INTERNATIONAL DRUG PRODUCTION AND ITS RELATIONSHIP TO THIRD WORLD ECONOMICS

A PAPER PRESENTED AT THE AMERICAN SOCIETY OF CRIMINOLOGY MEETINGS, SAN FRANCISCO FALL 1991

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Foreword:

This paper formed the basis of the presentation at the American Society of Criminology Meetings in San Francisco, Fall 1991. It was created in response to an attempt to ascertain the relationship between drug production and the traditional economies of the opium and coca producing countries where illicit drugs are produced. Unclassified information was obtained from government agencies, and combined with information from a variety of public sources. The desire was to develop more specific information relating to the actual or estimated value of drugs for specific countries. Information was obtained from the government which noted the approximate amount of land under cultivation, and projected yields and estimated value per kilo for opium or coca. However, no single unclassified publication detailed the actual value of drugs for a country by country comparison to the legal Gross National Product or Gross Domestic Product. The author notes that all the data is based upon estimates and that this implies that the methodology is not as reliable as it might be; a fact noted by all government agencies who work in the field of drug analysis.

A generalized overview of drug production and the characteristics associated with drug producing countries are an integral component of the paper. Geographical profiles of each country plus a concise description of their illicit drug economy is included. Two sets of tables have been produced, through the author's calculations. The first set of tables illustrates the estimated value of the crop, while the second notes the value of the crop and compares it directly to the legal economy of each country. Detailed information pertaining to attribution of sources is given in the end notes.

The conclusions suggest that the amount of money derived from drug production cannot be matched in the legal economies of the drug producing nations. The possibility of controlling illegal drug production within these countries is not a realistic goal against the power of economic interests within these countries.

Author's Background:

The author is a social anthropologist - sociologist with publications and papers in criminology, sociology, anthropology and higher education. In addition to full-time teaching at the college and university level since 1967, the author has engaged in cross cultural research in a variety of settings both at home and abroad. Currently, the author is entering his thirteenth year of fieldwork within the criminal justice subculture as a detective with a police department in Northern California. He has seen drugs on the street, and has worked on a homicide of an international drug broker who was killed in another jurisdiction.

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INTRODUCTION:

The study of drug production can be linked to the economic adaptation of specific geocultural areas within countries and regions. The advent of contemporary data bases, access to information relative to economic production in both the illicit and legitimate market economies of nations, and regions allows cultural anthropologists, cultural geographers and others the opportunity to view the impact which illegal drug production has upon a region, country, or a populace.

This essay will attempt to create a picture which will place drug production within a macro-context by illustrating certain broad similarities which the drug producing countries have in common with one another. A Geographic Profile of each country will be presented, it will contain a concise description of: Land Area; Population Size; Climate; Terrain; Natural Resources; Infant Mortality; Life Expectancy; Ethnic Divisions; Language; Religion; and Economic Features. The latter will address either the Gross Domestic Product, or Gross National Product, depending upon the availability of the data.1

DATA BASES

One of the most widely distributed unclassified geographical data bases pertaining to countries has been produced by the Central Intelligence Agency; it is called the World Fact Book.2 It will serve as one of the primary sources for this examination of drug production, in that it

contains data which has been standardized, and is used by a variety of research groups both within and outside government. The estimated monetary value of illegal drug production is not identified nor is it figured into the GDP or the GNP, or per capita income within the profiles found in the World Factbook.3 However, the fact that specific countries are producers is cited within the World Factbook.

Information concerning drug production and the estimated value of drugs on a country by country basis is available from several public sources within the Federal government including the State Department Bureau of Narcotics Matters and the Drug Enforcement Administration. Data from the cited sources was combined with references from the popular media with the resulting picture reflecting a detailed view of the pattern of drug production. It was necessary to create new statistical information by combining data from more than one source and to extrapolate.

GENERAL CHARACTERISTICS

The estimated value of local drug production within many of the drug producing countries suggests that a considerable portion of their economic bases are supported by production and trafficking. Countries which have been identified as sources of illegal opium are: Afghanistan, India, Lebanon, Turkey, Iran, Mexico, Guatemala, Burma, Laos, Cambodia, Thailand, and Pakistan. Those countries which have a reputation as coca producers are: Peru, Bolivia, Colombia, Ecuador, and Brazil. Colombia has

controlled the largest number of facilities for refining coca paste and base into cocaine plus the international networks for distribution. The pattern suggests that more and more emphasis is beginning to be placed upon refining in the countries where illicit drug crops are grown and harvested, this includes both opium and coca.4

COMMON THEMES

Almost all the drug producing countries are Lesser Developed Countries, with central governments that tend to have the ability to exert authority in the urban areas more than they have been able to exercise authority over the rural sectors. These countries have a very low per capita income, low gross domestic product or low gross national product, and are stratified with the majority of the population classified as poor. Many of the countries have economies that are based around subsistence agriculture, with low levels of development. Education, life expectancy, infant mortality, and other traits associated with these countries fall into the expected range,i.e., extremely low when compared to developed countries. Most display a common pattern of rural, ethnic and cultural isolation from the government. This is the norm for the majority of the drug producing areas within the specified countries.

Ironically, as governmental infrastructure including roads, airstrips, and motor vehicle transport have come to the more remote rural areas, the ability of these regions to produce, and distribute more of their illegal crops appears

to have increased. The spread of governmental agencies,e.g., police and military have frequently correlated with an increase in drug trafficking. In a number of cases, military and police are alleged to have been in league with individuals who are tied to trafficking. There are numerous instances where druglords have their own armies which are outside the control of the governments of individual countries and which are financed primarily through trafficking in drugs.

Paradoxically, the developed countries have frequently furnished the hardware and financial support for the increase in the infrastructure of the governments of many of these countries. In some instances, aid of this nature has been tied to geopolitics and spheres of influence sought by the developed countries who for much of the twentieth century were divided into those who were Communists and those who were opposed to communism.

Several examples of western interaction with lesser developed countries for the purpose of fighting communism appear to have resulted in increased drug production within specific regions where drugs became a vehicle for raising revenue to wage war as well as to increase the power base for local leaders whose loyalty was needed. The Golden Triangle region in Southeast Asia; Afghanistan, and a number of areas within Central and South America have been labeled as examples of this type of phenomenon.5

The Communists were also conversant with the value of drugs as a producer of revenue and utilized drug production as a method of obtaining funds for their spheres of influence both within the areas of drug production and in more remote processing and distribution centers. Peru, Guatemala, Colombia, Burma, Thailand, and Laos, are examples of countries where specific local regions have furnished funds through the production of drugs for political and military movements or individuals identified with the Left.6 Countries like Lebanon, illustrate that drugs have been used as a source of revenue to fund a variety of sectors within the economy, including militias for many of the factions involved in the fighting within the country.

Isolated populations generally attach a high value to manufactured goods from the outside world; these items become more obtainable via the earning of money through the production of drug crops. The perceived value of sewing machines, bikes, watches, stereos, motorcycles, trucks, and machine produced items are generally greater in the more remote locales of the world. The development of a labor force which is employed in drug production is a normal phenomenon within the countries where drug production is a part of the economy. This encourages a specialization of labor, and a new opportunity for the labor force to be paid a higher wage for work in drug related occupations.

SOCIAL STRATIFICATION

Increased opportunities for poor people to acquire capital and assets are presented to those who want to participate in the drug industry. The rewards are not great for small rural growers and processors; but within a local subsistence, or pre-industrialized economic base the actual change in their living conditions can be readily observed. The opportunities for the acquisition of capital through participation in the drug industry is directly related to prior economic positioning within the system of social stratification.

A major concentration of the wealth from drugs is contained within the pre-existing upper classes and a small middle class, with few opportunities for real or large scale class upward mobility for the poor in the drug producing nations. There have been instances, few in number where poor people have become wealthy. However, it is the power elite who benefit to the greatest extent, because they control the infra-structure of business, banking, and the governmental sectors in the countries. Revenue from the drugs comes back to the legal sector which is already in place. Narco traffickers have to deal directly with the legal sectors, in order to use their assets.

Narco dollars within production areas have a very real impact upon the quality of life for the poor. Large traffickers rely upon the hopes of the poor to encourage the creation of a large pool of workers who are ready to work in

the drug industry. Some traffickers go to the extent of creating an alternative social security and educational system, including health care. The goal of this sort of endeavor is to create a loyal work force. When governments seek to move into rural areas to wipe out drug production, it is not unusual for the local populations to shield the drug traffickers. Many workers view the traffickers as the only source of jobs which can produce real income and don't want to lose their access to the opportunities which working in the drug industry gives them.

The lure of financial gain is all important for the larger traffickers; but for poor farmers and workers gain is measured in obtaining resources to finance a few more basic items; including food, clothing, medicine, and even school books for children. Most areas where drugs are produced are economically depressed. Drug prodution and the corresponding economic alternatives or incentives create a climate where some of the poor can see for the first time the possibility of changing their lives. Ethnic divisions within the drug producing countries are common, with those individuals who reside in the remote drug producing regions frequently belonging to ethnic minorities who are sometimes viewed or labeled as inferior by the dominant ethnic groups who control the government and commercial centers.

CULTIVATION

Coca and opium are derived from plants; before the substance can be extracted the plants must be cultivated. This involves the use of horticulture. A generalized description of practices follows: Horticultural techniques frequently make use of the pattern of slash and burn; where a plot of land is prepared for cultivation by using fire and cutting.7 This procedure is particularly useful in areas where the land must be cleared of competing plant forms which would either limit the amount of sunlight, or divert nutrients in the soil, or take up space more appropriate for the plants which are the source of the drugs. Slash and burn takes place at specific times of the year; when the appropriate opportunities exist for cutting the vegetation, and burning the ground cover. This means that the ground will be bare before the planting.

The possibility of erosion taking place within a slash and burn system is high. It is a technique which causes erosion on hillsides when too much rain occurs before the plants have reached sufficient size to hold the soil. The majority of land under cultivation for drug cropping is marginal, and prior to drug cropping the land has not been used to grow large amounts of crops which have a high commercial value in the legal marketplace. The cultivation of illegal crops increases pressure on marginal land, with the long-term implications not fully understood or documented by geographers, anthropologists, and agronomists.

Most slash and burn systems are linked to an abandoning of the land, for a period of time after cultivation has drained many of the nutrients from the soil.

The primary techniques of cultivation require hand labor, with very little mechanization introduced for the growing of either coca, or opium poppies. However, chain saws are in some instances a valuable asset in the slash and burn system of plot preparation, their use is gaining in popularity in regions that are forested. The preparation of the land is labor intensive. It is common for poor farmers to sell or trade their labor for specific jobs or periods of time while land is being cleared for an area where drugs are to be grown.

A significant input of human labor must be devoted to readying the fields (whether one is planting coca or opium poppies), and to accomplish that task many growers have to hire workers. Even in regions where extended family and clan ties are strong, it is not unusual to obtain additional help during certain times of the year thereby creating jobs for the local population.

COCA PLANTING

The planting of coca utilizes two methods which are determined by the season of the year in which the planting is to take place. During the period when rainfall is present, the coca plants are grown under some type of cover. When they reach a specific stage of development the small plants are replanted after the rain has abated. In the dry

season or the "less wet" season... germination in the fields is practiced. Rainy season planting would increase the need for human labor because of the two plantings and the need to water while undercover before the small plants are placed into the ground.8

Coca leaves can be harvested up to four or five times a year. The plants can produce leaves for years. The leaves of the coca plant are generally picked, transported, sometimes dried and stored. They can be processed into coca paste, or coca base while in a fresh state or stored and used at a later time.

The techniques of cultivation and many of the tools which are used to produce coca are part of the earlier cultural traditions in the coca producing regions. Historically, coca leaves were chewed with lime to release the chemical stimulant or used in a coca tea. Anthropologists and cultural geographers have noted that coca leaf chewing was an integral part of many of the cultures where coca is now produced and sometimes processed into cocaine. A number of countries have legal coca production; a certain amount of the legal crop is diverted into illegal trafficking because the rewards are much greater. The growing, distribution, and processing of coca when it is destined to be turned into cocaine or a precursor product is illegal in the same countries.

COCAINE PROCESSING

The processing of coca into paste, coca base and cocaine hydrochloride requires the use of chemicals, some of which are extremely toxic. Commonly used chemicals for processing coca leaves into coca paste, coca base, and cocaine hydrochloride are: sulferic acid, sodium carbonate, kerosene, ammonia, gasoline, acetone, ether, hydrochloric acid, and lime.9 Industrialized nations have been supplying the chemicals used in processing to cocaine producing countries in volumes where the recipient countries don't have the industrial infrastructure to utilize the chemicals in a legal fashion.10 The processing of cocaine has created another market for chemical manufacturers most of whom insist that they are not involved in the drug industry.

No concern for the habitat or the biological risks which workers take is present. The chemicals used in processing the coca leaves into cocaine find their way directly into the ecosystem and come in contact with the bodies of the workers in the processing pits and laboratories. Workers who spend time in and around the pits frequently have blisters or sores on their bodies from the action of the chemicals. Virtually no research into the long term impact of worker exposure to toxic chemicals in the drug industry has been done. Damage to the ecosystem might be expected in those areas where processing has been common for the last decade.11

The initial stages of processing takes place in the areas where the leaves are harvested, the resulting products are called coca paste or base depending upon how far the product is processed. The resulting product is generally transported out of the region where it was grown and underwent the initial stages of processing. It is then shipped to more specialized processing centers where the paste or base is processed into cocaine hydrochloride or white cocaine powder.

