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Cocaine

A European Union perspective in the global context

2

PAGINA BIANCA

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Foreword

Cocaine use and cocaine-related problems in Europe have increased markedly since the mid-1990s. Surveys have shown that in many EU countries — and in Europe overall — cocaine is now the second most commonly used illicit substance among the general population, after cannabis. Three million, or 2.2 %, of young adults aged 15–34 are reported to have used cocaine in the previous year. In addition, targeted studies have observed high levels of cocaine use in some recreational settings (clubs, parties). In a few EU Member States, the demand for treatment for cocaine use has also increased in recent years. Furthermore, a substantial proportion of opioid users in treatment report cocaine as their secondary drug, which may be contributing to their problems and complicating their care. Cocaine is also reported in the toxicological analysis of a high proportion of drug-related deaths in some countries, generally in combination with opioids and other substances.

The picture of cocaine use and trafficking in Europe is complex. Some countries (e.g. Spain, the Netherlands, and the United Kingdom) have a long-established cocaine problem, while several others (e.g. France, Italy, Portugal) have seen a rapid increase in cocaine use and seizures in recent years. Other countries, mainly in eastern and northern Europe (e.g. Latvia, Lithuania, Finland), still report very low figures for both cocaine use and seizures. However, the European cocaine market could become more homogeneous in the future if consumer demand grows, if increasing amounts of the drug become available, and if new trafficking routes towards and inside Europe continue to develop.

Cocaine is almost exclusively produced in the Andean-Amazonian region of South America and it is believed that during the 1980s and early 1990s the vast majority of the production remained on the American continent. With a significant proportion of the global cocaine output now destined for Europe, new cross-Atlantic trafficking routes have emerged and cocaine use and related health and social problems have been increasing in Europe. In response, the European Union and its Member States have gradually developed national and regional actions against cocaine trafficking, and have become increasingly involved in the fight against cocaine production at the international level.

This report provides an overview of what is known about how cocaine is produced and trafficked into the European Union. It aims to provide a better understanding of the actors involved, the routes taken, and the scale of the problem in Europe. It also reviews some of the supply reduction responses already developed at European level. Its findings are based on the latest data and analysis available from specialised European and international organisations, NGOs and scholars (!).

This publication is structured in a way that provides a condensed review of key issues relevant to understanding how cocaine reaches European markets. Background information on the chemistry and legal status of cocaine and crack cocaine, as well as key European figures, are also provided.

(!) Data limitations are explored in the box 'Data and sources' on p. 19.

Analysis begins with a summary of coca cultivation and cocaine production in South America, including a review of the issue of the availability of potassium permanganate, an essential chemical for manufacturing cocaine hydrochloride. This is followed by a description of the three main smuggling routes followed by cocaine before it reaches Europe. The report then discusses cocaine trafficking within Europe. Finally, it provides an overview of European initiatives to address the problem of cocaine production and trafficking and its consequences.

Introduction

Data published by the United Nations Office on Drugs and Crime (UNODC) point to an overall stable annual production of pure cocaine during the last decade, at between 800 and 1 000 tonnes. However, in Europe, the number of cocaine seizures has tripled during this period. Survey data have also shown an increasing trend in cocaine use in many countries in the region. New trafficking routes between the producer countries and Europe have also been identified, indicating a growing interest in the European market among criminal organisations. Such routes also have a detrimental impact on transit countries.

The changing situation of Europe in the international cocaine trade, and the increase in problems related to cocaine use, has recently triggered numerous policy initiatives and scientific publications. For instance, during its Presidency of the EU in 2007 Portugal launched a number of activities to reinforce Europe's response to cocaine trafficking, together with other problems linked to cocaine use. In the same year, the EMCDDA launched three publications exploring treatment and other public health issues related to cocaine and crack cocaine use ⁽²⁾.

