

WORKING PAPER 493

COCA, COCAINE AND THE SUBTERRANEAN "BOOM":

The rise of an illicit commodity economy and the  
consequences for development in Bolivia and Peru

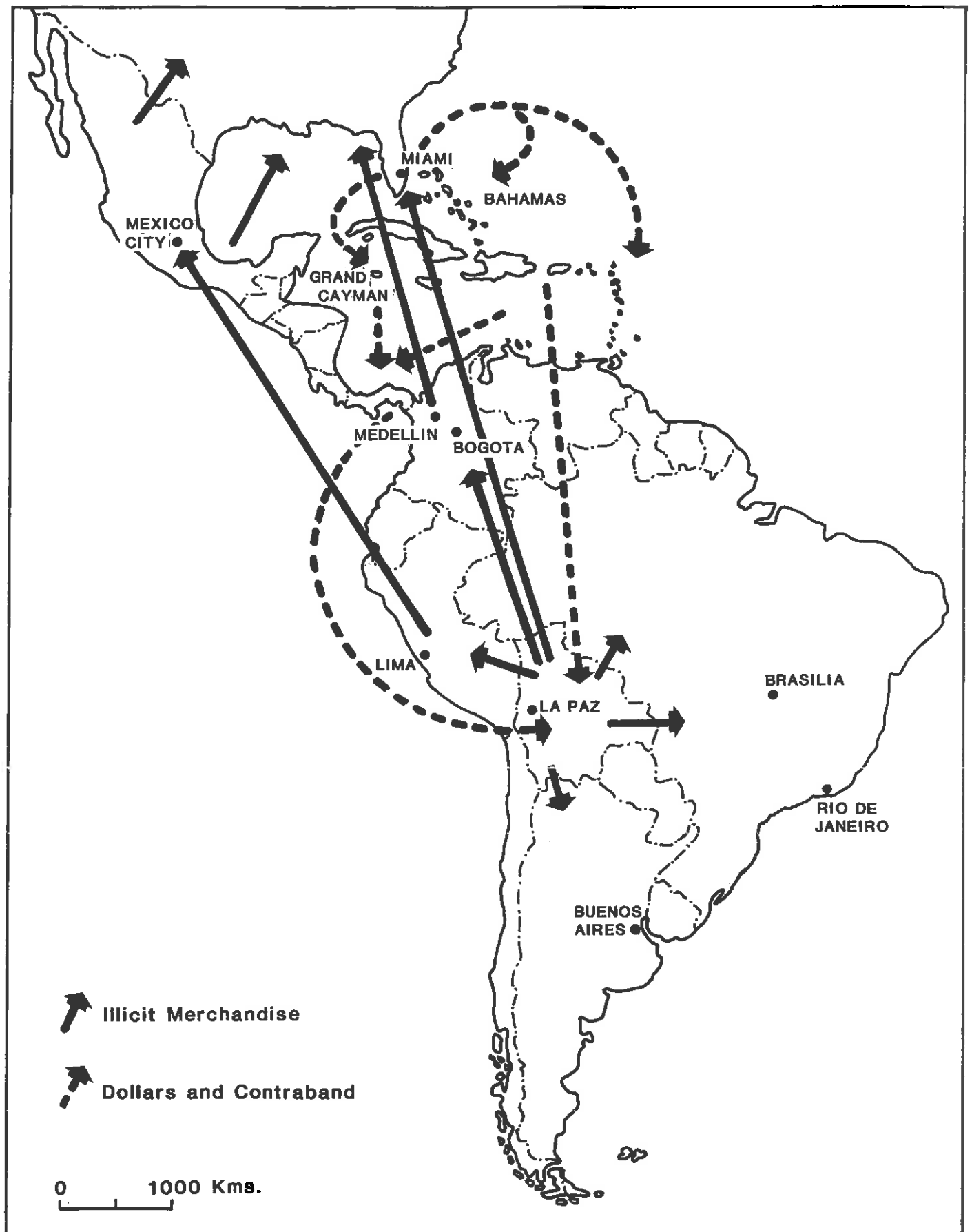
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Commodity flows and laundering of assets

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## PREFACE

The production and international distribution of narcotic drugs has today become one of the leading development issues facing many of the Latin American countries, yet one that has received little critical attention beyond a narrow circle of policy makers calling for the implementation of further repressive measures. Though the drugs connection linking Latin producers with U.S. consumers has a long and chequered history, over the past decade this trade has increased dramatically. Many countries' drug revenues now exceed their income from conventional exports; for example Jamaica is estimated to earn US\$ 1 billion a year from marijuana, while traditional "exports" - bauxite, sugar and tourism - generate around US\$ 700 million. The drugs business has also become a means of livelihood for hundreds of thousands of families, many of them poor peasants who are dependent upon the earnings from periods of wage labour in harvesting, transporting or refining narcotics. Here they are exposed to the dangers of arrest by police, ill-health through handling toxic substances (coca paste is made by treading coca leaves barefoot in sulphuric acid and kerosene) and exploitation by their employers, who may encourage them to use drugs as a form of debt-bondage. Yet the opportunities for alternative, legal employment have been greatly reduced throughout much of Latin America as a consequence of prolonged

economic recession and the debt crisis.