Colombia has been known for this type of activity, serving as a center for coca which is produced in Peru, Bolivia, Ecuador, and Colombia. Today, most of the countries in the region have a limited but growing capacity to refine coca into the more profitable products. A significant number of jobs have grown up around all phases of the growing and processing business, including transportation, and the selling of supplies.

OPIUM PLANTING

Opium poppy seeds are usually planted directly into holes which have been punched or dug into the soil. Some growers use seedlings. Here again, hand labor and slash and burn are usually the norm. The cultivation techniques of opium require that the plants must be thinned and weeded before harvesting. Harvesting consists of making small cuts on the opium poppy bulb at the appropriate time in its life cycle. It is sometimes possible to tap individual plants up to six times during the harvesting period. In some regions

there have been attempts to obtain two distinct harvest and planting periods during the same year.

Raw opium gum is released and forms a sticky residue at the site of the cut. The resulting gummy material is gathered up and must be refined and treated with chemicals before it becomes heroin or morphine. Raw opium can be smoked and has been used by some local populations within their traditional cultures for several thousand years. The length of time that opium has been present in the opium growing regions varies from several thousand years to less than fifty years.12

In Southeast Asia, Southwest Asia, Mexico, and Guatemala, the cultivation is primarily by hand; with the use of traditional horticultural implements, e.g., the digging stick, punch plow, or the hoe. In some instances animal labor is used to till the soil with a plow, and in even rarer cases small tilling machines are employed. It is common for members of a community to participate in the planting, upkeep, and harvesting of the opium poppies.

Opium from the areas is generally processed within a short distance of the growing area into opium base and then into heroin of different grades. A number of stages are present in the processing, with the opium identified as a distinct commodity with a value for each stage or grade of the process. The further removed the refined product is from the original raw opium, the higher the value of the product.13 The product also increases in value, because of

cutting or dilution. The closer it gets to western society, the higher the value.

All the above culture areas have the capacity to refine opium into heroin, and all export differing grades of opium base and heroin. India, and Turkey have opium fields which are legal; illegal production still takes place but is felt by many experts to have been dramatically reduced in volume.14 Legal production in these two countries is controlled by their respective governments and helps to supply part of the world's needs for opium which can be employed to make a variety of (legal) drugs used in medicine.

PROFILES OF COUNTRIES:15

AFGHANISTAN: Total Area: 647,500 km2

The climate is arid to semiarid; cold winters and hot summers, with a terrain that consists of mostly rugged mountains, with plains in the north and southwest. It has natural resources of: natural gas, crude oil, coal, copper, talc, barites, sulphur, lead, zinc, iron ore, salt, and precious and semiprecious stones. The population is estimated at 14,825,013, with an infant mortality rate of 173 deaths per 1000 live births, and a life expectancy at birth of 43 years for a male and 42 years for a female.

The country has major ethnic divisions with the following groups being represented: 50% Pashtun, 25% Tajik, 9% Uzbek, 9% Hazara, with the remainder divided among Aimaks, Turkmen, Baluchi and other groups too small to identify. The religions are represented by the following groups: 74% Sunni Muslim, 15% Shi'a Muslim, and 11% other. Languages which are commonly found within the country: 50% Pashtu, 35% Afghan Persian, 11% Turkic languages (UzbeK and Turkmen), 4% minority languages primarily Baluchi and Pashai with much bilingualism.

Approximately 67.8 % of the labor force is engaged in agriculture and animal husbandry. Agriculture is the most important component of the economy. It supports about 80% of the population and accounts for about one third of the legal exports. The Gross Domestic product (excluding drugs) was estimated at 3.1 billion dollars, with a per capita income of 220 dollars. Two thirds of the population relies upon the raising of livestock for a major portion of their

economic support. The country is identified as an illegal producer of opium for the international trade.16

DRUG PROFILE

Afghanistan is a major supplier of opium and heroin. In 1988, it produced between 700 and 1000 metric tons of opium gum, it was cultivated on approximately 23,000 hectares of land.17 The value of the raw opium which was produced in 1988 using the 1987, and 1988 prices for raw opium for Afghanistan and Pakistan before refining are displayed in (Table I).

Processing adds considerable value to the product. The most basic stage of processing is when morphine base is refined from the raw opium. The wholesale value of morphine base in 1987, and 1988 in the same border region at the laboratories was between $2,000 to $3,500 per kilogram.18 Table (II) illustrates the value of the 1988 production in the price for the drugs which was available in 1987. The value of heroin at the laboratory sites in Pakistan / Afghanistan ranged from $4,000 to $6,000 per kilogram for 1987. However, the value increased from the high of $6,000 per kilogram at the laboratories on the border up to $10,000 per kilogram in Peshawar, Pakistan. The same morphine base when converted to heroin by Middle Eastern laboratory brokers exhibited a price range of between $5,000 to $16,000 per kilogram. The wholesale value upon entrance to the United States from both sources ranged between $70,000 to $200,000 per kilogram with an ultimate street value of cut

heroin ranging between $500,000 and $2,500,000 per kilogram.19

It is unknown, to what degree local dealers in-country are involved with receiving a share of the profits once the heroin or morphine is taken out of the country. The data suggests, that a rather large amount of money is eventually generated by the drugs produced in the border region between both Pakistan and Afghanistan.

Afghanistan has no narcotics enforcement program and does not ban the production of opium poppies. The current civil war does not lend itself to the control of the many activities of the people who live in the remote regions of the country. The prime area where drugs are grown and produced is along the border with Pakistan. The climate and soil conditions are ideal.

The independence of the ethnic tribes on both sides of the border with Pakistan and Afghanistan, coupled with the amount of weapons, and the needs for revenue have curtailed any idea of narcotics control. The tribal areas are virtually independent of the governments of Pakistan and Afghanistan. There is conflicting information from a variety of sources as to the degree of involvement of the various anti-communist groups in opium production and heroin laboratories. A number of sources have suggested that the war in Afghanistan has encouraged trafficking and production to expand.20 No information was obtained relative to the

communist government and their possible involvement in drug trafficking.

As pressure in Pakistan was exerted against opium production, many of the refineries for heroin simply moved across the border.21 There is little opportunity for other crops to generate the income that opium production can achieve for the tribes people on both sides of the border between the two countries. Opium production, and the refining of raw opium into more lucrative commodities will continue to be a source of cash for the people who inhabit the frontier areas, as well as traffickers with more connections to the outside world.22

INDIA: Total Area: 3,287,590 km2

The climate varies from tropical monsoon in the south to temperate in the north, with a terrain that consists of upland plains in the south, flat to rolling plain along the Ganges, deserts in the west, and the Himalayas in the north. It has natural resources of: coal, iron ore, manganese, mica, bauxite, titanium ore, chromite, natural gas, diamonds, crude oil, and limestone. The population is estimated at 833,421,982, with an infant mortality rate of 91 deaths per 1000 live births, and a life expectancy of 57 years for males, and 58 years for females.

The country has major ethnic divisions with the following groups represented: 72% Indo-Aryan, 25% Dravidian, and 3% Mongoloids and other ethnic groups too small in numbers to identify with percentages. The religions are: 82.6% Hindu, 11.4% Muslim, 2.4% Christian, 2% Sikh, .7% Buddhist, .5% Jains, and .4% other denominations. Languages which are common to the country are: Hindi, English, and 14 other spoken languages which have a million or more persons each. Hindi is the national language and primary tongue of 30% of the people. Hindustani is a form of Hindi which combines Urdu/Hindi and is spoken in the the northern sectors of the country. English is an important language and enjoys widespread acceptance in government, science, industry and commerce.

Approximately 67% of the labor force is engaged in agriculture. Agriculture is the most important sector of the economy. India is one of the 20 poorest nations in the world; it has been able to become self-sufficient in cereal or food grains, and has even created a significant export

market for certain agricultural products. Rice, other cereal grains, oilseed, cotton, jute, sugarcane, tobacco, tea, coffee, and the legal and illegal production of opium for the international marketplace rank as the leading agricultural exports. The Gross National Product (excluding drugs) was estimated at 231 billion dollars, with a per capita income of 290 dollars in 1987. 23

DRUG PROFILE:

India serves as a major center for legal opium production. A number of researchers suggest that between 10% to 50% of the legal production is diverted to the illegal trade.24 This equals approximately 60 to 300 metric tons of opium gum, i.e., if one uses the figure of 600 tons of opium gum which was produced for the legal trade in 1989.25 South West Asian heroin in 1988 was selling for $70,000 to $200,000 per kilo to wholesale importers as the drug entered the United States before it was marked up for other wholesalers or retail distribution.26

India has been identified as a major refiner of opium from Pakistan, Afghanistan. It is unknown, to what degree Indian refiners and wholesalers are able to capture the value added profits of opium produced out of the area.27 Bombay and Calcutta are the primary ports for trafficking. India has a reputation for being a major transit point for drugs.28

The widespread poverty, the vastness of the country, and other factors create an ideal climate for participation in international trafficking. At this point in history, India does not appear to have the internal resources to stem the leakage of drugs from the legal cultivation, nor does it have the ability to stop refining or export. Table (III)

illustrates the value of the raw opim gum to India for the period of 1989.

IRAN: Total Area: 1,648,000 km2

The climate ranges from between mostly arid or semiarid to subtropical along the Caspian coast, with a terrain that is rugged, moutainous rim, high central basin with deserts, mountains, and small plains along both coasts. The country has natural resources of: petroleum, natural gas, coal, chromium, copper, iron ore, lead, manganese, zinc, and sulfur.

The population is estimated at 53,866,523 with an infant mortality rate of 113 deaths per 1000 births and a life expectancy of 57 years for males, and 57 years for females. The major ethnic divisions are: 63% Persian, 18% Turkic, 13% other Iranian, 3% Kurdish, 3% Arab, and other Semite. Denominations include: 93% Shi'a Muslim, 5% Sunni Muslim, 2% Zoroastrian, Jewish, Christian, and Baha'i. The languages which are common to the country are: Farsi, Turki, Kurdish, Arabic, English, and French.

Petroleum acounts for 90% of the exports, with carpets, fruits, nuts, hides making up a small export market. In addition domestic agriculture focuses upon: wheat, barley, rice, sugar, beets, cotton, dates, raisins, tea, tobacco, sheep, goats, with opium produced for the international drug trade. The GNP is 93.5 billion dollars with a per capita income of 1,800 dollars.29

DRUG PROFILE

Iran has made the trafficking of drugs into a capital offense for those individuals who are caught with more than an ounce of a banned substance. They appear to be quite serious about stamping out drugs in their culture.30 However, not all areas are controlled by the central government. The regions where the Kurdish minority resides is thought to be a hotbed of drug smuggling, with opium being produced locally as well as opium in-transit from Afghanistan and Pakistan. The estimated range of opium production was placed at between 200 to 400 metric tons of opium gum for 1988.31 Table (IV) demonstrates the value of the raw product for the same time period.

Smuggling has been a tradition in the border areas between Iran and the following countries: Pakistan, Afghanistan, Soviet Union, and Turkey. Several authors have contended that cartels from Istanbul are heavily involved in the running of large scale smuggling operations in the border areas, and that most of the opium which is in transit is controlled by the Turkish based cartels.32 The long war between Iran and Iraq diverted resources away from drug enforcement in the remote regions. It remains to be seen if the central government will be able to stop opium production and smuggling in the Kurdish areas, particularly given the history of smuggling in the region and the characteristics of the terrain.33

PAKISTAN: Total Area: 803,940 km2

The Climate is mostly hot, dry desert with temperate climate zones in the northwest and arctic zones in the north. The terrain consists of a flat plain (Indus) in the east, mountains in the north and northwest, and a plateau (Baluchistan) in the west. It has natural resources of: iron ore, copper, slate, limestone, limited crude oil, low grade coal, and extensive reserves of natural gas.

The population is estimated at 110,407,376, with an infant mortality rate of 120 deaths per 1000 births. The life expectancy is 54 years for males, and 55 years for females. Major ethnic divisions are: Punjabi, Sindhi, Pashtun (Pathan), Baluch, Muhajir (immigrants from India and their descendents). Religions which are represented include: 97% Muslim, (77% of which are Sunni, 20% identified as Shi'a), 3% Christian, Hindu and others. The languages which are spoken are: Urdu and English (state), 64% Punjabi, 12% Sindhi, 8% Pashtu, 7% Urdu, 9% Baluchi and others, with English being the common language of the government.

Approximately 54% of the labor force is engaged in agriculture. Agriculture is an important sector, it accounts for more than 25% of the GDP, and employs more than 50% of the workforce. The Gross National Product was estimated at 39.5 billion dollars, with a per capita income of 370 dollars. Its major agricultural commodities are: cotton, rice, wheat, sugarcane, fruits and vegetables along with the production of opium for the international drug trade.34

DRUG PROFILE

Pakistan is known to be a major producer of opium, its primary region for opium production is located in the tribal areas of north-west Pakistan. Data pertaining to actual figures for production varies, with a range of 190 to 220 metric tons of opium gum being an offical United States government estimate for 1988.35 The value of the raw opium gum for this amount of production at the border refineries is shown in Table (V).