Cocaine in Europe at a glance

- Number of adults (15–64 years old) having used cocaine in their lifetime: 13 million (3.9 %).
- Number of young adults (15–34 years old) having used cocaine during the last year: 3 million (2.2 %).
- Cocaine is reported as the primary drug in about 17 % of all treatment requests.
- Available national estimates of problem cocaine use (only Spain and Italy): between 3.8 and 6 cases per 1 000 adult population.
- Around 500 cocaine-related sudden deaths were reported by 12 European countries. Most cocaine deaths appear, however, to be the result of chronic toxicity leading to cardiovascular and neurological complications.
- 92 000 seizures were reported for 2007, resulting in the interception of almost 77 tonnes of cocaine.
- Countries reporting the largest number of seizures (in descending order): Spain, UK (2006), Italy, Germany.
- Countries reporting the largest quantities of cocaine seized (in descending order): Spain, The Netherlands, Portugal, France.
- Mean retail price: from EUR 44 to EUR 88 per gram. Prices have declined since 2000 in most countries.
- Mean purity: between 20–60 % in most reporting countries, although purity at end-user level may be much lower.

Sources: EMCDDA, 2008, 2009a and 2009b (2007 data unless otherwise indicated).

⁽²⁾ These were as follows: *Drugs in focus No 17, Cocaine use in Europe: implications for service delivery* (online at <http://www.emcdda.europa.eu/html.cfm/index44778EN.html>); *Selected issue No 2, Cocaine and crack cocaine: a growing public health issue* (online at <http://www.emcdda.europa.eu/html.cfm/index44746EN.html>); *Literature review, Treatment of problem cocaine use: a review of the literature* (online at <http://www.emcdda.europa.eu/html.cfm/index40152EN.html>).

Cocaine

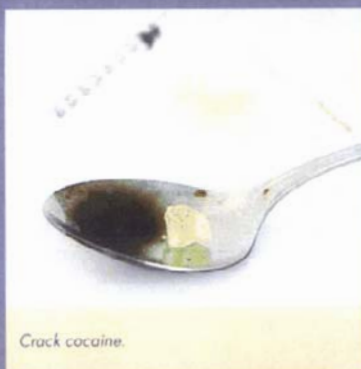
Cocaine is a natural product extracted from the leaves of *Erythroxylum coca* Lamark and *Erythroxylum novogranatense* (coca leaves). These tropical shrubs are cultivated widely in the Andean-Amazonian region, and are the only known natural source of cocaine. It is possible to obtain synthetic cocaine through various methods, but this is rare and is less economic than the extraction of the natural product.



Coca leaves and fruit (Peru, 2005).



Cocaine powder



Crack cocaine.

There are two forms of cocaine in Europe: cocaine powder (HCl, a hydrochloride salt) and the less common crack cocaine (a free base). The drug is typically snorted (powder) or smoked (crack), while injection is less common. The crack cocaine available in Europe is typically manufactured from cocaine HCl in locations close to where it is retailled and used. For this reason, crack generates very little cross-border or long-distance trafficking.

Cocaine is listed among the substances with addictive properties and presenting a serious risk of abuse in Schedule I of the United Nations 1961 Single Convention on Narcotic Drugs. Coca leaf is also separately listed in Schedule I and is defined by Article 1, Paragraph 1, as: 'The leaf of the coca bush, except a leaf from which all ecgonine,

cocaine and any other ecgonine alkaloids have been removed.' Potassium permanganate, an essential processing chemical in the manufacture of cocaine, is listed in Table I of the United Nations Convention against Illicit Traffic in Narcotic Drugs and Psychotropic Substances, 1988.

Source: EMCDDA, Cocaine and crack drug profile at <http://www.emcdda.europa.eu/publications/drug-profiles/cocaine>.

Coca and cocaine production in the Andean-Amazonian region

Historically, cocaine HCl was produced legally on an industrial scale in the 19th and early 20th century. The main manufacturers were Dutch, German and Japanese pharmaceutical firms, which obtained coca leaves from plantations on islands belonging to the Dutch (e.g. Java) and Japanese (Formosa) colonial empires. In the 1910s and 1920s, more coca was produced in Asia than in South America (De Kort, 1999; Karch, 1999).