This working paper addresses the development dilemma created by the narcotic drugs industry, focussing upon the situation in Bolivia and, to a lesser extent, Peru. These two countries have experienced a major social and economic transformation during the last few years, as a result of the seemingly insatiable demand for cocaine in the developed countries, demand that may be worth up to US\$ 40 billion a year. However, both are under intense pressure to eradicate coca production from their territories, notwithstanding that the crop has been grown in the region for thousands of years. Furthermore the production of cocaine provides substantial foreign exchange to both countries, creates jobs and contributes to gross national product. However, the drugs industry also creates serious financial distortions, undermining economic development and threatening the authority and legitimacy of the state. The purpose of this paper, therefore, is to evaluate the impact of narcotics production on the national economy, its consequences for rural development and the chances of success for policies of eradication and repression.

## Introduction

In line with the increased availability of various kinds of recreational drugs on the international market during the last decade or so, the United States government has expanded and intensified its activities in the international policing of narcotics. Today its vigorous anti-drugs policy rivals the debt crisis and hemispheric security concerns ("the fight against international communism") as a source of tension in its foreign relations with Latin America. Though Mexico and Colombia have long been the focus of United States' opprobrium for their association with drugs, the two Andean countries most closely associated with coca leaf, Bolivia and Peru, have recently felt the consequences of this new US policy. After many years of diplomatic pressure and bilateral aid directed towards crop substitution programmes, 1986 finally saw United States troops and helicopters involved in raids upon cocaine processing laboratories in the eastern lowlands of Bolivia. This marked a significant intensification of the "war on drugs", especially as it is now being waged in the jungles of the southern hemisphere. However, the militarisation of an anti-narcotics policy has arguably more to do with building the image of strong government in the United States than with solving the structural causes of drugs production in Latin

America, which remain economic underdevelopment and rural poverty.

Though invited by the Bolivian government to participate in joint military exercises under the codename "Operation Blast Furnace", the presence of United States troops provoked widespread condemnation amongst all classes throughout Bolivia. Not for the first time coca was seen as part of the cultural heritage of the country under attack from outsiders, and among nationalists the cultivation of coca leaf has begun to represent a form of anti-imperialist struggle. The Guardian newspaper gave a flavour of the antipathy generated by the raids when it reported the failure of police and agents from the United States Drug Enforcement Agency to arrest alleged traffickers in Santa Ana de Yacuma, in the Northeast of the country. It concluded, "The police and the Blackhawks (US helicopters) retreated after having been surrounded by hostile crowds of up to 3,000 people shouting 'Yankees go home'." (Guardian 16 October 1986).

The people of Santa Ana have a vested interest in protecting the town's most famous son, Roberto Suarez Gomez, a cocaine baron of immense wealth who has reputedly offered to solve the country's external debt problem. Stories such as this serve to highlight the populist image that individuals such as Suarez, or Pablo Escobar and Carlos Lehder in Colombia, are able to create through a combination of nationalist rhetoric and the generation of employment opportunities

amongst the poor. Escobar, for example, has built a low-cost housing estate for the urban poor of Medellin besides promoting public works, sports events and social occasions (Arango and Child 1985). A thorough study of the cocaine business would require an examination of the power base of such individuals, the spread of their influence in the construction of clientelist networks throughout the realms of the government bureaucracy and the security services, as well as an understanding of their financial activities involving legitimate domestic business investments and offshore laundering operations.

However, these powerful cocaine caciques are merely the pinnacle of an enormous pyramid with a rapidly widening base that represents a mass of individuals associated with coca and its derivatives. The increasing numbers of people involved in coca-related activities reflects the serious structural crisis affecting the Andean countries, circumstances that have forced the securing of livelihoods in the only dynamic, labour-intensive sector of the economy. Consequently, the first objective of this article is to examine the recent "boom" in coca production in Bolivia within the context of a severe economic crisis that has probably had no parallel elsewhere in the world in the modern period.

The second objective is to call into question the strategy of repression as a solution to the coca "problem". International treaties



have long called for the eradication of coca growing from Peru and Bolivia, with the 1964 Single Convention on Narcotic Drugs obliging these countries to phase out coca chewing within 25 years of the treaty's enactment (1). Yet while alien cultural norms judge the traditional uses of coca as morally reprehensible, that same culture - which exerts such a powerful influence over Latin American youth - associates the use of cocaine with wealth and success. It will require all the skills of Madison Avenue, or the long-term consequences of over-supply, to reconstruct the image of cocaine as unfashionable and downmarket. But constructive policy initiatives in the field of drug control could immediately begin to recognise the importance of coca to Andean culture and its nutritional contribution to the highland diet, as well as the expedience of its cultivation within a diversified cropping system in areas of agricultural colonization.

This article attempts to raise some of these issues within a broad developmentalist framework. It assesses the consequences of the coca/cocaine boom for the Bolivian economy, suggesting parallels with earlier commodity booms triggered by demand in the industrialised countries of the North, but which generated socially and spatially concentrated, short-term development for the producers of the South. In critically examining the logic of repression which characterises coca eradication policies, the article argues that the problem of drug production encompasses a much wider structural crisis confronting

many of the Latin American economies. Although it largely deals with the recent experience in Bolivia, much of the article is equally applicable to Peru - particularly with regard to developments on the agricultural frontier in the Huallaga Valley.

