immediate function of the Office of Drug Control and is reflected in the 1989 Drug Control Strategy mandated by the 1988 Act. Analysis of this document is not included in this paper, but referring to the President’s September 5 speech, which was essentially a review of the report, and the Democratic response which followed, the traditional divisions remain evident. The administration called for an increase of $2.2 billion of new revenues to bring the total commitment to the drug war to about $8 billion. Despite rhetoric that the war will be conducted on all fronts, approximately 70% of the funding was destined for law enforcement, especially toward financing a greatly accelerated prison construction program. Against the background of the highly visible state of anarchy in Colombia following last summer’s assassinations, the President designated over $70 million in direct military assistance with the promise of increased effort to fight the cartels throughout Latin America.17

The Democrats immediately pointed to the futility of pursuing a law enforcement agenda and argued for a major shift in emphasis to treatment and education, backed by a request for $3 billion more in expenditures over the administration proposal.18 Both sides understand the gap between announced intentions and actual appropriations, and neither side was willing to say where the additional funding was to come from. Given the virtual prohibition against new taxes, the money can only come from reshuffling other domestic programs: robbing Peter to pay Paul. When contrasted to the $350 billion figure bantered about to save the Savings and Loan Associations, $10 billion to attack the drug problem looks more like a skirmish than a war.

Two additional observations can be made regarding the overall impact of federal policy: the role of the national government in law enforcement will continue to expand; and the policies emerging to allow this police role will make this a less than “kinder and gentler nation.” With enhanced federal criminal violations now paralleling state criminal violations, it is not unusual to find city, county, state, and federal agents participating together in routine drug busts. It is also not unusual to find U.S. attorneys and local District Attorneys negotiating optimum prosecution strategies, especially in the light of the lucrative forfeiture spoils available through the new statutes. Traditional Constitutional restraints on federal police powers are increasingly diminishing. At the same time, federal money will continue to flow by way of grants to support local law enforcement needs, but not without strings: the matching formula has been reduced to a 50-50 split, and costly drug testing provisions have been added to facilitate receiving such money, thus significantly increasing the burden of enforcement on the states. According to the New York Times, of the $350 million earmarked for grants, only $149 million will actually be available, thus effectively
allocating only $39 million of the new money among the fifty states. And according to a study soon to be released, the states on the whole figure to receive $95 million less in FY 1990 than they are now scheduled to receive.19

It follows that with the emphasis on supply reduction and law enforcement, traditional procedural restraints will continue to be relaxed. The death penalty has already reappeared in federal law for drug-related murder and a new bill before Congress proposes to expand the death sentence to other crimes. While Congress avoided legislating a “good faith” exception to the exclusionary rule, this was accomplished, nonetheless, by the Supreme Court. Ease of forfeiture, relaxed search requirements for Customs and Coast Guard agents, flexibility in stopping and searching suspected traffickers at air and bus terminals by means of a drug courier profile test,20 increased drug testing in the workplace, together with the ever-increasing sanction for even casual drug use have led to the highest arrest and sentencing rates in the nation’s history. Unfortunately, with the current national mood, the likelihood of political posturing on the issue of getting tough on drugs will become more evident. John Glenn pointed to this possibility when, after a Senate debate on the issue of allowing U.S. agents to shoot down private aircraft suspected of being in the drug trade, he said: “All you have to do is mention drugs, and we go into a piranha-like frenzy to put out a press release.”21

This paper has not addressed the issue of legalization as an alternative to current policy, although it is much discussed publicly and in the media, because there is no evidence either in the Congress or in the Administration, that legalization is a viable political choice. The administration, far from examining any prospect to make drugs available under controlled conditions, has in fact targeted the experimental first time and casual users as key to effecting a reduction in drug abuse. In 1987, the Range Narcotics Abuse Committee in the House held extensive hearings on legalization, drawing together leading authorities on both sides of the issue, but ultimately came out against it.22 Finally, a legislative provision built into Title V of the 1988 Act seems at the moment to have laid the issue to rest: “The Congress finds that legalization of illegal drugs, on the federal or state level, is an unconscionable surrender in a war in which, for the future of our country and the lives of our children, there can be no substitute for total victory.”23
ENDNOTES


4. The historical account of early drug use in America is drawn from the testimony of David Musto, M.D., before the Select Committee on Narcotics Abuse and Control (SCNAC-100-2-11), September 30, 1988, pp. 115-126.


7. For an analysis of the response of Ohio agencies to LEAA both regarding drug treatment and law enforcement, see Ohio’s 1972 Comprehensive Criminal Justice Plan, Toward a Safer More Just Society, Columbus, Ohio, 1972.


18. For the Democratic response, see the *New York Times*, September 8, 1989.


20. The Supreme Court, in a string of cases going back to 1984, has altered the balance between due process and privacy rights on the one hand, and the interests of law enforcement on the other. Key cases include U.S. v. Leon, 468 U.S. 897 (1984)—"good faith" exception to the exclusionary rule; U.S. v. Peter Monsanto (105 LED 2d 512) 1989—forfeiture seizure case; Skinner v. Railroad Labor Executives (103 LED 2d 639) 1989—drug testing case; and U.S. v. Sokolow (104 LED 2d 1) 1989—drug courier profile case.


23. PL 100-690 (102 STAT 4296).
Drug-Free Workplace Act of 1988

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Historical Introduction

Narcotics were known in Iraq some 5,000 years before the birth of Christ. In the fourth century B.C., narcotics, in the form of white poppy juices, were recommended for a variety of illnesses by the great Greek physician, Hippocrates. Early Egyptians and other peoples of that era also recognized some of the medicinal uses of narcotics. By the time South America was colonized by the Spaniards, the natives were chewing the coca leaf containing cocaine for stimulation. The tradition of opium smoking was introduced from the East into the United States through San Francisco during the nineteenth century. Although some taxation measures were passed in an attempt to limit importation, these measures were unsuccessful and narcotics spread widely in the United States.

Several factors contributed to the growth of narcotics use in the United States including the introduction of the hypodermic needle during the American Civil War. Due to the widespread use of opiates and the syringe, drug addiction became known as the “Army disease.” The use of opium by hypodermic needle continued after the Civil War.

The practices of the patent medicine producers aggravated the problem. A potent dose of some narcotics was typically found in most patent medicine cures. When the user became concerned over his “drug habits,” a secret remedy or nostrum, typically more narcotics, was added to the patent medicine as a cure for the addiction.

The lack of concern by the American medical profession also contributed to the drug problem in the late nineteenth and early twentieth centuries. Medical teachers and textbook writers failed to address the danger of narcotics use and addiction. Indeed, some popular literature such as Conan Doyle’s Sherlock Holmes series glamorized narcotics. The problem was compounded with the introduction of another drug called heroin from Germany. Many extolled its qualities of pain relief and alleged addiction-free. It was believed that heroin was a panacea.¹

Drug use in the United States spread via both legitimate medical channels and through illicit traffic. Eventually, the opium problem grew to such proportions that the Federal Government passed the 1914 Harrison Act. The House of Representatives² reported:

This enormous increase in the importation of and consumption of opium in the United States is startling and is directly due to the facility with which opium may be imported, manufactured into its various derivatives and preparations, and placed within the reach of the individual. There has been in this country an almost shameless traffic in these drugs. Criminal classes have been created, and

¹Am Jur Proof of Facts 391, Criminal Drug Addiction and Possession 1 et seq; Terry and Pellens, The Opium Problem 54 (1928); Maurer and Vogel, Narcotics and Narcotic Addiction 36-43 (1954).
²H. R. Report No. 23, 63d Congress, 1 Session 2 (1913).
the use of the drugs with much accompanying moral and economics degradation is widespread among the upper classes of society. We are an opium-consuming nation today.

The enactment of the Harrison Act was a new approach to the control of narcotics. By the early 1900's, attitudes had begun to change. There was improved understanding about the drug problem and its effect on society. Federal and state legislation, treatment policies, and public attitude reflected these changes.

However, as the twenty-first century approaches, the drug problem still has not been solved and is entwined into all aspects of American life, even in the workplace.

Drug Abuse in Late Twentieth Century America

The use of illegal drugs on the job has reached crisis proportion for American industry. No business nor profession is excepted. Drug abuse has moved into chemical plants, airline hangers, courtrooms, newsrooms, and nuclear plants. Drug use in the workplace is out of control.

A poll by the National Drug Abuse Treatment Referral and Information Service (NDA-TRIS), operated by the Fair Oaks Hospital of New Jersey, shows that 75 percent of 227 drug users admitted to using illegal drugs on the job.³

The poll also indicated that:
- 64 percent believed that drugs hindered their job performance.
- 44 percent admitted they had sold drugs to fellow employees.
- 25 percent reported the daily use of drugs at work.
- 18 percent admitted to a drug related accident.
- 18 percent said they had stolen from their employer to support their habit.
- 26 percent said they had been fired for previous drug use.
- 39 percent said they feared a salary increase would increase their consumption.

Subtitle F of the Federal Anti-Drug Abuse Act of 1988⁴ is entitled Drug-Free America Policy and includes specific findings by Congress that:
- Approximately 37 million americans used an illegal drug in the past year (1987) and more than 23 million Americans use illicit drugs monthly.
- Half of all high school seniors have used illegal drugs at least once and over 25 percent use drugs at least monthly.
- Illicit drug use adds enormously to the national cost of health care and rehabilitation.
- Illegal drug use can result in a spectrum of serious health problems including heart disease, high blood pressure, bleeding and destruction of brain cells, infertility, impotency, immune system impairment, kidney failure, pulmonary damage, heart attack, stroke, and sudden death.

⁴Anti-Drug Abuse Act, Public Law 100-690, 5251 Subtitle F; 21 USC 1502.
Approximately 25 percent of all AIDS victims acquired the disease through intravenous drug use.

Over 30,000 people were admitted to emergency rooms in 1986 with drug-related health problems.

There is a strong link between teenage suicide and the use of illegal drugs.

10 to 15 percent of all highway fatalities involve drug use.

Illegal drug use is prevalent in the workplace and endangers workers, national security, public safety, company morale, and production.

About 1 out of 10 American workers have their productivity impaired by substance abuse.

Drug users are three times more likely to be involved in on-the-job accidents, are absent from work twice as often, and incur three times the average level of sickness costs as non-users.

The total cost to the economy of drug use is over $100 billion per year.

The connection between drugs and crime is well-proven.

The above results of the NDATRIS poll and the Congressional findings are confirmed by other national polls and studies. The bottom line is that illegal drugs are entrenched in late twentieth century America and are in the American workplace.

Drug-Free Workplace Act of 1988

On the basis of cumulative statistical evidence from the above and other studies, Congress passed the Federal Drug-Free Workplace Act of 1988, herein after referred to as the Act, to become effective in 1989. The Act requires all contractors or individuals receiving Federal contracts of $25,000 or more to certify to the contracting Federal agency that such contractor (employer) will provide a drug-free workplace. As defined and required by the Act, the certifying contractor must:

1. Publish a statement notifying employees that the unlawful manufacture, distribution, dispensing, possession or use of a controlled substance is prohibited in the Contractor's workplace and specifying the actions that will be taken against employees for violation of such prohibition;

2. Establish a drug-free awareness program to inform such employees about:
   a. The dangers of drug abuse in the workplace;
   b. The Contractor's policy of maintaining a drug-free workplace;
   c. Any available drug counseling, rehabilitation, and employee assistance programs; and
   d. The penalties that may be imposed upon employees for drug abuse violations occurring in the workplace;

3. Notify such employees in the above required statements that as a condition of continued employment, the employee will:
   a. Abide by the terms of the statement; and

Ibid., 5151, Subtitle D; 41 USC 701.

6 Ibid., 5152.
b. Notify the employer of criminal drug statute conviction for a violation occurring in the workplace no later than five days after such conviction;

4. Notify the contracting Federal agency within ten days after receiving a violation notice from an employee or otherwise receiving actual notice of such conviction; and

5. Within 30 days after receiving notice of a conviction, impose the following sanctions or remedial measures on any employee who is convicted on drug abuse violations occurring in the workplace:
   a. Take appropriate personnel action against such employee, up to and including termination; or
   b. Require such employee to satisfactorily participate in a drug abuse assistance or rehabilitation program approved for such purposes by a Federal, State, or local health, law enforcement, or other appropriate agency.