The opium processing laboratories are crude but effective. It would be exceedingly difficult to take them out of production. Given the fact that Pakistan is more developed than Afghanistan, it is obvious that groups of traffickers within Pakistan are able to accumulate profits not only from nationally produced opium and heroin, but also the opium produced within Afghanistan. The drug war in Pakistan has been less than successful, allegations of widespread corruption, and the political instability within the region have not created a climate where drug supression can work. It would destroy the economic base for too many people particularly in the more remote frontier areas which have a great deal of freedom from the Central government. Some journalists both inside and ouside of Pakistan, claim that various governmental officials including the military have been involved in trafficking.36

TURKEY: Total Area: 780,580 km2

The climate is temperate with hot and dry summers coupled with mild wet winters, the interior regions of the country have a harsher climate. The terrain is mostly mountains, with a narrow coastal plain, and a central plateau (Anatolia). It has natural resources of: antimony, coal, chromium, mercury, copper, borate, sulphur, and iron ore.

The estimated population of the country is 55,355,831 with an infant mortality rate of 80 deaths per 1000 live births and a life expectancy of 63 years of age for males, and 66 for females. Major ethnic groups which are found include: 85% Turkish, 12% Kurd, 3% other. Religions which are present: 98% Muslim (Sunni), 2% other mostly Christian and Jewish. Turkish is the official language, with Kurdish and Arabic having a number of speakers.

Approximately 56% of the workforce is engaged in agriculture, it accounts for approximately 25% of the country's exports. The Gross Domestic Product is 62.6 billion dollars, with a per capita income of 1,180 dollars. Agricultural crops which are produced; cotton, tobacco, cereals, sugar beets, fruits, nuts, livestock products, a legal producer of opium for the pharmaceutical trade.37

DRUG PROFILE

The official policy of Turkey is to control the production of opium poppies by turning all production into legal production and by buying the crop directly from the producer. All stages of the legal production are checked by government officials who are trained to detect leakage into the illegal marketplace. There are no reliable figures on illicit opium production. The Turkish government insists that none exists. It would appear that Turkey has some importance in the international trafficking of opium.38 Drug laboratories are found in Turkey. A number of drug seizures in Europe, and the United States can trace the source of some of their drugs to laboratories and traffickers in Turkey.39

The geographical proximity to Europe, and the drug producing areas of South West Asia tend to place Turkey in a position as a "land bridge for drugs" as well as legal products. In this latter aspect, large numbers of "sealed trucks go from Turkey to points in Europe," with an unknown number carrying drugs within their cargos.40

Turkey has many border areas which are remote, and which contain poor ethnic minorities, e.g., the Kurdish peoples. Opium production on a relatively small scale takes place in the more remote regions of the country.41

LEBANON: Total Area: 10,400 km2

The climate is Mediterranean, mild to cool, with wet winters and hot dry summers. The terrain ranges from a narrow coastal plain, to valleys, and mountains. The natural resources are: limestone, iron ore, salt, and water.

Its population is 3,300,802 with an infant mortality rate of 50 deaths per 1,000 live births and a life expectancy of 65 years for males, and 70 years for females. Major ethnic divisions are: 93% Arab, 6% Armenian, and 1% other. Religious divisions are extremely important, the following comprise a basic listing: 75% Muslim, 25% Christian with numerous subdivisions within the above groups. Numerous factional groupings are extant based upon ethnicity, kinship, religion, and geographical location. Many of the factions have well armed militias and are involved in ongoing struggles with one another.

1975 marks the period when civil war and foreign invasions became the most important component of life in Lebanon. The former service areas of banking and commerce for the entire middle east have been destroyed; with agriculture making up an increasing part of the economy. The Gross Domestic Product is 1.8 billion dollars, with a per capita income of 690 dollars per year. It exports: argricultural products, chemicals, textiles, precious and semiprecious metals and jewelry, and metal products. Agricultural products include: fruits, wheat, corn, barley, potatoes, tobacco, olives, onions, and opium for the international drug trade.42

DRUG PROFILE

Lebanon has been identified as a source of opium and heroin. The constant mini-wars, and a lack of control by government authorities have created a fertile ground for large scale trafficking. The estimate of drug production for 1988 identifies 2,000 to 5,000 hectares under cultivation with opium poppies.43 However, the actual production of heroin from the region for 1988, suggests that at least 5 metric tons of heroin were produced. This indicates that opium from different sources both within Lebanon and outside of Lebanon were probably combined to come up with the five metric tons of heroin.

In 1989, 6.5 metric tons of heroin were converted, with 4.5 tons stemming from local cultivation of opium poppies.44 The raw opium which was produced locally was estimated to be approximately 30 to 50 metric tons.45 Prices for opium and heroin can be seen in Tables (VI,VII).

The ability to obtain information which can be used to comprehend the true nature of Lebanon's participation in the international trafficking community is hindered by the political and religious factionalization. Cash from the drug trade helps in part to secure weapons and ammunition for some of the armed militias. There is little chance that drug production will decrease during the current period of social disorganization. Opium is produced in the Bekaa Valley, Syria controlls the valley with its troops...it has

been suggested by some that Syria extracts a price from the growers and processors in the region.46

BURMA: TOTAL AREA: 678,500 km2

The climate is hot and humid with the impact of tropical monsoons. It's terrain is marked by central lowlands ringed by steep rugged highlands. Natural resources of: crude oil, timber, tin, antimony, zinc, copper, tungsten, lead, coal, some marble, limestone, precious stones, and natural gas.

The population is estimated at 40,451,732 with an infant mortality rate of 99 deaths per 1000 live births. The life expectancy at birth is 53 years for males and 56 years for females. Major ethnic divisions within the country are: 68% Burman, 9% Shan, 7% Karen, 4% Rakhine, 3% Chinese, 2% Mong, 2% Indian, and 5% other. Religions are represented by 85% Buddhist, 15% animist beliefs, Muslim, Christian, and other. The language is Burmese, with minority populations having their own languages.

The largest single component of the economy has been agriculture, the country is one of the poorest in Asia. More than 65% of the workforce is engaged in agriculture, it furnishes about 40% of the Gross Domestic Product. The Gross domestic Product is estimated at 9.3 billion dollars, with a per capita income of 230 dollars. Rice, beans, maize, oilseeds, sugarcane, peanuts (self-sufficient in these commodities) plus a major producer and exporter of opium for the international drug trade. Other exports are teak, gems, rice, oilseed, metals, and rubber.47

DRUG PROFILE

Burma is one of the major producers of opium and heroin for the international drug trade. In 1988, 1,065 to 1,500 metric tons of opium gum were produced while in 1989 it is estimated that over 2,500 metric tons were produced. In the raw form, opium gum sells for approximately $36.00 per kilogram in the area where it is harvested. The value at the Thai/Burma border near the refineries is about $160 per kilogram.48 Table (VIII) notes the value of the production for 1989 of raw opium.

The greatest profit is in heroin; 69 metric tons were produced in 1989, Burma is the largest single producer of

opium in the world. Table (IX) explores the value of the product as heroin base, here it ranges between $2,600 per kilo to $3,500 per kilo. While table (X) illustrates that 69,000 kilos of heroin translates into dollar amounts that are almost beyond belief as they move up the different levels of distribution and are cut and sold.49 The latter figure is important because there are signs that some movement to establish full integration from the fields to the street is taking place or has been identified as a goal by the cartels. If the latter were to take place, the profits and cash would rise accordingly, thereby creating more opportunities for the cartel members.

"It is cultivated in the States of: Shan, Kachin, Kayah, Karen, Mandalay and Chin." The Shan Plateau is "the area where a majority of the opium fields are located." "It has an average elevation of 1,000 meters and is known to have some mountains with heights of over 2,500 meters." "The fields are generally half of a hectare in size."50 The central government of Burma has no real power in the growing areas. The government controls the large towns and the capital, but the countryside is in the hands of insurgents.51

Tens of thousands of soldiers form the backbone of armed insurgent armies ranging from drug lords, communists of different ideological stripes and even nationalistic minded groups representing specific regions and ethnic communities. Ironically, some of these groups owe part of

their historical roots to western interests in the area. Most of the armed insurgent forces are directly involved in the trafficking and production of opium and heroin.52 The major refining points are located near the Thai / Burmese border. There is little hope of crop substitution ever working as long as Burma is divided by factions who are dependent upon opium as a source of revenue to fuel their activities. Indeed there are indications that the major growers are attempting to plant larger and larger amounts of poppies, which will bring to the outside world a virtual tide of heroin.

LAOS: Total Area: 236,800 km2

The climate is influenced by tropical monsoons, with a rainy and dry season; the terrain is primarily rough with some plains and plateaus. Natural resources of: timber, hydropower, gypsum, tin, gold, and gemstones are present within the country.

The population is estimated at 3,935,786, with an infant mortality rate of 128 deaths per 1000 live births. The life expectancy is 48 years for males, and 51 years for females. Primary ethnic divisions consist of: 50% Lao, 15% Phoutheung, 20% Tribal Thai, 15% Meo, Hmong, Yao, and others. The most common languages are: Lao, French, and English plus tribal dialects.

Laos is one of the poorest countries in the world, with an estimated per capita income of 140 dollars per year, and a Gross Domestic Product of 551 million dollars. Subsistance agriculture is the source for over 60% of the reported Gross Domestic Product, and employs 85% of the population. Agricultural products include: rice, corn, vegetables, tobacco, coffee, cotton and opium for the international drug trade.53

DRUG PROFILE

Laos is a country that was impacted by the War in Indo China; it gained a reputation as a country which was a major producer of opium. The areas for primary cultivation were

generally located in the more remote hilly regions. Tribes people like the Mien, Hmong, and others had a tradition of growing opium for personal use for a considerable period of time. The awareness that opium could generate large volumes of cash was seized upon by the French during colonial days.54 Laotian tribes people in more recent times were recruited first by the French, and then by the Americans to serve as soldiers to fight against the: Chinese (communist), Pathet Lao (communist), Kyhmer Rouge (communist), Viet Cong, and North Vietnamese (communist).55

A number of scholars have stated that evidence exists to support the thesis that opium was grown in large amounts during the period that the French used the hill people of Laos as soldiers against the enemies of France in the region. Some authors have alleged that profit from the trade in opium was used to support French Counter-Intelligence Operations in the area.56 When the Americans moved into replace the French, they inherited a system whereby a set of relationships existed between the hill people and the traffickers both large and small.

What eventually transpired was the fostering of a different type of leadership within the cultures of the hill people, whereby some of the clan leaders ended up becoming major traffickers in opium and heroin as well as military leaders. In order to retain the loyalty of the clan leaders, and other leaders who emerged it became necessary to overlook the local production of opium and heroin and to

downplay the enforcement arm of the government of the United States. The secret war in Laos which was fought by ethnic troops in the hills of Laos, and on the main plateau could not have been conducted without the addition of supplementary revenues which were generated by trafficking.57

The war brought opportunities for those who were able to take advantage of the infra-structure which was provided by Air Transport. Opium could be moved out of isolated areas by small aircraft and brought to more central locations, and then moved out again by larger aircraft. A major opium refinery was alleged to have been operated by Hmong traffickers on the largest secret airbase in Laos, where Air America, and American pilots flying close air support with Hmong pilots were based. The refinery was said to be under the control of the local ethnic (Hmong) community and its leadership including General Vang Pao.58

After the war, and the withdrawal of the Americans, little was heard in the west about Laos. It is known that opium production has been taking place, with an estimate in 1988 of between 210 to 300 metric tons of opium gum being produced.59 Opium production increased in Laos during 1989, reports received by the United States government suggest that Laotian military and civilian officials have been involved in the drug trade and notes that no eradication programs or enforcement are present.60 In 1989, the Laotian government signed a narcotics control agreement with the

United States.61 The value of the raw opium is illustrated in Table (XI).

THAILAND: Total Area: 514,000 km2

The climate is tropical, rainy, and warm, with monsoons varying from dry to wet and humid. The terrain consists of a central plain and eastern plateau, with mountains in different regions of the country. Tin, rubber, natural gas, tungsten, timber, lead, fish, gypsum, lignite, and fluorite are the most available natural resources.

The population is estimated at 55,524,352 with an infant mortality rate of 50 deaths per 1000 live births and a life expectancy of 62 years for male and 68 years for female. Ethnic groups within Thailand encompass the following: 75% Thai, 14% Chinese, 11% other. Religious denominations are: 95% Buddhist, 4% Muslim, .5% other including local variations of religious and belief systems. Languages which are common to the country: Thai, English, ethnic and regional dialects.

The labor force is primarily involved in agriculture, with 73% of the total labor force employed in this aspect of the economy. Thailand is considered as one of the more advanced countries of the developing world in Asia, in that it has a per capita income of 965 dollars, plus a Gross National Product of 52.2 billion dollars. Within the agricultural area it exports: rice, sugar, corn, rubber, manioc, pineapple, seafood, and is an illegal producer of opium for the international marketplace. In addition, other exports include: textiles, fish products, tapioca, jewelery, corn, tin and manufactured items.62

DRUG PROFILE

Thailand is a major conduit and broker for drugs produced within its boundaries and in neighboring countries. In 1988, it produced between 23 to 33 metric tons of opium gum on 4,604 hectares.63 It has stiff penalities for violating the laws related to trafficking and drug cultivation. Numerous Thai police and military have died while attempting to enforce the rule of law in areas where traffickers have a great deal of power. Opium in Thailand is grown by hill people in more remote areas. The north of Thailand is a favorite, along the border with Burma for the

growing of poppies. Table (XII) estimates the value of the locally produced raw opium with prices for the product based upon values at the border refineries.