### The Bolivian Economic Crisis and the Subterranean Economy

The rapid expansion of the Bolivian cocaine industry during the 1980s must be seen within the context of a dramatic economic crisis. The onset of recession in the world economy from the late 1970s severely hit primary commodity exporting countries which have suffered from falling demand and declining market prices for their products, as well as from a rising debt service to export earnings ratio. Bolivia displays many of these structural problems, particularly in relation to the production of tin, historically the backbone of the economy. International economic forces - the failure of the International Tin Council in 1985 and the collapse of the world market price for tin - combined with complex internal problems - including the long-term undercapitalization of the mining sector resulting in high production costs (Bolivia produces the world's most expensive tin) - have contributed to creating a major economic crisis and led to widespread redundancy in the public sector. For example, since the tin crisis over 20,000 miners have lost their livelihood. The result is that gross domestic product has fallen in successive years since 1979; the foreign debt of US\$ 3.5 billion absorbs close to 60% of export earnings and the import bill has been slashed in order to meet the demands of multilateral creditors. Finally the value of domestic earnings has slumped under successive devaluations and an inflation rate which reached 8,171% during 1985 (LAB 1987, Reid 1987, Dunkerley

and Morales 1986).

The response of the population to the crisis, which has resulted in widespread un- and under-employment and falling levels of income, has been the pursuit of multi-occupational livelihood strategies, many within the "informal sector", a term generally used to cover a diverse range of street trades, personal services and forms of petty commodity production. However, the crisis has also spawned a number of livelihood activities that are possibly better included, amongst others, in the category of subterranean economy. Examples include school teachers, who in 1985 were earning the equivalent of \$13 per month, buying and selling dollars on the street; housewives from middle income groups travelling across the border (especially to Argentina and Brazil) to purchase basic consumer goods for resale in urban markets; or redundant tin miners panning for gold in the eastern jungle region. More importantly, however, has been the employment created by the cocaine industry as production in the formal economy has come to a standstill, a phenomenon that is examined at a later stage.

The category subterranean economy is used here in order to suggest the parallel and illicit nature of an economic system that avoids regulation by, and contributions towards, the state and its "formal" economy. It is preferable to the term "informal sector",

which is frequently described simply as possessing contrasting characteristics with the "formal", although some degree of functionality is now generally recognised to exist between the two (Bremar, 1985). The subterranean economy, on the other hand, contravenes state laws and regulations designed to protect that which generates its revenues through assorted means of taxation. Although threatened by coercive action, the subterranean economy can be self-sustaining, capable of generating high rates of profit and exist as a parallel, if not autonomous, economic system. Consequently it may attract fractions of "rogue" capital in search of super profits and rapid rates of accumulation. In Bolivia it is the subterranean, rather than the formal, economy that has flourished in recent years, partly because of the financial networks involved in the drugs business.

The subterranean economy is not a recent phenomenon but has a long tradition in many of the countries of Latin America and predates the production and smuggling of narcotics. In Colombia, for example, there is a history of illegal exports of traditional commodities, particularly of coffee and cattle (Camacho 1981). According to estimates made by the Central Bank of Colombia, the total value of illegal exports of traditional products was in excess of US\$ 400 million in 1976, of which coffee comprised around 45% (Junguito and Caballero 1982). Drugs, however, constitute about 80% of illegal exports from Colombia, with the combined value of marijuana and

methaqualone estimated at US\$ 2.15 billion and cocaine US\$ 460 million in 1979. Illicitly earned income is thus responsible for placing Colombia in an exceptional position; as a non-oil exporting developing country it has a US\$ 5 billion foreign exchange surplus and where black market dollars are sold below the rate prevailing in the national banking system (Craig, 1983)

In Bolivia contraband activities, generally unhindered across a notoriously porous border and largely involving illegal imports, have experienced a massive expansion during recent years. These include all kinds of goods - from motor vehicles and electrical domestic appliances to clothing, cigarettes and basic foodstuffs. While the larger, more expensive items form part of a laundering operation to reintroduce profits generated by drug exports back into the country, the basic goods are the fruit of small-scale contraband runs to the border. As Reid described it recently, "Stalls in the indian market ..(of La Paz).. are stocked with tinned food and liquor from all over the world. ..Bolivia is now importing eggs, dairy products and diet Coca-Cola from Chile, jam from Argentina, .. coffee and textiles from Brazil. Local food production has slumped." (Reid 1987). Estimates of the size of the contraband trade vary, from an annual average of US\$300 million representing between 40% and 60% of legal imports (Triennial Plan 1987) to rivalling official imports and exports (LARR, RA-87-04).

Underlying the entire subterranean economy in Bolivia, however, are the structures associated with the cocaine business. Again, an attempt at estimating its turnover is a hazardous exercise but there is sufficient evidence to suggest that it has been growing at a significant rate during the 1980s. There is some agreement, for example, that export revenues in the early part of the decade were unlikely to have been below US\$ 1 billion (Lee 1985, Dunkerley and Morales 1986, Bascope 1982). According to the Triennial Anti-Narcotics Plan presented by the Bolivian government to a meeting of the United Nations Fund for Drug Abuse Control in Vienna during April, the gross value of the production of cocaine in Bolivia during 1986 was between US\$ 2.0 and US\$ 2.5 billion, representing approximately 450 tonnes of cocaine. As the Plan stated, "The gross value of cocaine production, which is a good estimator (sic) of the GDP of this activity, reached a value between 53% and 60% of the GDP of the formal economy in 1986; and it represented between three and four times the value of the formal national exports." (Triennial Plan, 1987, Document 2, p.4).