Today, cocaine HCl is manufactured illegally from coca cultivated in the Andean-Amazonian region of South America. Total global production of coca (and cocaine HCl) is almost fully concentrated in just three countries: Colombia, Peru and Bolivia (in descending order of present-day estimated coca output). However, it is estimated that a few hundred hectares of coca shrubs are also cultivated in Ecuador, Venezuela and Brazil, and cocaine HCl may be refined outside the three main Andean coca and cocaine producers.



Coca field (Bolivia, 2006).

Coca is regarded as a sacred leaf by some of the indigenous American communities of the Andes and Amazon basin, where it has been used for a variety of purposes for thousands of years (Mortimer, 1974). As a consequence, the legal status of coca is sometimes ambiguous in South America, complicating efforts to control cocaine production. Bolivian and Peruvian laws allow the growing of some coca in order to supply long-standing, licit, local consumer markets for coca leaves ('chewing') and derived products, mostly coca tea, in both countries. The International Narcotics Control Board (INCB) has recently called for the suppression of these legal coca markets under Article 49, 2e, of the 1961 Single Convention on Narcotic Drugs, which requires the elimination of coca consumption 'within twenty-five years of the coming into force of this convention' (INCB, 2008a). Additionally, some coca is grown legally in Peru and Bolivia for processing into decocainised flavouring agents that are sold to international manufacturers of soft

drinks under Article 27 of the 1961 Single Convention. Finally, the 'chewing' of coca leaves and the drinking of coca tea appears to be tolerated for some communities or in some regions in a number of South American countries, including Argentina, Brazil, Chile, Colombia and Ecuador.



Different legal products based on coca leaves, including tea (Colombia, 2004).

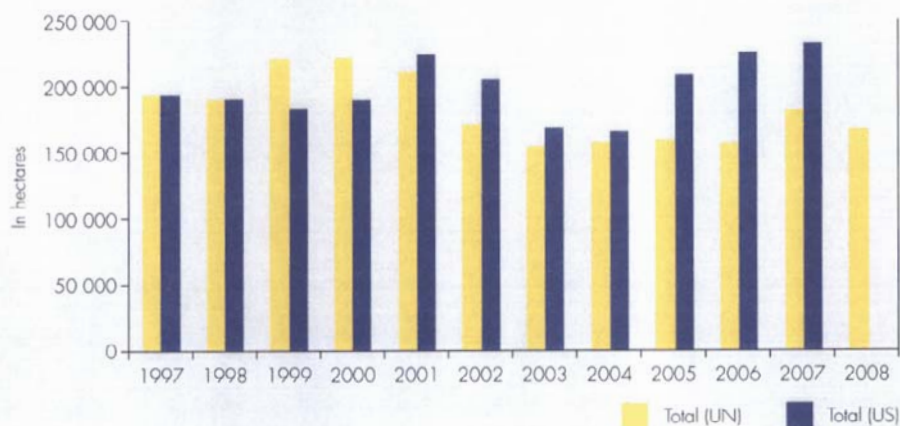
Estimating coca cultivation

In 2007, the global acreage of coca bush cultivation was estimated, depending on the source, to be 181 600 hectares (UNODC, 2008b) or 232 500 hectares (NDIC, 2008). By comparison, the UN Food and Agriculture Organization estimates that 523 500 hectares of maize (a staple food for Colombians) were harvested in Colombia in 2007 (FAO, 2009). Most of the coca cultivation was thought to take place in Colombia but acreage estimates varied largely between sources with figures of 99 000 hectares (UN) and 167 000 hectares (US). Peru was considered the country with the second largest acreage, estimated at 53 700 hectares (UN) ⁽³⁾ or at 36 000 hectares (US). Finally, estimates for Bolivia, the third largest grower of coca shrubs, were relatively close at 28 900 hectares (UN) and 29 500 hectares (US).

As regards trends, both sources report increases in acreage in Peru and Bolivia over the period 2003–07, but diverge regarding the trend in Colombia: the UN reports a decline between 2003 and 2007 and the US reports an increase. Thus, according to the UN estimate, Colombia in 2007 accounted for 55 % of the total coca bush cultivation for the three countries, yet according to the US estimate this share was above 70 %.