6. Make a good faith effort to maintain a drug-free workplace through implementation of the above provisions.

The Act expressly provides penalties of suspension, termination, or debarment for any Contractor that:

1. Makes a false drug-free certification; and/or
2. Violates the certification by failing to carry out the above requirements of publishing a statement to employees, failing to timely notify the contracting Federal agency of any employee drug convictions, failing to impose sanctions or participation in a rehabilitation program, and/or failing to make a good faith effort to maintain a drug-free workplace.

Compliance with the Act appears to be satisfied if the contractor leaves the appropriate paper trail of defined certifications, notices, and announcements. However, the Act does introduce a “Catch-22” by authorizing the contracting Federal agency to determine the “good faith effort” of each contractor based on the number of his employees convicted for drug violations in the workplace. Thus, the contractor is held directly accountable for employee drug violations in the workplace. Furthermore, the Act broadly defines the “drug-free workplace” as any site for the performance of work under a specific Federal grant or contract. In other words, the ”workplace” is not limited to the employer’s facilities, but is extended to any off-site location where the employees are doing work on behalf of the employer.

Although the Act is too recent to determine its real effect on employers and employees, some firms are already interpreting the Act to implicitly require drug testing of employees. For example, Texas Instruments (TI) announced in June that it will commence random drug testing of all employees on January 2, 1990. TI will use urine testing. 7

**The Validity of Drug Testing**

In theory, drug testing sounds like the answer to the drug problem and employee drug testing appears to be the sensible way to cut the billions of dollars in productivity lost to

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drugs each year. However, employers are finding themselves increasingly more involved in court battles over the legality of drug testing.

The reason why drug testing is not universally accepted is that the tests are not 100% accurate 100% of the time. Accuracy problems are particularly associated with urine testing. Blood tests are more reliable, but employers are reluctant to use this means of testing since it requires the breaking of an employee’s skin to draw blood, and this more clearly violates the rights of the employee. Urine testing may be less accurate, but it is also less “invasive.” Blood testing is also very expensive relative to the cost of a standard urine test.

The most commonly used urine screening methods to determine employee drug use are the enzyme immunoassay and radio-immunoassay tests. Both test for the presence of marijuana, cocaine, barbituates, amphetamines, phencyclidine (PCP), opiates (including heroin), benzodiazepine, and metaqualone. The radio-immunoassay test must be conducted in a laboratory due to the use of radioactive materials, but the enzyme immunoassay can be performed almost anywhere - in the laboratory or in the workplace.

Simple urine drug screening tests as described above are typically quoted at about $25 to $75 per test. However, the more accurate sophisticated techniques such as gas chromatography, mass spectrometry, or complex chemical analyses are\(^8\) substantially more costly, i.e., up to $300 or more.

The enzyme immunoassay and radio-immunoassay urine tests present questions of accuracy including:

. False positives can be caused by seemingly harmless substances which have molecular structures similar to certain drugs. For example, painkillers containing ibuprofen (marijuana); cold, cough, and weight control medicines containing phenylpropanolamine (amphetamines); and some herbal teas (coca).  
. Traces of drugs can be found in urine after any use. Thus, marijuana can be detected in urine up to ten days after the smoking of one cigarette. For a regular smoker who stops cold, it can be detected for as long as 20 days.
. Persons exposed to pot smoke can test positive for drug use. It is possible for a non-marijuana user to inhale enough marijuana smoke to test positive three days later.
. Urinary drug testing can yield up to 50% false positives and/or false negatives. Simple “drug - no drug” results of urinary drug tests prove inaccurate as frequently as 10-20% of the time.

As a further complication of urine testing, drug-free urine samples are being purchased through the mail. One of America’s best known urine salesmen is a Texan who sponsors an annual “Urine Ball” and features himself as the “Urine King.” Therefore, firms such as TI which initiated random drug testing of employees have a serious credibility problem if the test results are to be used to establish that the workplace is drug-free.

\(^8\)Roche Biomedical Laboratories, Toledo, Ohio, a subsidiary of Hoffman-LaRoche Inc., 1989 Professional Fees, Effective July 1989.

Legal Issues

The primary legal challenges which employees might raise against employer sponsored drug screening are typically based on constitutional grounds, breach of contract, right of privacy, and/or discrimination.

Constitutional Challenges

The United States Constitution provides the first place where an employee may look to challenge the legality of a private employer drug screening program based on Federal and/or state statutory requirements. The employee may claim that a drug screening program violates the Bill of Rights under the 4th Amendment and 5th Amendment, and due process and equal protection under the 14th Amendment. The Bill of Rights and the 14th Amendment apply only to actions by the Federal and state governments and are not generally applicable to actions by a private employer. However, where the employer is acting per a Federal or state statute, it may be argued that the employer is an extension of the government and the private action is now government action.

The 4th Amendment provides:

"the right of the people to be secure in their persons, houses, papers, and effects, against unreasonable searches and seizures ... ".

Under this protection the employee may argue that drug testing is an unreasonable search and seizure and prohibited under the 4th Amendment.

The 5th Amendment provides:

"... nor shall (any person) be compelled in any criminal case to be a witness against himself...

By raising this Amendment the employee may claim that drug testing violates his 5th amendment right against self-incrimination because the test results may be used against the employee, i.e., he is being forced to give evidence against himself.

The 14th Amendment provides:

"... nor shall any state deprive any person of life, liberty or property, without due process, nor deny to any person within its jurisdiction the equal protection of the laws."

The challenge which may be raised by the employee is that he is being denied due process of law since he is compelled to submit to the drug testing. Further-more, the employee may claim that the drug screening test is discriminating against minority groups and denies such groups equal protection under the laws.

The above legal challenges are based on U.S. constitutional issues and are particularly applicable where any Federal or state statute (or regulation) directly or indirectly requires drug testing. This is regardless of whether such requirement is explicit or implicit as in the Federal Drug Free Workplace Act.

Contractual Challenges

The National Labor Relations Act (NLRA) provides for collective bargaining with recognized employee bargaining units or unions. Many unions have challenged employee testing including drug testing as being in violation of the union contract. In a 1987 decision, an arbitrator ruled that a Boise Cascade drug screening plan was in direct violation of the union workers' contract rights. The union represented over 18,000 members at paper industry mills in Washington, Oregon, and California. The arbitration action was initiated
after the company announced a program for conducting urine tests for drugs and breath tests for alcohol. Under the program, the testing would be required of any employee directly or indirectly involved in a serious on-the-job accident. When the union filed for a court injunction against the testing program, the company agreed to arbitration.  

Right of Privacy  
In 1965, the United States Supreme Court held that the right of privacy is an inherent or "penumbra" right under the U.S. Constitution. In spite of this ruling by the Supreme Court, there remains a continuing debate as to whether there is a constitutional right of privacy. The problem is that the words "right of privacy" are not clearly stated in the U.S. Constitution.  

However, some state constitutions are much more definite. For example, the Illinois constitution states:  
"The people shall have the right to be secure in their persons, houses, papers, and other possessions against unreasonable searches, seizures, invasions of privacy . . . ."  
Likewise, the California and Pennsylvania constitutions expressly guarantee citizens the right of privacy.  

At common law, the right of privacy was recognized. Invasion of privacy was a common law tort. Thus, a plaintiff could sue for invasion of privacy if his private correspondence was read or published without permission. This common law tort has been subsequently extended by courts and legislatures to meet twentieth century needs. This is particularly true in the area of employment where courts have acted to protect employees from invasions of privacy such as electronic surveillance including wiretaps, polygraph tests, and employer intrusions into the employee's private life.  

In a 1984 Texas Court of Appeals decision, K-Mart had cut the lock off a female employee's locker and searched the locker and her purse. The employee sued for invasion of privacy and was awarded $108,000.  

Many employees subjected to drug testing view urine tests as intolerable intrusions which violate one's right to privacy. A urine sample can supply an employer with much more information about the employee than simply whether he is a drug user. An employee relinquishes this additional information whether he wishes to or not, simply by urinating in a vial. A urine sample contains a wealth of personal information. In addition to detecting drugs ingested, it may reveal the individual's medical history by detecting medications for venereal disease, epilepsy, schizophrenia, and high blood pressure. Last night's sexual activity may also be detected in the urine. Furthermore, urination is generally considered to be a private affair. It may be argued that being supervised by another while urinating is humiliating and degrading. Opponents to drug testing contend that employees should not be subjected to such treatment.  

13California Constitution, Article 1, 1; Pennsylvania Constitution  
Another argument against urine drug testing is that the employer has the potential to control an employee's off-duty behavior. Many drugs can be detected in the urine several days after usage. Furthermore, as noted above, the employee's sex life and medical history may be readable in his urine. Therefore, the testing subjects the employee to “Big Brother” surveillance by his employer.

**Discrimination**

Although there is a concern about how many lawsuits may arise from drug testing, another real issue is what to do with the drug-using employee once he has been identified. Federal and State laws treat drug addiction as a disability and require that the employer make a reasonable effort to rehabilitate the employee. For example, the Vocational Rehabilitation Act was passed by Congress in 1973 and applies to the federal government, federal contractors/subcontractors, and recipients of federal finance assistance. This Act expressly prohibits discrimination in employment on the basis of handicap so long as the individual “meets all employment criteria except for the challenged discriminatory criteria and can perform the essential functions of the position in question without endangering the health and safety of the individuals or others.” Drugs and alcohol addiction are considered “physical and mental impairments” within the meaning of the Act.\(^\text{15}\)

**Conclusion**

The Drug-Free Workplace Act of 1988 became effective in March 1989 and requires certification of a drug-free workplace. Such certification is already causing employers to randomly test employees for drugs using unreliable urine tests. The random drug testing of employees appears to be implicit in the Act and will lead to legal challenges by employees on the basis of Constitutional grounds (4th, 5th, and 14th Amendments) and civil grounds arising in tort (invasion of privacy).

\[^{15}\text{Vocational Rehabilitation Act of 1973, 29 USC 701-796.}\]
Analysis of the
Cocaine Reduction Policies in the Producer Countries

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Despite much rhetorical bravado and a handful of widely publicized successes, the U.S. war on drugs has been a bitter disappointment to the American public. Even Washington officials realize that they are not making any appreciable progress on either the domestic or foreign battlefields. While the inflow of heroin and marijuana during the last ten years has remained roughly the same, that of cocaine increased more than ten-fold. Falling wholesale price from $55,000 per kilo in 1980 to $15,000 in 1988 and rising supply in consumer markets to 300 tons per year, up from 50 to 70 tons as recently as 1985, indicate that the domestic cocaine supply is still increasing faster than demand.\(^1\) The rise in the illegal import is taking place even though at least seventy percent of the last several drug budgets have been devoted to supply reduction programs. The Bush administration's war on drugs is calling for an increase of $2.2 billion to launch a strategy which, with the exception of making more arrests of users, plans to do more of what already has been done with only marginal success during the last five years. The authors of the 1988 Anti-Drug Abuse Act clearly point out that supply reduction is still the predominant strategy in the war on drugs. But the same group of legislators also indicate that without any future diminution of domestic narcotics demand, going after supply alone will not stop the growth of this rapidly expanding industry. Even though there is a unanimous consensus among policy analysts that the solution of the U.S. cocaine problem must revolve around both the supply and demand strategies, the content of this paper is considerably more modest in scope. It critically examines the effectiveness of U.S. supply reduction efforts in Peru, Bolivia, and Colombia— the three main cocaine producing countries. The analysis is structured around the four vertical stages of production which are identified as coca leaf cultivation, coca paste production, final processing into cocaine base and cocaine hydrochloride, and transport of the finished product to the American markets. The objective of the paper is to find the most vulnerable stage of production at which a given amount of U.S. intervention effort is capable of inflicting the largest amount of damage upon the Latin American cocaine production complex. To the chagrin of many Americans, heavy reliance upon coca eradication, coca pit destruction, transport interdiction, and, only to a lesser extent, upon destruction of cocaine crystallization labs has simply failed to curb the domestic supply of cocaine. Finding a more cost effective supply reduction strategy will not stop the present epidemic, but it will certainly release funds for a more viable multidimensional attack on this elusive public problem.

Coca Eradication

Since 1985 the core of U.S. drug control policy consists of eradication of coca plants from which cocaine is derived. Ann Wrobleski, Assistant Secretary of State for Inter-
national Narcotics Matters and coordinator of the Reagan Administration’s international anti-drug effort, indicated that “The primary policy focus is to stop the drugs at the source .... So we’ve focused our effort in the fields, in an effort to eradicate the plants before they are harvested.”

