3.1 Production

3.1.1 Afghanistan

Fact Sheet[1] - Afghanistan Opium Survey 2008[2]

	2007	Change on 2007	2008
Net opium poppy cultivation (after eradication)	193,000 ha (177,000-209,000 ha)	-19%	157,000 ha (130,000-190,000 ha)
in per cent of agricultural land[3]	2.5%		2.1%
Number of poppy-free provinces (out of 34)	13	+38%	18
Eradication	19,047 ha	-71%	5,480 ha
Weighted average opium yield	42.5 kg/ha	+15%	48.8 kg/ha
Potential production of opium	8,200 mt (7,530-8,960 mt)	-6%	7,700 mt (6,330-9,308 mt)
Number of households involved in opium cultivation	509,000 (437,000-653,000)	-28%	366,500 (315,000-470,000)
Number of persons involved in opium poppy cultivation	3.3 million	-28%	2.4 million
in per cent of total population[4]	13.7%		9.8%
Average farm-gate price (weighted by production) of fresh opium at harvest time	US$ 86/kg	-19%	US$ 70/kg
Average farm-gate price (weighted by production) of dry opium at harvest time	US$ 122/kg	-22%	US$ 95/kg
Current GDP[5]	US$ 8.2 billion		US$ 10.2 billion
Total farm-gate value of opium production	US$ 1 billion (0.912-1.088)	-27%	US$ 730 million (601-885)
in per cent of GDP	12%		7%
Potential export value of opium, morphine and heroin (border areas of neighbouring countries)	US$ 4 billion (3.5-4.5 billion)		US$ 3.4 billion (2.7-4.3 billion)
Indicative gross income from opium per ha/year	US$ 5,200	-10%	US$ 4,662
Indicative gross income from wheat per ha/year	US$ 546	+198%	US$ 1,625

1 The information in this section comes from the Afghanistan Opium Survey 2008 (UNODC/Ministry of Counter Narcotics, Afghanistan, November 2008), and can also be found at http://www.unodc.org/unodc/en/crop-monitoring/index.html. Source unless otherwise indicated: National monitoring system supported by UNODC.

2 The figures in brackets represent the lower and upper limits of the 90% confidence interval

3 The area available for agriculture has been updated by UNODC based on Landsat 7 ETM images.

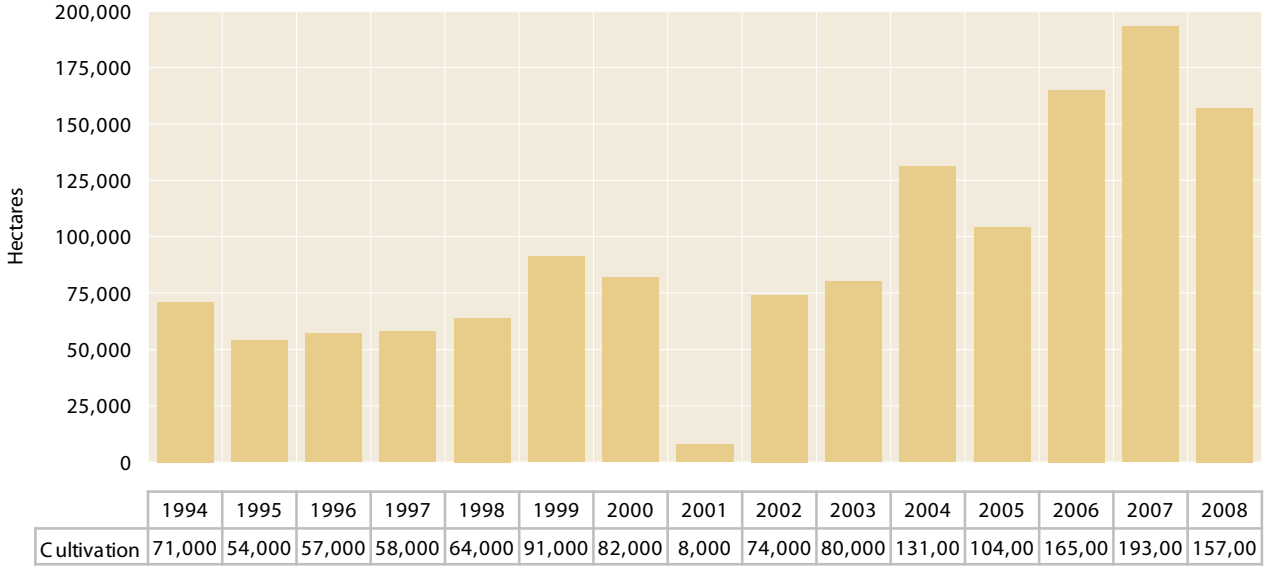
4 Population 24.1 million in Afghan year 1385 (April 2006 to March 2007) and 24.5 million in Afghan year 1386 (April 2007 to March 2008); source: Afghan Government, Central Statistical Office.

5 GDP Afghan year 1385 (April 2006 to March 2007), revised figure, and GDP for Afghan year 1386 (April 2007-March 2008; preliminary estimates); GDP growth in constant Afghanis amounted to 16.2% in the Afghan year 1386, up from 11.2% in the Afghan year 1385; source: Government of Afghanistan, Central Statistical Office. The inflation (change in the Consumer Price Index) amounted to 16.9% in 2007 and 27.1% over the first two quarters of 2008 (Source: IMF International Financial Statistics, October 2008). Foreign exchange rate of the Afghan currency remained practically unchanged (2006: Afghanis 49.93; 2007: Afghanis 49.96; first two quarters of 2008: Afghanis 49.65 for US$ 1).

Cultivation and eradication

The total opium poppy cultivation in 2008 in Afghanistan was estimated at 157,000 ha, a reduction of 19% compared to 2007. Almost the entire cultivation (98%) was confined to seven out of 34 provinces, all of which had security problems: five of these provinces were in the south (Hilmand, Kandahar, Uruzgan, Daykundi and Zabul provinces) and two in the west of Afghanistan (Farah and Nimroz provinces). In 2008, 18 provinces were poppy-free, five more than 2007. This included the eastern province of Nangarhar, which, in 2007, had the second largest area under opium poppy cultivation in the country. Only a very small portion of the total cultivation took place in the north (Baghlan and Faryab provinces), north-east (Badakhshan province) and east (Kunar, Laghman and Kapisa provinces). Together, these provinces accounted for less than 2% of cultivation. Eradication activities in 2008 were severely affected by resistance from insurgents. In 2008, a total of 5,480 ha of eradicated opium poppy fields were verified by the Ministry of Counter Narcotics, Afghanistan/UNODC. This included governor-led eradication (4,306 ha) and eradication led by the centrally controlled Poppy Eradication Force (1,174 ha).