⁽³⁾ UNODC's coca acreage estimates for Bolivia and Peru include areas dedicated to licit coca crops. In Bolivia, for instance, national legislation (Ley 1008) allows the cultivation of up to 12 000 hectares of coca to supply the licit national consumer market.

Figure 1. Global cultivation of coca bush, 1997–2008 (available estimates)



Sources: UNODC, 2007a; UNODC 2008b; WOLA, 2007 (based on ONDCP reports); NDIC, 2008.

NB: The UNODC (2009a) notes that, due to methodological changes, estimates prior to 2004 are not directly comparable with subsequent ones. The United States had not released its 2008 estimate at the time of writing (November 2009).

Taking an overall and long-term view, UN data show a decline of about 25 % in the total coca cultivation surface of the three countries during the period 1990–2006. The US surveys suggest that this aggregate coca cultivation has remained stable or has increased during the last 20 years. Finally, according to calculations based on US official coca acreage estimates (1987–2007) ⁽⁴⁾ the surface under coca cultivation in 2007 in the three countries could have grown to encompass the largest area on record since 1987 (WOLA, 2007; NDIC, 2008) (Figure 1).

Estimating cocaine production

In 2006, in spite of different results in estimating the land surface dedicated to coca crops, the two existing sources converged somewhat as far as the Andean aggregate potential production of pure cocaine ⁽⁵⁾ was concerned ⁽⁶⁾. In 2007, differences in acreage estimates were reflected in different

⁽⁴⁾ United States data for years 1997 to 2006 are from the Washington Office on Latin America (WOLA, 2007), an NGO; US data for 2007 are from the NDIC (2008).

⁽⁵⁾ The figures of illicit cocaine production published by the UNODC and the US government are estimated amounts of 'pure cocaine' (UNODC, 2009c; NDIC, 2008) contained in the cocaine HCl that could be potentially manufactured from the coca leaf output estimated for a given year. Thus, since it is estimated that 600 tonnes of 'pure cocaine' were produced in Colombia in 2007 and that on average the Colombian cocaine HCl contains 85 % 'pure cocaine' (UNODC, 2008b), it may be estimated that in 2007 some 690 tonnes of cocaine HCl could potentially have been manufactured in Colombia (600 tonnes of 'pure cocaine' + 15 %).

⁽⁶⁾ In 2006, the UNODC estimated the global coca acreage at 156 900 ha and global cocaine production at 984 tonnes (UNODC, 2008a), while the US suggested 220 000 ha and 970 tonnes (NDIC, 2007).

cocaine production estimates, the UNODC (2008a) estimating production at 994 tonnes and the US (NDIC, 2008) suggesting 865 tonnes, or nearly 15 % less ⁽⁷⁾. However, these estimates are arrived at by different calculation methods, since the US acreage estimate of Andean coca cultivation in 2007 (232 500 ha) was about 28 % higher than the UN estimate (181 600 ha) for the same year ⁽⁸⁾.

Trends in pure cocaine production in the Andean region over the period 2003–07 appear to be relatively stable overall, with estimates fluctuating around 900 tonnes ⁽⁹⁾. At country level, both sources report increases in production in Colombia and Bolivia, but diverge regarding Peru, with UN figures showing an increase and US figures reporting a decline over the period.

For 2008, however, the UNODC estimates that global cocaine production decreased by 15 % to 845 tonnes (or 149 tonnes less than the previous year), representing a return to levels recorded in 2003–06 ⁽¹⁰⁾. The sudden decline in 2008 is due entirely to a fall in coca cultivation and cocaine manufacturing in Colombia, since the coca acreages and the cocaine outputs of both Bolivia and Peru are estimated to have increased (UNODC, 2009a). The UNODC attributes the decline in coca cultivation in Colombia — 81 000 ha, or 18 % less than 2007 — to enhanced suppression efforts by the Colombian government, which reported the eradication of 229 130 ha of coca shrubs in 2008 (UNODC, 2009a). The even larger drop in pure cocaine production — to 430 tonnes, 28 % less than 2007 — is due mostly to the effects of eradication, which is reported to have had a greater impact in regions where high-yield coca is grown (UNODC, 2009c).