There are several reasons why also the present administration has made coca eradication an objective of high priority. Firstly, plant destruction of poorly armed peasants may seem easier than taking on the well armed Colombian cartel. Secondly, coca bushes require approximately two years to mature before they can be harvested, thus if eradication rate is greater than that of replacement, the supply will be slowly cut back.

Thirdly, the larger, open coca fields are easy targets for aerial spraying. Plants grown at high altitudes could be sprayed without worrying about residual effects, because land at these elevations cannot be used for any other crops. While it is true that the coca leaf has been an important cultural crop for many centuries in the Andean countries, the profit incentive has led to cultivation greatly exceeding these traditional uses. In Bolivia for example, the annual cultivation necessary for fulfillment of domestic needs was estimated at 10,000 tons in 1985, but that year the country produced 240,000 tons of the leaf. Any effort against coca cultivation must consider the traditional aspects that have made coca an established staple. But at the same time it must be recognized that the purpose of most cultivation in the Andean countries is not tied to cultural needs. Besides the cultural resistance, another formidable obstacle in the way of coca eradication is the sheer size of the area under cultivation.

While Bolivia and Peru are the primary coca producers, smaller amounts are grown in Colombia and other South American nations. Despite considerable U.S. lobbying to expand eradication efforts in these countries, the amount of coca leaf being grown has continued to expand at an astounding rate, as shown in Table 1.

### Table 1: Coca Cultivation in Select Latin American Countries in Hectares

<table>
<thead>
<tr>
<th>Country</th>
<th>1985</th>
<th>1988</th>
<th>Percent Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>Peru</td>
<td>95,000</td>
<td>115,630</td>
<td>21</td>
</tr>
<tr>
<td>Bolivia</td>
<td>34,000</td>
<td>49,976</td>
<td>46</td>
</tr>
<tr>
<td>Colombia</td>
<td>15,000</td>
<td>27,230</td>
<td>75</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>144,700</strong></td>
<td><strong>192,836</strong></td>
<td><strong>33</strong></td>
</tr>
</tbody>
</table>


Rapid increase in coca cultivation means rapid increase in supply of cocaine. Since one hectare of land grows enough leaves to produce two kilos of the final product, adjusting for spoilage, seizure, and local consumption, the 1988 coca output can be converted to 358,578 kg of cocaine in contrast to 290,604 kg in 1985. Major Edwin Merwin, an organizer of a paramilitary force for the Narcotics Assistance Unit in Bolivia, has firsthand experience concerning the immensity of the problem and has called this approach “ludicrous.” He is convinced that limited eradication efforts will accomplish nothing. “What’s the difference if we eradicate 400 or 40,000 hectares? There’ll still be enough to bury the world in cocaine.” In order for coca eradication to become an effective supply reducing strategy, it must be...
carried out on a large scale with massive aerial spraying. But also here huge obstacles must be overcome. From a technical point of view, there is the problem of finding a suitable herbicide which does not damage the surrounding ecosystem. One proposed chemical is tebuthiuron, or “Spike.” Tebuthiuron is not a defoliant but a herbicide designed to kill woody plants. In October, 1987 it was tested with five other herbicides on a small plot in Peru’s Huallaga Valley. It effectively killed coca and was immediately approved by U.S. Environmental Protection Agency. But EPA warned that since “Spike” is an extremely potent substance that will kill trees, shrubs and other forms of desirable vegetation, it should be kept out of lakes, ponds, and streams. When the U.S. Government tried to purchase “Spike” for spraying purposes from the Eli Lilly Co. in 1988, the company refused to oblige, stating the need for further testing in order to study the health and environmental effects of the herbicide. Critics also claim that even when sprayed at higher elevations on land suited almost exclusively to coca production, the rains could wash the potentially destructive chemical into the more fertile valleys used for cultivation of food crops. They argued that the Huallaga test was inadequate and too poorly planned to prove that ”Spike” is harmless to the delicate tropical ecosystem. American drug officials are still optimistic that large-scale aerial spraying of coca herbicides will become a reality in a not too distant future. They argue that environmental concerns are overblown, and that coca growers by eradication of jungle for expansion of coca cultivation tend to inflict far greater damage upon the local environment. The Peruvian and Bolivian governments, under heavy pressure from growers, have been reluctant to allow chemical eradication even to the point of passing laws against it. Since an aerial eradication program has been postponed for further testing, drug enforcement agencies have resorted to manual crop destruction. But manual eradication is slow and dangerous work. In Peru’s Huallaga valley nineteen CORAH workers were killed in 1984. It is not known whether the narcos or local guerrillas committed the killings. By that time U.S. administrators decided to protect the eradication parties. Once American helicopters manned by U.S. civilian pilots were employed to ferry the CORAH teams with police guards to the worksites, eradication rate had increased considerably. But stepped up eradication activity is being matched by a proportional rise in local resistance efforts. Last year in Upper Huallaga Valley alone police and military forces have suffered 152 casualties in 44 separate incidents. According to a State Department report, “The deterioration of the security situation in the Upper Huallaga Valley departments of Huanuco, San Martin and Ucayali will continue to be a determining factor in government anti-narcotics planning efforts and the U.S. narcotics assistance program.”

| Table 2: Coca Eradication in Latin American Countries in Hectares |
|------------------|-------|-------|
|                  | 1985  | 1988  |
| Peru             | 0     | 5,130 |
| Bolivia          | 30    | 1,476 |
| Colombia         | 2,000 | 230   |
| TOTAL            | 2,030 | 6,836 |

The contrast between eradication data in Table 2 and cultivation data in Table 1 offers hard evidence that coca destruction strategy is not working. Even though since 1985 the rate of eradication has jumped by 236 percent, the net quantity of land under coca cultivation has increased by 33 percent. The data imply that the plants are being replaced at a faster rate than they are destroyed. One possible scenario is that even if in a given year a massive manual eradication program results in a net decrease of land under cultivation, it most likely will be only a momentary success.

Limited supply of coca due to stepped up eradication effort will cause an immediate price increase and equip the farmers with even a greater incentive to cultivate new land. One possible way to pump new blood into crop eradication is to combine it with a suitable crop substitution program. But at this time this does not seem to be a viable option because even relatively high-return crops like cocoa and coffee, fail to compete with the profitability of illegal crops. In Peru’s Upper Huallaga Valley a coca grower’s gross income in 1985 was ten time higher than that of a coffee grower and twenty-one times that of a rice farmer. Also field hands on coca farms earn twice the income possible in legal agricultural pursuits. Such price and wage discrepancies in prices make crop substitution programs at the present time unsuitable to complement the coca restriction program. All U.S. policies directed against this new form of rural capitalism are being met by strong resistance. Coca growing in Peru and Bolivia has not only become an economic safety net for the impoverished peasantry, it has also developed into an important source of American dollars which are almost indispensable for their economic survival. Particularly in Bolivia, the smallest of the cocaine producing countries, coca production has been recognized as by far the country’s most important business and its primary source of foreign exchange. Even in Peru it has become an important source of jobs and income. If the basic reason for the resistance to coca destruction policy is economics, it is important to examine next the depth of the political infrastructure on which this resistance is based on. In Peru the political strength of coca farmers is essentially based on vigorous local organizational activity. According to Lee, in the Upper Huallaga Valley where over 90 percent of farm income can be traced to coca cultivation, growers operate through provincial and district self-defense fronts called Federaciones de Defensa de los Intereses del Pueblo. The fronts essentially defend the farmers rights to cultivate coca and relies on mass demonstrations, roadblocks, and other mobilization tactics. The political activity has leftist leanings and organizations are infiltrated by Sendero Luminoso guerrillas who are now in control of various Huallaga Valley areas. They are well armed and frequently launch attacks against local police outposts. Sendero, through their strong opposition to coca eradication in general and to coca herbicide spraying in particular, has gained considerable support from the peasant population. A Sendero leaflet distributed to the farmers states “We repudiate and denounce the plan to eradicate coca plantations by using herbicides of high destructive power, such as “Spike,” which not only destroy coca, flora, and fauna, but also threaten the lives of animals and humans throughout the Huallaga region.” In 1988 similar pressure from other coca lobby sources have caused the Peruvian government to stop its herbicide testing program. In Bolivia the growers are a much stronger regional and national political force than in Peru. According to Healy, it is a force to be reckoned with by the government in office. Since 1982, around 80,000 coca growing families from a total of Bolivia’s rural
population of 840,000 families, have persistently exercised their democratic labor rights to block many state efforts to control coca leaf production. They function through local union organizations and gain national influence by sending delegates to congresses where members have an opportunity to air grievances and elect representatives to the centralized offices of peasant power. Successful coca lobbying also encouraged the peasants to organize the Association National de Productores de Coca (ANTPCOCA) with representatives from all coca producing zones in La Paz, Santa Cruz, and Cochabamba regions. In contrast to Peru, Bolivian network of producers work within the democratic rules of the game and do not resort to any form of violent pressure tactics.\footnote{18} Even though the resistance to eradication policies in the two major coca producing countries is based on rather different institutional arrangements, it is very effective in preserving the will of the campesinos. In both countries the coca growing lobbies have great depth and breadth, and despite U.S. strong lobbying efforts, coca production is still on the rise. Because of such well entrenched resistance to all coca reduction efforts, curbing of the cocaine supply in U.S. markets by the restriction of coca cultivation is not a feasible solution to our domestic drug problem.

**Destruction of Coca Paste Pits**

Another stage of production which can be considered for stopping the flow of cocaine is that of coca paste production. The process involves soaking of dried coca leaves in a solution made up of water, kerosene, and sulfuric acid. Prolonged agitation of the solution in a plastic-lined pit eventually causes a surfacing of a whitish cocaine alkaloid liquid. Its decantation and evaporation yields coca paste which is then sold in one-kilo bricks mostly to Colombian cocaine refiners for final processing of cocaine.\footnote{19} The labor intensive process requires no technical skills or electricity, and the precursor chemicals are relatively easy to obtain. Large numbers of Bolivian and Peruvian farmers are getting involved in paste production, because the price of paste is more stable and considerably higher than that of dried coca leaves. Since paste processing is a weight-loss process, around 800 kg of leaves are used to make 2.5 kg of paste, in order to save transport costs the pits are located right in the coca cultivating regions. Given the immense size of the coca growing region, the number of paste producers must be incredibly high which, in turn, implies that most operations are relatively small undertakings. Even though the primary goal of U.S. policy is centered on destruction of coca, raids against the ubiquitous pits are not ruled out. In the Peruvian Huallaga region a recent operation called Snowcap managed to destroy 1,470 paste pits and tons of precursor chemicals.\footnote{20} The rationale for the latter type of operations is not only to diminish the supply of paste, but also to decrease the profitability of coca cultivation. While the operation was taking place, it produced some temporary results as prices for a 100-pound load of coca leaves plummeted from $90 to new low levels of $30 to $15.\footnote{21} Most of the leaf grown in this area was simply left rotting in the fields due to a sudden drop in demand. A similar Peruvian operation named Candor VI was carried out in 1988 with almost identical results.\footnote{22} Some labs and pits were destroyed, but it was business as usual as soon as the operation ended. There are several reasons why operations directed at pit destruction are not cost effective. The most obvious one is that maceration pits can be almost immediately replaced without hardly any loss of valuable equipment. They are simply holes in the ground lined with plastic sheeting. Any
other loss would consist of some stored relatively cheap precursor chemicals. Another reason for not allocating scarce paramilitary resources for pasta pit operations is that of a raid on an average crystallization lab will most likely produce a significantly higher yield of cocaine than on an average pasta pit. In 1988 all Peruvian government agencies destroyed a total of 146 pits and seized 1.4 metric tons of coca paste.\(^23\) The average seizure rate amounted to 5.6 kg of paste per pit or, converting it into cocaine equivalent units, 3.84 kg of cocaine.\(^24\) While no data is available to calculate similar average seizure rate on cocaine crystallization labs in Peru, for Colombia it amounts to 27 kg of cocaine per lab.\(^25\) Since an average cocaine lab raid yields seven times more cocaine than a pit raid, an operation directed against a pasta processor is considerably less cost effective as one against a crystallization lab. The third reason is political rather than economic and entails a lack of U.S. sensitivity to the internal problems of the cocaine producing countries.\(^26\) Since peasants make up the predominant demographic group involved in the production of any paste, any paramilitary effort directed at this level of activity runs a high risk of instilling ill will toward the U.S. by the democratic government of drug-producing nations or even topple these friendly regimes by forcing peasants into more sympathetic communist hands.\(^27\)