Unfortunately for the Bolivian government, while the value of traditional, legal exports has declined from over US\$ 1 billion in 1980 to an estimated \$500m in 1986, the rising revenues from cocaine exports are beyond the fiscal control of the state. Attempts to quantify the amount of coca-dollars entering the country's formal

financial circuit are also difficult; a figure of US\$ 400 million has been reported (Bolivia Bulletin, July 1986). According to the Triennial Plan, the "Errors and Omissions" column in the Balance of Payments figures for 1986 show a positive balance of US\$ 175 million, and Total Liquidity (M2) reveals an additional US\$ 100 million, both being attributable to drug-related capital entering the legal economy (Triennial Plan 1987). The government's recent efforts at attracting bank deposits without questioning the origin of capital is an attempt to replicate the success of the ventanilla siniestra (left hand window) at the Colombian National Bank, which has provided over half of Colombia's international reserves (Lupsha 1981).

Besides facing an acute fiscal crisis the Bolivian state is also trapped in something of a Catch-22 situation. With declining export earnings and an increasing debt burden the country is ever more dependent upon foreign aid. This is increasingly tied to its performance on the eradication of coca growing, yet it is the transfusion of cocadollars that is keeping the economy afloat. Threats of diplomatic sanctions may be designed to push governments into action, but they do display a wilful ignorance of the bottom-line realities. Typical were the words of Republican senator Paula Hawkins in 1984: "Why should we give these countries any foreign aid if they are the source of all this poison? We're going to cut off their aid and shut them down." (quoted in Lee, 1985:144). Although there have



been cases of collusion between the state and organisations involved in drug trafficking, to threaten governments in such a way is to seriously confuse the causes of, and interests behind, such forms of illicit activity. For a number of states in Latin America and the Caribbean, the rise of narcotrafico has created a very serious crisis of legitimation, severely undermining state institutions, weakening their capability to act within the national territory, and serving to strengthen the forces of reaction.

Meanwhile, new oligarchies are being created, either from the roots of the old elite, whose wealth was based upon traditional agro-exports, or from the nouveaux riches of humble origins. This new oligarchy, irrespective of its social composition however, has its economic power based upon a lucrative involvement in drugs that provide profits far in excess of those generated by conventional business activities. The emergence of such oligarchies, though associated with the production and distribution of illicit substances, nevertheless parallels the rise of regional elites in earlier periods, who accumulated power and wealth from coffee, rubber, sugar or minerals. Though it is generally convenient to label the involvement of capital in illegal activities as deriving from "mafia organisations", it is important to be clear about the objective class interests of criminal syndicates which are deemed to operate beyond the laws of society, and thus also the interests of capital itself:

' "More than any other business I know," says ...a Miami criminal defense attorney, "the drug business is pure capitalism, pure supply and demand." ' (Wall Street Journal July 2, 1986). (2)

While recession and economic crisis force conventional business and the public sector to a standstill, accumulation continues in the higher realms of the subterranean economy, though it generally falls to the "informal sector" to provide the many goods and services required, and to assist in reducing effective levels of un- and under-employment. In Bolivia since 1980 it has been the cocaine "industry" which has performed this fundamental role, providing employment for an estimated 300,000 people in the growing, processing and transporting of coca leaves (Lee 1985) and indirectly stimulating demand for basic goods and services, all of which has contributed to gross domestic product. In this light the following section describes the essential background to the development of a cocaine dependent economy in Bolivia.

### From Cotton to Cocaine: The Rise of the Narcocracy

The 1952 National Revolution decisively and irreversibly transformed the oligarchical nature of Bolivian society which had previously been run by a handful of tin barons who were more closely tied to the world, than to the domestic, economy. The post revolutionary state ushered in fundamental social and economic reforms and began to play a leading role in production and investment, controlling a large slice, as a result of nationalization, of the mining sector (Eckstein 1985, Dunkerley 1984). The Agrarian Reform of 1953 likewise broke the stranglehold of the quasi-feudal latifundia over rural society, formalizing petty commodity production amongst the peasantry of the valleys and highlands while opening up the eastern lowlands, or Oriente, to large-scale farming and agribusiness. Colonization of designated areas of the Oriente was encouraged, officially to reduce the population pressures on a fragmented highland land base, though in reality to satisfy two ulterior objectives:

a) To increase the production of tropical products for domestic consumption at low prices, based upon the exploitation of the surplus product of unremunerated household labour (rice, manioc, fruits),

b) To provide a source of semi-proletarian labour for the capitalist

estates engaged in the production of high-value agro-exports (cotton, sugar, soya) to generate foreign exchange and thus contribute to the diversification of the export base.

While all of the regimes since 1952 have pursued a similar policy towards agriculture, i.e. benign neglect, vested interests have encouraged substantial state investments and credit provision towards agro-industry. For example, between 1970 and 1975 89% of total agricultural credit was directed to the Oriente; yet over the period 1960 - 1976 a mere 0.8% of credit within the region reached the small producers, while over 50% was grabbed by livestock operations and a further 28% by co-operatives comprising medium sized operators. Meanwhile the small producers of the highlands and valleys, as well as of the Oriente, undertook to meet the demands for basic food staples; despite being bypassed in credit and technical assistance, and experiencing deteriorating terms of exchange with the market, while depending on a diminishing and ecologically fragile land base where 73% of households have access to less than 3 hectares of land (Dandler 1984, Dandler et.al. 1985, Eckstein 1983).