Taking the long-term view, UN data indicate an increase of 28 % in the total pure cocaine production of the three countries during the period 1990–2007 (UNODC, 2008a). This may reflect improvements in cultivation and production techniques, since during the same period the total acreage cultivated is estimated to have shrunk by about 25 %.

⁽⁷⁾ According to the UNODC (2009a), authorities around the world seized 41.5 % — some 412 tonnes — of the estimated global pure cocaine alkaloid output in 2007. By comparison, the 2007 interception rate for opiates was much lower, at 19 % of global production, or 143 tonnes of heroin equivalent.

⁽⁸⁾ Contacted by the EMCDDA, the UNODC confirmed that its estimation methods differ from those used by the United States, although some elements are shared. Thus, for Bolivia and Peru, the methods used to estimate the scope of cultivation and the yield of coca leaves are different, but the UNODC uses the coca leaf to cocaine conversion rates information collected by the United States for its estimation of cocaine production. In the case of Colombia, the UNODC relies on its own coca leaf to cocaine conversion rates, which in recent years were considerably higher than those estimated by the United States.

⁽⁹⁾ Fluctuations during this period were between 889 and 1 008 tonnes, according to the UN (UNODC, 2009a), and between 790 and 930 tonnes according to the US (NDIC, 2008).

⁽¹⁰⁾ No US estimate of Colombian coca or cocaine production in 2008 was available at the time of writing.

Suppressing coca in Colombia

Colombia is the world's leading illicit producer of coca and of cocaine HCl. It is also one of the countries in the world with the longest experience of using aerial spraying of herbicides to suppress drug crops. This method as an illicit crop suppression measure has been promoted and supported by the federal government of the United States since the early 1980s. The first major aerial spraying campaign was launched in 1982 against cannabis plantations, and in the 1990s regular aerial spraying campaigns were introduced against poppies and then against coca plantations (Guáqueta, 2007). In 2000, the Colombian government launched a new aerial spraying campaign against coca and poppy plantations, using a reportedly highly concentrated herbicidal mixture based on glyphosate. In addition to aerial spraying, a ground eradication campaign involving the manual uprooting of drug plants was initiated in 2001 (Vargas, 2005). Both campaigns were still underway in 2009.

There is ample evidence of the negative impact of drug production on the environment, notably deforestation and the disposal of chemicals used to refine drugs in rivers and streams of often-fragile ecosystems (UNODC, 2006). Large-scale aerial spraying of chemicals has also been blamed for adversely affecting the environment and human health (Jelsma, 2001), but there is little evidence available to assess such claims.

The surface area subjected to eradication measures in Colombia has rapidly increased since 2000, and in 2008 the area subjected to eradication was almost three times larger (230 000 hectares) than the UN-estimated acreage of harvestable coca in that same year (81 000 hectares) (UNODC, 2009a). However, it must be noted that for a variety of reasons — such as replanting after spraying — only a portion of the illicit crops sprayed are effectively suppressed (Vargas, 2005).

In spite of the considerable investment in suppression efforts — probably the world's most substantial — and irrespective of the uncertainty of acreage estimates, there is little doubt that coca continues to be cultivated on a large scale in Colombia. This supports the contention that eradication measures alone are unlikely to be effective if they are not accompanied by other measures to address the broader causes of the problem. While the issue of agricultural drug production and drug trafficking in Colombia is highly complex and underpinned by a wide range of interacting factors (Thoumi, 1995), two issues stand out that are likely to be of particular relevance: the land issue; and the armed conflict.

From coca to cocaine

Manufacturing cocaine hydrochloride from coca leaves is a multifaceted chemical process, which in the Andean-Amazonian region is typically performed in three stages. During the first stage coca leaves are transformed into coca paste. The leaves are moistened with limewater or other alkali and extracted with kerosene (paraffin, domestic fuel). The dissolved cocaine is extracted from the kerosene with sulphuric acid to produce an aqueous solution of cocaine sulphate. This solution is neutralised with lime, causing cocaine base to precipitate (coca paste). This stage requires little skills or financial investment apart from buying the necessary, widely available, chemicals. Often it is the coca growers themselves who carry out this process, and they then sell the coca paste to middlemen. However, some farmers simply sell coca leaves.