**Destruction of Cocaine Refineries**

The third processing step in the vertical production structure is the conversion of paste into cocaine base and then into cocaine hydrochloride crystals. Paste, or sometimes cocaine base, is flown from Peru and Bolivia in small planes for final processing to Colombia, although on a much smaller scale some refining also takes place in Peru, Bolivia, Brazil, and Ecuador.\(^28\) Even though such activity outside of Colombia is less common, economics is the basic reason for its existence. During the last several years excess cocaine production has caused a decline in profits and prices all along the production chain. Under such circumstances the only way to cut costs in order to preserve the profit margin is through vertical integration. This has prompted some organizations in coca growing countries to establish their own operations all the way from pasta production to transporting the final product to U.S. and European markets.\(^29\) However, Colombia still produces most of the world's cocaine supply and its cartels dominate drug traffic throughout the Latin American region.\(^30\) From the early to mid 1980s, most of the Colombian cocaine was refined in large-sized laboratories. Evidence about the size of laboratories can be arrived from seizure data. A 1984 raid on one of the Medellin cartel's cocaine-refining complex on the Yari River netted 10 metric tons of cocaine and large quantities of valuable precursor chemicals. This single operation confiscated an amount equal to 5 percent of the cocaine entering the United States in that year. In order to decrease the risk of large seizure, for several years the cartel refiners adjusted by dispersing into smaller labs.\(^31\) But recent intelligence indicates that processors have returned to large scale operations and located them on their home turf near Cali and Medellin.\(^32\) Last year's data on seizure rates in Peru provide additional evidence of large scale refining activity. Altogether 78 laboratories, with a potential of processing over 54 metric tons of cocaine per year or 692 kg of annual output per lab, were destroyed.\(^33\) Whether in Colombia or Peru, it seems that there is an apparent need to refine cocaine on a large scale. This need can be attributed to the
existence of large scale economies at the refining stage of the production. Employment of trained personnel, massive procurement of precursor chemicals mostly from U.S. mainland, intelligence gathering about governmental activity, and provision of security to protect highly valued final product provide additional evidence for the presence of large scale economies. It makes economic sense to spread out the cost of such high-priced inputs or activities over the highest possible output range. The larger is the laboratory's output, the lower is the cost per unit weight of the final product. And it is this relatively large output of the average refinery that makes the crystallization stage extremely attractive to search-and-destroy missions. Assuming that the average cost of any given raid is constant, higher seizure rate at the refinery operations level makes raids on them more cost effective than on small pit operations. Besides being cost-effective, lab destruction has some other far-reaching economic and political consequences. Since the cartel buys most of its coca paste from numerous Bolivian and Peruvians, diminution of Colombian refinery capacity will not only decrease the demand for coca paste but for production of coca leaves as well. This means that a continuous pressure on the refinery stage of production will automatically decrease output activity at all the lower stages of production. From the political perspective refinery destruction policy is also a superior alternative to direct U.S. involvement in the destruction at coca fields or paste pits. With this new policy the compesinos will be pointing the accusatory finger for coca and coca paste demand decreases at the Colombians buyers rather than locally stationed American field agents. The weakness of the crystallization facility destruction approach is that its continuous pursuit may force the cartel to split the refining activities into more numerous and, thus, smaller capacity operations. But even that accomplishment is a considerable victory for the Colombian government, because smaller-sized plants will be operating without the benefits of scale economies. Also possible loss of pecuniary economies in ether and acetone buying, increase in security activity to guard more numerous but smaller refining units, and general destruction of established business lines are some of the other factors that will cause a considerable cost increase in the refining operations.

Interdiction of Drug Trafficking

The final stage of the vertical supply chain consists of smuggling of the finished product into the United States. Once cocaine reaches American shores, it is diluted and dispersed into a labyrinth of markets and submarkets. Enforcement at this level is more for punitive reasons than in the hope of reducing the overall supply. "Successful" interdiction then must focus on activities that have a potential of stopping the drug from reaching the U.S. markets.

During the Reagan administration this form of interdiction and coca eradication have been heavily stressed co-priorities. One of the primary advantages of interdiction is that one need not work through the reluctant bureaucracies of foreign governments, and seized assets can be funneled back into drug enforcement efforts.

Unfortunately, the lessons of history seem to doom any attempt to seal off the U.S. borders which stretch for thousands of miles. The British were not satisfied with their blockade during the American Revolution, and the U.S. Navy was unable to entirely seal off the Confederacy's cotton trading capabilities with Europe during the Civil War. Today
the job is infinitely more difficult because there is an ever greater variety of ways to smuggle merchandise into the U.S., and modern smugglers are armed with the state of the art equipment, such as communication scramblers, long range aircraft, sophisticated radar equipment, and night vision apparatus.\textsuperscript{35}

Colombian traffickers also have an immense capacity to invent new smuggling routes to U.S. markets once the old ones become too risky. In 1985 with the rapidly increasing concentration of U.S. efforts to stop the flow of drugs through the Caribbean basin, Colombians responded with the establishment of up to then unheard of smuggling routes which are still utilized up to this date: The Medellin group built ties with Mexican marijuana and heroin smugglers and with Mexican authorities to facilitate the shipment of Colombian cocaine across the Mexican border into the American southwest. In the Caribbean they strengthened relations with the Bahamas and Jamaica and developed new ties in Cuba, Haiti, Belize and several smaller island countries. The net result was a massive proliferation of new routes and the corruption of governments previously untouched by the cocaine trade; the total tonnage of exported cocaine increased and prices dropped. By 1986, some 40 United States had been diverted from the traditional Caribbean routes across the US-Mexican border.\textsuperscript{36}

Limited enforcement resources, coupled with the innumerable entry points by sea and air make it unlikely that future efforts to blockade the borders will fare any better than the present arrangements. In the past American authorities have been successful in guarding only certain select pipelines into U.S. markets, but Washington just does not have enough resources to guard all the accesses routes simultaneously to America’s vast East Coast and the newly established West Coast wholesale drug markets. Fishing boats, cargo planes, helicopters, speedboats, airline luggage, swallowed condoms by passengers, air freight—nearly anything in which cocaine can be hidden and shipped has been tried. The profitability of smuggling is great enough to insure that there will always be those willing to take the risks. For example, an owner-pilot who flew a small plane between Colombia and Pennsylvania was able to make $1.5 million per trip. \textsuperscript{37}

According to a customs agent, a speedboat owner who made pickups of air-dropped bundles make up to $100,000 per night. \textsuperscript{38} Often times surveillance provides an overwhelming stream of intelligence, but border law enforcement agencies simply do not have the resources to pursue all the possible targets. But what was impossible to accomplish in a decade of concerted effort was achieved during the Colombian government 1989 summer crackdown on the Medellin and Cali cartels. According to the Custom Service and other federal agency officials, large air shipments of cocaine from Colombia to staging areas near the U.S. have slowed to a crawl. \textsuperscript{39} A huge Colombian government anti-drug assault, resulting in waves of arrests and massive confiscation of cartel assets, apparently snarled the delivery network of planes, helicopters, pilots, mechanics, and fuel suppliers that the cartel depends on to ship large quantities of cocaine out of Colombia. The information was obtained from informants and electrical surveillance of staging areas in Mexico and off the southern coast of the United States. Customs agents continue to capture smugglers with twenty and thirty pound loads, but the large shipments that only Colombia’s cartels
were capable of moving appear to have dried up. Additional evidence for the slowdown of cocaine inflow can be found in Miami wholesale prices which have risen to $18,000 per kilo from about $11,000 in less than a month, and in San Diego the price has edged up from its $15,000 per kilo level. Even if this shortage of cocaine in the U.S. wholesale markets is a temporary phenomenon, it offers evidence that sustained massive assaults upon the cartel’s infrastructure is a more effective method of clogging the cocaine pipeline than a concerted attack on the cartel’s transportation infrastructure in the Caribbean basin and along U.S. borders.

Conclusion

That part of Bush administration’s plan that deals with bringing the war on drugs to American streets through stepped up local law enforcement activity is one of the most uneconomical ways of fighting the currently raging epidemic. The new approach may decrease the U.S. unemployment problem, but it will not even come close to putting a dent into the present drug problem. Because of our highly developed technology, capital intensive operations, such as raids on crystallization labs with American donated helicopters and other kinds of equipment, are relatively cheaper than labor intensive law enforcement activity on U.S. streets, such as prolonged stakeouts on crack houses or massive arrests of drug peddlers. Presence of scale economies in the refining stage due to indivisibilities of high priced inputs and services increases the probability of higher seizure rates and makes operations against this activity more cost effective than against any other stage of production. Cost effectiveness is further enhanced by the far-reaching effects on the entire production chain, once continuous government pressure on cartel refineries and its general infrastructure is applied. Not only, then, is there an automatic decrease in output activity at all the lower stages of production but, as we found out during the 1987 summer, also upon the delivery system to U.S. markets. The least cost rule in economics dictates that if the marginal physical productivity per last dollar spent for a particular supply reduction strategy, like destruction of Colombian refineries, is greater than for some other approach, like coca leaf eradication, it makes sense to shift financial resources from the latter to the former. The ruling philosophy in Colombia at the top of the production chain is one of plomo o plata (lead or silver), which leads either to assassination or corruption. It could not have been lived up to more zealously than in the summer of 1989, when within days the cartel assassinated a judge, a provincial police chief and a presidential candidate, Luis Carlos Galan. The murders immediately prompted President Barco through emergency powers to reinstate the extradition treaty to U.S. and order mass arrests of drug traffickers. Such action underscores the honesty and high degree of motivation of Colombia’s executive branch. Despite pervasive bribery and corruption at the lower levels of administration, Colombia’s national police and investigative agencies during the last year have been conducting an effective campaign against cartel’s processing laboratories, seizing large quantities of cocaine, and destroying precursor chemicals in record quantities. But Colombia’s valiant efforts are severely hampered by its limited resources. Before the Colombian government’s war against the cartel came to a head, the total American aid to the anti-narcotics efforts in that country amounted to only $10 million per year. The recent $65 million grant in the form of helicopters, reconnaissance planes, and weapons
to counter the cartel’s stepped up aggression against the government targets is an important first step in the right direction. Allocating fifty percent of the $2.2 billion 1989 drug budget increase to Colombian operations would make a great deal of sense. Americans are incensed by the domestic drug problem and horrified by the cartel’s blatant brutality. Considering the courage and cooperativeness of the Colombian people, now is the prime time to step up the supply reduction war and Colombia is the right place.
ENDNOTES


10. CORAH stands for Special Project for the Control and Eradication of Coca in Huallaga.


16. Baseo Huallaga, “Para Armado de 72 Horas,” August, 1988, as quoted by Rensselaer Lee III.


21. Ibid.


24. In the vertical production chain 2.5 kg of paste is equivalent to 1 kg of cocaine.


30. Ibid, p. 70.

31. Bagley, “Columbia and the War on Drugs.”


34. Even though large operations have the capability to achieve lower per unit costs than their smaller counterparts, there is some 1988 evidence of downsized lab activity in Bolivia and Peru, U.S. Department of State Bureau of International Narcotics Matters, Bolivia, uncirculated annual report on Bolivian drug trade, 1988.

35. Kerr, p. 3.

36. Bagley, “Colombia and the War on Drugs,” p. 75.


Demand Reduction: A Drug Abuse Control Strategy
Whose Time Has Come - Hopefully

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There is much controversy concerning the best way to reduce drug use and abuse in the United States today. The two main approaches are supply reduction and demand reduction with the former garnering much more popular and governmental support than the latter. The purpose of this paper is to make a case for demand reduction based on the problems inherent in the supply reduction strategy and on the possible advantages and positive outcomes of demand reduction. Although the paper will primarily discuss cocaine, it will by necessity focus on other drugs as well.

Historically the United States has employed a supply reduction approach with three components: 1) arresting and incarcerating the users and pushers, 2) attempting to stop the drugs coming into the country at the border, and 3) attempting to directly or indirectly prevent drugs from being smuggled out of the country where they had been grown or manufactured. To date, none of these approaches has had much positive impact. Although it seems reasonable to simply arrest and jail those individuals who use or sell illegal substances, this simply is not an effective strategy for reducing the flow of drugs. While it is true that many users and low level drug pushers have been arrested, and formerly crime ridden neighborhoods made more livable (due to pushers relocating), the impact on the availability of drugs has been minimal. (Nadelmann, 1988).