The generosity of the state towards agro-industry is best illustrated by the handouts of the Banzer regime (1971-1978) to the cotton producers. Between 1971 and 1975 the Agricultural Bank provided credit of US\$ 59.2 million to the cotton producers association, ADEPA,

ostensibly to increase production and take advantage of rising world prices. Of this credit US\$ 40 million remains outstanding and has been written off by the state (Dandler et. al. 1985, Ladman 1982). Of more interest to our purposes here, however, is the argument developed by Rene Bascope that ADEPA appeared to lose all interest in cotton once it discovered the sustained profitability offered by cocaine. Thus while cotton production declined from 1976, the movement of capital in the two largest banks of the lowland region increased by an average of 308% per year up to 1979 (Bascope 1982). James Dunkerley's rigorous and exhaustive study of Bolivian politics since 1952 accepts that it is "inconceivable" that high-level planning involving members of ADEPA and others of the agro-industrial elite did not take place (Dunkerley 1984:315). Using state credit to offset the costs of starting-up cocaine processing operations; employing its commercial links to procure large quantities of supplies such as sulphuric acid; making use of its relative geographical distance from major urban centres, but with the means of transport (light planes) to move goods freely within and between countries, the new Bolivian "narcologarchy" was born out of the Santa Cruz agro-industrial elite with direct access to the instruments of power. Indeed, it thrived under Banzer's benevolent support until 1978, and, when perturbed by the national election of a leftist alliance, simply seized the reins of power militarily and imposed, on 17 July 1980, a government of "National Reconstruction" (Bascope 1982, Dunkerley 1984).

This miserable experiment lasted for over two years until democracy was restored and the high-profile drugs barons retreated to their regional power base and lucrative business. Henman (1985) describes the Garcia Meza dictatorship as a formal "narcocracy" - in contrast to the informal system of the Banzer years, arguably also the norm in Peru, Colombia, Jamaica, Belize, and Ecuador. Though sounding somewhat conspiratorial, Henman suggests that the system of informal narcocracy allows individual states to pay lip service to the war on drugs while remaining unable or unwilling to suppress the principal economic activity within their borders: the production of illicit drugs. He believes that "the informal narcocracy is becoming a leading if not the predominant form of social and political organization in many parts of late twentieth-century Latin America" (Henman 1985:157).



**Bolivia**

### Coca: From sacred leaf to international commodity

Post-1952 government policy to encourage colonization of the Oriente was rarely accompanied by sufficient investment to ensure its success. Three broad colonization zones were identified and it was largely left to the peasantry from the valleys and highlands to establish themselves upon their land allocations and secure their reproduction. Besides the colonization crescent close to the agro-industry of Santa Cruz, the peasantry was directed towards the Alto Beni due east of La Paz and the Chapare zone within the Cochabamba region. It is the Chapare that most interests us here, as this is the area associated with the boom in coca leaf production since the mid-1970s.

It is important to understand the nature of colonization in the Chapare as distinct from elsewhere. With good access into the zone from the densely populated Cochabamba Valleys, over half the colonists come from within the Cochabamba region. As a result of its agrarian history, the Cochabamba peasantry has acquired the reputation for a strong commercial orientation and involvement in a range of small-scale trading and petty production activities, a high degree of spatial mobility and combative syndicalist organisations.



Consequently, unlike other colonization zones, where colonist families aim to establish permanent family farms - though in practice many survive as semi-proletarian households - in the Chapare procuring land on the agricultural frontier is not a goal in itself. Land in the community of origin is retained and continues to be worked, and there is much movement between the frontier and the highlands by family members, and other kin and friends, who meet seasonal labour demands and receive payment in kind, in rice and coca.

The opening up of the land to cultivation commences with rice which, after three months, is harvested and replaced by cassava and maize. When the maize is harvested coca is planted between the cassava to benefit from shade and reduce competition with weeds. After a year the cassava is harvested and the land now only supports the perennial coca; this produces its first leaves after nine months and yields four harvests per year for up to twenty years or more, though yields begin to decline after nine or ten years. Traditionally, coca might give way to citrus trees at this stage, so it does not represent the final point in the cropping cycle of the land, nor a tendency towards monoculture. Coca usually occupies no more than one or two hectares, so that when the farm reaches maturity a variety of annuals and perennials are produced (Flores and Blanes 1984).

Coca, then, is traditionally part of a diversified cropping system

within the Chapare, and an important one for three reasons. It is not particularly demanding of labour; once established the tasks of weeding and harvesting are light and women take much of the responsibility for performing them. As it is harvested four times per year, coca provides a regular source of income to meet household expenditure. Finally coca has consistently maintained a comparative price advantage over other crops. For example, a USAID-funded anti-coca project reported that it yielded per hectare four times the return on bananas and citrus, sixteen times the returns on rice and twenty-four times the returns on maize! (PRODES 1978).

Coca, it should be said, is part of the natural pharmacopoeia of the Andes and its use can be dated back to at least 3000 B.C. According to Plowman, "Its use as a masticatory persists today in many parts of the Andes and Amazon basin where it serves as a mild stimulant and medicine among Indians and rural inhabitants. In addition to small quantities of the alkaloid cocaine, coca leaves contain several minor alkaloids, essential oils and relatively high amounts of vitamins and minerals" (Plowman 1980: 91). The "sacred leaf of the Incas" continues to perform a sacramental role within the cultural life of many peasants and miners; it is widely used as a natural medicine, as well as for divining purposes, and provides an important nutritional component to the restricted highland diet (Antonil 1978). However, demand for its derivative has pushed the market price for coca beyond

Table 1: Coca Production in Bolivia, 1965 - 1985

Year	Production (metric tons)
1965	5,515
1970	6,000
1971	6,800
1973	9,400
1975	11,800
1976	14,760
1977	15,600
1978	18,860
1979	22,000
1980	58,275
1981	64,275
1982	82,000
1984	152,000
1985	171,000

Source:

Compiled from the wide-ranging estimates that appear in Dunkerley (1984) and Flores and Blanes (1984). The figures for 1984 and 1985 are taken from Healy (1986).

the reach of many traditional users, who now obtain it with difficulty despite the dramatic increase in production.