The second stage involves transforming coca paste into cocaine base. Coca paste is re-dissolved in sulphuric acid, and potassium permanganate is added to destroy cinnamoylcocaine and other impurities. The filtered solution is again treated with alkali to precipitate the free base, which is dissolved in acetone or other solvents. This requires additional skills and investment, but many coca growers also perform this stage.

Finally, cocaine base is refined into cocaine hydrochloride by adding concentrated hydrochloric acid to the solution, causing cocaine hydrochloride to settle out as a solid residue. This is a more complex procedure that requires more skills, more chemicals and more financial investment. This is therefore performed in jungle 'laboratories' run by organised crime groups that buy coca paste or cocaine base from the middlemen (Thoumi, 1995; UNODC, 2007c; EMCDDA drug profiles).

The main chemicals used in the process described above are subject to international control measures. Sulphuric and hydrochloric acids, acetone and certain other solvents are listed in Table II, whereas potassium permanganate is listed in Table I, of the United Nations Convention against Illicit Traffic in Narcotic Drugs and Psychotropic Substances, 1988.

The UNODC, based on its own field surveys in 2008 and 2009 and on information from the US Drug Enforcement Administration (DEA), reports the following national average ratios for Colombia (UNODC, 2009c):

- 1 hectare of coca shrubs yields 4.2 tonnes of fresh coca leaves per year;
- 1 tonne of fresh coca leaves yields 1.5 kg of coca paste or 1.4 kg of cocaine base;
- 1 kg of cocaine base yields 0.9 kg of cocaine hydrochloride;
- 1 kg of cocaine hydrochloride contains approximately 85 % pure cocaine;
- 1 hectare of coca shrubs yields 6.6 kg pure cocaine.

In Colombia in 2008, average prices for coca products were as follows (UNODC, 2009c):

- 1 kg of coca leaves: USD 1.10;
- 1 kg of coca paste: USD 963;
- 1 kg of cocaine base: USD 1 450;
- 1 kg of cocaine hydrochloride: USD 2 348.

Drug production and the land issue in Colombia

In Colombia, most of the coca leaves, coca paste and cocaine base is produced by small farmers, who rely extensively on family labour. An estimated 60 000 to 100 000 families are involved in this illicit agricultural activity (UNODC, 2009c; Calvani, 2005). Most of these families are poor and live in remote agricultural 'frontier' areas located in the Amazon and Orinoco basins, respectively south and east of the country. In many of these regions, state institutions and services are absent, and irregular armed groups (guerrillas and paramilitaries) control the territory. Large numbers of farmers have migrated to the 'frontier' because of lack of access to land, or to escape the violence in their regions of origin. Many of them grow coca for a living because the frontier areas lack the infrastructure — especially transportation — needed for other, licit, crops to be profitable, or because they do not have access to the resources needed to launch sustainable licit agricultural activities. However, especially in the late 1970s, some of them were also attracted to the frontier by the relatively large profits to be made from producing coca paste (Molano, 1987; Mondragón, 1999; Thoumi, 1995).

The concentration of land ownership in Colombia has been cited as a likely cause of the existence of so many 'cocaleros', or coca growers, and their presence in the 'stateless' frontier. In the early 2000s, 0.4 % of registered landowners in Colombia owned 61.2 % of the country's arable land, while 97 % owned only 24 % of it (IGAC/CORPOICA, 2002). This situation results to a considerable extent from the large-scale land purchases made by drug traffickers eager to gain recognition as 'respectable' landowners since the late 1980s. By the mid-1990s 'narcos' were the registered owners of an estimated total of 4.4 million hectares of land in Colombia (Reyes, 1997), which is equivalent to approximately twice the amount of arable land in Colombia, or about 4 % of the country's total land area ⁽¹⁾. This concentration process, which is often referred to as 'counter-land reform', has further fuelled the migration of landless farmers to the coca growing frontiers. As the former UNODC representative in Colombia put it: 'land concentration is one of the main causes of rural poverty, internal displacements ⁽²⁾, armed groups, land misuse and illicit crops' (Calvani, 2005). In part because many land purchases have been made for non-agricultural purposes since the 1990s, land is also under-utilised, and just 3.6 % of rural properties are dedicated to agriculture. Thus, land concentration and under-utilisation make alternative development initiatives both more difficult to implement and less productive.