As well as having an insignificant impact on drug availability, the arrest, prosecution, and incarceration of drug law violators is having a very negative effect on the functioning of courts and jails, and is deleteriously altering law enforcement priorities. During 1987, according to the Greater Washington Research Center (cited in Nadelmann, 1989), in New York city and Washington D.C., drug law violations accounted for more than 40% and 52% respectively of all felony indictments. Drug law violators now make up 10 percent of local and state prisons populations, and more than one third of federal prison inmates. Estimates are that in fifteen years drug law violators will make up fifty percent of the federal prison population. (Nadelmann, 1988)

As well as filling the jails and overwhelming the courts the emphasis we have placed on supply reduction has also had a less obvious but perhaps more important effect on day to day law enforcement priorities. If the police forces around the country are expected to constantly cope with the ever present drug problem, as they are, we cannot expect them to be able to attend to other problems such as violence and property crimes as diligently as we might prefer. There are only so many officers, resources and monies available and we have chosen how they are to be used.

International supply reduction strategies have also experienced limited success because of several very challenging problems. First, as stated by Senator D.P. Moynihan (cited in Nadelmann, 1989) cocaine can be grown on approximately 2,500,000 square miles in South America. It has been estimated that less than 1,000 square miles is currently being used
for coca bush cultivation. Second, even if attempts at preventing pushers from one of the cocaine exporting countries from smuggling cocaine to the United States were successful, another group of entrepreneurs would step in. The high profits involved in the drug trade guarantee a large reservoir of drug suppliers. (Kaplan, 1988).

Stopping the flow of drugs right at the border has been another popular approach into which we have poured a great deal of effort and money. This strategy has also not been a great success (Reuter, 1988). It is extremely difficult to stop the flow of cocaine across the border due to the fact that the drug is so compact that it can be smuggled in anything from flowers to condoms partially filled with the drug and swallowed. The only real success that interdiction can claim is that of marijuana, presumably because of its bulk. This success may be partially responsible for the fact that the United States is now considered one of the world’s leading growers of “high quality” marijuana. (Nadelmann, 1989).

The tragedy in all of this is that while we have been increasing the drug enforcement budgets appropriated to agencies such as the F.B.I., the U.S. Attorney, U.S. Customs and the Bureau of Prisons by between 100 and 1,000 percent, coca growing areas have expanded, the price of cocaine has remained constant, the purity has gone from 12 to 60 percent and the supply has remained virtually unchanged in most parts of the country. (Nadelmann, 1988).

Although the present paper’s main focus is demand reduction in schools as it exists today, it has been used for years - mostly unsuccessfully. In the 1960’s when there was a tremendous increase in illicit drug use, scare tactics which exaggerated the frequency or seriousness of negative effects were used as an attempt to prevent usage. While scaring people worked for a short time in some cases, over the long term this technique’s primary effect was to erode confidence in those individual’s or agencies who used this strategy.

Another common strategy has been to bring in a recovering addict to speak of the evils of abuse, and through recounting what was usually a tragic story attempt to show that drug use was not an appropriate behavior to undertake or continue. One problem with this approach was that students often felt that if they did become involved in drug abuse that they would be able to get off drugs just as the recovering individual had. Others simply felt that they would not have problems with drugs because they had stronger wills than the addict. Common to all these presentations was the fact that they usually tended to be single efforts with no program development or follow up.

In the 70’s educators began to use the drug information approach believing that if students knew the facts about drugs they would not use them. Problems arose because often times the information aroused curiosity and interest and actually increased usage rates. Most of the time this type of campaign had no effect on behavior.

In the late seventies and early eighties researchers began to broaden their approaches in their attempts to decrease drug use among young people. Perry (1980) and her colleagues in their attempt to decrease the prevalence of cigarette smoking, trained teams of high school students to work with junior high school students. During this program the junior high students: 1) learned about the negative effects of smoking, 2) committed publicly to not becoming regular cigarette smokers, 3) heard testimonials from those students who experimented with cigarettes and got hooked, 4) identified pressures to smoke, 5) rehearsed
methods to resist those pressures, and 6) role played situations in which they resisted the pressures to smoke. Results showed that there were significantly fewer cigarette smokers in the treatment schools, as compared to the controls, one year after the program was carried out.

Another study carried out by Botvin and Eng (1982) focused on the acquisition of life skills by seventh graders as a means of preventing cigarette smoking. The program was conducted by trained peer leaders from the 11th and 12th grades. The components of the program were 1) smoking information, 2) decision making, 3) advertising techniques, 4) coping with anxiety, 5) communication skills, 6) assertiveness, and 7) social skills. Overall, this program resulted in reducing the incidence of new smoking by about fifty eight percent.

In 1983 Schinke and Gilchrist reported a study in which they worked with pre-junior high school students. Their program consisted of information, problem solving, decision making, persuasive communication, and role playing difficult drug situations while peers and leaders offered feedback. Half way through the seventh grade while 37.5% of the control group had smoked in the previous month, only 8% of the experimental group had.

In a study reported by C. Anderson Johnson (1983) resistance skills were strongly emphasized. Seventh grade students were taught various methods of learning how to reject engaging in drug behaviors they really did not want to perform. This skill was taught by means of role modeling, rehearsal and reinforcement. After two years the group who had participated in the program were smoking 50% less than those who had not participated.

In a study which focused on alcohol misuse in elementary school, Dielman, Shope, Leech and Butchart (1989) emphasized social skills and peer pressure resistance. These researchers found that although none of the treatment main effects reached the .05 level of significance (p = .06 in one case) the control group students tended to report higher levels of alcohol use and misuse than students in the treatment group.

In an evaluation report carried out by Earle (1989) an innovative program headed up by Gerald Edwards was discussed. Uniquely Edwards and his colleagues have school district and community members trained, away from home, to analyze their school and/or community, and design new drug and alcohol prevention/intervention programs. The specific purposes of the training are to: 1) provide an understanding of drugs and their abuse, 2) identify model prevention and intervention programs, 3) identify local and regional resources, 4) through the use of a problem solving model develop action plans, 5) develop policies and procedures, and 6) devise strategies to mobilize the efforts of parents and other community members. Once the teams have been trained and return home, technical assistance and support are provided by Edwards and his colleagues to assist the groups in carrying out their individual prevention/demand reduction programs.

The findings of the Earle (1989) evaluation were quite positive. The assessment of the program, carried out in 25 high schools and 41 junior high schools, revealed that alcohol, cocaine, heroin, marijuana and cigarette use decreased anywhere from 10% to 33% (p < .05) over a two year period.

After considering both supply and demand reduction strategies, as superficially presented in this paper, one needs to ask why more effort and money isn’t put into demand reduction in the schools. The authors feel there are at least three reasons for the continued high level of support for supply reduction and the concurrent minuscule commitment.
to demand reduction. First, we are very accustomed to turning to the police and courts to solve many of our problems. The United States is after all one of the most litigious countries in the world. Second is the fact that the legal, supply reduction strategy is one that is easy to understand and elicit support for. Chasing, arresting and locking up users and dealers seems reasonable and also results in many tangible results to show voters and other concerned citizens - videotape of confiscated drugs, busted pushers, and agents destroying coca shrubs. Another more subtle reason for our heavy involvement in the supply reduction approach is that we are allowed the luxury of not having to look at our own drug behaviors. Those presently in power seem to still think that the drug problem is caused primarily by pushers and third world entrepreneurs that want to make a lot of money. There seems to be little recognition that in the area of drug abuse we are definitely our own worst enemy. Demand reduction strategies would bring us more closely in contact with that reality and perhaps help the country cope with the problem.
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The Political Economy of Coca and Cocaine in A Bolivian Yungas Community

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Introduction

At the present time Bolivia ranks second only to Peru as a producer of coca (Erythroxylum coca) which has grown to become that country's leading export commodity (Kawell 1989:36). In addition, it is estimated that coca constitutes 15% of Bolivia's GDP (Ibid.). A large number of Bolivians, in various social strata and occupations, are directly or indirectly involved in coca cultivation, trading coca leaves and processing of the leaves into cocaine and trading the drug. In 1980, a Bolivian government official in charge of recording and control of production and trade of coca, estimated that as many as 1,000,000 Bolivians were directly and indirectly involved in the cocaine business (Sandagorda 1980:165). Kawell gives a more conservative estimate of 200,000 people directly involved in coca cultivation and cocaine processing, while another 300,000 are in the underground economy dependent on the coca trade (1989:26). According to Henkel some 17,000 farmers are directly involved in the cultivation of coca (1986:53). These numbers, which are all estimates, need to be considered in light of the fact that Bolivia's total population is less than 7,000,000 people. Bolivia's two major coca growing areas are the Chapare region of Cochabamba and the Yungas valleys of La Paz. By 1980 the Chapare region had surpassed the Yungas as Bolivia's leading coca producer (Sandagorda 1980:168). In the Yungas, coca has long been known as "el oro verde" (green gold), the crop which made many great fortunes for some of the region's most important families and provided the local peasantry with a better standard of living than prevailed elsewhere in the country. Yungas coca was of the highest quality for chewing and had long demanded good prices in the traditional internal markets of the highland peasant villages and mining centers. When in the early 1970's the Chapare region began producing coca most of it entered the international cocaine trade while Yungas coca continued to receive better prices in its traditional internal markets. In the late 1970's, as the demand for cocaine hydrochloride rapidly expanded in the United States and Western Europe, the price paid for coca leaf dramatically increased in the Yungas. Even better prices were being offered for coca paste, base and cocaine hydrochloride. It was during this time coca paste began to be processed in the Yungas. Much has been written about the impact of cocaine use in the United States but much less is known about the effects it has had on the many Andean villages where the coca leaf is cultivated and processed into paste. Sidney W. Mintz (1989) has reminded us how coca is historically the most recent of tropical crops, including coffee, sugar, and tea, which

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1I am grateful to Dr. M. Barbara Leons (Department of Anthropology, Towson State University) and my daughter Eve A. Leons for sharing with me some of the ethnographic data contained in this paper. However, I alone am responsible for the data's interpretation.
have dramatically changed not only the Western consumer countries but also the producer countries in the tropical world. Mintz also points out that cocaine, much like the other stimulants, “wreak[s] vast and irreversible changes on producer nations” (32). In this article I propose to delineate some of the major economic and political changes, which in the past two decades have occurred in the Bolivian Yungas canton (county) of San Calixto as a consequence of its involvement in the production of cocaine.3

Coca in the Yungas Economy

Coca has played a most important role in the Yungas’ political economy since pre-Columbian times, indeed the region may have been settled by the Incas in order to cultivate this plant. From the eighteenth century until the middle of the twentieth century haciendas dominated the economic and the political life of the Yungas region (Klein 1985). Prior to 1952, “the time of the haciendas,” coca production constituted more than 95% of all cash crops raised in canton San Calixto. This was attributable to transportation problems and the prevailing land tenure system. The transportation of crops from the Yungas to La Paz was both costly and difficult. The high costs involved could only be absorbed by coca, a light weight and high priced commodity. At this time most of the coca was raised on hacienda lands for the benefit of the owners (hacendados), their tenants (colonos or peons) produced only a small amount of coca for sale. The tenants were obligated to devote much of their time to working on the lands set aside for the benefit of the hacendados, in exchange for usufruct rights to land. On their small parcels of land the peons focused on the production of subsistence crops and cultivated small amounts of coca leaf for both personal use and sale to traveling coca buyers from the altiplano (highlands).

Revolution and Land Reform (1952-1970)

The Revolution of 1952 has proven itself to be a watershed event in Bolivia’s history. Soon after coming to power the new government proclaimed a land reform decree, and unlike what happened in other Latin American countries, implemented the new act in most of the country. In the Yungas provinces the 1953 land reform swept away the hacienda system, creating a class of small land owners, while eliminating the considerable political powers of the hacendados at the provincial and national levels of government. Following the Revolution Bolivia’s government, with substantial U.S. government aid, embarked on a massive road building program and encouraged urbanization in the countryside. One of the main aims of the new government was to make this largely rural and agricultural country an exporter rather than an importer of foodstuffs. This was to be achieved through the colonization of the sparsely populated tropical parts of the country where marketable cash crops for the national and international markets could be grown. It was believed there was a vast national and international market for coffee, citrus fruit, rice and sugar which Bolivia would be able to exploit. In the more densely settled sub-tropical Yungas of

2 San Calixto is the fictitious name of a village and also the county of which it is the capital.
3 Myrna Cintron (1986) has written an excellent historical article in which she traces the history of coca and cocaine and reactions to coca extracts in Europe and the United States since the 1800’s.
La Paz the national government urged the substitution of coffee and citrus crops for coca, since the latter was believed to have a limited market.