Afghanistan, opium poppy cultivation (ha), 1994-2008

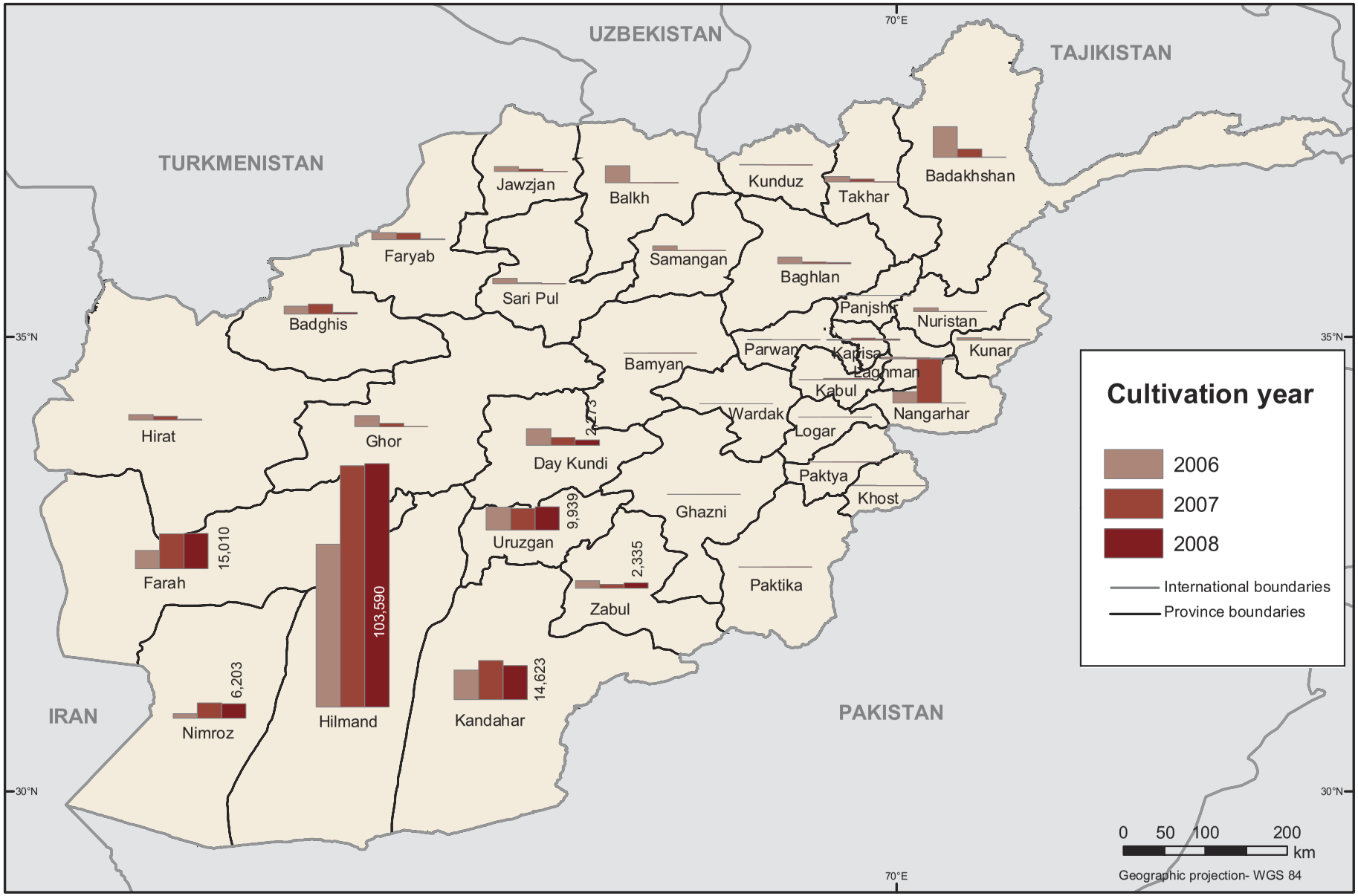


	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008
Cultivation	71,000	54,000	57,000	58,000	64,000	91,000	82,000	8,000	74,000	80,000	131,00	104,00	165,00	193,00	157,00

Afghanistan, regional distribution of opium poppy cultivation (ha), 2007-2008

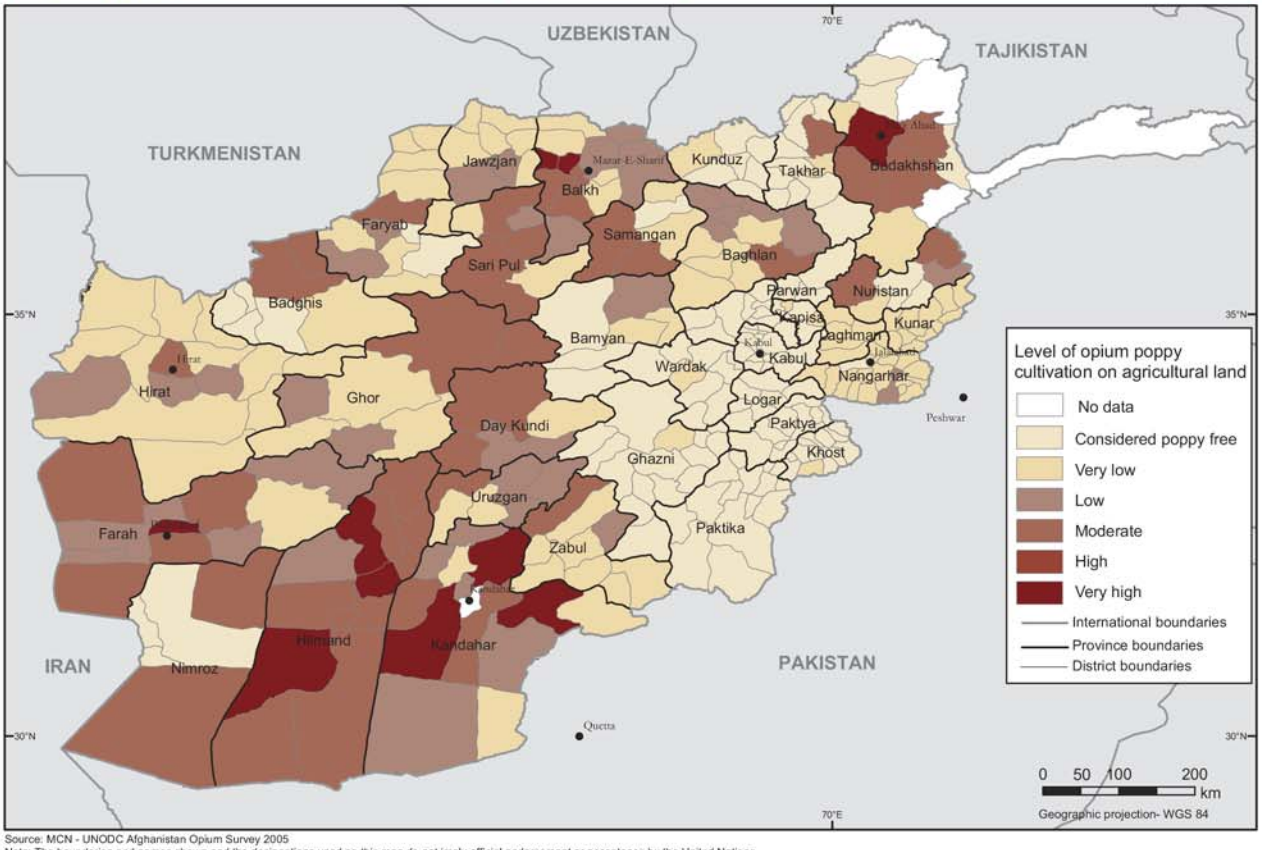
Region	2007 (ha)	2008 (ha)	Change 2007-2008	2007 (ha) as % of total	2008 (ha) as % of total
Southern	133,546	132,760	-1%	69%	84%
Northern	4,882	766	-84%	3%	0.5%
Western	28,619	22,066	-23%	15%	14%
North-eastern	4,853	200	-96%	3%	0.1%
Eastern	20,581	1,151	-94%	11%	0.7%
Central	500	310	-38%	0.3%	0.2%
Rounded total	193,000	157,000	-19%	100%	100%

Opium poppy cultivation in Afghanistan, 2006 – 2008



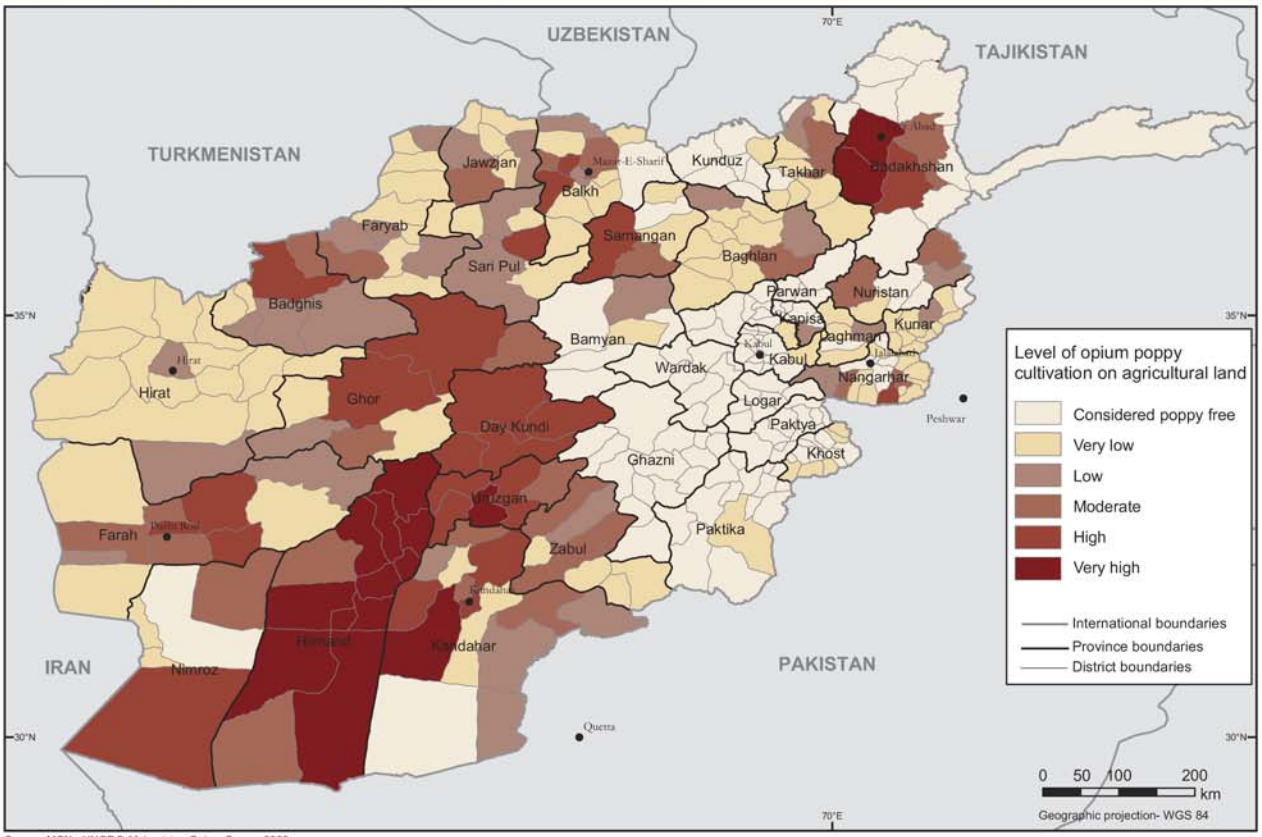
Source: MCN - UNODC Afghanistan Opium Survey 2008
Note: The boundaries and names shown and the designations used on this map do not imply official endorsement or acceptance by the United Nations.