The warnings made earlier to employ caution when quantifying aspects of the drug business need to be underlined when dealing with estimates of coca production in Bolivia; the figures should be used to give an impression of scale and trends rather than as accurate indications at a moment in time. Table One draws upon three different sources to illustrate the scale of the coca "boom". Prior to 1970 it appears that average annual production did not exceed 6,000 metric tons, while in 1982 it reached 82,000 metric tons and in 1985 an estimated 170,000 metric tons of coca leaf was produced (3). This exponential-like increase in production clearly reflects the insatiable demand in the United States for cocaine - now the popular "drug of choice". The high prices paid to the producers of coca leaf, however, do not directly reflect the demand of the end consumers, but the fractions of rogue merchant capital engaged in processing and distribution. Thus, though there is evidence of an increasing vertical integration in the refining and marketing of cocaine, particularly by Colombian operations, the producers of coca themselves retain the characteristics of petty commodity, rather than capitalist, producers. This is to say that the production of coca leaf - the raw material by which so many who handle its derivatives wax rich - remains in the hands of household enterprises, employing unpaid family labour and

TABLE 2 : Coca leaf prices per "carga" (1251bs) 1980 - 1983

Month	Price in Pesos	Price in US\$ (official rate)		Price in US\$ (parallel rate)	
1980					
January	5,000	(25)	200		
May	2,500		100		
September	19,000		760		
1981					
January	12,500		500		
May	6,500		260		
September	6,000		240		
1982					
January	7,000		280		
May	8,000		360		
September	20,000	(44)	455	(200)	100
1983					
January	25,000	(196)	128	(400)	62
May	60,000		306	(450)	133
July	80,000		408	(600)	133
September	110,000		561	(850)	129
October	70,000		357	(900)	77
November	90,000	(500)	180	(1,000)	90
December	105,000		210	(1,250)	84

Source: Flores and Blanes (1984)

subject to the fluctuations of the market and the operation of merchant capital. This would appear to have worked to their advantage - at least until recently.

Table Two lists the average prices paid to producers per carga of coca leaves for selected months between January 1980 and December 1983. The prices appear in Bolivian pesos, and in dollars calculated at the official rate and, from September 1982, at the rate on the parallel market. Each carga is equal to 125lbs of leaves, with coca yielding on average 45 cargas per hectare per year. Thus, in September 1980 when a carga of coca fetched US\$ 760, producers were able to realise a potential gross income of US\$ 34,200 per hectare ! However, it is important to note the large fluctuations in the price of coca from month to month which correspond, not only to the logic of supply and demand, but to the campaigns of repression occasionally effected by the state. This makes coca growing a riskier occupation than at first it might appear.

Severe fluctuations in the price of coca have caused many producers to engage in processing their own leaves into paste and thereby retain more value from their labour. Certainly with prices falling as low as \$10 to \$15 per carga, as they did in September 1986 on news that US troops on anti-narcotics exercises were to stay in Bolivia for a further 60 days, it is to be expected that many have made efforts at refining. The process is really quite simple and requires a few

commonly available additives, such as lime, kerosene, sulphuric acid and acetone, as well as labour to tread the leaves. An indication of the increased profits available to coca growers who engage in the initial stages of processing and bulk reduction is given in the Diagram. However, their conquest of this primary stage admirably suits the interests of merchant capital which is able to concentrate on securing control of the more technical - and more lucrative - downstream refining and marketing. The Diagram illustrates the profit margins associated with each stage of the business from growers to consumers, and these are seen to increase as the product draws closer to its final market destination.

In some respects it might be argued that the industry has become more "democratised" as it has allowed a growing number of individuals to increase their participation and benefit from improved income levels associated with the production of coca paste. It would appear an economically rational move to develop the onsite reduction of bulk, transforming 500 kgs of leaves into 2.5 kgs of coca paste, thus facilitating the logistical operations involving transport. Within the Chapare this has led to the development of markets openly engaged in the buying and selling of coca paste and processing materials, such as those of Shinahota and Ivirgarzama. At these markets traders either buy paste with United States dollars, or offer automobiles and motorcycles for exchange, and sell kerosene, sulphuric acid and toilet

paper (used as a filter and drying material) at exorbitant rates of mark-up; for example a litre of kerosene which cost 5,000 pesos at a state outlet in the city of Cochabamba was retailing at between 200,000 - 300,000 pesos in May 1985 (Healy 1986). Also on sale are the contrand goods of the wider consumer society: consumer durables such as refrigerators, motorcycles, electrical domestic appliances and wristwatches as well as cigarettes, beer and food. Conspicuous consumption, however, appears to be strongly associated with the desire to escape the status of farming as a livelihood, and this is most evident in the boom in truck sales amongst small holders; ownership of a truck being the most popular route of social mobility for rural households. Flores and Blanes note that 300 Fords were sold in the Chapare in the second half of 1980, and more recently Reid reports that the Volvo importer has sold almost as many trucks in the first quarter of 1987 as in the whole of 1986, with more than half the sales in cash (Flores and Blanes 1984, Reid 1987). Consequently, despite the high levels of income, it remains open to question whether the coca boom has brought about sustainable development in the Chapare.