In the early 1960s the government’s agricultural extension agents were trying to persuade Yungas peasants to cultivate more coffee and citrus fruit in place of the traditional coca crop. The various changes promoted by the Bolivian government during the 1950’s and 1960s resulted in a greatly expanded and changed market, profoundly affecting the peoples production and con- sumption patterns. Before the 1952 Revolution the national market for coffee, citrus fruit and other Yungas crops was limited to a very small urban elite, by 1960 the market for these commodities had expanded dramatically. During the time of the haciendas the tenants had very limited personal involvement in the marketplace. Following the land reform they became small land owning farmers and were consumers of a range of commodities which included canned sardines, bottled beer, kerosene lamps and stoves, and battery powered radios and record players. The Bolivian government’s goal of attaining self- sufficiency and becoming an exporter of agricultural products was achieved by 1970.

Political Economy of San Calixto (1952-1970)

The village of San Calixto, like many other “new towns” in Bolivia, rapidly developed in the years following 1952. Drawing most of its population from the ex-haciendas in the canton it further added to its numbers through the settlement of a number of merchants and craftsmen from neighboring colonial towns and the altiplano. People were attracted to San Calixto because of its new road, grade school, potable water system, economic opportunities and stores. For most villagers, who had been born in local haciendas, San Calixto was an exiting place in which to live. In 1969 canton San Calixto was inhabited by an estimated 1,205 people, of this number 522 lived in the village. The canton’s inhabitants belonged to various ethnic groups: Ayamara Indian (campesino), negro, mestizo and blanco. These ethnic groups have traditionally occupied different social strata.

Following the land reform, the traditional blanco hacienda owning elite saw its fortunes eclipsed as a new elite, largely composed of mestizo shop- keepers, established itself as the dominant economic and political force in the area. The former Ayamara Indian and negro tenants of the haciendas were now mostly poor land owning farmers with little capital and few social links to the outside world. This new farming class in short order created patron-client relationships, which figured prominently in economic and political relations, with the new power holders. These links in part mimicked the now defunct feudal ties which had existed between hacendado and colono, but were dissimilar in that they facilitated a greater market orientation in both economic and social life.

In the years between 1953 and 1969 local agricultural production for the market increased and the traditional reliance on coca as a cash crop was modified. The peasants were no longer obligated to provide unpaid labor services to the hacendados. It had also, following the completion of the road in 1960, became much easier and more profitable to market coffee and citrus fruits. Finally, villagers were both aware that the national government was ambivalent about the cultivation of coca, and that every year there were fewer people who still chewed the coca leaf as many dropped the habit and the young generally disdained the practice. These factors combined to limit Yungas cultivators enthusiasm for
the crop. Coca was locally seen as a crop of “el tiempo pasado” (the past) and most farmers were taking steps to gradually replace this ancient crop which for so long had been the mainstay of the local economy. This voluntary and ultimately market directed crop substitution was carried out through planting coffee and citrus trees in well-established coca fields (coca plantations) and as these trees matured the coca leaf harvest would first decline and eventually cease. There was no local opposition to this process of crop substitution as most of the villagers recognized the necessity of a shift away from reliance on coca.4

In 1969 I collected several estimates which indicate a fifty percent reduction, since the early 1950s, in the amount of coca locally produced. Most of this decrease in coca leaf production occurred on lands which before the land reform had been cultivated for the hacendados. Several hacendados left San Calixto following the implementation of the land reform (abandoning their fields) while those who remained were due to labor shortages forced to shift to the cultivation of less labor intensive crops such as potatoes, coffee and particularly citrus fruit. During the 1960s, the canton’s new elite, cultivated some coca but they like the ex-hacendados who had remained found it more profitable to focus on the cultivation of the less labor intensive crops. Coca is a very labor intensive crop and good workers were not easy to attract, in the relatively sparsely settled Yungas, at what was in the 1960s the going rate of $.32 per day for a woman and $.50 per day for a man’s wage. Were it not for the chronic indebtedness of most of the peasants, only those without land would have worked for the ex-hacendados and storekeepers, since all recognized it to be far more profitable to work their own fields. Various technological innovations such as mule drawn plows, fertilizers, pesticides and primitive tractors were used by those members of the local elite, mostly ex-hacendados, with greatest difficulty attracting workers. Perhaps the most significant break with the past was that some members of the elite now themselves worked in the fields. A fact they did not advertise in the village and certainly not in the capital.

My data shows that in 1969 coca accounted for 60.7% of the villagers income and was thus still the single most important cash crop cultivated. Citrus fruit accounted for 21.7%; coffee 5.7%; and avocados, potatoes, sugar cane, mangoes for the remaining 12% of cash crop derived income. The village storekeepers, who make up the most “modern” sector of the local economy, and were most heavily involved in the market, show this shift towards cash crop diversification and decreasing reliance on coca cultivation most dramatically. For the storekeepers, coca production accounted for only 44.3%, and with citrus fruit, coffee, potatoes and avocados accounting for 53% of their income derived from agriculture. San Calixto’s peasants continued emphasis on coca cultivation was almost entirely due to economic considerations. One of the economic realities facing Yungas peasants was their limited ability to experiment with the cultivation of new crops, since their failure was an immediate threat to their survival. Local peasants are very aware that in the recent past such experiments (e.g. sugar cane and potato cultivation) had failed disastrously. The peasants, perennially short on cash, also favored coca because of its reliable harvests, three or four times a year, which brought in ready cash. In addition, coca requires no fertilizers or insecticides, which peasants find too expensive and also do not know how to apply

4In other parts of the Yungas, coca cultivation seems to have been less affected by these factors.
accurately.

It is important to note that during the 1960s I encountered no religious or dietary based resistance to the abandonment of coca cultivation. In the more acculturated southern part of the Yungas, coca leaves are masticated by many middle-aged and particularly older peasants, while eschewed by most young peasants and all of the mestizos and blancos. Coca is commonly chewed by mature Indian and negro peasants on social and ritual occasions. In part, because the older peasants are more heavily involved in the establishment and maintenance of social relations than are younger people, coca continues to function as a “lubricant” for them (see Mayer 1986:7). On ritual occasions I observed young men and women accepting coca when offered and then generally quickly spitting out the leaves. When I asked local villagers why they chewed coca the reply invariably was “it’s only a custom,” one much like having a beer with a relative or friend. When I suggested various dietary explanations for the chewing of coca to informants they demurred pointing out that they eat food when they are hungry. Enrique Mayer, in an article reviewing coca use amongst indigenous people in the Andean area, also dismisses the old myth that people chew coca as a food substitute (1986:4).

Informants recalled how the chewing of coca had been virtually universal among adult Indians and negros in earlier times (pre-1952) but how many had given up the habit in recent years. Several middle aged individuals recollected having been habitual coca users ten or more years ago and how they had abandoned the practice, which they now referred to as a vice. In San Calixto coca leaf mastication was clearly recognized as one of several traits, much like wearing sandals, eating chuñu (dehydrated potatoes) or speaking Aymara, which defined one as a campesino, a rural and backward person. To give up any one of these practices moved one closer to ethnic reclassification, for example, from an Indian (campesino) to cholo or even mestizo. In contrast with what Mayer reports, no peasant ever told me they believed coca chewing gave them “energy, wisdom, and courage” (1986:9). The difference in our findings may well be due to the fact that Mayer describes the uses of coca in the “closed corporate” communities of the Andean world while San Calixto is an “open” community where there is less emphasis on the establishment and maintenance of horizontal social ties and there is greater involvement with the outside world.

In the late 1960s there was already evidence for considerable social and economic differentiation within the canton. Villagers distinguished between “the poor ones,”; “those that have,” and “the rich.” The “rich” class was made up of mestizo merchants and several blanco ex-hacendados while the other two categories were comprised of negro and campesinos. Economic differentiation did not simply occur along the major ethnic cleavages in the community. At least one negro (a former hacienda owner) and one campesino (a truck owner) were recognized as “rich”, both had earnings of more than $2,000 in 1968 from farming alone. This internal economic differentiation can be demonstrated in part by considering local household differences in cash crop production.

In 1968 some 36 village households earned less than $500; 24 households between $500 and $2,000 and 8 households between $2,000 and $3,500. Those classified as “rich,” not only had significant earnings derived from agriculture, but in addition at least doubled their income through the buying and selling of cash crops; lending of money; running small general stores; and the ownership of trucks; caches (coca drying facilities) or the
local coca press. These villagers live in households either extended through kinship or by the device of having adopted poor landless workers. These households monopolized the most profitable sectors of the local economy: they owned much of the best lands, and were involved in trade, transportation and money lending. It was within this small group that continual friction over control of political offices and economic resources was expressed. Real and fictive kinship at crucial times functioned to maintain group solidarity within the class against the peasant majority.

Those households in the middle category were largely made up of intact nuclear and extended families, which had received several hectares of land from the land reform, who spent most of their time working their land for themselves. Most of these households were either former tenants of the canton’s estates or the children of former tenants who had inherited land. The heads of households in this category were middle aged and elderly adults with children, grandchildren and other kin attached. Households in the lowest category (“the poor”) were made up of households headed by single women; elderly widows, people severely affected by tuberculosis, alcoholism or mental illness. Most of these people had received little or no land at the time of the land reform and most of their income was earned through working for more affluent villagers.

In the 1960s many of the local peasant households had one or more of its younger members living either in La Paz or elsewhere in the Yungas. The reasons for migration out of San Calixto most frequently cited by the villagers included the local lack of social mobility, scarcity of land, lack of excitement and limited educational opportunities. Many young people saw village life as boring and longed for a factory job and the bright lights of La Paz.

The canton of San Calixto, and indeed much of the region was under the control of a classic Latin American style of political leader (cacique). In this role he dominated the local and regional political economy and functioned as a broker who traded peasant support to the national government in exchange for control over economic assistance to San Calixto. The caciques position at this time was quite unassailable and no significant challenger appeared on the local scene.

San Calixto’s Political Economy 1970 to the Present

As cocaine has since the late 1970s come to dominate Bolivia’s national economy so has it come to powerfully affect San Calixto’s political economy. In 1985 coca was by far the village’s most valuable cash crop. Coca has greatly increased in importance since the 1960s due to a doubling in its price and a dramatic expansion in the amount of land under coca cultivation. During the years of hyper-inflation, experienced in Bolivia in the early 1980s, coca prices remained stable while the prices of such legal cash crops as coffee and citrus fruits collapsed. The government tried to control inflation through imposing price controls on all legal commodities, since cocaine (as an illegal drug) could not be controlled, it came to serve as a hedge against inflation for the peasants.

The income of many villagers is now no longer limited to the cultivation of coca but is instead largely derived from their involvement in the trading of coca, processing of coca paste and trading the paste. Generally the sons and daughters of Indian and negro peasant households are involved in the buying and selling of coca leaf and in the processing
stage. Some young sons of the elite, have become involved in the more capital intensive and profitable areas of trafficking in cocaine. Since they are vulnerable to arrest by law enforcement agents and lacking the protection of the urban and well organized trafficantes (cocaine dealers) they have generally not met with much success.

Most of the local people have directly or indirectly profited economically from the cocaine boom. Although like other instances of dramatic and rapid forms of economic change, this boom has not been without costs. Local villagers increases in real income during the 1980s stands in sharp contrast with the experiences of most other Bolivians who saw their savings wiped out and earnings shrink because of hyper-inflation. As a result urban standards of living have plummeted and a large number of local youths who had left San Calixto in earlier years have returned in order to participate in the bonanza. Several of these youths are quite successful cocaine dealers in the canton.

Although coca is now, even more than during the 1960’s, the dominant cash crop villagers continue to grow coffee and citrus fruit and traditional subsistence crops. However, even more than in the late 1960s, people find it often more convenient and more profitable to purchase such dietary staples as rice, plantains and manioc in the local market. Henkel argues that a decrease in the production of food crops in the coca growing regions of Bolivia, has resulted in scarcity and high prices in the altiplano markets. Henkel sees this problem being compounded by a flow of highland workers, at crucial times in the agricultural year, into the Yungas and Chapare (1986:67). The evidence from San Calixto does not support such an interpretation. Locally, the production of all cash crops, not only coca, continues to increase. Also, the flow of migrant workers from the altiplano into San Calixto is an old phenomenon and is continuing at only slightly higher rates. The cause of food and labor shortages described by Henkel for the highlands may be explained by evidence from the Chapare and other of the newer coca growing regions of Bolivia.