Foreign investors in opium play a major role in the production and purchasing of the opium crop and the refined products. The Hong Kong and Thai based Triads play a significant role in the opium trade which comes from South East Asia.64 The Triads are virtually impossible to penetrate, which explains some of the reasons for their success in trafficking. In addition, smaller ethnic Chinese and Vietnamese criminal groups are involved in the importation of heroin from South East Asia. Given Thailand's pivotal role as a center for financial control, and its location next to the largest producer of opium and heroin in the world, it would be foolish to under estimate its role in the flow of drugs out of the region. Drugs have a very real impact upon the economy of Thailand. Thailand has an econoic interest in trafficking in Burma, Laos, and southern China. It is in these areas that Thailand generates most of its revenues that are linked to drugs. Obtaining hard data is almost impossible, i.e., the real economic value of external drug production relative to Thailand's economic base.

Thailand has attempted to use alternative cropping and is willing to use investment and support from the west to replace the income which would be lost by the hill people. The west has been unable to come up with the cash

which would be needed to facilitate the move of Thai farmers into the legal sector for any sustained period of time. Refugees from Cambodia, China, Burma, Laos and Viet Nam have strained Thailand's ability to confront all the social problems which are evident. Drugs are just one additional factor to be delt with, little hope is held out for a quick fix to the solution. Researchers would be ill-advised to use the figures attached to the opium harvest in Thailand, as the sole value of trafficking in the country.

MEXICO: Total Area: 1,972,550 km2

The climate ranges from tropical to desert, with a terrain that is mostly high rugged mountains with low coastal plains and high plateaus. The natural resources are: crude oil, silver, copper, gold, lead, zinc, natural gas, and timber.

The population is estimated at 86,366,019 with an infant mortality rate of 42 deaths per 1,000 live births and a life expectancy of 67 years for male, and 73 years for female. Major ethnic divisions are: 60% Indian-Spanish, 30% Indian, 9% White, 1% other. The religions are (primarily) 97% Roman Catholic, with 3% Protestant. The language is Spanish, with ethnic languages also being present in some regions, plus widespread use of English.

Mexico's economy has generated a Gross Domestic Product of 135.9 billion dollars with a per capita income of 1,640 dollars per year. Exports include: crude oil, oil products, coffee, shrimp, engines, cotton, and other products. It has an industrial base with the following: food and beverage processing, tobacco, chemicals, iron and steel, petroleum, mining, textiles, clothing, transportation, equipment, and tourism. Agricultural production consists of: corn, cotton, wheat, coffee, sugarcane, sorghum, oilseed, pulses, and vegetables, it is an illegal producer of opium poppies for the international drug trade.65

DRUG PROFILE

Mexico has been involved in the production of opium and heroin, with figures of between 44 to 55 metric tons of opium gum produced in 1988 on 7,700 hectares. The main States where opium is grown: Chihuahau, Durango, Sinola, Nayarit, Jalisco, Michoacan, Guerrero, Oaxaca, and

Chiapas.66 Black tar heroin and Mexican brown are the two major types of heroin. Almost all the locally produced heroin is smuggled into the United States. Traditional opium smuggling routes have been supplemented with the movement of large amounts of cocaine in trucks and cargo. Cocaine is now a major economic factor, it is transported through Mexico, its dollar value is thought to exceed that of opium but it is not grown locally. No estimate of the "shipping" charges for cocaine through Mexico is given.

The value of the raw opium for the above time period is estimated at $2,800 per kilogram to $8,000 per kilogram in Mexico.67 Table (XIII) illustrates the estimated value of the opium which was produced in Mexico in 1988, and 1989.

After engaging in efforts to curb the growing of opium, the opium production of Mexico increased from the 55 metric tons 1988 to an estimated 85 metric tons in 1989.68 If one applied the high end value of $8,000 per kilo, the amount for 85,000 kilos is approximately $680,000,000 with a corresponding increase in the potential value for the crop at all stages of refining as suggested in the following breakdown.

When the opium is refined into heroin at a 60 to 80% purity rate, it is worth approximately $100,000 to $200,000 per kilogram (wholesale price to the port of entry-United States), while at the street level the same kilogram after it has been cut in purity is valued at between $1,000,000 to $2,000,0000 if it is Mexican brown, or between $500,000 to

$1,000,000 if it is Black Tar.69 Profits from Mexican opium are controlled primarily by Mexican traffickers.

The subject of drug production is a politically sensitive area in Mexico.70 The Mexican government has lost police and military in the fight to take control of the countryside in some regions. They are allegedly plagued with the problem of widespread corruption among government officials at all levels.71 The picture in the media (United States) which has emerged is of an alleged relationship between large scale traffickers and the Mexican government, whether police, military, or civilian sectors.72

The chronic problems of unemployment, low per capita income and the needs for revenue, helps to fuel the drive to produce commodities which can be sold to create income. Most of the opium is grown in regions where the fields are hard to get to, and the public in the communities are hostile to suppression efforts. It is not uncommon for traffickers to have political and extra-legal power, thus they appear to be outside the law. A number of the traffickers are linked together through family ties, and cultural affiliation as well as business; this aspect makes penetration of the Mexican cartels and trafficking networks more difficult.

Mexico has asked for assistance from the United States in the form of equipment and funding for its anti-drug programs. There is little room for optimism given the economic realities.

GUATEMALA: Total Area: 108,890 km2

The climate is tropical, and hot in the lowlands and cooler in the highlands; the terrain is mostly mountains with narrow coastal plains, and a limestone plateau. Natural resources consist of: crude oil, nickel, rare woods, fish, and chicle.

The population is estimated at 9,116,877, with an infant mortality rate of 64 deaths per 1000 live births. The life expectancy is 59 years for males, and 63 years for females. Primary ethnic divisions are: 56% Ladino, 44% Indian. The majority of the population is Roman Catholic, with some blending of traditional Mayan beliefs, a small number of Protestants are found in the country. Spanish is the official language, but over 40% of the population speaks Indian dialects.

The economy is based upon agriculture, with over 60% of the labor force employed in this aspect of the economic system. Guatemala is a poor country, its Gross Domestic Product was estimated at 9.6 billion dollars, with a per capita income of 1,100 dollars per year. Traditional exports are coffee, cotton, bananas. Its agriculture raises coffee, cotton, corn, beans, sugarcane, bananas, livestock, and opium for the illegal drug trade.73

DRUG PROFILE

According to government sources, Guatemala has emerged as a leading source of opium poppies in Latin America. The Provinces of San Marcos and Huehuetenango have begun to cultivate opium. The current or offical government estimate is that 1,495 hectares are currently under cultivation.74 However, a recent article suggested that between 5,000 to 7,000 acres, or 2,429 hectares when converted, are under cultivation.75 Opium poppies can potentially produce a yield of approximately $2,000 per acre for small farmers.76 The part of the country where opium is grown is under the control of the "Revolutionary Organization of the People in Arms" which is supposed to be aware of the trafficking.77 There is little to be optimistic about given the proximity to the United States, and its markets. The external distribution of the raw opium and its refining into heroin

are linked to Mexican cartels. Table (XIV) illustrates an estimation of the value of raw opium.

BOLIVIA: Total Area: 1,098,580 km2

The climate varies with altitude from humid and tropical in the lowlands to cold and semi arid in the higher elevations. The terrain consists of high plateaus, hills, and lowland plains. Natural resources are: tin, natural gas, crude oil, zinc, tungsten, antimony, silver, iron ore, lead, gold, and timber. The cold thin air of the high plateaus makes physical activity very difficult, problems of over grazing, soil erosion, and desertification are present.

The population is estimated at 6,588,601 with an infant mortality rate of 123 deaths per 1000 live births, and a life expectancy of 52 years for males, and 56 years for females. The major ethnic divisions are: 25% Quechua, 25% Aymara, 25-30% mixed, 5-15% European. The dominant religion is Catholic 95%, with a small Protestant minority, and the backdrop of traditional belief systems which are practiced alongside Christianity. Languages which are present include: Spanish, Quechua, and Aymara.

The Gross National Product was 4.6 billion dollars, with a per capita income of 680 dollars. Farmers constitute half the workforce; the main cash crop is coca, sold for cocaine processing. Industries are: mining, smelting, petroleum, food and beverages, tobacco, handicrafts, clothing, with the illegal drug industry producing the largest revenue. Agricultural products include: coffee, soybeans, corn, sugar, rice, potatoes, timber, livestock, and coca for the international drug trade.78

DRUG PROFILE

Bolivia is a major producer of cocaine with 57,000 to 78,000 metric tons of coca leaf in 1988.79 This translates into 92 to 134 metric tons of cocaine hydrochloride. Approximately 41,000 to 56,000 hectares were under production for the same period.80 The region where coca is produced is called the Chapare and Yungas; plus the Provinces of Carrasco, Chapare, and Arani in the Department of Cochabamba. The Yungas is an area located on the Eastern slope of the Andes mountains in the Department of La Paz.81

These areas are experiencing an economic boom because of the advent of coca production. Coca is processed in-country into coca paste, and coca base with an unknown amount turned into cocaine hydrochloride. Colombia is still the primary destination point for the coca paste or more refined product coca base. Bolivia appears to be increasing its own processing capability.

Brazil is a new destination point, the "river system that borders Bolivia and Brazil serves as a shipping route." Numerous "airstrips dot the countryside in the Department of Beni, and unknown amount of cocaine is flown out on these airstrips." Chile, Paraguay, and Argentina are known recipients of Cocaine produced in Bolivia.82 The country's economy has suffered from the depression of world prices of tin, and silver. Cocaine is one of the only products which Bolivia has remaining with which to generate cash. It is probably the most important sector of the economy.

Historically, the government has been unable to deal with the production, refining, and export of cocaine. Major dealers are known to have extra-legal power, and high government officials have been accused by journalists of being involved in the trafficking.83 In the regions where cocaine is prevalent, the traffickers enjoy the protection of the local community.

The social and economic conditions have created a situation where there is no reason to believe that cocaine production will be reduced.84 However, in early 1991 the

legislative body of Bolivia enacted enabling laws to allow the use of the Bolivian military in drug suppression missions. The use of the Bolivian military for drug suppression was specifically forbidden by Bolivia's congressional body during an earlier period.

The value of cocaine hydrochloride which was produced in Bolivia during 1988 at the wholesale level in the United States using U.S. dollars was between $11,000 to $34,000 per kilogram.85 Table (XV) notes the wholesale value of the cocaine produced in Bolivia for 1988, while Table (XVI) illustrates the worth of the product when it is sold on the streets for between 50 to 120 dollars per gram. This translates into a range of $50,000 to $120,000 per kilo. It is unknown what amount went into the local economy.

COLOMBIA: Total Area: 1,138,910 km2

The climate is tropical along the coast and eastern plains, and cooler in the highlands. The terrain consists of a mixture of flat coastal lowlands, plains in the east and central highlands, with some high mountains. Natural resources are: crude oil, natural gas, coal, iron ore, nickel, gold, copper, and emeralds. The highlands are subject to volcanic eruption, and deforestation is taking place in some regions.

The population is estimated at 31,945,165 with an infant mortality rate of 54 deaths per 1000 live births and a life expectancy of 64 years for males, and 68 years for females. The major ethnic divisions include; 58% mestizo, 20% white, 14% mulatto, 4% black, 3% mixed black-Indian, 1% Indian. It is estimated that 95% of the population is Roman Catholic, traditional religions are practiced alongside Christianity together with contemporary blends from the region. The primary language is Spanish.

The Gross Domestic Product is estimated to be 33 billion dollars per year, with a per capita income of 1,140 dollar per year. Colombia is the world's second largest producer of coffee, it accounts for 30% of its legal exports, with petroleum, coal, bananas, and fresh cut flowers making up the remainder of the legal exports. Colombia is a major processor and grower of coca for the illegal drug trade. Its industries include: textiles, food

processing, oil, clothing and footware, beverages, chemical, metal products, and cement. The mining of: gold, coal, emeralds, iron, nickel, silver, and salt comprise an important element of the economic base. Its agricultural production revolves around: coffee, rice, corn, sugarcane, plantains, bananas, cotton, tobacco, and coca.86

DRUG PROFILE

Colombia is known as the major supplier of cocaine to the world. However, it is not the major grower of coca in the region. In 1988, it cultivated 19,000 to 24,000 metric tons of coca leaf which was turned into beween 32 to 40 metric tons of cocaine hydrochloride.87 The total hectares involved within the country were estimated to be 27,230 given over to actual coca production.88 It is the control of the Processing, Refining, Distribution, and Marketing Networks that largely operate outside of the country that makes Colombia's Cartels the General Motors or Toyota of cocaine. Colombia's power stems from its economic and physical control of the processing and distribution networks for cocaine exported from all the coca producing countries. Here again, hard data is almost impossible to obtain.