Opium poppy cultivation in Afghanistan (at district level) 2005



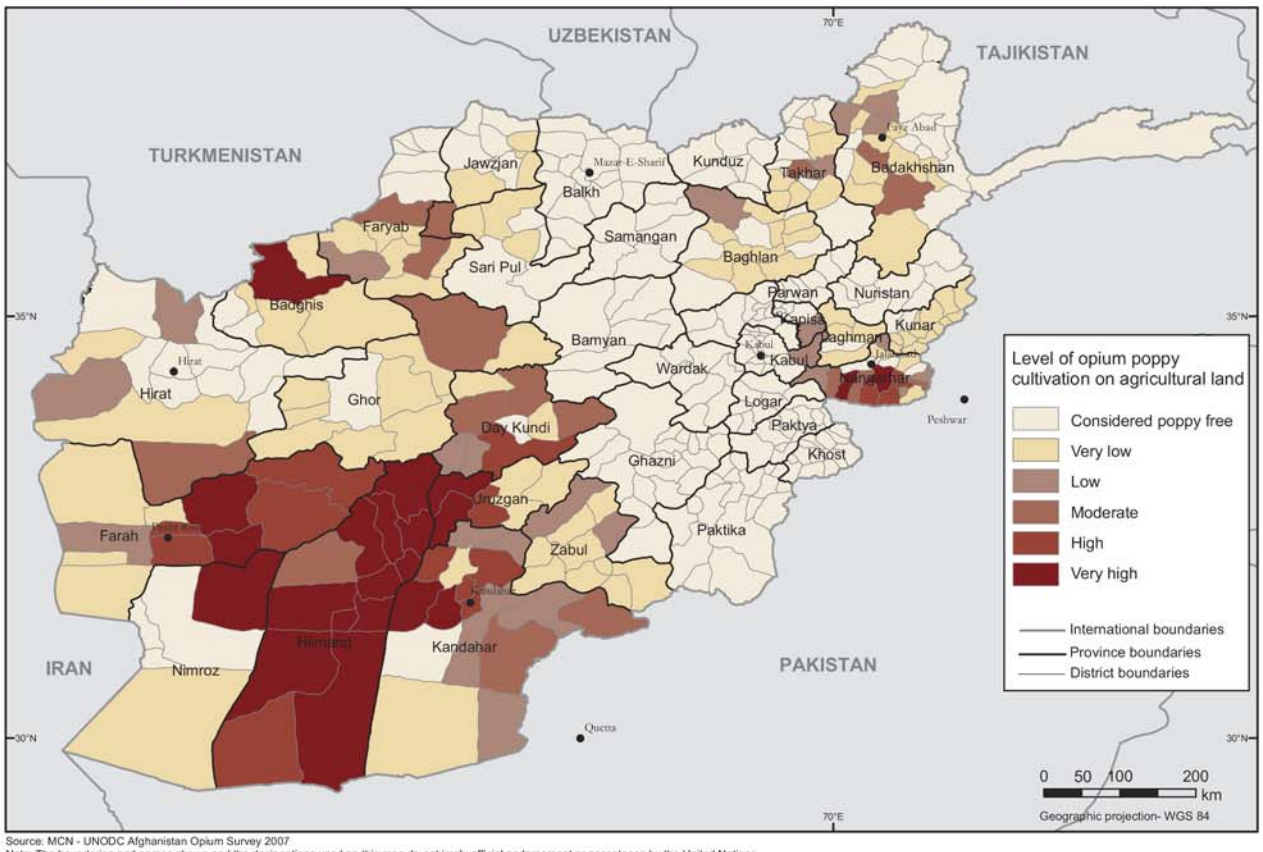
Source: MCN - UNODC Afghanistan Opium Survey 2005
Note: The boundaries and names shown and the designations used on this map do not imply official endorsement or acceptance by the United Nations.

Opium poppy cultivation in Afghanistan (at district level) 2006



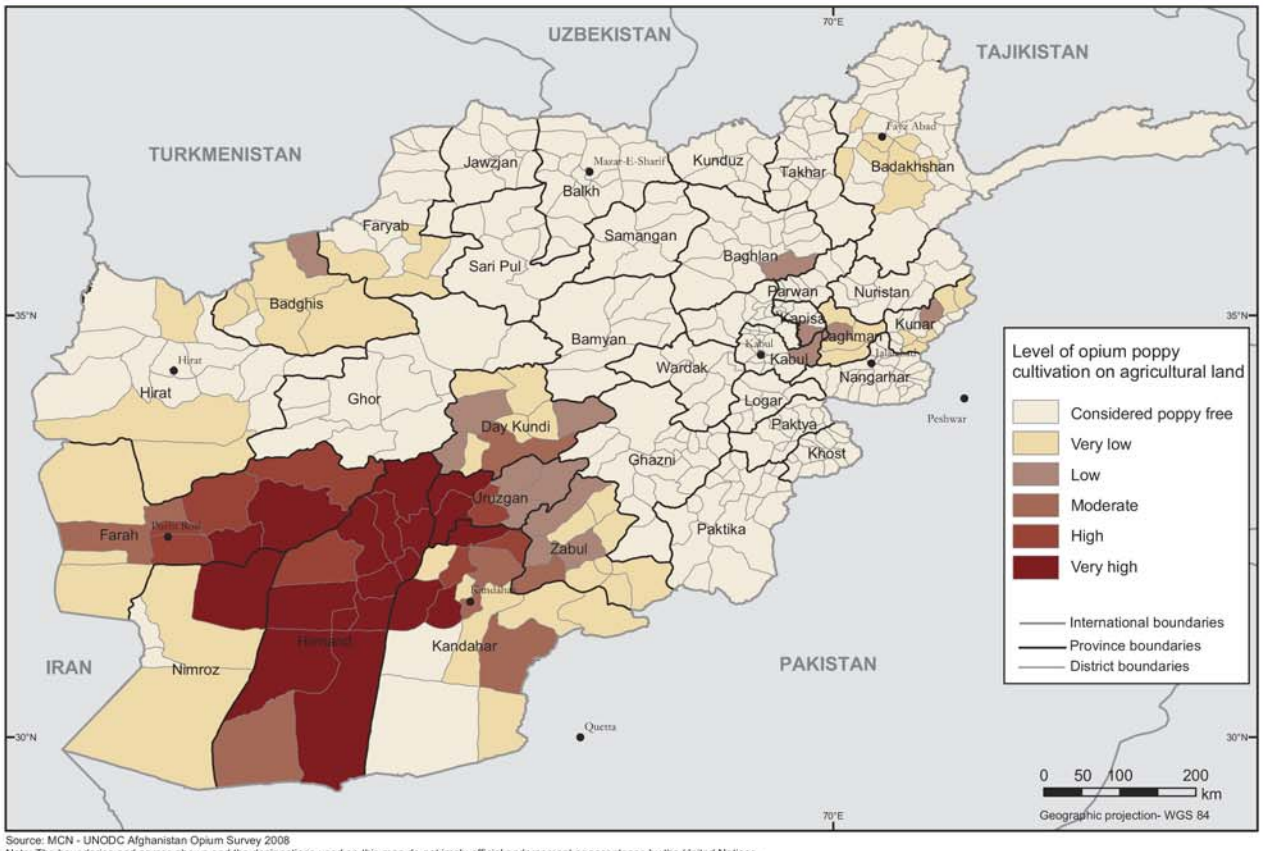
Source: MCN - UNODC Afghanistan Opium Survey 2006
Note: The boundaries and names shown and the designations used on this map do not imply official endorsement or acceptance by the United Nations.

Opium poppy cultivation in Afghanistan (at district level) 2007



Source: MCN - UNODC Afghanistan Opium Survey 2007
Note: The boundaries and names shown and the designations used on this map do not imply official endorsement or acceptance by the United Nations.

Opium poppy cultivation in Afghanistan (at district level) 2008



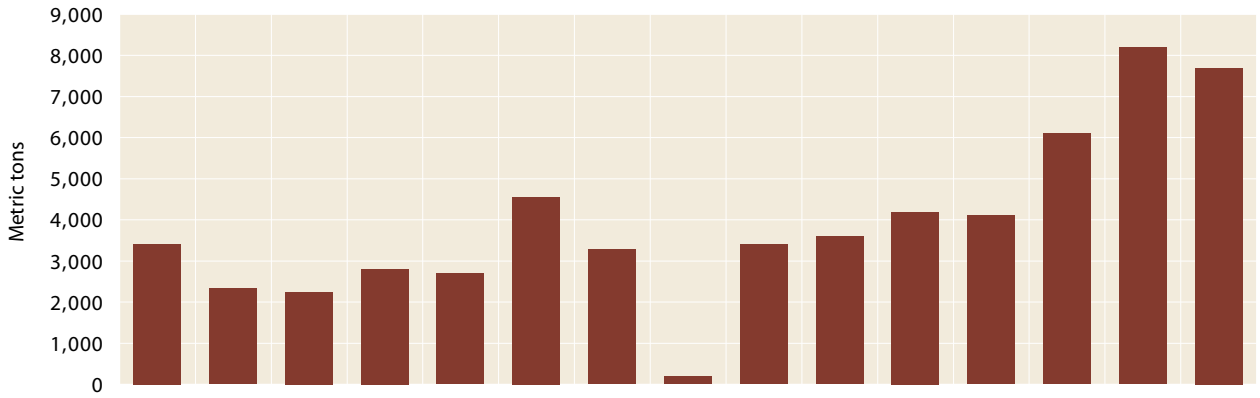
Source: MCN - UNODC Afghanistan Opium Survey 2008
Note: The boundaries and names shown and the designations used on this map do not imply official endorsement or acceptance by the United Nations.