The most significant economic change which has occurred in San Calixto since the early 1970s is that virtually all coca leaf is now locally processed into coca paste and almost none is sold in the traditional internal market. This means that highland peasants and miners often have difficulty in purchasing coca leaves for chewing and ritual uses. It also means that Bolivia’s national government, which during the 1960s levied a tax of $2.50 per tambor (50lb.) of coca shipped out of the Yungas, has seen this important source of income diminish.

It can be argued that economic development has taken place in San Calixto since the 1970’s as at least the first stage in the production of cocaine hydrochloride takes place at the local level. As a result of this innovation a host of other changes have occurred in San Calixto. Some of the young men have learned entrepreneurial skills, as local buyers and sellers of coca leaves, a few have learned some chemistry as part of their involvement in the making of coca paste, and most have acquired new work habits quite different from those of their parents. One of the major complaints the older villagers have against local production of cocaine is the involvement of the young men. They complain that they now find it even more difficult than in the past to find agricultural workers and they see the young as lazy and no longer respecting them. Quite clearly a generation gap, not present in the 1960s, has developed. In the past young men learned from older men how to build coca fields and plant coca as members of juntas (cooperative work groups). In this context
they also learned values specific to work and the proper behavior for adult men. At present it is rare to find young men working with older men in such groups, since they find it more profitable to be involved in the cocaine industry.

The processing of coca paste is quite labor intensive and village children as young as eleven to thirteen years of age are recruited as pisadores (leaf stompers). They are often paid in cocaine, much of which they smoke, giving their mother only part of their earnings. Many of these children drop out of school. It is now rare to hear villagers expressing an interest in improving the local school system, a favorite topic of conversation in the 1960s, when education was seen as a way out of San Calixto and its limited opportunities. At present San Calixto offers to many a far more attractive home than Bolivia’s cities with their appalling poverty.

One effect of the local development of the cocaine industry is that fathers find it difficult to get their sons to accompany them to their fields. Many of San Calixto’s teenagers prefer to spend most of the day drinking and smoking pitillos (a cigarette made of a mixture of marijuana and cocaine) while their parents work in the fields. When evening falls the young men go out into the surrounding countryside and work all night at processing the coca leaves into paste. A few of the villagers are now addicted to cocaine and live only to obtain money by any means possible for drugs, while others are occasional users suffering no apparent harm. Some individuals seem to have a psychological pre-disposition to cocaine addiction while others do not. Most of the cocaine users in San Calixto are young men, under the age of thirty, very few women smoke the pitillos. It is in the cities of La Paz or Cochabamba one can see the ravages of cocaine addiction most dramatically.

Since the late 1970s more stores and bars have opened in the village. Much of the increased wealth in the village is spent in the local bars, and alcoholism is now a much greater problem than it was during the 1960s. Local fiestas, last longer and are much more expensive than in the past. More troops of dancers, wearing costly costumes, dancing to the best bands from La Paz, are now involved in the week long celebrations. The consumption of smuggled consumer goods in the village is a new phenomenon and includes TV’s, cassette players, refrigerators, propane stoves, freezers, motorcycles, very stylish Italian track suits and Reebok athletic shoes. None of these commodities are of Bolivian or U.S. manufacture. This increase in expensive consumer goods has contributed to an increase in robbery and also to greater physical conflict within the community than was the case in the late 1960s. In contrast to what Henkel reports for the Upper Cochabamba valley, locally there is little evidence of peasant cultivators using their new riches to acquire more land or “green revolution inputs to improve their farming operations” (1986:67). This difference between the two areas is due to the facts that in the Yungas little cultivatable land is for sale and neither the local terrain or crops cultivated readily lend themselves to mechanization or other modernizing in-puts. These factors, and a local history of haciendas, contribute to a more limited development of socio-economic differentiation than Sanabria (1986) reports for the Chapare. This is of course not to argue that socio-economic differences do not exist in San Calixto, nor to argue these have not become more pronounced in recent years, rather that there is little evidence for dramatic qualitative changes.

San Calixto’s storekeepers have lost much of their former economic pre-eminence. Be-
fore 1970 they relied less than the local peasants on coca and more on the cultivation of coffee and citrus fruit. In the light of sharp decreases in the prices of coffee and citrus fruit during the late 1970s and 1980s this may be seen as a miscalculation on their part. Furthermore, since much of the storekeepers income was derived from the buying of coca leaf from clients, and its sale in the traditional market, the entry in the early 1970s of cocaine trafficantes (traffickers) meant a drastic reduction in their income. The cocaine trafficantes effectively challenged the storekeepers control over both the coca leaf and labor markets. The trafficantes seemed to have unlimited amounts of money to pay for coca leaf, coca paste and to young people willing to work as coca leaf buyers or as pisadores. The trafficantes profits from cocaine, several times as great as the profits made by the storekeepers, allowed them to replace the latter as well as the ex-hacendados as sources of credit for the peasants. The introduction of an alternate source of credit, which had played a crucial role in the establishment and maintenance of patron-client networks, profoundly affected internal political and economic relationships.

Another factor involved in the decline of the storekeepers fortunes is that they are simply not willing to take the great personal and financial risks it takes to become involved in cocaine trafficking. Their aspirations for wealth and power are more limited and have largely been satisfied at the local level. San Calixto’s storekeepers present position is reminiscent of that of the ex-hacendados in the 1950s and 1960s. The storekeepers and ex-hacendados were both satisfied with the status quo, unable and unwilling, to pay the high costs involved in adapting to a new economic world. Local economic development is curtailed by the strategies employed by the cocaine traders from outside the community. In order to minimize the economic independence of local villagers, coca traders often pay them for their coca or labor in such goods as Italian track suits, European designer jeans or Japanese cassette players rather than in cash.

The economic differences which existed in the 1960s within the peasant class, and even within the community as a whole, were not as great nor as dramatically visible to all as they are now. Villagers find it much harder to overlook a TV or a refrigerator owned by another villager than the older and more traditional forms of wealth. Although in the past, people often grumbled about the economic and political powers of the “forasteros” (outsiders), as the storekeepers were called, a degree of social acceptance and legitimacy was granted them not assigned to villagers now displaying their new found wealth.

During the 1960s the storekeepers were quite careful to “hide” their wealth which might have differentiated them too sharply from the majority of villagers. They did not live in big houses nor display a standard of living much higher than many villagers enjoyed. They generally owned a greater amount of socially acceptable goods rather than luxury items with no productive value. Goods, such as trucks, owned by storekeepers were seen as legitimate and essential to their role and status in the community. It is noteworthy that before 1970 that not one member of the local elite had a bathroom installed in their houses nor owned a propane fuelled stove or refrigerator. These were amenities many desired and most of the elite could have afforded. In terms of dress mestizo males were quite indistinguishable from that of all but the poorest members of the community. Only when they visited one of the province’s old colonial towns or La Paz did they dress in a manner which more accurately reflected their economic and ethnic status. Although
fictive kin ties between mestizo storekeepers and other villagers had many economic and political functions these also functioned to maintain the legitimacy of social relations within the community between competing groups. The storekeepers, much more that the ex-haciendados, were very aware of their tentative (guest) status in San Calixto.

It is hard to over estimate the impact of new consumer goods on the social life of the community. Television is very popular in San Calixto. Those villagers who own TV’s are very popular with their relatives and friends, several have also made a lucrative business from selling seats and soft drinks to paying customers. The impact of television viewing on the values, aspirations and world view of the people is great. Most popular TV shows are Brazilian and Mexican “novellas” (soap operas) which show an upper class life style and further stimulate demand for consumer goods. In the fields where men once talked village politics, gossiped about a local soccer match, or someone’s sexual escapades now the fate of novella characters are passionately discussed.

Much more than during the late 1960s an atmosphere of secrecy and suspicion pervades the community. People are afraid, with considerable justification, of having their newly-acquired consumer goods stolen by fellow villagers or their involvement in cocaine paste processing or trading revealed to government agents. The generation gap which has developed in recent years and a prevailing atmosphere of secrecy are connected. At present some of the local young people steal in order to support their addiction and others because they simply find it preferable to work in agriculture for a pittance. It is generally the younger villagers who know where the cocaine labs are located and who are most involved in illegal activities while most of the older, more affluent, villagers generally avoid involvement in these affairs. The older villagers, who are afraid of being robbed or killed, frequently criticize the youth of the village for their shortcomings.

In the political sphere profound changes have also occurred. The sindicatos (peasant unions), organized by the government following the Revolution of 1952, are moribund. There is none of the passionate interest in local, national and even international politics present in the 1950s and 1960s. The people’s interests now seem to be focused on satisfying their passions for the acquisition of consumer goods. A passion already present during earlier times but which then could not be responded to by the local economy.

The local cacique, like most other members of the elite not involved in the cocaine trade, has lost most of his political influence in village affairs now that he no longer dominates the local economy. During the 1950s and 1960s, the cacique could, with some justification claim credit for the establishment of the village’s school, construction of the potable water system, local road and electrification system. These obras (public works) he obtained for the village were expected from him in his role as a recognized broker with the national government. At the present time there is no one cacique in San Calixto. Instead, there are several contending factions, none with a monopoly on power, and lacking the access to governmental institutions once manipulated by the cacique. The leaders of these factions have been unable to establish a health clinic, expand the local school nor improve the potable water system, all changes long desired by the villagers.

At present San Calixto’s various political factions are primarily interested in protecting coca cultivation and coca paste production and consequently are in an antagonistic position vis-a-vis the national government. Bolivia’s national government in turn is under great
international pressures to curtail cocaine production. This position of course limits local political factions’ ability to gain obras (public works) for the village. The community’s various factions are also unable to organize the people to work collectively or to impose a property tax on home owners or a business tax on the various stores and traders operating in the canton.

The presence in San Calixto of a large variety of weapons is also a new phenomenon: revolvers, automatic weapons and grenades all contributes to factionalism and a political atmosphere which on occasion borders on anarchy. This is exacerbated by the presence of cocaine trafficantes, from Santa Cruz and the Beni region, who compete for access to coca and workers needed in the processing of coca paste. The trafficantes mostly blancos, also seek to minimize local village traders’ involvement in the more lucrative areas of the cocaine trade through threats and by informing on them to La Paz drug enforcement officials. The cocaine traffickers are of urban middle class background and are generally of higher social and ethnic status than the people of San Calixto. They have good connections with officials in the provincial and national governments which both give them a degree of protection and can be used to minimize competition. As a result of cocaine trade involvement several local youths are now in prison. Because of a high level of violence, many of the sons of San Calixto’s mestizo and blanco elite families have left the community for the relative safety of La Paz.

As San Calixto has become much more involved in the external world, many of the villagers have become more cognizant of their low social status as a result of abuses directed against them as Indians and negroes and also as peasants. For example, some young men having joined the military and police forces involved in drug control and local villagers generally believe they have been abused and even killed because of ethnic or class background. Many villagers have in recent years been exposed to the indiscriminate violations of their human rights by Bolivia’s military and drug control agents when these raided the community on several occasions. These raids did not lead to the eradication of coca bushes or destruction of cocaine refining laboratories but rather involved the physical abuse of men and women, and the theft of much personal property.

In discussing the social costs of the cocaine industry Henkel argues it has “led to widespread corruption among the military, police, and numerous government officials throughout the country” (1986:68). The Bolivian military, police and indeed all government officials, long before the cocaine industry was established, have traditionally been perceived as notoriously corrupt by Bolivians of all walks of life. Bolivia’s military and drug control officials are recognized as particularly corrupt and brutal by the villagers. The governments attempts at controlling coca cultivation and cocaine processing has done little to improve its image amongst the peasants. It might be better to argue that with more money around, corruption has reached unprecedented heights and has penetrated the countryside. However, Bolivia’s peasants, like those of Peru, are not without either political or military skills in dealing with those forces who seek to destroy their livelihood. Several years ago peasant syndicates from a neighboring town, organized and well armed, chased the military and police out of the villages and they have not since that time returned. At present the national government has no presence in San Calixto. The people of San Calixto now live in great fear that the national government will resort to the use of
herbicides, at the urging of the United States government, in an attempt to eradicate coca.