⁽¹⁾ According to the FAO (2008), in 1995 there were 2.4 million hectares of arable land in Colombia, while the country's total land area was approximately 1.1 million square kilometres, or 110 million hectares.

⁽²⁾ With around three million internally displaced persons (IDP) in 2008, 'Colombia continues to have one of the largest IDP populations in the world' (UNHCR, 2009).

Drug production and armed groups in Colombia

Colombia is affected by a 50-year-old conflict, with armed groups present in many regions where coca is grown and cocaine products are manufactured. Similarly, in Afghanistan, the world's leading illicit producer of opium and possibly of heroin, internal armed conflicts have been recurrent over the last 30 years (Paoli et al., 2009). Historically, at world level, many of the countries that at one point in time became major producers of drug plants had internal conflicts or were at war ⁽¹³⁾. This strongly suggests the existence of synergies between armed conflicts, especially civil wars, and illicit agricultural drug production (McCoy, 1972; Lamour and Lamberti, 1972; Labrousse, 1991; Vargas, 2005; Calvani, 2005; GTZ, 2007; Chouvy and Laniel, 2007).

Such synergies are in evidence in Colombia, where many sectors of the drug economy have been connected with, or indeed controlled by, irregular armed groups since the mid-1980s (Medina Gallego, 1990; Betancourt and García, 1994; Duncan, 2006). Colombia's internal conflict pits left-wing guerrilla movements, the large FARC and the smaller ELN, against several right-wing paramilitary units that federated under the banner of the AUC in 1997 ⁽¹⁴⁾ and whose main objective is the suppression of guerrilla movements in the country. Many of the groups that joined the AUC have roots in the private armies set up by drug cartel bosses in the late 1980s (Medina Gallego, 1990; Betancourt and García, 1994; Duncan, 2006). The Colombian military is also actively fighting against the guerrillas, especially the FARC, which it accuses of being a major international drug trafficking organisation.

Taken together, the FARC and the paramilitaries have territorial control of many drug-producing areas (UNODC, 2009c). These rural regions, their population, and the resources that may be extracted from them, form the base of the irregular armies' economic and political power as well as being the location of much of their fighting ⁽¹⁵⁾. Typically, in the areas under their rule Colombia's two main irregular armed groups monopolise the purchase and sale of coca paste or cocaine base, and set the prices at which these commodities are bought from producers and sold to cocaine refiners (Jansson, 2005). In addition, they actively promote the illicit cultivation of drug plants, and the 'taxing and protecting' of cocaine laboratories and clandestine landing strips for aircraft (Calvani, 2005). Some of the fighting between the guerrillas and the paramilitaries is rooted in the struggle to gain control of drug-producing regions (Labrousse, 2004). Although the armed groups are involved in lucrative illicit activities other than drugs, including arms trafficking, extortion, robbery, misappropriation of public funds, and kidnapping for ransom (Duncan, 2006), there is little doubt that the drug trade provides a significant — but hard to estimate — proportion of both groups' funds (Labrousse, 2004; Duncan, 2006).

⁽¹³⁾ In addition to present-day Afghanistan and Colombia, the historical list includes: China, Guatemala, Mexico, Myanmar, Laos, Peru and Thailand.

⁽¹⁴⁾ FARC-EP stands for Fuerzas Armadas Revolucionarias de Colombia – Ejército del Pueblo (Revolutionary Armed Forces of Colombia-People's Army); ELN stands for Ejército de Liberación Nacional (National Liberation Army); AUC stands for Autodefensas Unidas de Colombia (United Self-Defence Forces of Colombia). The AUC stopped functioning as the paramilitary umbrella organisation in 2003, but many of the men who belonged to it are still active in 2009.

⁽¹⁵⁾ However, the irregular armies' illicit activities and violence are also played out in urban centres (Duncan, 2006).