Production

The total opium production in 2008 was estimated at 7,700 mt, a reduction of 6% compared to 2007. Due to higher than average yields in the seven provinces where most of the opium poppy cultivation took place, the decrease in production was smaller than the decrease in cultivation.

Taking domestic consumption of opium, seizures and opium exports into account, Afghanistan's morphine and heroin production destined for export was estimated at 630 mt in 2008, a decrease of 5% compared to 666 mt in 2007.

Afghanistan, potential opium production (mt), 1994-2008

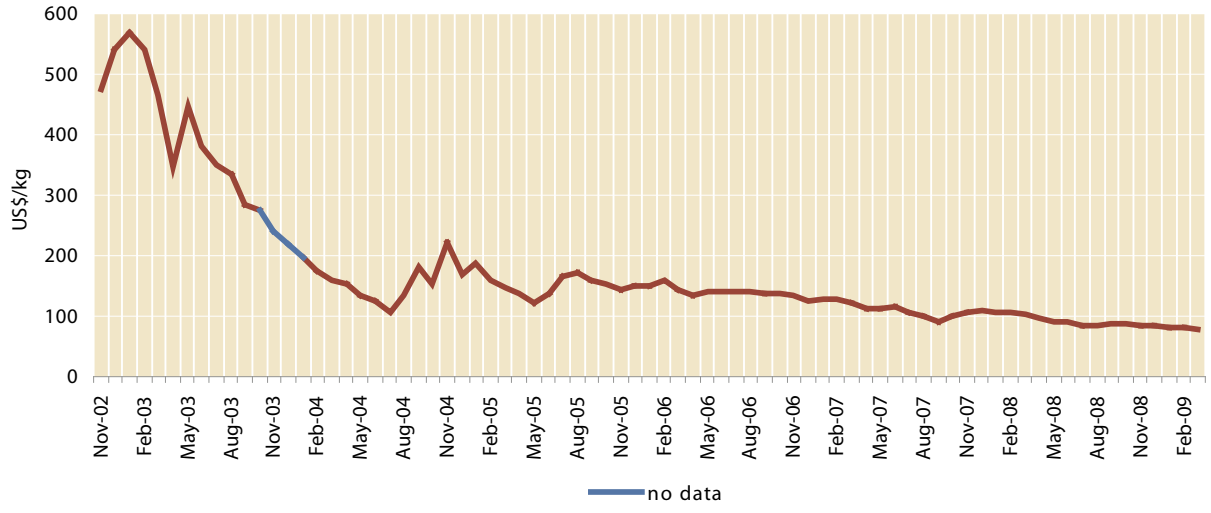


	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008
Production	3,416	2,335	2,248	2,804	2,693	4,565	3,276	185	3,400	3,600	4,200	4,100	6,100	8,200	7,700

Prices

Farm-gate prices for dry opium at harvest time decreased by 22% to US$ 95/kg in 2008, compared to US$ 122/kg in 2007 (price weighted by production). Regional trader prices for dry opium decreased in all regions except the Central Region. Prices fell by 30% in the Eastern Region, 20% in the Northern, 20% in the Southern and 17% in the Western Region. In general, in 2008, regional trader price differences were less pronounced than in the three previous years. Regional prices tended to be higher in the Eastern and Western Regions, which are thought to be the two main exit routes for opium and heroin exports, and low in the South, where the bulk of opium production occurs. Low prices can be a consequence of many factors, including difficult marketability of opium due to law enforcement activities, cost of transport from northern to southern Afghanistan for heroin production and onward trafficking to other countries, or a high volume of opium being offered on the market.

Afghanistan, monthly farm-gate prices of dry opium (US$/kg), Nov 2002 - Mar 2009

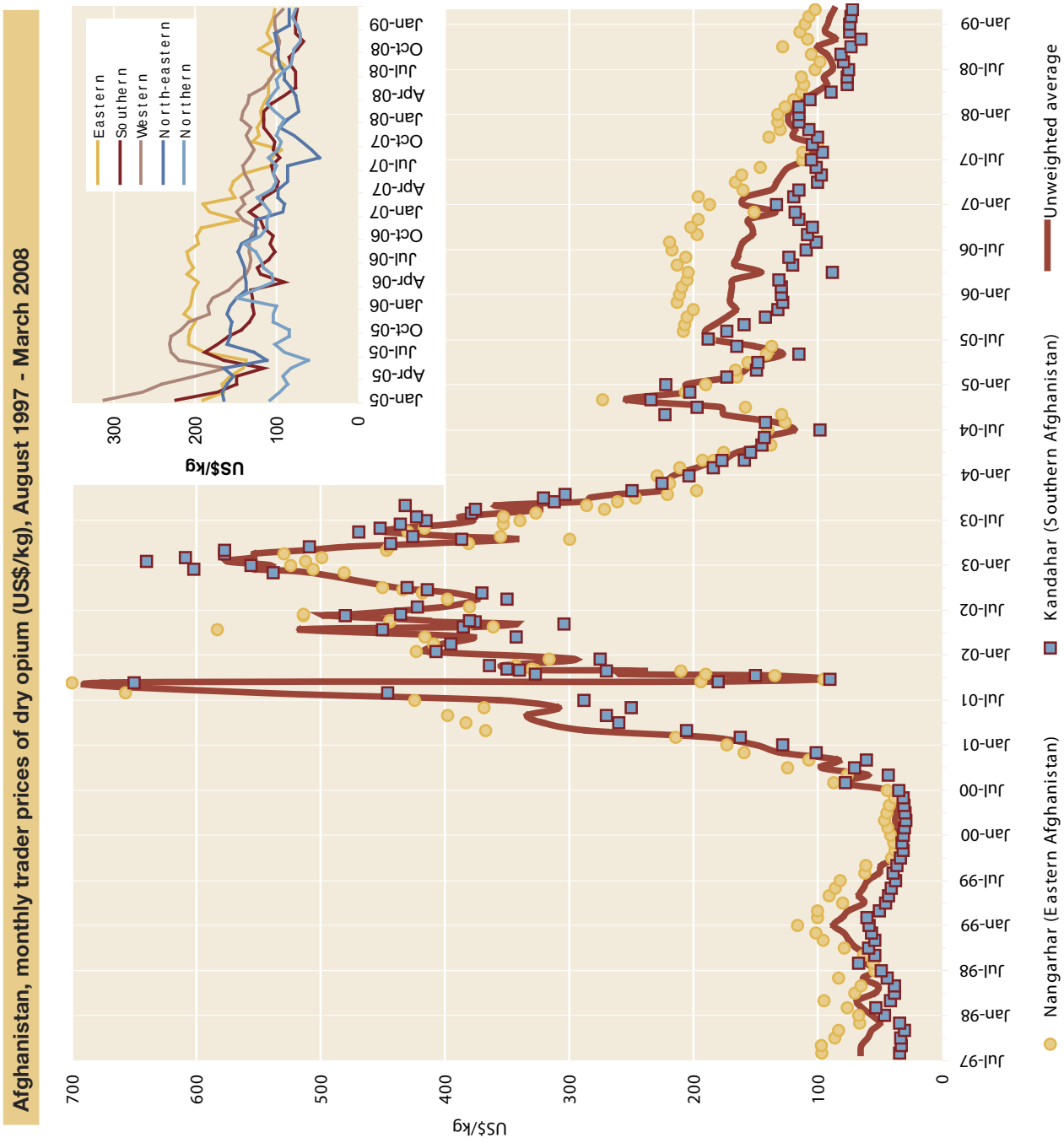


Farm-gate value

The gross income for farmers who cultivated opium poppy was estimated at US$ 730 million in 2008. This is a decrease from 2007, when farm-gate income for opium was estimated at US$ 1 billion. The farm-gate value of opium as a proportion of GDP decreased in 2008 to 7% compared to 12% in 20076. The total farm-gate income from opium in Afghanistan is calculated based on dry opium prices at harvest time.

Households involved

In 2008, the survey estimated that 366,500 families were involved in opium poppy cultivation compared to 509,000 families in 2007 (a decrease of 28%). Given an average of 6.5 members per family, this represents an estimated total of about 2.4 million persons, or 9.8% of Afghanistan's population of 24.5 million.



6 These percentages were calculated considering the 2007 GDP estimated by the Central Statistical Office of Afghanistan at US$ 10.2 billion.

