BULLETIN ON NARCOTICS

1 and 2, 1989

ue on drug abuse assessment

NITED NATIONS

DIVISION OF NARCOTIC DRUGS
Vienna

BULLETIN ON NARCOTICS

Volume XLI, Nos. 1 and 2, 1989

Double issue on drug abuse assessment

UNITED NATIONS
New York, 1989

CONTENTS

Coca-leaf production in the countries of the Andean subregion

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ABSTRACT

The estimated areas under coca-bush cultivation in 1988 are expected to total 44,300 hectares in Bolivia, 25,000 hectares in Colombia, 400 hectares in Ecuador and 114,400 hectares in Peru. The estimated projections for 1989 indicate that coca-leaf production may amount to 68,200 tonnes in Bolivia, 20,000 tonnes in Colombia, 300 tonnes in Ecuador and 120,100 tonnes in Peru. Of all the Andean countries, Venezuela is the only one that has no coca-leaf production problem. According to estimates for the period from 1985 to 1989, coca-leaf production will increase by 43.3 per cent in Bolivia, by 13.6 per cent in Colombia and by 26.2 per cent in Peru. Coca-leaf production in Ecuador has consistently followed a downward trend. According to estimates, since 1985 coca-leaf production in Peru has accounted for more than one half of the total amount produced in the Andean subregion, while production in Colombia, though it has increased in the same period, has accounted for a relatively small share. In 1987, estimated coca-leaf production in Bolivia amounted to 30.2 per cent of the total amount produced in the subregion.

Historical background

Coca-leaf production in the Andean subregion is believed to date back as far as 20,000 years. The only archaeological evidence of such production, however, has been found in Ecuador, where it dates back to the Valdivia period (3000 B.C.), and in the "Asia I" community in Peru, where it may date back to around 2000 B.C. [1]. It was not until the rule of Inca Lloque Yupanqui that the first extensive coca-leaf crops were planted. Apparently, during the reign of Inca Roca (circa A.D. 1250-1315), coca was first brought to the Incan cities, where it was introduced to the upper classes of society and eventually used by members of all the social strata. Until then, coca had represented a divinity and had been used for multiple magical/religious and medicinal purposes. During the colonial era, the use of coca leaves was restricted and it became a powerful element of social and economic control. During the republican era, this factor disappeared in all the countries in which coca-leaf consumption subsisted [2].

Current production

Only Peru and Bolivia currently produce a limited amount of coca leaves in a legally, culturally and socially defined manner. In the other countries of the Andean subregion, coca-leaf production has practically disappeared or is exclusively associated with illicit use.

It is estimated that in 1981, there were some 50,000 hectares under coca-bush cultivation in Peru, including 14,000 hectares for local consumption by small-scale farmers, and approximately 55,000 hectares in Bolivia, including 10,000 hectares for local consumption by small-scale farmers (see table 1).

Table 1

Estimated areas under coca-bush cultivation in the countries of the Andean subregion, 1981-1988

(Thousands of hectares)

Country	*1981*	*1982*	*1983*	*1984*	*1985*	*1986*	*1987*	*1988*[a]
Bolivia	55.0	55.0	55.0	..	34.0	37.0	40.3	44.3
Colombia	2.5	5.0	12.8	16.0	17.6	25.0	25.0	25.0
Ecuador	..	..	..	..	1.0	0.7	0.5	0.4
Peru	50.0	50.0	50.0	..	95.2	107.5	109.5	114.4
Venezuela	—	—	—	—	—	—	—	—

Sources: United States of America, Department of State, Bureau of International Narcotics Matters, *International Narcotics Control Strategy Report, 1984* (Washington, D.C., 1985); United States of America, Department of State, Bureau of International Narcotics Matters, *International Narcotics Control Strategy Report, 1985* (Washington, D.C., 1986); United States of America, Department of State, Bureau of International Narcotics Matters, *International Narcotics Control Strategy Report, 1986* (Washington, D.C., 1987); United States of America, Department of State, Bureau of International Narcotics Matters, *International Narcotics Control Strategy Report, 1987* (Washington, D.C., 1988).

[a]Projected figures.

In the same year, 2,500 hectares were cultivated in Colombia. Table 1 shows that since the mid-1980s, the areas under coca-bush cultivation have increased substantially in the countries of the Andean subregion, except in Ecuador and Venezuela. In 1988, 44,300 hectares are assumed to be under coca-bush cultivation in Bolivia, 25,000 hectares in Colombia, 400 hectares in Ecuador and 114,400 hectares in Peru [3]. It should be noted that in 1988, it is estimated that coca-bush cultivation in Colombia will account for only 13.6 per cent of the total for the subregion; in Peru, it will account for 62.1 per cent; in Bolivia, 24.1 per cent; and in Ecuador, 0.2 per cent. In Venezuela, no coca-leaf production was recorded during the period from 1981 to 1988.

As shown in table 2, during the period from 1985 to 1989, the amount of coca leaves produced is expected to increase in Bolivia by 43.3 per cent, in Colombia by 13.6 per cent and in Peru by 26.2 per cent [3]. During the same period, Ecuador, which has initiated an extensive eradication campaign, is expected to record a reduction of 91.9 per cent; this, together with other factors, has had a positive impact on the control of the production, trafficking

Table 2

Estimated coca-leaf production in the countries of the Andean subregion, 1985, 1987 and 1989

(Thousands of tonnes)

Country	1985		1987		1989[a]	
	Amount	*Share (percentage)*	*Amount*	*Share (percentage)*	*Amount*	*Share (percentage)*
Bolivia	47.6	29.0	56.4	30.2	68.2	32.7
Colombia	17.6	10.7	20.0	10.7	20.0	9.6
Ecuador	3.7	2.3	0.8	0.4	0.3	0.1
Peru	95.2	58.0	109.5	58.7	120.1	57.6
Venezuela	—	—	—	—	—	—
Total	164.1	100.0	186.7	100.0	208.6	100.0

Sources: United States of America, Department of State, Bureau of International Narcotics Matters, *International Narcotics Control Strategy Report, 1984* (Washington, D.C., 1985); United States of America, Department of State, Bureau of International Narcotics Matters, *International Narcotics Control Strategy Report, 1985* (Washington, D.C., 1986); United States of America, Department of State, Bureau of International Narcotics Matters, *International Narcotics Control Strategy Report, 1986* (Washington, D.C., 1987); United States of America, Department of State, Bureau of International Narcotics Matters, *International Narcotics Control Strategy Report, 1987* (Washington, D.C., 1988).