The primary regions for domestic coca growing are found in the Departments of: Caqueta, Vapues, Putumayo, and Guaviare. These areas are outside the control of the government because of the power of the cartels, and insurgent groups in the areas.89 Popular resistance movements against the government have been present in the growing areas, primarily because of the need to preserve jobs within the region. Efforts to stop production are looked at as a direct threat to economic survival by the

local populace in the coca areas. Alliances between Marxist oriented revolutionary groups and cartels are not unknown. Colombia has attempted to shut down the cartels, and paid a high price in violence throughout the countryside. Bombings, killings, and terror have been the by-product with very little longterm impact upon the actual production and distribution networks.90

A variety of transportation forms are used to move the cocaine out of Colombia and the entire region including: human mules who swallow small packages (condoms with cocaine powder) and carry the drugs in their bodies. More commonly employed techniques are to use aircraft, ships, and cargo destined for other countries. No country has the resources to check all the cargo entering into its jurisdication, so smugglers have a very high probability of being able to get their goods into the destinations with very little risk to themselves.

It is evident that shippers are not particularly concerned about losing some of their product, particularly when one considers the number of times that coca leaf can be harvested during a normal year. Table (XVII) notes the value of cocaine harvested in Colombia during 1988 using the wholesale range of $11,000 to $34,000 per kilo. The potential street value is displayed in the Table (XVIII).

The actual value which the cartels had access to, goes beyond wholesale domestic production and reaches into the other producing countries and the consuming countries as

well, with both licit and illicit generators of revenue and profits.91 An unknown percentage of the cocaine revenues from the growing regions (Ecuador, Peru, Bolivia, and Colombia goes to the cartels which are based in Colombia. It would be misleading to take only the revenue generated by the wholesale price based solely upon Colombia's domestic production, and to assign a final value for the country on that basis.

Some authorities have noted an increased flow of cocaine into Europe; it is thought that the cartels are taking advantage of the new markets and the greater value of some European currencies,i.e., some are worth more than the dollar. Regardless of the internal effort expended by the Colombian government, it is doubtful that the cartels can be broken, therefore Colombia's (cartels) role as the organizing force and main profiteer from the trade will be preserved.

ECUADOR: Total Area: 283,560 km2

The climate is tropical along the coast with a cooling trend as one goes into the interior. Its terrain reflects a coastal plain (Costa), an inter-Andean highland (Sierra), and flat to rolling eastern jungle (Oriente). The natural resources are: petroleum, fish, and timber. The environment is subject to frequent earthquakes, landslides, volcanic activity, tsunamis, deforestation, desertification, and soil erosion.

Ecuador's population is estimated at 10,262,271 with an infant mortality rate of 63 deaths per 1000 live births and a life expectancy of 64 years for males, and 68 years for females. Ethnic divisions are: 55% mestizo, 25% Indian, 10% Spanish, and 10% black. The dominant religion is Roman Catholic with 95% of the population, traditional beliefs are also practiced alongside Christianity. Spanish is the offical and dominant language, Indian languages are used by a large number of those identified as Indian.

The Gross Domestic Product was 9.4 billion dollars, with an estimated per capita income of 940 dollars per

person. The major exports are: petroleum, coffee, bananas, cocoa products, shrimp, fish products and coca. The latter is produced for the international drug trade. Agricultural products are: bananas, coffee, cocoa, sugarcane, corn, potatoes, rice, and coca. Industries which are present: food processing, textiles, chemicals, fishing, timber, and petroleum.92

DRUG PROFILE

Ecuador cultivated between 200 to 300 hectares of coca in 1988, with a yield of between 300 to 500 metric tons of coca leaf.93 This translates into approximately 10 metric tons of cocaine hydrochloride.94 Tables (XIX,XX), illustrate the wholesale value for 1988, and the retail street value of Ecuadorian cocaine.

Coca is cultivated primarily in the areas along the Colombian border. Ecuador has a large amount of coca products moving in-transit across its borders, primarily from Bolivia and Peru. Its port facilities have been brought to the attention of traffickers; and its role as an exporting country may increase.95 While Ecuador is poor, it does not have the same degree of social disorganization which is present in Bolivia, or Peru. The trafficking in Ecuador is believed to be dominated by the Colombian cartels, who still control the international networks for distribution and marketing. It is not known with what success the government will be able to control drugs as long as it remains such a valuable commodity.

PERU: Total Area: 1,285,220 km2

The climate of Peru varies from tropical in the east to dry in the desert areas in the west. Its terrain embraces a western coastal plain (Costa), the high and rugged Andes in the center (Sierra), and an eastern lowland jungle in the Amazon Basin. Peru has natural resources of: copper, silver, gold, petroleum, timber, fish, iron ore, coal,

phosphate and potash. The environment is subject to earthquakes, tsunamis, landslides, mild volcanic activity, deforestation, overgrazing, soil erosion, desertification, and air pollution in Lima.

The population of the country is 21,448,501 with an infant mortality rate of 69 deaths per 1000 live births and a life expectancy of 61 years for males, and 66 years for females. Major ethnic divisions are: 45% Indian, 37 mestizo, 15% white, 3% black, Japanese, Chinese, and other. The religion is predominantly Roman Catholic, with numerous traditional beliefs being practiced alonside Christianity. Spanish and Quechua are the official languages, with Aymara also present.

Peru's Gross Domestic Product is estimated at 19.6 billion dollars, with a per capita income of 920 dollars per year. Peru is the largest producer of illegal cocaine in the world, its illegal economy exceeds its legal economy relative to exports. Traditional exports are: fishmeal, cotton, sugar, coffee, copper, iron ore, refined silver, lead, zin, crude petroleum, and byproducts. Its industries consist of: mining, petroleum, fishing, textiles, clothing, food processing, cement, auto assembly, steel, shipbuilding, and metal fabrication. Agricultural products include: wheat, barley, potatoes, beans, rice and coca for the international drug trade.96

DRUG PROFILE

Peru is known as the world's largest producer of coca, and coca paste, and coca base. In 1988, it cultivated between 97,000 to 124,000 hectares of coca.97 This created a coca leaf product of between 97,000 and 124,000 metric tons, with a potential yield of 194-248 metric tons of cocaine hydrochloride.98 The estimated wholesale value of the product using the $11,000 per kilo to $34,000 per kilo wholesale 1988 price is given in Table (XXI). The potential street value of the product is demonstrated in Table (XXII).

The Huallaga Valley accounts for two thirds of the coca which is grown in all of Peru.99 Peru does not control the growing areas, indeed much of the country is now controlled by armed insurgents, including but not limited to Sendero Luminoso and local workers in the drug economy. Social and

economic conditions in Peru are chaotic at best; inflation, violence, poverty, and a lack of a viable (non-coca) export base have left Peru with one product to generate income. If Peru were to shut off cocaine production, it would create even greater economic chaos.

Coca is the only game in town, and no one has any possible solutions to the myriad of social problems which Peru now faces. More than one expert suggested that the United States was going to become involved in a major military operation to eradicate the growers and the leftist movement of Sendero Luminoso; but events in the Middle East in 1990-91 overshadowed the proposed suppression operations, together with the lack of desire on the part of the Peruvian government to have significant numbers of United States military forces on its soil.100

However, by summer 1991 accounts of United States "civilian employees" being involved in combat "fire fights" with Sendero Luminoso was public knowledge. The use of helicopter gunships, fortified outposts, "civilian employees" and the order of battle bring back memories of an earlier period from Indo-China.(101) It remains to be seen as to the degree of depth that the "War on Drugs" will take in South America.

CONCLUSIONS

The main elements which have been covered within the text of the essay suggest that drug production within the specific countries is linked to the common social attributes of poverty, cultural isolation within the growing areas, pressures for revenue, lack of licit alternatives for crops or jobs for the peasants who are involved in the actual growing and processing areas, and relatively weak economies in most instances. Given the demand for drugs by the western world, there is very little to be optimistic about relative to any real chance for a marked decrease in production. If one were to look for countries which shared the traits which drug producers exhibited, a significant number of potential or new producers could come on line to meet production demands for the developed world.

Drug trafficking is not without its social costs for the narco trafficking countries, all now have problems with populations that are gaining addicts...deaths from violence are all too common. It would be fair to state that many in the producing countries believed that the west's problems with drugs were of no concern, but a problem of the end users in the richer countries. There is an element of antagonism towards the more developed world, and drugs are seen by some as a poetic way of hitting back by the poorer countries. The vast majority of people employed in narco-

production are poor farmers or workers who are not concerned about the external world; drugs are merely a source of revenue, a cash crop, jobs... which furnish an option to a rather bleak economic picture for those who are employed in that portion of the economy.102

This essay was aimed at meeting a need to create an overview of drug producing nations which could then be used by researchers interested in having this type of information in a condensed format for use as a vehicle to stimulate additional research in the field. One of the outgrowths of the research has been to suggest that many of the same conditions which foster the creation of narco trafficking and production in lesser developed countries, can be found in regions within developed countries.

If one were to examine marijuana production in the United States one would find: a rural population with lower life expectancy, lower social standing, depressed traditional economies, and a lack of viable economic alternatives, coupled with a demand for an illicit crop with a high cash value, plus the availability of a buying and distribution network, and a lack of concern relative to the ability of the government to effectively eradicate the crop. The parallels are rather obvious.

In the same light, if one examines crack cocaine production in the inner city areas of the United States, the same model might hold partial validity. The obvious exception is the urban setting, but life expectancy, low per

capita income in the inner city urban areas, the perceived lack of viable alternatives, and the cash involved along with cultural isolation and a poor labor force create many of the same conditions found in Third World countries. It would appear that if certain social and economic conditions, harsh economic realities, and other traits are present...then a higher probability exists for this type of endeavor.

If by some chance the developed nations were to curtail Third World production and domestic consumption; economic, social, and political chaos would probably ensue in the lesser developed areas where drugs are produced.103 However, the number of countries in the world who can combine the identified traits, with climate and soils which are conducive to the growing of opium or cocaine are larger than those countries that are currently producing. One can only ponder what might happen if the lesser developed world is opened-up beyond those presently identified countries by drug cartels searching for a cheaper labor force, and social and political climates favorable to growing and refining into end use products... .

The number of countries which have the land, and favorable inputs as based upon the model are quite large in number. It would be reasonable to expect that more countries in the America's, Africa, Asia, and even former East Block countries might compete for revenues by turning in some way to drug production.

TABLE (I). PRICE PER KILO OF RAW OPIUM

Afghanistan (1988)production

	$60 per kilo	$130 per kilo
700,000 kilos	$42,000,000	$91,000,000
1,000,000 kilos	$60,000,000	$130,000,000

Sources: Calculations by author, price per kilo based upon 1988-87 prices for Southwest Asian opium. (D.E.A.-Dept. of Justice: 1988 "Intelligence Trends," undated photocopy), p. 8. Same agency:(87 prices, published December 1987),p. 8. Kilo estimate based upon conversion of metric tons into kilos by author. Source for metric tons (United States Department of State, Bureau of International Narcotics Matters, "International Narcotics Control Strategy Report, March 1989,"),p. 16. "executive summary"

TABLE (II). PRICE PER KILO OF MORPHINE BASE

Afghanistan (1988) production

	$2,000 per kilo	$3,500 per kilo
700,000 kilos	$1,400,000,000	$2,450,000,000
1,000,000 kilos	$2,000,000,000	$3,500,000,000

Sources: Calculations by author, price per kilo based upon 1988 prices for Southwest Asian morphine base. (D.E.A.-Dept. of Justice: 1988 "Intelligence Trends," undated photocopy), p. 8. Same agency: (87 prices, published December 1987), p. 8. Kilo estimate based upon conversion of metric tons into kilos by author. Source for metric tons (United States Department of State, Bureau of International Narcotics Matters, "International Narcotics Control Strategy Report, March 1989,"), p. 16. "executive summary"

TABLE (III). PRICE PER KILO OF RAW OPIUM

India (1989) production

	$60 per kilo	$130 per kilo
300,000 kilos	$18,000,000	$39,000,000
600,000 kilos	$36,000,000	$78,000,000

Sources: Calculations by author, price per kilo based upon 1988 prices for Southwest Asian opium. (D.E.A.-Dept. of Justice: 1988 "Intelligence Trends," undated photocopy), p. 8. Kilo estimate based upon conversion of metric tons into kilos by author. Source for metric tons (United States Department of State, Bureau of International Narcotics Matters, "International Narcotics Control Strategy Report, Mid Year Update August 1989,"), p. 62.

TABLE (IV). PRICE PER KILO OF RAW OPIUM

Iran (1988) production

	$60 per kilo	$130 per kilo
200,000 kilos	$12,000,000	$26,000,000
400,000 kilos	$24,000,000	$52,000.000

Sources: Calculations by author, price per kilo based upon 1988 prices for Southwest Asian opium. (D.E.A.-Dept. of Justice: 1988 "Intelligence Trends," undated photocopy), p. 8. Kilo estimate for 1988 was based upon conversion of metric tons to kilos by author. Source for metric tons (National Narcotics Intelligence Consumers Committee "(NNICC) Report 1989," published June 1990), p. 49.

TABLE (V). PRICE PER KILO OF RAW OPIUM

Pakistan (1988) production

	$60 per kilo	$130 per kilo
190,000 kilos	$11,400,000	$24,700,000
220,000 kilos	$13,200,000	$28,600,000

Sources: Calculations by author, price per kilo based upon 1988 prices for Southwest Asian opium. (D.E.A.-Dept. of Justice: 1988 "Intelligence Trends," undated photocopy), p. 8. Kilo estimate for 1988 was based upon conversion of metric tons to kilos by author. Source for metric tons (National Narcotics Intelligence Consumers Committee "(NNICC) Report 1989," published June 1990), p. 49.