3.1.2 Bolivia (Plurinational State of)

Fact Sheet Bolivia Coca Survey 2008[1]			
	2007	**Change on 2007**	**2008**
Coca cultivation	28,900 ha	+6%	*30,500 ha*
Of which in the Yungas of La Paz	*19,800 ha*	+5%	*20,700 ha*
in Chapare	*8,800 ha*	+8%	*9,500 ha*
in Apolo	*300 ha*	+0%	*300 ha*
Of which permitted by Bolivian law 1008	*12,000 ha*		*12,000 ha*
Production of sun-dried coca leaf	51,000 mt	+6%	*54,000 mt*
Potential production of cocaine HCl	104 mt	+9%	*113 mt*
National weighted average farm-gate price of coca leaf (outside state market)	US$ 4.1/kg	+32%	*US$ 5.4 Kg*
Total farm-gate value of coca leaf production	US$ 214 million		
GDP[2]	US$ 9.1 billion		
Farm-gate value of coca leaf production in per cent of GDP	2.4%		n.a.
Farm-gate value of coca leaf production in per cent of value of 2007 agricultural sector	16%		
Reported eradication of coca bush*	6,269 ha	-13%	5,484 ha
Reported seizure of sun-dried coca leaves*	1,730 mt	+21%	2,095 mt
Reported seizure of cocaine base*	14,912 kg	+25%	18,584 kg
Reported seizure of cocaine HCl*	2,923 kg	+148%	7,246 kg
Reported destruction of coca laboratories[3]*	4,087	+22%	4,999
Of which cocaine HCl processing laboratories	6		

* As reported by the Government of the Plurinational State of Bolivia.

Cultivation and eradication

In 2007, the total area under coca cultivation in Bolivia increased by 6% to 30,500 ha, the third consecutive yearly increase. Overall, cultivation levels remained well below the levels reached in the early and mid-1990s. Increases in the country's two largest cultivation regions, the Yungas of La Paz and Chapare, occurred roughly at the same rate.

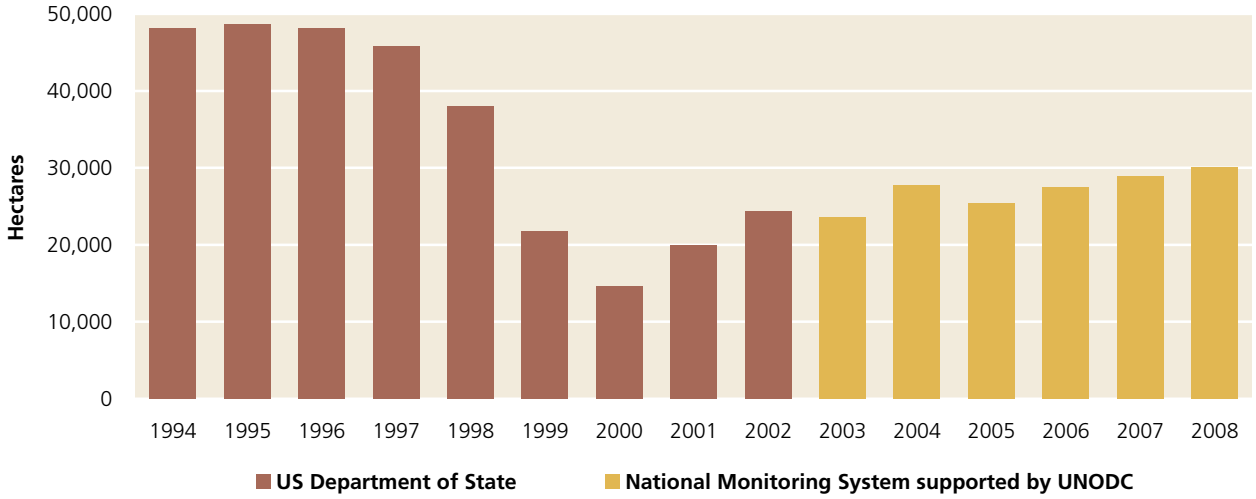
The Government of the Plurinational State of Bolivia reported 5,484 ha of eradication of coca bush, which is less than in 2007 but more than in 2005.

1 The information in this section comes from the report on Coca Cultivation in Bolivia (UNODC/Government of Bolivia, June 2009), and can also be found at http://www.unodc.org/unodc/en/crop-monitoring/index.html

2 Source: Instituto Nacional de Estadística de Bolivia (INE).

3 Excluding coca leaf maceration pits.

Bolivia, coca cultivation (ha), 1994-2008



Production

In 2007, potential cocaine production in Bolivia increased by 9% to113 mt. The increase in cocaine production is more pronounced than for the area under coca cultivation. This is because areas of relatively low yield where coca leaf is produced for traditional purposes have not been included.

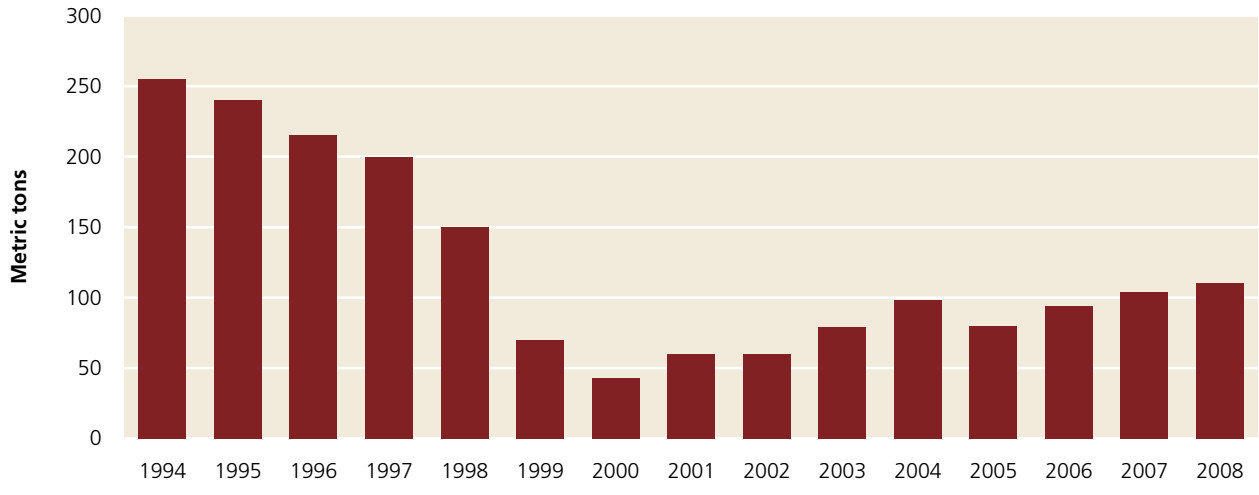
Prices

Farm-gate prices of sun-dried coca leaf in Chapare Region outside the state-controlled market experienced a strong increase in 2008 and reached a level of over US$ 6/kg (average US$5.5/kg), which was last reached in 2002. However, information from the first months of 2009 indicates a return to prices of around US$ 4/kg after good coca leaf harvests in the preceding rainy season. Coca leaf prices in the Yungas of La Paz, on the other hand, remained relatively stable over the course of the year. The monthly average price ranged from 36 bolivianos (Bs) or US$ 5.1/kg to Bs 39 or US$ 5.3/kg. The annual average is of Bs 38 was similar to 2007, however, expressed in US$ terms, it increased from US$ 4.8/kg in 2007 to US$ 5.2/kg in 2008 due to a change in the currency exchange rate.

The annual average price of sun-dried coca leaf in the state-controlled market increased significantly both in Bolivianos and US$ terms, from an average of Bs 35 or US$ 4.6/kg in 2007 to Bs 44 or US$ 6.1/kg in 2008 (weighted by the amount of coca leaf traded in the state-controlled markets of Sacaba in Chapare region and Villa Fatima in La Paz).