[a]Projected figures.

and consumption of coca-leaf derivatives in that country in recent years. In the subregion as a whole, the amount produced is expected to increase by 27.1 per cent during the period from 1985 to 1989 [4].

It is estimated that in 1985, 29.0 per cent of the coca leaves produced in the Andean subregion came from Bolivia, 10.7 per cent from Colombia, 2.3 per cent from Ecuador and 58.0 per cent from Peru. The projected figures for 1989 indicate that, of the estimated total of 208,600 tonnes of coca leaves produced in the subregion, 32.7 per cent is expected to be produced in Bolivia, 9.6 per cent in Colombia, 0.1 per cent in Ecuador and 57.6 per cent in Peru [4].

Eradication

It is estimated that in 1985, only 11.1 per cent of the coca bushes cultivated in the Andean subregion were eradicated. In 1987, the figure dropped to 9.4 per cent, while it is expected that 20.0 per cent will be eradicated in 1989 [3].

It is also estimated that of the total amount of coca leaves produced in the subregion, 9.4 per cent were eradicated in 1985 and 5.8 per cent in 1987. And for 1989, it is expected that 11.1 per cent will be eradicated [4].

Concluding remarks

The magnitude of the problem of coca-leaf production, together with the recent increase in the areas under cultivation and in the amounts produced, is a clear sign that this is an economic phenomenon of a proportion that far exceeds

the current capacity of most of the countries in the Andean subregion to control it, particularly because no sector of the formal economy of those countries has grown as quickly and dynamically as coca production. Not only have a number of individuals become multimillionaires practically overnight, but whole new social classes have been formed that are connected with the illicit economy of drug trafficking [5-9].

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Cocaine-related problems in the city of São Paulo, 1982-1986

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ABSTRACT

From 1982 to 1986, there was an overall increase in the number and amount of illicit cocaine seized at São Paulo. There was a total of 1,552 seizures of illicit cocaine, which were confirmed by testing in the laboratory of the Technical Service of Forensic Toxicology, a section of the Medical-Legal Institute of São Paulo. The increase in cocaine seizures was accompanied by an increase in cocaine-related mortality. Although there were no cocaine-related deaths reported in the city before 1982, there was an increasing trend in the number of such deaths during the five-year period that followed.

Introduction

The illicit traffic in and use of cocaine are assuming alarming proportions and are presenting enormous health and social problems in Brazil.

Epidemiological studies of drug abuse, the results of which can help in the design and development of appropriate drug-abuse prevention, treatment, rehabilitation, social reintegration and control programmes are scarce in Brazil [1-6]. The trends observed in the city of São Paulo with respect to illicit cocaine seizures and cocaine-related mortality for the period from 1982 to 1986, which are presented in this article, may prove useful for the assessment of cocaine-related problems in Brazil in general. The data can be used as indirect indicators [7] in studying the prevalence and incidence of cocaine abuse and other related problems.

Data source

The present study is based on data obtained from the registers of the Technical Service of Forensic Toxicology, a section of the Medical-Legal

Institute of São Paulo that tests in its laboratory all suspected substances seized by law enforcement agencies within the city.[1] The authors limited this study to those entries for which samples taken from seized substances tested positive for the presence of cocaine products (powder, leaves, solution, paste).

Data on mortality related to illicit cocaine use were obtained from records of emergency treatment and rehabilitation centres in the city during the period from 1982 to 1986.

Results

Illicit cocaine seizures began to rise dramatically in 1982. As indicated in the table below, during the period from 1982 to 1986, there were 1,552 seizures of illicit cocaine, as confirmed by laboratory testing. The number of cocaine seizures each year increased from 45 in 1982 to 675 in 1986. Of the total number of seizures in that period, 2.9 per cent occurred in 1982 and 43.5 per cent in 1986.

Cocaine seizures in the São Paulo area, as confirmed by laboratory testing, 1982-1986

Year	*Number of cocaine seizures*	*Share (percentage)*
1982	45	2.9
1983	164	10.6
1984	364	23.4
1985	304	19.6
1986	675	43.5
Total	1 552	100.0

Of the total number of seizures of illicit drugs in the São Paulo area, seizures of cocaine accounted for 0.53 per cent in 1982, 1.70 per cent in 1983, 3.78 per cent in 1984, 2.87 per cent in 1985 and 5.85 per cent in 1986.

In 1982, the first death related to illicit cocaine use was reported at São Paulo; in 1983, there were two cocaine-related deaths; in 1984 and in 1985, three; and in 1986, nine.

The increase in cocaine seizures, together with the increase in cocaine-related mortality during the same period, are indicative of upward trends in the prevalence and incidence of illicit cocaine use in the city of São Paulo. These observations support the findings of authors reporting on trends in cocaine-related deaths in other countries [10-12].

[1]It should be noted that the laboratory is equipped only with basic devices and has no sophisticated apparatus. Nevertheless, it was possible to analyse and identify the substances by using organic solvent, thin-layer chromatography [8] and gas-liquid chromatography [9].

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