**Conclusions**

Bolivia’s 1952 Revolution, and the changes which flowed from this event, set the stage for the penetration of a modern capitalist market into the countryside. These market forces, controlled by a new entrepreneurial class, resulted in dramatic changes in the economic and political life of the country. San Calixto's economy, political structure, relations between generations and local values have all unalterably changed through its involvement in the cocaine market over the past decade. This is a new world, neither wholly made nor controlled by people at the local level, and whose future causes much anxiety amongst the inhabitants of San Calixto.

There have been both great costs and benefits as a result of the transformations caused by the cocaine boom in San Calixto. From the perspective of the peasant villagers however, the costs pale in comparison with the gains derived. In comparison, the social dislocation experienced by England’s working class during the early stages of the Industrial Revolution, the suffering of San Calixto’s inhabitants is minimal. Of course, Bolivia is not experiencing an Industrial Revolution but rather is responding to new demands for exotic stimulants from First World countries. Bolivians, like other people of the Third World, do not make bargains wholly on their own terms and are going to find the costs increasingly hard to bear as the benefits vanish. This too is part of Bolivia’s long history as a producer of raw materials for distant lands.
ENDNOTES


Local Impact of Cocaine Production in South America

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The Bush administration has identified three countries in South America for special attention in an effort to control cocaine production at the source. Although these countries, Colombia, Peru and Bolivia, are the major producers and processors of cocaine, narcotics traffickers have expanded operations throughout the northwest region of the continent. Attempts to control production of this chemical substance, both locally and with the assistance of drug enforcement officials from the United States, have forced traffickers to expand the area for coca leaf planting and to disperse locations of processing labs. However, these three Andean countries continue to provide most of the cocaine consumed in the United States and Europe. Recent events in both the consuming and producing regions have focused political attention again on the severity of this problem and the inability of several legal agencies to control adequately either supply or demand. This brief examination concentrates attention on those countries in the supply side of the political and legal argument in order to describe the local complexity of drug enforcement over which the consuming nations have little or no control.

Regions of Coca Leaf Production

In South American the three primary zones are the Chapare and Yungas regions in Bolivia and the Upper Huallaga region in Peru. Eighty percent of the cocaine imported into the United States is produced here in primary form as coca leaves. In recent years this crop has become the dominant focus of agricultural activity in these areas and provides farmers with their major source of income. Food crops are being abandoned in favor of coca.1

Bolivia’s economy has been transformed by cocaine production and profits from a formal sector, which has become a near fiction, to an informal economy in which cocaine has become responsible for nearly 80 percent of all forms of economic activity. Even contraband trade has become profitable and safe, with U.S. dollars becoming the common currency in Bolivia. The circulation of dollars has allowed the local economy to function more efficiently but has contributed to high levels of inflation.2

In the Peruvian Andes traditional coca leaf growing and transportation between forest regions and the highlands has been changed. Small amounts still are moved to satisfy highland demand but a larger amount is moved toward processing labs in the forest. This lucrative activity has affected migration to the coast for wages; many migrants return seasonally to the forest to work for higher incomes produced by transporting and processing coca leaves and paste through the underground economy. At this time there are no economic alternatives for the Andean Indian to substitute crops for coca. However, the number of people now involved in this informal economy has produced a cash dependence
that could prove difficult if disrupted.³

There are five secondary areas of production. In Bolivia, this is the east facing slope of the Andes near Santa Cruz; the Cuzco region of Peru; Cajamarca Department in northern Peru; the Colombian Llanos; and scattered mountain valleys of southern Colombia. Most of the remaining leaf production is located here and could spread as enforcement officials extend their control over production in the primary areas. The increase in coca leaf production in Colombia is an attempt to expand the supply of this raw product. Producers in Peru and Bolivia now understand the value added component in the price structure as the substance is processed into greater concentrations of cocaine.

The upper Amazon basin of Brazil is a more recent zone of coca leaf plantations. The full extent of leaf production is unknown but authorities continue to discover and destroy coca plants. It appears that these new areas of leaf production in northern Brazil represent trafficker anticipation of supply problems from Peru and Bolivia.

Because of its location between production and processing centers, Ecuador is in a particularly sensitive position and may not be able to avoid the “spillover” effects of increased drug activity or greater law enforcement measures in adjacent countries. Coca leaf production has never been a dominant activity in this country and recent attempts to create small plantations have been defeated by vigilant indigenous residents and police action. Indigenous organization in the tropical rainforest of eastern Ecuador has been particularly strong and an apparent commitment to long-term economic development of a lasting nature seems to have overcome ambitions of short-term wealth and its associated risk. In addition, the Ecuadorians have a major economic investment to protest, the lucrative oil fields in this region which have been responsible for most of the country’s export income in recent years. With the assistance of U.S. advisers and military equipment, police forces have managed to keep coca production under control.⁴

However, increased vigilance along the Ecuadorean border has not stopped the flow of capital and personnel from Colombia. Despite the capture of a few traffickers attempting to enter the country, authorities believe that many ranking members of the cocaine cartels may be residing in Ecuador. Recent purchases of real estate with prices well above recent market value and the availability of dollars are indications that cocaine capital and influence are relocating in this perceived “safe” country.⁵ Another direction of this exodus may be toward Brazil.

Economic and Social Significance⁶

The cocaine industry in South America also includes chemical refinement of the product into an increasingly pure form which requires transportation to laboratories and, ultimately, transportation north to centers of consumption. The value added during this stage of refinement could be twenty times the original purchase price of dried coca leaves from Bolivia and Peru. This highly purified form of cocaine is most economical to transport to consuming countries where it is diluted for street sale at enormously inflated prices. Production, transportation and management of this product may constitute the largest informal or underground business activity in the world. Billions of dollars are exchanged, the labor and management numbers may be in the thousands and the formal economy benefits from this business activity through infusions of capital. However, the risk factor

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is so high that participants are forced to protect their interests in a manner that disrupts the normal functioning of society. Corruption and intimidation are the usual byproducts of this system and the public attitude about cocaine as a moral issue is affected by the enormous economic scale of this activity throughout a nation. Consequently, the insistence by U.S. narcotics officials on control of cocaine production at the source has become increasingly difficult to enforce. Cocaine has blurred the difference between legal and illegal activities.

Cocaine represents an important source of income for the Andean countries. About one third of U.S. sales of this product returns to South America, perhaps $1.5 to 2 billion dollars. In Peru and Bolivia, cocaine is the most important producer of export income. Coffee may rank higher in Colombia, unless international coffee agreements fail and export prices fall.

Jobs are provided by the cocaine industry, both licit and illicit. Perhaps one million people are involved, from actual cultivation through refining, transportation and related occupations in the legal sector who benefit from the multiplier effect. Much income generated by this industry is invested in legal business, some of which have a developmental orientation such as crossbreeding cattle or attempts at improving cotton or sugarcane yields. It appears that cocaine income is financing portions of the formal economy which cannot be financed by the governments. In Bolivia and Peru this income partly compensates for losses in international lending, aggravated by the inability of these countries to repay external debts.

For a large portion of Andean society, economic expectations have increased, from the higher incomes of rural coca leaf growers in Peru and Bolivia to the societal respectability achieved by families with new wealth. In Colombia, the cocaine elite consider themselves to be an emerging social class rather than criminals or revolutionaries. They wish to align themselves with existing oligarchic groups whose politics are to the right. As with so many members of this exclusive group, the new owners of wealth invest abroad or hide currency in tax havens in Central America or the Caribbean. Little of the portion invested locally is placed into mining, manufacturing or transportation, the “core” industries.

**Political Impact**

Economic power or anticipation of a positive change in lifestyle has generated political strength among the coca leaf growers. To complicate matters, coca leaf production is a legal activity in Peru and Bolivia, despite efforts to limit acreage. Therefore, growers are organized and are well represented in national government. In Bolivia, they have a combined representation of one third of the Chamber of Deputies and they are backed by left and far-left political parties. In Peru, the growers’ strength is less but they dominate those regions where coca is produced, the Upper Huallaga Valley. This leftist leaning group is supported by the *Sendero Luminoso* guerrillas whose influence has increased because they have denounced plans to eradicate plants with herbicides. Their combined strength has been demonstrated by mass civil protests as well as sabotage. In Bolivia, coca farmers and their supporters have protested U.S.-Bolivian drug policies by totally blockading the third largest city in that country—Cochabamba. Therefore, U.S. attempts to reduce production at the source may be an unenforceable policy.
In addition to the political power of the producers are the criminal syndicates that handle all cocaine refining activities beyond production of the coca leaf. Colombia is the center of this phase of the industry, especially the cities of Medellin and Cali. The organizers of these refining, smuggling, and distribution operations are well-known as members of the extradition list circulated by the U.S. Drug Enforcement Agency. At the moment (1989) these syndicates are at war with the government of Colombia and their political agenda is designed to block the extradition system by disrupting the justice system and attacking leftists.7 Their financial strength has allowed them to influence every national institution. Some syndicate members have gained popular respect by financing public works projects. The purchase of influence has an international dimension in the protection of transportation routes to the United States and Europe. Political affiliations and sympathies differ with position in the vertical integration of the cocaine industry. Coca growers in Peru and Bolivia are aligned with the left and have the protection of guerrilla forces operating in the rural areas. Sendero Luminoso may be exploiting anti-eradication policies of the government but these forces also may be financing arms purchases with drug money.

In Colombia where field labor is minimal and activities involve higher management decisions with consequent increases in income, the producers have aspired toward "establishment " positions in the social hierarchy. Investments in land have aligned this group politically with the large hacienda oligarchic class who have been targets of the rural guerrillas. Extortion was common until cartel members brought private armies to protect their interests which may have included cocaine processing labs. Rural violence pitted owners against guerrillas and produced a dirty war that involved massacres of peasants who collaborated with the rural leftists forces. Police, military, landowners and businessmen became sympathetically if not actively involved in rural control of guerrilla groups. It appears that the major cartels obtain their cocaine paste from Peru and Bolivia while guerrilla groups are partly responsible for expansion of coca planting in the Llanos and Amazon regions of southeastern Colombia.

Some conflict between the traffickers and guerrillas is apparent in Peru but the Sendero Luminoso appear to have control of the coca-producing regions.

Some Disturbing Conclusions

The production of cocaine in South America is an existing industry. Its economic prominence is a response to the great demand for this product and the success of the cocaine industry as a business venture is undeniable. Its success has influenced the economic, political, and social sectors of several nations and has utilized both the formal and informal organizational structure of business. There have been occasional suggestions to promote legalization of this substance but dominant opinion favors stricter control which implies police, perhaps military action, in producing countries. Human consequences of cocaine abuse have not been addressed here, but availability of this substance in South America is creating greater concern because of increasing use and addiction.

At this time civil disturbances in Colombia appear to have generated an official response. That country appears to be near a civil war which, if true and if conducted to a military decision, could theoretically place in power a government of criminals, as defined by nations whose legal systems consider cocaine production to be a crime. The serious-
ness of this theoretical scenario is strengthened by the realization that many citizens in cocaine-producing countries support production of this chemical, that its agricultural importance is protected in two countries, that some people consider the income generated by this activity to be locally beneficial and economically important for the underprivileged, that officials in several agencies formally and informally participate in some phase of this business, and that some people view the income generated by cocaine as partly offsetting the negative impact of the external debt and, therefore, may have positive developmental applications. Production has simply responded to demand and some responsible analysts of hemispheric problems, such as members of the Inter-American Dialogue, have linked solutions to reduction in demand, especially in the United States.\textsuperscript{8}

If current efforts succeed in the consuming countries to drastically curtail use of cocaine, the producing countries may suffer severe economic consequences. According to Rensselaer Lee, hard currency reserves would become depleted, massive unemployment would occur, crime and subversion would increase in rural areas causing a new flood of migrants to urban areas. Present political systems would be threatened by these problems. So long as the demand exists for this substance, methods will be found to produce cocaine for the United States and other countries.

Solutions require an international approach with an understanding that the internal societal structure of some Latin American countries may continue to be seriously affected. Subsequent political directions of threatened societies could reverse the recent return of several countries to democratic government. The profitability of cocaine has undeniably influenced the economic structure of producing countries. Every proposed solution, from reduction in production to reduction in consumption, will inevitably reduce the flow of dollars to Latin America and may be responsible for a new wave of economic chaos.
ENDNOTES

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