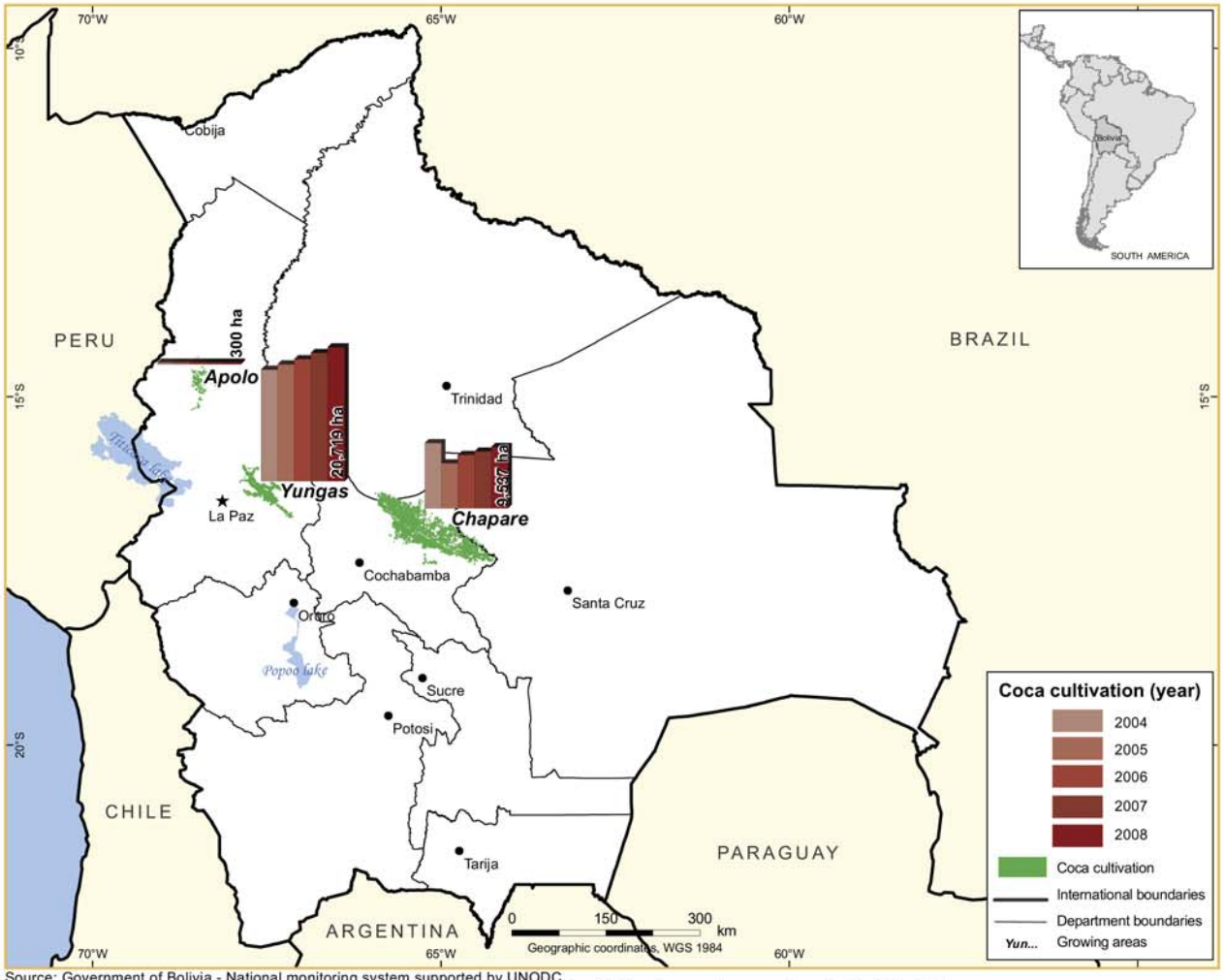
Bolivia, potential cocaine production (mt), 1994-2008

Note: Production estimates for 2004 and 2005 were updated in 2007 based on a new UNODC study on coca leaf yield in the Yungas of La Paz.
Sources: 1994-2002: Comisión Interamericana para el Control del Abuso de Drogas (CICAD) and US Department of State, *International Narcotics Control Strategy Report.* Since 2003: UNODC calculations, partly based on UNODC coca leaf yield surveys.



Bolivia, monthly farm-gate prices of sun-dried coca leaf, Chapare Region (US$/kg), 1990-2008

Bolivia, coca cultivation by region 2004-2008



Source: Government of Bolivia - National monitoring system supported by UNODC
The boundaries and names shown and the designation used on this map do not imply official endorsement or acceptance by the United Nations

3.1.3 Colombia

Fact sheet – Coca Survey 2008[1]			
	2007	**Change on 2007**	**2008**
Net coca cultivation (rounded total) *Of which in Pacific region* *Central region* *Putumayo-Caquetá region* *Meta-Guaviare region* *elsewhere*	99,000 ha *25,960 ha* *20,950 ha* *21,130 ha* *19,690 ha* *11,170 ha*	-18% *+15%* *-11%* *-34%* *-38%* *-44%*	81,000 ha *29,920 ha* *18,730 ha* *13,960 ha* *12,150 ha* *6,200 ha*
Potential production of cocaine	600 mt	-28%	430 mt
Average farm-gate price of coca paste	US$ 943/kg COP 1,959,000/kg	+2% -4%	US$ 963/kg COP 1,887,855/kg
Average wholesale price of cocaine*	US$ 2,198/kg COP 4,567,000/kg	+7% 0%	US$ 2,348/kg COP 4,580,000/kg
Total farm-gate value of the production of coca leaf and its derivatives	US$ 934 million	- 53%	US$ 441 million
in per cent of GDP in per cent of agricultural sector	0.5% 5%		0.3% 2%
Reported aerial spraying of coca bush*	153,134 ha	-13%	133,496 ha
Reported manual eradication of coca bush*	66,805 ha	+43%	95,634 ha
Reported seizure of cocaine*	126,641 kg	+63%	206,100 kg
Reported destruction of coca processing laboratories*	2,360	-6%	2,207
Of which cocaine HCl processing lab.	*265*		636
Reported opium poppy cultivation*	714 ha	-45%	394 ha
Potential opium latex production	34 mt*	n.a.	31 mt**
Potential heroin production (rounded)	1.4 mt*	n.a.	1.3 mt**
Average farm-gate price of opium latex	US$ 286/kg	+11%	US$ 318/kg
Average heroin price	US$ 10,780/kg	-8%	US$ 9,950/kg
Reported seizure of heroin	537 kg		696 kg

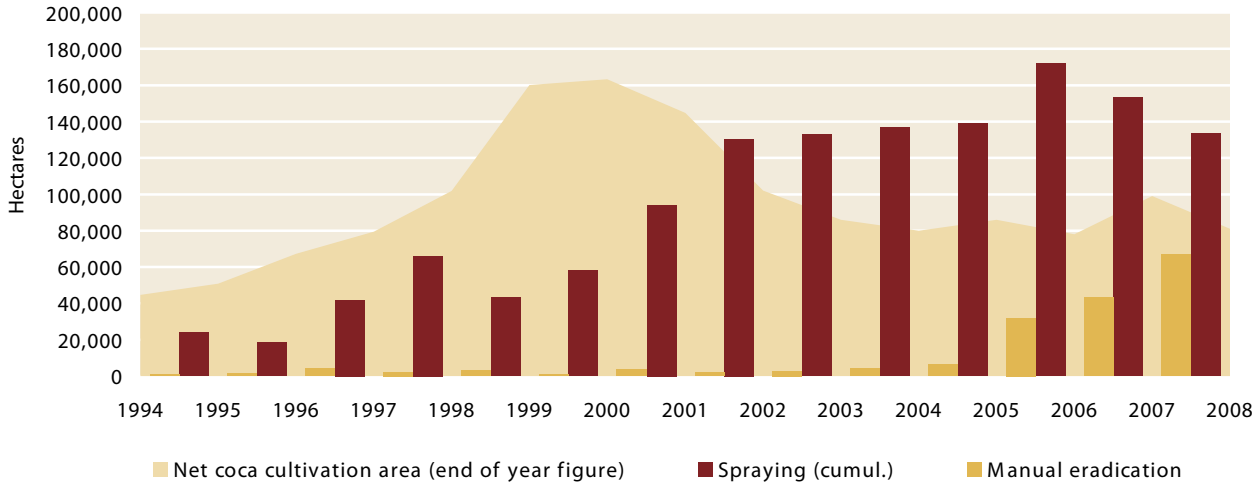
* As reported by the Government of Colombia. Figures for 2008 are preliminary.

** Own calculations based on regional yield figures and conversion ratios from US Department of State.

1 The information in this section comes from the report on Coca Cultivation in Colombia (UNODC/Government of Colombia, June 2009), and can also be found on the internet (http://www.unodc.org/unodc/en/crop-monitoring/index.html). Source unless otherwise indicated: National monitoring system supported by UNODC.

Colombia, Coca cultivation and reported eradication/spraying (ha), 1994-2008

Sources: Cultivation: 1994-1998: CICAD and US Department of State, International Narcotics Control Strategy Report; since 1999: National Illicit Crop Monitoring System supported by UNODC; eradication/spraying: Government of Colombia.



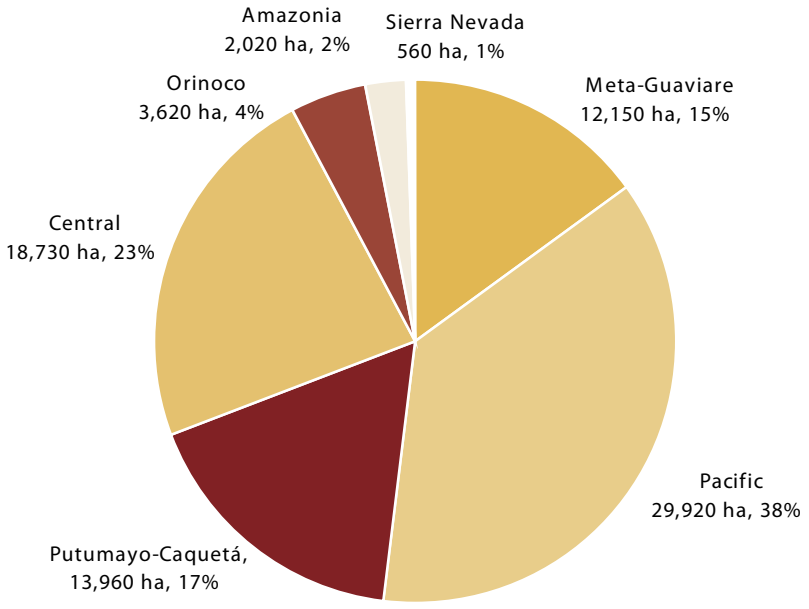
Cultivation and eradication

In 2008, the area under coca cultivation decreased by 18% to 81,000 ha, roughly the same level as in 2006. Most of the decrease of 18,000 ha took place in the regions of Meta-Guaviare, Putumayo-Caquetá and Orinoco. On the other hand, a significant increase was observed in the Pacific region as well as in some smaller cultivation regions. Thus, the Pacific region remained the region with the largest area under coca cultivation, with just below 30,000 ha or 38% of the total area, followed by the Central region (23%), Putumayo-Caquetá (17%) and Meta-Guaviare (15%).