### Coca and the Consequences for Rural Development: The Chapare

Since the onset of the coca boom there has been a rapid and profound monetarization of the Chapare economy, involving the circulation of United States dollars - even for everyday transactions. Though the process of commoditisation everywhere involves the increasing use of cash as the medium of exchange with the market, the displacement of use value production by conspicuous consumption appears a retrogressive leap in the development process. For example, there has been an absolute decline in the local production of staple foods (rice, yuca, fruit) and a reliance on the market to satisfy food needs with produce brought in from outside the zone. The proliferation of trucks, purchased with the proceeds of a good coca harvest, but without sufficient demand to make running them a profitable business, illustrates the absurd priorities of a situation where productive investment in agriculture is a poor alternative to expenditure on status symbols. The same can be said for many of the small stores, "shops without customers", in which families tend to consume their own provisions.

In other words the coca boom has tended to produce a speculative pattern of development, in which there is much buying and selling of basic goods and contraband consumer durables within the Chapare, but

where ultimately value is accumulated outside of the zone. This is most evident in the construction of large houses in the city of Cochabamba or provincial valley towns and the extraordinary growth of a service sector economy tending to the needs of the urban nouveaux riches. Whilst fashionable boutiques, luxury villas, and Mercedes saloons offer a glimpse of the ostentatious, cocaine-financed lifestyles, the primary producers of this wealth still do not enjoy the benefits of rural electrification or supplies of clean drinking water; health posts, schools and roads remain seriously deficient in number and quality. The need for economic diversification in the Chapare and the development of profitable, alternative activities cannot be in doubt. However the colonists' syndicates have shifted to a single issue defence of coca growing, involving armed attacks on government posts, while their collective and developmentalist role has disintegrated. The entire region is gripped by coca fever, similar to the commodity booms of the past. The immediate objective is to seize and clear land and plant it to coca for quick profits, rather than to lay the foundations for a sustainable system of production that will support future generations.

Though the small producers of coca leaves and coca paste have experienced a significant improvement in levels of income, the boom has also benefited a large mass of individuals who have come to rely upon casual work in the Chapare. These people represent a floating

population, moving between their home communities in the increasingly impoverished highlands and periods of wage labour in the coca industry. Opportunities for periodic employment have increased in importance as agriculture in the highlands has continued to be accorded a low government priority, despite the ravages of the 1982-83 drought episode and the effects of the economic crisis. Though some labour is required in the tasks of cultivation and harvesting, most is employed in the process of treading coca leaves in kerosene and sulphuric acid to produce coca paste. Though the work is thought to be deleterious to health, high wages attract large numbers of young males. Healy says that pisadores were paid eight to twelve times more than wages for agricultural work in the Upper Cochabamba Valley during August 1985, and even public employees have opted for the superior remuneration of the subterranean economy (Healy 1986) (4). Clearly the coca problem has come to encompass the wider structural crisis confronting the Bolivian economy, and simply cannot be resolved through a policy of crop eradication. For hundreds of thousands of the rural and urban poor coca has become a lifeline to survival amidst the collapse of the traditional model of development.

### Coca and the Consequences for Rural Development: Peruvian parallels

The brief appearance of a "formal narcocracy" in 1980 and the state of economic collapse have served to highlight the importance of a coca based subterranean economy in Bolivia. This may have somewhat overshadowed similar developments in Peru. It is clear that coca production has increased in Peru, though figures appear to be more unreliable still than in the case of Bolivia. Perhaps this is because, as a survey conducted by ENACO (the State coca monopoly) reported in early 1980, as little as 10 to 15 per cent of the area under coca was accurately registered (McNicol 1983). Consequently, though estimates vary considerably, it is generally agreed that coca production in Peru exceeds that in Bolivia - indeed doubles it, according to the United States Drug Enforcement Administration (Strug 1986). At a House of Representatives hearing in June 1983, however, it was estimated that Peru's income from the drug trade in 1982 amounted to US\$ 850 million, compared to more than US\$ 1 billion for Bolivia (Lee 1985). The Peruvian Central Bank calculates that between US\$ 600 and US\$ 800 million, deriving from the coca trade, shows up indirectly in annual monetary and trade statistics, but this only represents a fraction of total potential revenues. It is believed that Peru supplies about half the raw material for the cocaine entering the United States market, with the other half coming from Bolivia and Colombia (LARR, RA-87-04). These frequently conflicting and

occasionally wildly inaccurate figures not only serve to illustrate the difficulties associated with analysing the phenomenon of drug production from a distance, but suggest insuperable problems face eradication efforts in the field.