TABLE (VI). PRICE PER KILO OF RAW OPIUM

Lebanon (1989) production

	$60 per kilo	$130 per kilo
30,000 kilos	$1,800,000	$3,900,000
50,000 kilos	$3,000,000	$6,500,000

Sources: Calculations by author, price per kilo based upon 1988 prices for Southwest Asian opium. (D.E.A.-Dept. of Justice: 1988 "Intelligence Trends," undated photocopy), p. 8. Kilo estimate for 1988 was based upon conversion of metric tons to kilos by author. Source for metric tons (National Narcotics Intelligence Consumers Committee "(NNICC) Report 1989," published June 1990), p. 49.

TABLE (VII). PRICE PER KILO OF HEROIN

Lebanon (1989) production

	$5000 per kilo	$16000 per kilo
6500 kilos	$32,500,000	$104.000,000

Sources: Calculations by author, price per kilo based upon 1988 prices for Southwest Asian heroin at the brokers in a Middle eastern Laboratory. (D.E.A.-Dept. of Justice: 1988 "Intelligence Trends," undated photocopy), p. 8. Kilo estimate based upon conversion of metric tons into kilos by author. Source for metric tons (United States Department of State, Bureau of International Narcotics Matters, "International Narcotics Control Strategy Report, March 1990,"), p. 26.

TABLE (VIII). PRICE PER KILO OF RAW OPIUM

Burma (1989) production

	$36 per kilo	$160 per kilo
2,500,000 kilos	$90,000,000	$400,000,000

Sources: Calculations by author, price per kilo based upon 1988 prices for Southeast Asian opium, border refinery area. (D.E.A.-Dept. of Justice: 1988 "Intelligence Trends,"undated photocopy), p. 9. Kilo estimate for 1989 was based upon conversion of metric tons to kilos by author. Source for metric tons (National Narcotics Intelligence Consumers Committee "(NNICC) Report 1989," published June 1990), p. 38.

TABLE (IX). PRICE PER KILO OF HEROIN BASE

Burma (1988-89) production (one year)

	$2600 per kilo	$3500 per kilo
69,000 kilos	$179,400,000	$241,500,000

Sources: Calculations by author, price per kilo based upon 1988 prices for Southeast Asian heroin base, border refinery area. (D.E.A.-Dept. of Justice: 1988 "Intelligence Trends," undated photocopy), p. 9. Kilo estimate based upon conversion of metric tons into kilos by author. Source for metric tons (United States Department of State, Bureau of International Narcotics Matters, "International Narcotics Control Strategy Report, March 1989"), p. 15. "executive summary"

TABLE (X). COMPARISON PRICES PER KILO OF HEROIN

Burma (1988-89) (one year)	$2600 per kilo	$3500 per kilo
69,000 kilos	$179,400,000	$241,500,000
wholesale entry to the U.S.A.	$100,000 per kilo	$210,000 per kilo
69,000 kilos	$6,900,000,000	$14,490,000,000
wholesale mid level U.S.A.	$200,000 per kilo	$310,000 per kilo
69,000 kilos	$13,800,000,000	$20,700,000,000
street value U.S.A.	$275,000 per kilo	$375,000 per kilo
69,000 kilos	$18,975,000,000	$25,875,000,000

Sources: Calculations by author, price per kilo based upon 1988 prices for Southeast Asian heroin base from the fields to the street. (D.E.A.-Dept. of Justice: 1988 "Intelligence Trends," undated photocopy), p. 9. Kilo estimate based upon conversion of metric tons into kilos by author. Source for metric tons (United States Department of State, Bureau of International Narcotics Matters, "International Narcotics Control Strategy Report, March 1989"), p. 15. "executive summary"

TABLE (XI). PRICE PER KILO OF RAW OPIUM

Laos (1988) production

	$36 per kilo	$160 per kilo
210,000 kilos	$7,560,000	$33,600,000
300,000 kilos	$10,800,000	$48,000,000

Sources: Calculations by author, price per kilo based upon 1988 prices for Southeast Asian opium, Burma border refinery area. (D.E.A.-Dept. of Justice : 1988 "Intelligence Trends," undated photocopy), p. 9. Kilo estimate for 1988 was based upon conversion of metric tons to kilos by author. Source for metric tons (National Narcotics Intelligence Consumers Committee "(NNICC) Report 1989," published June 1990), p. 38.

TABLE (XII). PRICE PER KILO OF RAW OPIUM

Thailand (1988) production

	$36 per kilo	$160 per kilo
23,000 kilos	$828,000	$3,689,000
33,000 kilos	$1,188,000	$5,280,000

Sources: Calculations by author, price per kilo based upon 1988 prices for Southeast Asian opium, Burma border refinery area. (D.E.A.-Dept. of Justice : 1988 "Intelligence Trends," undated photocopy), p. 9. Kilo estimate for 1988 was based upon conversion of metric tons to kilos by author. Source for metric tons (National Narcotics Intelligence Consumers Committee "(NNICC) Report 1989," published June 1990), p. 38.

TABLE (XIII). PRICE PER KILO OF RAW OPIUM

Mexico (1988) production

	$2,800 per kilo	$8,000 per kilo
44,000 kilos	$123,200,000	$352,000,000
55,000 kilos	$154,000,000	$440,000,000
(1989) production		
85,000 kilos	$238,000,000	$680,000,000

Sources: Calculations by author, price per kilo based upon 1988 prices for opium, Mexico. (D.E.A.-Dept. of Justice: 1988 "Intelligence Trends," undated photocopy), p. 7. Kilo estimate for 1988,89 was based upon conversion of metric tons to kilos by author. Source for metric tons (National Narcotics Intelligence Consumers Committee "(NNICC) Report 1989," published June 1990), p. 46.

TABLE (XIV). PRICE PER KILO OF RAW OPIUM

Guatemala (1988) production

	$2,800 per kilo	$8,000 per kilo
9,000 kilos	$25,200,000	$72,000,000
14,080 kilos	$39,424,000	$112,640,000
17,600 kilos	$49,280,000	$140,800,000

Sources: Calculations by author, price per kilo based upon 1988 prices for opium, Mexico. (D.E.A.-Dept. of Justice: 1988 "Intelligence Trends," undated photocopy), p. 8. 9,000 kilos based upon official U.S. government estimate. Brook Larmer's article; "U.S. Targets Guatemalan Opium," Christian Science Monitor (March 7 1990) set the approximate land under opium cultivation at 6,000 acres, this was converted by the author to hectares (2,429 hectares).

a. Mexico's yield='s 44-to-55metric tons of raw opium, this converts to 44,000 to 55,000 kilos of opium.

b. Guatemala has only 32% of the same land mass under cultivation as Mexico.

c. Using the analogy that the climate and terrain are analogous in the growing regions:

32% of 44,000 kilos= 14,080 kilos of opium

32% of 55,000 kilos=17,600 kilos

TABLE (XV). PRICE PER KILO OF COCAINE

Bolivia (1988) production

	$11,000 per kilo	$34,000 per kilo
92,000 kilos	$1,012,000,000	$3,128,000,000
134,000 kilos	$1,474,000,000	$4,556,000,000

Sources: Calculations by author, kilos and price per kilo based upon 1988 prices and official estimate for production of cocaine. (National Narcotics Intelligence Consumers Committee: 1988 Report, April 89), pp. 31,32,39.

Table (XVI). PRICE ON THE STREET/RETAIL VALUE (U.S.A.) COCAINE

Bolivia (1988)

	$50,000 per kilo	$120,000 per kilo
92,000 kilos	$4,600,000,000	$11,040,000,000
134,000 kilos	$6,700,000,000	$16,000,000,000

Sources: Calculations by author, kilos and price per kilo based upon 1988 prices and official estimate for production of cocaine. (National Narcotics Intelligence Consumers Committee: 1988 Report, April 89), pp. 31,32,39.

TABLE (XVII). PRICE PER KILO OF COCAINE

Colombia (1988) production

	$11,000 per kilo	$34,000 per kilo
38,000 kilos	$418,000,000	$1,292,000,000
48,000 kilos	$528,000,000	$1.693,000,000

Sources: Calculations by author, kilos and price per kilo based upon 1988 prices and official estimate for production of cocaine. (National Narcotics Intelligence Consumers Committee: 1988 Report, April 89), pp. 31,32,39.

Table (XVIII). PRICE ON THE STREET/RETAIL VALUE (U.S.A.) COCAINE

Colombia (1988)

	$50,000 per kilo	$120,000 per kilo
38,000 kilos	$1,900,000,000	$4,560,000,000
48,000 kilos	$2,400,000,000	$5,760,000,000

Sources: Calculations by author, kilos and price per kilo based upon 1988 prices and official estimate for production of cocaine. (National Narcotics Intelligence Consumers Committee: 1988 Report, April 89), pp. 31,32,39.

TABLE (XIX). PRICE PER KILO OF COCAINE

Ecuador (1988) production

	$11,000 per kilo	$34,000 per kilo
10,000 kilos	$110,000,000	$340,000,000

Sources: Calculations by author, kilos and price per kilo based upon 1988 prices and official estimate for production of cocaine. (National Narcotics Intelligence Consumers Committee: 1988 Report, April 89), pp. 31,32,39.

TABLE (XX). PRICE ON THE STREET/RETAIL VALUE (U.S.A.)
Ecuador (1988)

	$50,000 per kilo	$120,000 per kilo
10,000 kilos	500,000,000	$1,200,000,000

Sources: Calculations by author, kilos and price per kilo based upon 1988 prices and official estimate for production of cocaine. (National Narcotics Intelligence Consumers Committee: 1988 Report, April 89), pp. 31,32,39.

TABLE (XXI). PRICE PER KILO OF COCAINE

Peru (1988) production

	$11,000 per kilo	$34,000 per kilo
194,000 kilos	$2,134,000,000	$6,596,000,000
248,000 kilos	$2,728,000,000	$8,432,000,000

Sources: Calculations by author, kilos and price per kilo based upon 1988 prices and official estimate for production of cocaine. (National Narcotics Intelligence Consumers Committee: 1988 Report, April 89), pp. 31,32,39.

TABLE (XXII). PRICE ON THE STREET/RETAIL VALUE
(U.S.A.)
Peru (1988)

	$50,000 per kilo	$120,000 per kilo
194,000 kilos	$9,700,000,000	$23,280,000,000
248,000 kilos	$12,400,000,000	$29,760,000,000

Sources: Calculations by author, kilos and price per kilo based upon 1988 prices and official estimate for production of cocaine. (National Narcotics Intelligence Consumers Committee: 1988 Report, April 89), pp. 31,32,39.

NOTES

1. United States Central Intelligence Agency, World Factbook 1989 (Washington D.C.: 1989), p. vii.

G.D.P.: GROSS DOMESTIC PRODUCT : The value of all goods and services produced domestically.
G.N.P.: GROSS NATIONAL PRODUCT:The value of all goods and services produced domestically, plus income earned abroad, minus income earned by foreigners from domestic production.

2. Central Intelligence Agency [1989], op. cit..

3. Editorial Staff member Central Intelligence Agency, (phone conversation 1990) stated that an editorial decision had been made to exclude the dollar value of the drug trade from the estimate of the GNP or GDP.

4. Some of the drug producing regions have moved in the direction of gaining more control over the income generated by the drugs, and have started a trend towards the establishment of refineries in the countries as well as working upon establishing networks of distribution. They are no longer content to share the smallest portion of the revenues from the drugs. This parallels in some ways, the move away from colonialism which has modified some of the licit economic structures in many of these countries.

5. Lawrence Lifeshultz, " Inside the Kingdom of Heroin," The Nation, (November 14 1988), pp. 491-496.

5,6. Alfred McCoy, The Politics of Heroin in Southeast Asia (New York: Harper Row 1972).

5,6. Michael Satchell, Richard Chesnoff, Maria Weschler, Joseph Shapiro, Robert Rosenberg, Carta Anne Robbins, Sharon Golden, "Narcotics: Terrors New Ally," U.S. News and World Report (May 5 1987), pp. 30-37.

5,6. Leslie Cockburn, Andrew Cockburn "Guns, Drugs and the CIA," Television Documentary (FRONTLINE SPECIAL) (Boston: WBGH 1988).
Contained historical footage and interviews which illustrated the political and cultural realities of drug trafficking in Southeast Asia as well as a portion of the Contra period in Central America.

7. Slash and Burn is also used during the preparation of the land prior to planting traditional food crops; it is not a special technique.

8. Personal Communication from a confidential source within the government of the United States, (1990).

9. Peter T. White, "Coca an Ancient Indian Herb Turns Deadly," National Geographic (January 1989), pp. 6-47.

10. Douglas Jehl, Ronald Ostrow, "German Cocaine Chemicals for Colombia," Los Angeles Times (June 6 1990).

11. The most commonly used precursor chemicals are extremely toxic and classified as very hazardous. Chemical dumping at the production sites is the norm; they don't have any other way to deal with the chemicals.

12. Peter T. White, "The Poppy," National Geographic (February 1985), pp. 143-188. This article is an excellent overview, eventhough it is somewhat dated.