The Colombian authorities continued to intensify manual eradication activities, which increased by 43% and reached a record high of 95,634 ha in 2008. In the Departments of Putumayo and Antioquía (Central region) alone, 30,834 ha and 19,366 ha were eradicated, respectively. In addition, in 2008, more than 133,000 ha of coca bush were sprayed in 14 Departments. Most spraying took place in the Department of Nariño (Pacific region), where over 54,000 ha were sprayed, followed by Guaviare, Putumayo, Caquetá and Antioquía.

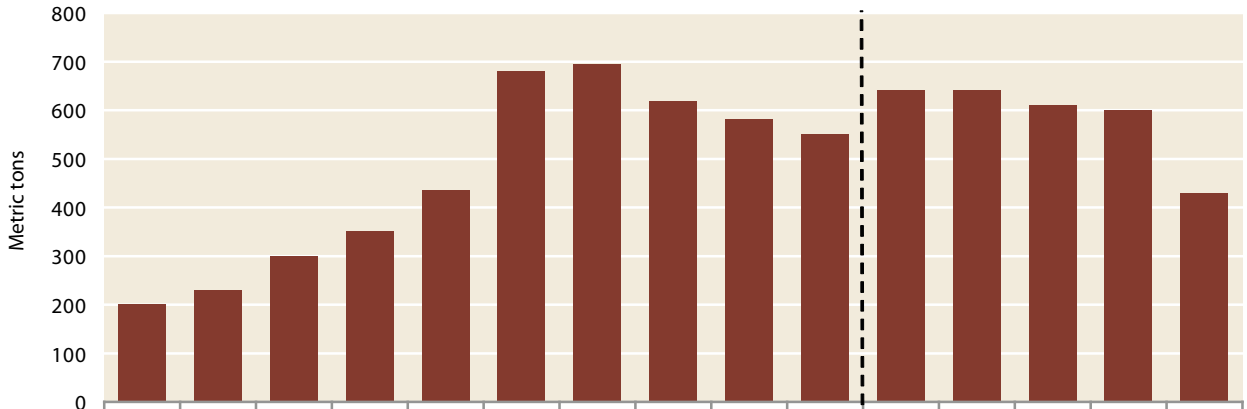
Colombia, coca cultivation by region, 2008

Source: National Illicit Crop Monitoring System supported by UNODC



Colombia, potential cocaine production (mt), 1994-2008

Note: Cocaine production estimates for 2004 and later are not directly comparable with previous years.
Sources: see Table 5 Global illicit cultivation of coca bush and production of coca leaf and cocaine.



	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008
Production	201	230	300	350	435	680	695	617	580	550	640	640	610	600	430

Production

In 2008, the potential cocaine production in Colombia was estimated at 430 mt, much lower than in any of the four preceding years for which comparable data is available. The reduction in potential cocaine production (-28%) was more pronounced than the decrease in area under coca cultivation (-18%). Among other reasons, this was due to strong area decreases in some of the main coca cultivation regions (Meta-Guaviare, Putumayo-Caquetá and Orinoco), which were only partly counterbalanced by area increases in Pacific and other regions with average or below average yields. Lower coca leaf yields in Meta-Guaviare and Putumayo-Caquetá also contributed to the overall reduction in potential cocaine production.

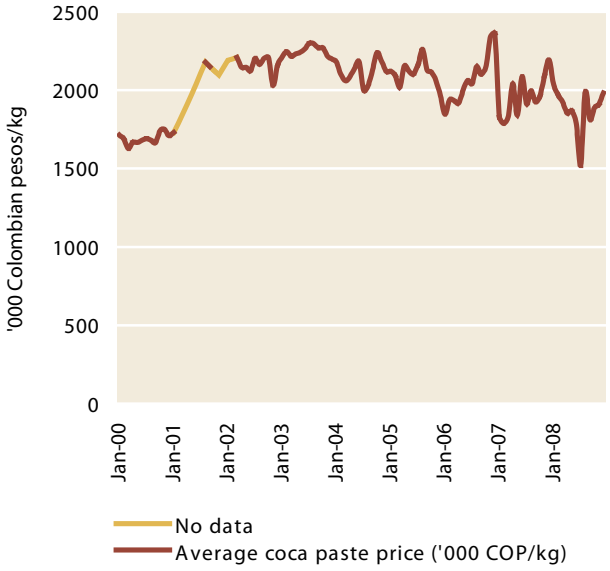
Prices for coca leaf, cocaine and opium

UNODC's monitoring of coca leaf prices in Colombia is not yet fully developed and the availability of monthly average farm-gate prices differs from region to region and over the course of a year. Thus, small-scale price changes should be interpreted with caution. Farm-gate prices are also thought to be influenced by armed groups who are able to control prices in their region of influence.

Farm-gate prices in Colombian pesos (COP) for coca leaf and derivatives changed little in 2008 compared to 2007. Over the last three years, farm-gate prices for coca leaf and paste were decreasing, despite higher costs of agricultural inputs and precursors necessary for producing coca paste. On average, the per kilo price of fresh coca leaf decreased from COP 2,400/kg or US$ 1.2/kg in 2007 to COP 2,200/kg or US$ 1.1/kg in 2008.

Farm-gate prices of coca paste have seemed relatively

Colombia, monthly farm-gate prices of coca paste ('000 COP/kg), Jan. 2000 to Dec. 2008

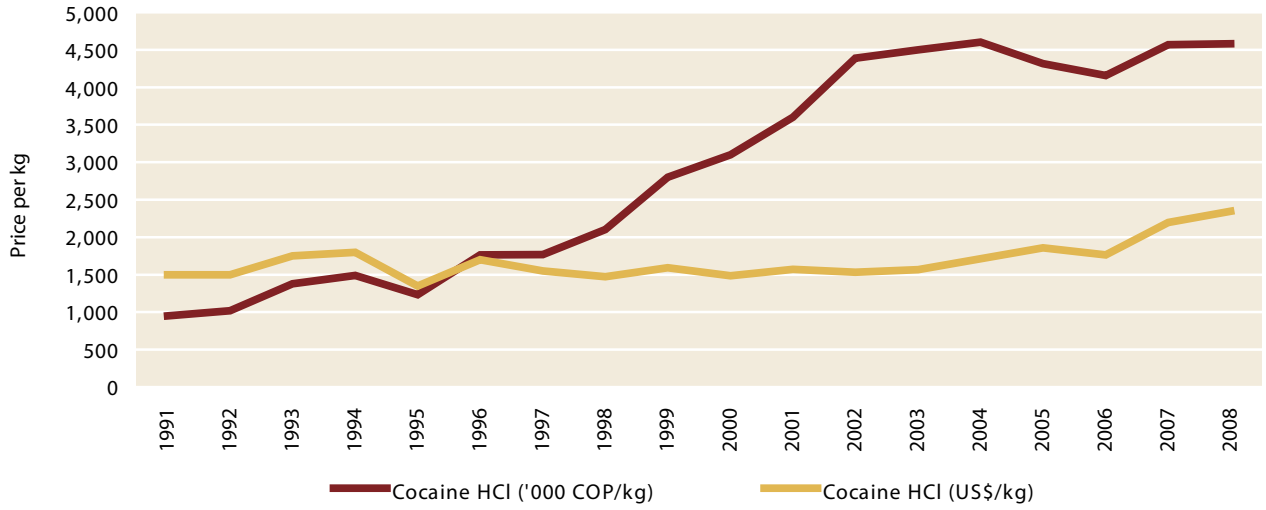


stable or slightly declining since 2004. Regional price averages ranged between a maximum of COP 2,056,000/kg in the Central region and a minimum of COP 1,714,583/kg in the Pacific region. In 2007, both the regional maximum and minimum prices were slightly higher with a maximum of 2,121,107/kg observed in the Central region and the minimum at COP 1,772,677/kg in the Putumayo-Caquetá region.

Coca leaf, which in Colombia is sold as fresh leaf (not sun-dried as in Bolivia and Peru), and coca paste, which many farmers in Colombia produce on the farm, are traded in Colombian pesos. Cocaine at the wholesale level, however, is thought to be traded mainly in US dollars. Wholesale prices of cocaine in Colombian cities

Colombia, annual wholesale prices of cocaine HCl (US$/kg and '000 COP/kg), 1991-2008

Note: Prices of unknown purity in major cities of Colombia. Source: Colombian Directorate of Anti-Narcotics (DIRAN).