Production data is hardly of better quality at a sub-regional level where efforts are being made to displace coca through crop substitution programmes. This is the case, for example, in the Upper Huallaga Valley where a United States agricultural research and extension project is attempting to introduce basic infrastructure (roads, hydroelectric plants, marketing facilities, credit and extension services) and replace coca with a range of other cash crops. Though it has been in existence since 1980, the project still lacks firm estimates of coca production in the area, which range from between 17,000 and 20,000 hectares (Kendall 1985, Strug 1986) to between 140,000 and 180,000 hectares (LARR, RA-87-04). While Peruvian officials have called for investments of US\$ 300 million, the current project has a budget of US\$ 18 million (Lee 1985). This ensures that economic incentives for voluntary substitution are limited while repression is prioritised: in this case the forcible uprooting or spraying of coca bushes, the threat to producers of losing their land, while under constant surveillance by US helicopters (Strug 1986). The response of Peruvian peasants has been similar to their Bolivian counterparts when confronted by heavy-handed intervention: armed

resistance. This has involved attacks upon project installations and resulted in the deaths of 29 project workers since 1984. However in the Peruvian case localised peasant uprisings are complicated by the existence of more widespread rural insurgency led by maoist revolutionaries. Lee describes the scenario;

"In Peru's Upper Huallaga Valley, for example, in 1983 and 1984, Sendero Luminoso guerillas moved in, capitalizing on widespread anti-government and anti-American sentiment apparently created by a US -sponsored coca eradication effort designed to help farmers switch to other crops. Operating hundreds of miles north of their strongholds, the guerillas recruited 1,500 - 2,000 valley inhabitants ..... and launched a series of attacks against the headquarters of a US -trained narcotics strike force, polic stations and other local installations. This prompted (ex-president) Belaunde to declare a state of emergency in the region and to send in the Peruvian army, which promptly suspended anti-narcotics efforts for several months." (Lee 1985:157)

For some commentators it may be a natural development to see connections between drug interests and left-wing guerilla movements - a "marriage of convenience" - irrespective of the lack of evidence; an inconclusive debate on this issue continues in Colombia. What both

these phenomena have in common, however, is that they appear to offer a solution to poverty for tens of thousands of the rural poor. Faced with low wages, high unemployment, spiralling inflation, high costs of food but low producer prices, and the continuing prospect of poverty in the countryside, many have entered the ranks of the subterranean proletariat of the cocaine industry. Over the short-term the production of coca and its derivatives may represent a livelihood solution for the poor and allow them to withstand a profound crisis in the traditional model of development; it may even result in localised improvements in living standards, though more evident are the outbursts of conspicuous consumption. But like earlier commodity booms generated by external demand, coca and cocaine cannot constitute the basis of a viable and sustainable strategy for economic development. An alternative model is clearly required; it will not, however, be imposed with repression but will surely only arise given comprehensive rural development involving the massive mobilisation of resources and the fullest participation of those most in need.

## Notes

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(1) The rationale of a policy of total eradication of coca is revealed in the presentation by a retired DEA official, now chief of staff of the US House of Representatives Select Committee on Narcotics Control and Abuse, to a conference at Cornell University on the subject, "The Coca Leaf and its Derivatives: Biology, Society and Policy". It is worth quoting at length:

"(The drug control treaty of 1964) obliged countries where coca leaf chewing was practiced to phase out this practice within 25 years after the treaty's enactment. The treaty authorized these countries to produce as much coca as they needed for the coca leaf chewers, but also required them to gradually reduce the amount of coca they were



producing for chewing."

"Today, the inability of the governments of Peru and Bolivia to phase out the overproduction of the coca leaf is an enormous problem. From the mid-1960s to the early 1970s, little control activity took place. Some administrative efforts were made but they were never implemented. During this time we see both Bolivia and Peru develop the capability to convert the coca leaf to coca paste and to move it out of the country."

"There is some reason to believe .... that coca leaf chewing is expanding in the area. Another development in the last two to three years is the incredible and devastating spread of basuco (coca paste) smoking, particularly among young people, and the enormous proliferation, particularly in Peru, and now also in Bolivia, of the coca paste pits and the clandestine manufacture of coca paste close to the coca leaf-growing areas."

"As the two major producers of coca, Peru and Bolivia have failed in their efforts to licence and control coca production. They really have not addressed the problem of coca leaf chewing, and it is a problem that is similar to many of the problems in their territory which they are unable or unwilling to address. It's just another problem, people say. Well, they have so many problems that they have

to assign priorities; coca is not a high enough priority. These countries' international obligations under the law today are quite simple. They have an obligation to phase out coca chewing and the coca that is being produced for chewing. And secondly, their main obligation to every nation in the world today, particularly the developed nations that are most severely affected by cocaine, is to bring under control, in their territory, the unlicensed and illicit production of coca leaf." (Cusack, 1986: 70-71; my emphasis)

2. Or as Marx wrote,

"Capital is said ... to fly turbulence and strife, and to be timid, which is very true; but this is very incompletely stating the case. Capital eschews no profit, or very small profit, just as Nature was formerly said to abhor a vacuum. With adequate profit, capital is very bold. A certain 10 per cent will ensure its employment anywhere; 20 per cent will produce eagerness; 50 per cent positive audacity; 100 per cent will make it ready to trample on all human laws; 300 per cent and there is not a crime at which it will scruple, nor a risk it will not run, even to the chance of its owner being hanged. If turbulence and strife will bring a profit, it will freely encourage both. Smuggling and the slave trade have amply proved all that is here stated." (Marx, Capital Vol.1:712). Quotation discovered in Roger Lewis' chapter in Henman et. al. (1985).

3. In the Triennial Anti-Narcotics Plan, total coca leaf production is estimated at 122,200 metric tons of which the Chapare produces 87% (Triennial Plan 1987).

4. "Even local public employees such as rural schoolteachers in the Upper Cochabamba Valley have apparently made a massive entry into the lucrative coca paste-making business. One Bolivian police report indicated that 70 per cent of the school teachers in the region, whose monthly salaries during the end of 1984 averaged \$15-\$20, were working in cocaine factories. Their involvement even brought rural schoolchildren to work in the underground ... economy.... . Even the army has felt the acute labour shortage among youth." (Healy 1986:124)

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