13. The price for drugs increase as they move closer to western society, and as they are cut in purity. The tremendous increase in profits has been recognized by some drug producing areas, particularly in Asia, the Americas, and to a lesser extent in Southwest Asia. The goal of some of these drug traffickers is to establish networks reaching from the fields to the streets thereby catching a greater share of the profits, analogous to a vertical and horizontal penetration of the marketplace.

13. Peter Leung, "Asian Drug Rings Aim to Dominate United States Heroin Trade," San Francisco Chronicle (April 23 1990).

13. Mexican heroin traffickers, and Colombian cartels have also been involved in this type of endeavor, particularly in California.

13. United States Department of Justice, "Intelligence Trends: From the Source to the Street: Current Prices 1987," (Washington D.C. Drug Enforcement Administration undated photocopy), pp. 7-9.

14. United States Department of Justice, "Intelligence Trends: From the Source to the Street: Current Prices 1988," (Washington D.C. Drug Enforcement Administration undated photocopy), pp. 7-9.

14. Turkey is frequently cited as a country where drugs are under control, i.e., opium growing for illegal purposes has been almost completely eliminated. However, it is relatively common knowledge that international drug cartels are based in Turkey and that the Kurdish areas are drug producing with both heroin refineries and a small amount of opium growing. The Turkish government has been relatively successful but not in the above areas. India has made an effort, but the value of opium and heroin in one of the poorest countries in Asia makes eradication difficult.

15. The short profiles of the countries which have been taken from the World Factbook 1989 have been edited in order to give a concise overview of the specific countries. Quite frequently, authors don't take into account the limited geographical backgrounds of readers... the goal of this work was to create a reference for longitudinal study of drug producing countries and to illustrate how readily available information is on the subject matter. The geographical profiles are highlighted through single spacing; each profile has a specific endnote to facilitate those who want to find the complete profiles in the original source. 1989 was selected because many of the source materials for drugs which were available from the government were based between 1987-89.

16. Central Intelligence Agency [1989], Op.Cit., pp. 1-2.

17. United States Department of State, Bureau of International Narcotics Matters, "International Narcotics Control Strategy Report March 1989," (Washington D.C. March 1989), p. 16 (executive summary section).

18. United States Department of Justice, "Intelligence Trends: From the Source to the Street: Current Prices 1987," (Washington D.C. Drug Enforcement Administration undated photocopy), p. 8.
The 1988 price was identical.

19. Ibid., p.8
The 1988 price was lower for some U.S. wholesale prices.

19. United States Department of Justice, "Intelligence Trends: From the Source to the Street: Current Prices 1988," (Washington D.C. Drug Enforcement Administration undated photocopy), p. 8.
The wholesale range of $500,000 to $2,500,000 takes into account the range displayed in the 1987 and 1988 prices from the DEA.

20. Lifeshultz, [1988], op. cit., pp. 491-496.
Two quotes which sum up the relationships cited in this section:
"...the local press...the Herald suggests that...the main conduit by which weapons reach the Afghan insurgents in the north is also one of the principal routes for the transport of heroin to Karachi and the road which links the two..."
"...the CIA's pipeline to the Mujahedeen is organized and coordinated by Pakistan's Interservices Intelligence. The main carrier is an outfit called the National Logistical Cell. Owned and operated by the Pakistani Army, it is the largest transport organization in the country. All its drivers and loaders are army personnel. Security at N.L.C. installations is tight... the Herald gave this eyewitness Report: The drug is carried in N.L.C. trucks, which come sealed from N.W.F.P. (Northwest Frontier) and are never checked by the police...some of these contain heroin."

21. Henry Kamm, "Afghan Opium Yield Up as Pakistan Curbs Crop," New York Times (April 14 1988).
Kamm states that...60% of the heroin in Western Europe comes from this region, and that Istanbul (Turkey) based cartels provide the organization and the cash.

22. Allan Dodds Frank, "Unwelcome Side Effects from Peace in Afghanistan," Forbes (August 8 1988), pp. 34-36.

23. Central Intelligence Agency [1989], op. cit., pp. 136-138.

24,25. United States Department of State, Bureau of International Narcotics Matters, International Narcotics Control Strategy Report, Mid Year Update August 1989," (Washington D.C. August 1989), p. 62.
This document cites the 10 to 50% leakage of the legal or registered opium crop, which would then equal 300 to 600 metric tons of opium.

26. United States Department of Justice, "Intellignece Trends: From the Source to the Street: Current Prices 1988," (Washington D.C. Drug Enforcement Administration undated photocopy), p.8.

27,28. Personal Communication from a confidential source within the government of the United States, (1990).

29. Central Intelligence Agency [1989], op. cit., pp. 141-142.

30. United States Department of State, Bureau of International Narcotics Matters, "International Narcotics Control Strategy Report, Mid Year Update August 1989," (Washington D.C. August 1989), p.77.

30. no author cited, "17 Reported Hanged in Iran Anti-Drug Campaign," New York Times (January 8 1989).

31. National Narcotics Intelligence Consumers Committee (NNICC), "The NNICC Report 1989, The Supply of Illicit Drugs to the United States," (Washington D.C. June 1990), p. 49.

32. Kamm, [1988], op. cit..

33. National Narcotics Intelligence Consumers Committee (NNICC), "The NNICC Report 1988, The Supply of Illicit Drugs to the United States," (Washington D.C. April 1989), p. 76.
This report cites heroin labs operating in Kurdish controlled areas of Iran.

33. Frank, [1988], op. cit., pp. 34-36.

33. The Kurdish peoples live in Iraq, Iran, Turkey, and the Soviet Union. They inhabit terrain which is usually quite rugged, smuggling and the herding of animals are common parts of the culture, particularly for those outside the small towns or cites.

34. Central Intelligence Agency [1989], op. cit., pp. 229-231.

35. National Narcotics Intelligence Consumers Committee (NNICC), "The NNICC Report 1989, The Supply of Illicit Drugs to the United States," (Washington D.C. June 1990), p. 49.

36. Mahnaz Ispahani, "Pakistan...Country in Crisis," San Francisco Chronicle (March 18 1987).

36. Rone Tempest, "Big Drug Dealers Escaped Pakistani Raid, Afghans Driven from Homes Say," Los Angeles Times (December 18 1988).

36. Mark Fineman, "Drug Trade is Number One Issue, Bhutto Declares," Los Angeles Times (Decemeber 18 1986).

36. Stuart Auerbach, "Antidrug Drive Undercut," Washington Post (August 2 1985).

36. Please refer to endnotes numbers 20, 32 for more information.

37. Central Intelligence Agency [1989], op. cit., pp. 299-301.

38,39,40. Allan Cowell, " For Heroin, Turkey is the Land Bridge to the West," New York Times (July 14 1987).
Please refer to Kamm [1988) op. cit. for additional information.

41. The Kurdish peoples are engaged in smuggling, armed rebellion, drug production and other illegal acts according to Turkish authorities. The Kurds suggest that they are the victims of discrimination and oppression, and that they interested in self-determination. There is evidence from recent history to support both viewpoints.

42. Central Intelligence Agency [1989], op. cit. pp. 169-171.

43. National Narcotics Intelligence Consumers Committee (NNICC), "The NNICC Report 1988, The Supply of Illicit Drugs to the United States," (Washington D.C. April 1989), p. 74.

44. United States Department of State, Bureau of International Narcotics Matters, "International Narcotics Control Strategy Report March 1990," (Washington D.C. March 1990), p. 26.

45. National Narcotics Intelligence Consumers Committee (NNICC), "The NNICC Report 1989, The Supply of Illicit Drugs to the United States," (Washington D.C. June 1990), p. 49.

46. The armed militias are able to purchase arms with profits from the drug trade; many of the militias obtain a large part of their funding from the trade.

46. Amy Kaslow, "Lebanese Trafficking and Syrian Control of the Bekaa Valley," Christian Science Monitor (March 7 1990).

46. See Kamm [1988] op. cit., for more information on this subject; he refers to Lebanon and Syria.

46. The author viewed a television documentary, which was produced in Europe, it is alleged to show Syrian military checkpoints and drug manufacturing in the Bekaa valley. (The author has a copy of the tape, but no source for the tape).

47. Central Intelligence Agency [1989], op. cit., pp. 46-48.

48. The figure of 2500 metric tons was arrived at by adding the 1988-89 growing seasons together because of overlap and taking the average which was rounded off to 2500 metric tons.
National Narcotics Intelligence Consumers Committee (NNICC), "The NNICC Report 1989, The Supply of Illicit Drugs to the United States" (Washington D.C. June 1990), p. 38.

48. Burmese prices were derived by dividing the price for 10 kilos by 10 in order to arrive at the amount per kilo; raw opium is generally price in 10 kilo amounts before processing.

48. Prices wer also found in a San Francisco Chronicle Graphic (dated : April 23, 1990 on the trade).

48. United States Department of Justice, "Intelligence Trends: From the Source to the Street: Current Prices 1988," (Washington D.C. Drug Enforcement Administration undated photocopy), p. 9.

48. United States Department of State, Bureau of International Narcotics Matters, "International Narcotics Control Strategy Report March 1989" (Washington D.C. March 1989), p. 15 (executive summary section).

49. United States Department of State, Bureau of International Narcotics Matters, "International Narcotics Control Strategy Report March 1989," (Washington D.C. March 1989), p. 186.
Lists the metric tons of heroin for Burma for 1988-1989.

49. United States Department of Justice, "Intelligence Trends: From the Source to the Street: Current Prices 1988," (Washington D.C. Drug Enforcement Administration undated photocopy), p. 9.

50. United States Department of State, Bureau of International Narcotics Matters, "International Narcotics Control Strategy Report March 1989," (Washington D.C. March 1989), pp. 185-186.

51. Ibid., p. 181.
Burma is the largest opium producer in the world...major portion of this crop is produced in areas under the control of insurgents.

52. David Kaplin, Alec Dubro, Yakuza (Macmillian Collier 1987), p.212. The authors give an interesting perspective in the following quotation drawn from their important book on the Yakuza.
"...of even greater importance to the future of organized crime was the fate of those Nationalists Army units that fled south into Burma. It was there in the early 1950's that the U.S. Central Intelligence Agency, anxious to set up a second front along with Taiwan against Mao, helped form the remants of Chiangs army into a guerilla force of some 10,000 men. It was a critical mistake. ... the Nationalists turned to opium as a way to finance their activities. Without much hope of defeating the Communists they soon degenerated into a prive drug militia, which

today, in concert with Thai and Hong Kong Triads, control a considerable amount of the world's heroin traffic. The region settled by Chiang's renegade KMT soldiers is Southeast Asia's notorious Golden Triangle, a remote mountainous area where the ill defined borders of Thailand, Burma and Laos meet."

52. The most infamous drug trafficker in the region is called Prince Prosperous, or General Kuhn Sa. He has a price on his head, the United States wants him because it is alleged that he ordered the killing of a DEA agent's wife. The General denies it; he fields a large military force which is part of the Shan state area in Burma. He has played a role for anti-communist forces, in that he has sometimes turned his army against the Burmese Communist Party.

52. Time Magazine, "The Great Opium War," (March 1 1982), p.26.

52. Charles Wallace, "Prince Prosperous, The Drug Dealer," San Francisco Chronicle (August 1 1990).

52. Charles Wallace, "Money, Roads, Clinics, Electricity, and Addicts," San Francisco Chronicle (August 1 1990).

52. Jack Anderson, Dale Van Atta, "Thailand's Top Heroin Peddler," San Francisco Chronicle (July 12 1990).

52. Newsweek, "Asian Connection," (June 25 1984), p. 62.

52. Newsweek, "Burmas Money Tree," (May 15 1989), pp. 42-43.

52. Time Magazine, "Junior Rambos-Burma," (June 18 1990), pp. 43-44,49.

52. Far Eastern Economic Review: (May 28th; June 4th, 1987 editions).

53. Central Intelligence Agency [1989], op. cit., pp. 168-169.

54. Alfred McCoy, The Politics of Heroin in Southeast Asia, (Harper and Row, New York 1972), pp. 73-76, 92-109, 306-308.

It has been republished in 1991, and updated; it is "the" basic work on the subject.

54. David Truong, "Running Drugs and Secret Wars," Covert Action Bulletin #28, (Washington D.C. Summer 1987), pp. 3-5.
The magazine is "left of center," this piece delt with allegations against the United States or its former and current allies.

55. Leslie Cockburn, Andrew Cockburn, "Guns, Drugs and the CIA," Television Documentary (FRONTLINE SPECIAL) (Boston: WGBH 1988).
The video contains footage of the ground war against various communist groups in Southeast Asia, with historical background and interviews.

55. Kaplan and Dubro, [1987], op. cit., p. 212.

56. McCoy, [1972], pp. 99-100.

57. Cockburn and Cockburn [1988 Guns, Drugs and the CIA]:
Selected Commentary from the documentary:
(taken from a commercially prepared transcript of the documentary and checked against the tape)

(a). Victor Marchetti (former member of the director's staff CIA):
"As things changed in the world the CIA got involved with KMT types in Burma who were drug runners because they were resisting the drift towards communism there. The same thing happened in southeast asia, later in Latin America."

(b). William Colby (former director of the CIA):
" CIA has a solid rule against being involved in drug trafficking. That's not to say that some of the people who CIA has used or been in touch with over the years may well have themselves been involved in drug traffic, but not the CIA."
(c). Ron Rickenbach (former official U.S. AID):
"It was then the presence of these air transport services in and out of the areas in question where the product, where the opium was grown that greatly facilitated an increase in production and an ease of trashipment from the point of agriculture to the point of processing."

"Growing opium was a natural agricultural enterprise for these people (Hmong and others) and they had been doing it for many years before the Americans ever got there. When we got there they continued to do so."

(d). Victor Marchetti:
"Well, there may have been other funds generated by Vang Pao himself through his dope operations."

frontline narrator:
"Is it conceivable that the CIA would fight a war with dope money?"

Marchetti:
"Well, yes, in the sense that they would not sell dope to earn money to support an operation. But they would look the other way if the people they were supporting were financing themsleves by selling dope."

(e). Tony Poe (former case officer for the CIA who supervised Vang Pao and the Hmong):
"Oh, he was making millions, "cos" he had his own source of, uh, avenue for his own, uh, heroin."

(f). Joe Nellis (former chief counsel for the House Select Committee on Narcotics):
"Vang Pao had a heavy hand in the production of heroin in that area."

frontline narrator:
"How much of the money that was going to pay these thousands and thousands of tribesmen to fight for us, for the CIA. Where was that money coming from?"

Joe Nellis:
"From the trade."

frontline narrator:
"From the opium trade?"

Joe Nellis:
"Yes, surely."

58. A great deal of debate has raged over the question whether a refinery operated on the base in Laos; a number of sources have tended to verify that such a refinery operated at one end of the base; but was not part of the American section.

59. National Narcotics Intelligence Consumers Committee (NNICC), "The NNICC Report 1989, The Supply of Illicit Drugs to the United States," (Washington D.C. June 1990), p. 38.

60, 61. United States Department of State, Bureau of International Narcotics Control "Strategy Report March 1990," (Washington D.C. March 1990), p. 26.

62. Central Intelligence [1989], op. cit., pp. 291-293.

63. National Narcotics Intelligence Consumers Committee (NNICC), "The NNICC Report 1989, The Supply of Illicit Drugs to the United States," (Washington D.C. June 1990), p. 38.

The crop year 1988-89 saw between 49 to 58 metric tons being produced, a significant increase for Thailand.

64. Personal Communication from a confidential source within the government of the United States, (1990).

65. Central Intelligence Agency [1989], op. cit., pp. 196-197.

66. National Narcotics Intelligence Consumers Committee (NNICC), "The NNICC Report 1989, The Supply of Illicit Drugs to the United States," (Washington D.C. June 1990), pp. 45-47.

66. National Narcotics Intelligence Consumers Committee (NNICC), "The NNICC Report 1988, The Supply of Illicit Drugs to the United States," (Washington D.C. April 1989), p. 88.

67. United States Department of Justice, "Intelligence Trends: From the Source to the Street: Current Prices 1988," (Washington D.C. Drug Enforcement Administration undated photocopy), p. 7. (The given price is for 10 kilos, the author divided by 10 to arrive at the price per kilo).

68. National Narcotics Intelligence Consumers Committee (NNICC), "The NNICC Report 1989, The Supply of Illicit Drugs to the United States," (Washington D.C. June 1990), p. 46.

69. United States Department of Justice, "Intelligence Trends: From the Source to the Street: Current Prices 1988," (Washington D.C. Drug Enforcement Administration undated photocopy), p. 7.

70, 71. Allegations of Mexican corruption in regards to Drug Trafficking were reported in the following:

70, 71. Henry Weinstein, "Official Mexico Corruption Blasted," Santa Rosa Press Democrat (reprinted from the Los Angeles Times), (July 7 90).

70, 71. Henry Weinstein, "Everyone I met is Corrupt," Santa Rosa Press Democrat (reprinted from the Los Angeles Times), (June 6 1990).

70, 71. Fred Setterberg, Lonnie Shavelson, "Mexico Drug Raids Called Fake," San Francisco Chronicle (July 14 1990).

70, 71. James Mills, The Underground Empire, (Garden City New York, Doubleday 1986).

71. Associated Press, "Mexican Police to operate in United States," Marin Independent Journal (July 7 90).

The article quotes a Mexican government official..."by no means will DEA agents carry guns in Mexico." The same article notes that half of the cocaine flowing into the United States is being smuggled across the southern border from Mexico after it has been flown or moved north from Colombia or one of the staging or producing countries.

Hector Camarena a DEA agent was killed by Mexican Traffickers who were working with corrupt police and other government officials. He was not armed and was not able to defend himself. Only those agents who were assigned to the American Embassy in Mexico City, who had diplomatic immunity were officially allowed to carry weapons in Mexico. It cost Camarena his life.

72. There are very few stories of drug suppression in the media pertaining to Mexico. Against the backdrop of corruption, some individuals are trying to stem the tide...but they receive very little publicity on both sides of the border. It is as if the media in both countries would rather ignore the subject of dedicated law enforcement in Mexico and to only deal with the obvious stereotypes.

72. Rick Del Vecchio, "How Black Tar Gets to the Users," San Francisco Chronicle (July 7 1990). The article notes that Mexican drug rings are frequently composed of individuals who are related; this makes working undercover very difficult; and it hinders law enforcement in areas where most of the people are related to one another.

73. Central Intelligence Agency [1989], op. cit., pp. 120-122.

74. National Narcotics Intelligence Consumers Committee (NNICC), "The NNICC Report 1989, The Supply of Illicit Drugs to the United States," (Washington D.C. June 1990), p. 53.

75,76,77. Brook Larmer, "U.S. Targets Guatemalan Opium," Christian Science Monitor (March 7 1990).

78. Central Intelligence Agency [1989], op. cit., pp. 35-36.

79. United States Department of State, Bureau of International Narcotics Matters, "International Narcotics Control Strategy Report March 1989," (Washington D.C. March 1989), p. 16 (executive summary section).

80,81,82. National Narcotics Intelligence Consumers Committee (NNICC), "The NNICC Report 1988, The Supply of Illicit Drugs to the United States," (Washington D.C. April 1989), pp. 41-45.

83. No author cited, "Guns Drugs and Politics," Newsweek (July 28 1988), pp. 26-29.

83. John S. Demott, Barett Seaman, Alessandra Stanley, "Striking at the Source," Time (July 28 86), pp. 12-14.

84. Robert Collier, "Bolivia's Anti Drug War in Tailspin," San Francisco Chronicle (November 6 1990).

84. David Kline, "Bolivia : How to lose the Coke War," Atlantic (May 1987), pp. 22-27.

84. Penny Lernoux, "Playing Golf While Drugs Flow," The Nation (February 2 1989), pp. 188-192.

85. National Narcotics Intelligence Consumers Committee (NNICC), "The NNICC Report 1988, The Supply of Illicit Drugs to the United States," (Washington D.C. April 1989), pp. 31-32.

86. Central Intelligence Agency [1989], op. cit., pp. 65-66.

87. National Narcotics Intelligence Consumers Committee (NNICC), "The NNICC Report 1988, The Supply of Illicit Drugs to the United States," (Washington D.C. April 1989), pp. 39, 45.

88. Ibid.
The author arrived at 27,230 by taking the figure of 23,750 and adding it to 30,250 and taking the average which was 27,230.

89. Ibid., p. 46.

90. Cocaine is still coming into the United States, even after attempts at suppression against major traffickers in Colombia have been undertaken with a tremendous cost in human lives.

90. Donald Soble, "Cocaine Rolls Down America's Interstates," Los Angeles Times (October 6 1990).

90. Susan Greenwood, "Cocaines Dirty 300," Newsweek (November 13 1989), pp. 36-40.

90. Robert Collier, "Medellin Drug War's Grim Toll," San Francisco Chronicle (June 13 1990).

90. Tom Wells, " A price on Policemen," Santa Rosa Press Democrat (June 1 1990).

90. Anna Arana, "Colombia nearly nabs Drug Lord," San Francisco Examiner (July 7 1990).

91. Revenue from drug trafficking has become an integral part of the economy for drug trafficking and consuming countries.

92. Central Intelligence Agency [1989], op. cit., pp. 83-84.

93. United States Department of State, Bureau of International Narcotic Matters, International Narcotics Control Strategy Report March 1989," (Washington D.C. March 1989), p. 15 (executive summary section).

94. Calculations by the author.

95. Peter Lupsha, "Cocaine Politics," Update: International Association for the the Study of Organized Crime, Vol. 1, #2 (Spring 1985), pp. 1-2.

96. Central Intelligence Agency [1989], op. cit., pp. 237-239.

97,98,99. National Narcotics Intelligence Consumers Committee (NNICC), "The NNICC Report 1988, The Supply of Illicit Drugs to the United States," (Washington D.C. April 1989), pp. 39-40.

100. The following articles are excellent source materials for drug production and trafficking in Peru.

100. Robin Kirk, "Why Peru won't go along with U.S. Drug Policy," San Francisco Chronicle (October 1 1990).

100. Phil Bronstein, "Guns and Coca," Image Magazine, San Francisco Chronicle (February 17 1990), pp. 8-15, 30-31.

100. Harry Anderson, Douglas Waller, Robert Parry, Spencer Reiss, Mike Smith, "The Next Nasty War," Newsweek (May 21 1990), pp. 36-37.

100. Peter Andreas, "The U.S. Drug War in Peru," The Nation (August 13/20 1988), pp. 127-128.

100. No author cited, "U.S. Reported to be Sending Agents to Peru in Drug fight," New York Times (January 23 1989).

101. No author cited, "Peru Guerillas Raid Anti-Drug Base," San Francisco Chronicle (June 19 1991). Contains an account of Guerillas in Peru's Huallaga Valley raiding a U.S. built anti drug base with rocket propelled grenades, and smalls arms and being repulsed by U.S. civilians and Peruvian national police flying UH-1H Huey (helicopter gunships).

102. Louis Kraar, "The Drug Trade," Fortune Magazine (June 6 1990), pp. 31-38.

103. Elaine Sciolino, "Drug Production Rising Worldwide, State Departments Says," New York Times (March 2 1989). Contains an acknowledgement that the curbing of drug growing would undermine allied economies, thus posing additional problems in the area of foreign policy.

(ALL DATA EXPRESSED IN DOLLARS (UNITED STATES)

AFGHANISTAN GDP/GNP	VALUE drug $	LEGAL Per Capita
3.1 billion	3.5 billion (1988) morphine base	[220]
	130,000,000 (1988) raw opium 130 per kilo	

INDIA GDP/GNP	VALUE drug $	LEGAL Per Capita
231 billion	78,000,000 (1989) raw opium* 130 per kilo	[290]

IRAN GDP/GNP	VALUE drug $	LEGAL Per Capita
93 billion	52,000,000 (1988) raw opium* 130 per kilo	[1,800]

PAKISTAN GDP/GNP	VALUE drug $	LEGAL Per Capita
39.5 billion	28,600,000 (1988) raw opium* 130 per kilo	[370]

TURKEY GDP/GNP	VALUE drug $	LEGAL Per Capita
62.6 billion	(UNKNOWN)	[1,180]

LEBANON GDP/GNP	VALUE drug $	LEGAL Per Capita
1.8 billion	104,000,000 (1989) heroin at the lab.	[690]
	6,500,000 (1989) raw opium 130 per kilo	

BURMA GDP/GNP	VALUE drug $	LEGAL Per Capita
9.3 billion	400,000,000 (1988) raw opium 160 per kilo at the lab.	[230]
	241,000,000 (1988) heroin base at the lab.	
	14,490,000,000 heroin wholesale first U.S. Port of Entry	

LAOS GDP/GNP	VALUE drug $		LEGAL Per Capita
551 Million	48,000,000 raw opium at the lab.	(1988) 160 per kilo	[140]

THAILAND GDP/GNP	VALUE drug $		LEGAL Per Capita
52.2 Billion	5,280,000 raw opium at the lab.	(1988) 160 per kilo	[965]

MEXICO GDP/GNP	VALUE drug $		LEGAL Per Capita
135.9 Billion	680,000,000 raw opium at the lab.	(1989)	[1,640]

GUATEMALA GDP/GNP	VALUE drug $		LEGAL Per Capita
9.6 Billion	140,800,000 raw opium at the lab.	(1988)	[1,100]

BOLIVIA GDP/GNP	VALUE drug $	LEGAL Per Capita
4.6 Billion	4,556,000,000 (1988) Cocaine wholesale 34,000	[680]
	16,000,000,000 (1988) Cocaine retail street value United States 120,000	

COLOMBIA GDP/GNP	VALUE drug $	LEGAL Per Capita
33 Billion	1,693,000,000 (1988) Cocaine wholesale 34,000	[1,140]
	5,760,000,000 (1988) Cocaine retail street value United States 120,000	

ECUADOR GDP/GNP	VALUE drug $	LEGAL Per Capita
9.4 Billion	340,000,000 (1988) Cocaine wholesale 34,000	[940]
	1,200,000,000 (1988) Cocaine retail street value United States 120,000	

PERU GDP/GNP	VALUE drug $	LEGAL Per Capita
19.6 Billion	8,432,000,000 (1988) Cocaine wholesale 34,000	[920]
	29,760,000,000 (1988) Cocaine retail street value United States 120,000	

END