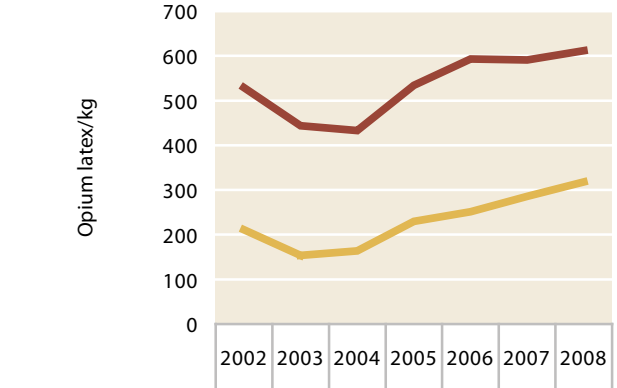


increased by 7% in US dollar terms from US$ 2,198/kg in 2007 to US$ 2,348/kg in 2008. In Colombian peso terms, however, prices did practically not change, due to a stronger peso.

The trend of increasing farm-gate prices observed since 2004 in both US dollar and Colombian peso terms for opium latex continued in 2008. However, wholesale prices for heroin decreased compared to 2007. According to reports of the Government of Colombia, the area under opium poppy cultivation shrank to a few hundred hectares.

Colombia, farm-gate opium latex prices, 2002-2008

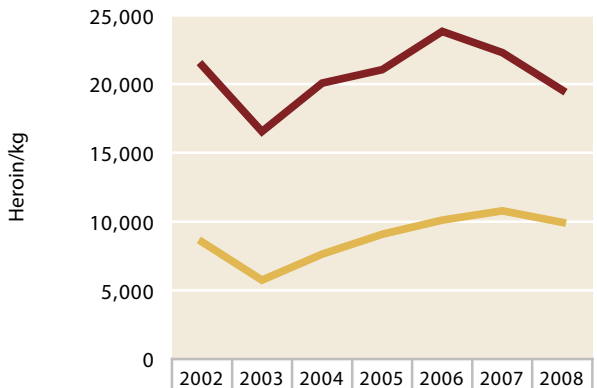
Source: DIRAN



	2002	2003	2004	2005	2006	2007	2008
Opium latex ('000 COP/kg)	529	444	433	534	593	591	612
Opium latex (US$/kg)	211	154	164	230	251	286	318

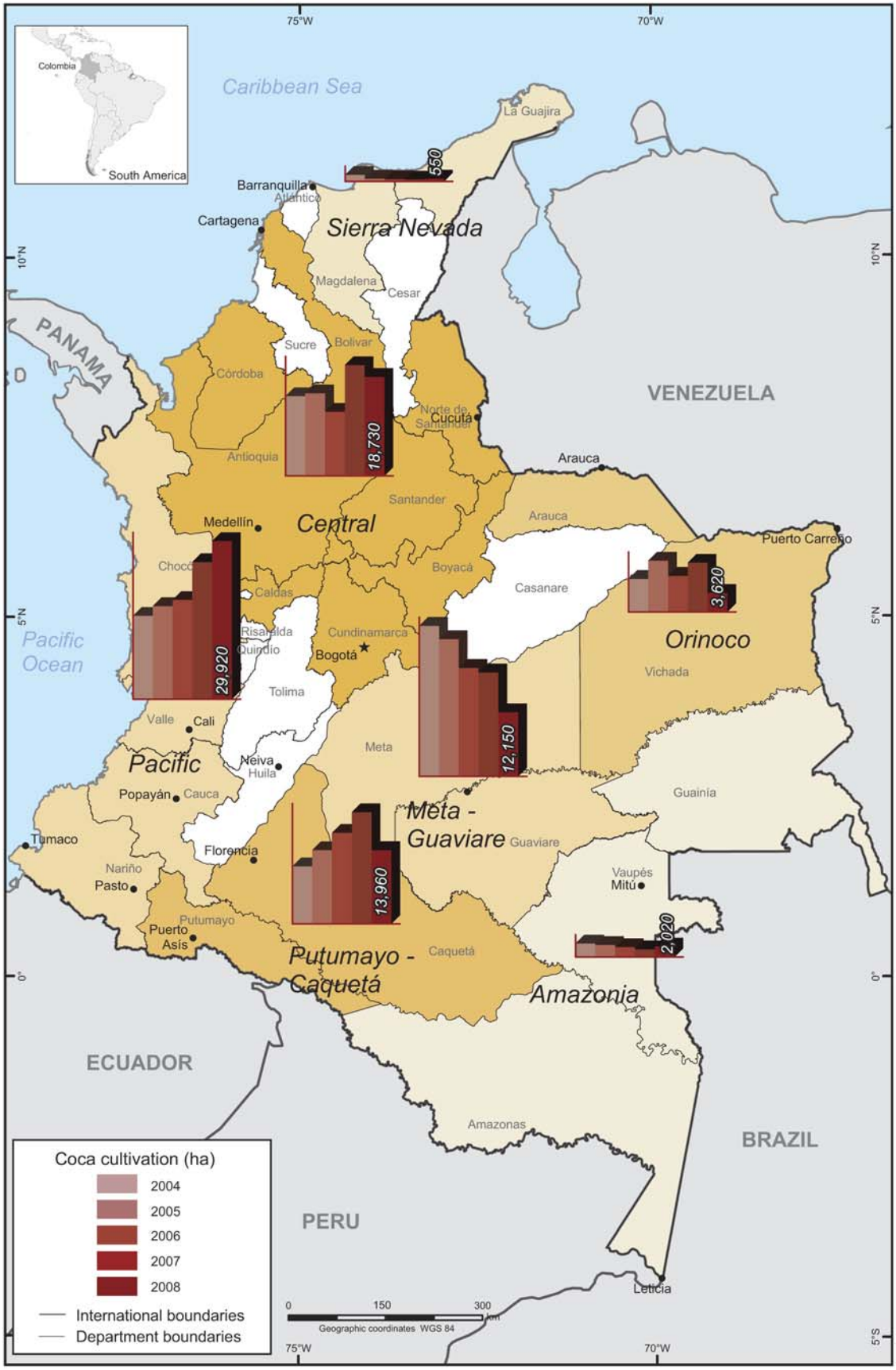
Colombia, farm-gate wholesale heroin prices, 2002-2008

Source: DIRAN



	2002	2003	2004	2005	2006	2007	2008
Heroin ('000 COP/kg)	21370	16561	20067	21051	23822	22294	19560
Heroin (US$/kg)	8520	5740	7635	9070	10103	10780	9950

Colombia, coca cultivation by region, 2004-2008



Source: Government of Colombia - National monitoring system supported by UNODC
The boundaries and names shown and the designations used in this map do not imply official endorsement or acceptance by the United Nations

3.1.4 Lao People's Democratic Republic

Fact Sheet – Lao PDR Opium Survey 2008[1]

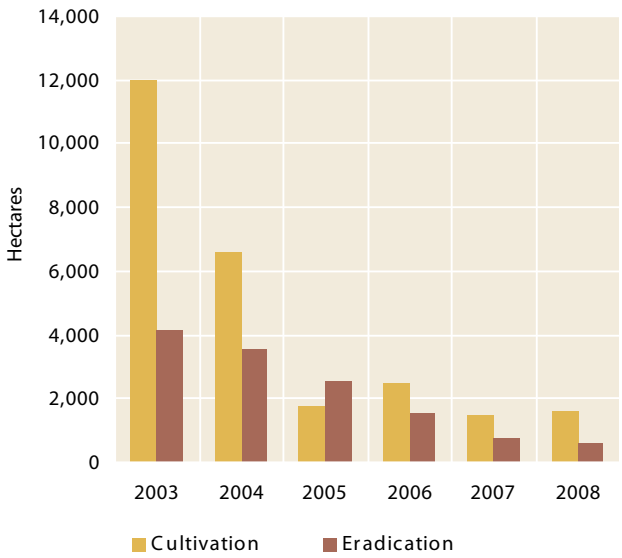
	2007	Change on 2007	2008
Opium poppy cultivation[2]	1,500 ha (1,230-1,860 ha)	+7%	1,600 ha (711-2,687 ha)
Average dry opium yield	6 kg/ha	-	6 kg/ha[3]
Potential production of dry opium	9.0 mt	+7%	9.6 mt
Average retail/wholesale price of opium[4]	US$ 974/kg	+26%	US$ 1,227/kg
Eradication[5]	779 ha	-26%	575 ha
Number of new opium addicts	7,700	-36%	4,906[6]
Average drug prevalence rate (in northern Lao PDR)	0.30%		0.19%

Cultivation and eradication

In 2008, opium poppy cultivation was found in all six surveyed provinces in the north of Lao PDR (Phongsaly, Luang Namtha, Oudomxay, Luang Prabang, Xieng Khouang and Huaphanh provinces). The total area under opium poppy cultivation in the Lao PDR increased by 7% in 2008 to 1,600 ha. Overall, the level of opium poppy cultivation in the country remains extremely low and is restricted to isolated plots in remote areas.

According to Government reports, eradication took place on 575 ha (during or after the helicopter survey). In the majority of cases, eradication took place when opium harvesting was already underway. The largest area eradicated was in Phongsaly where 310 ha or 54% of the total eradication was undertaken, followed by Huaphanh (53 ha) and Oudomxay (47 ha).

Lao PDR, opium poppy cultivation* and eradication (ha), 2003-2008



* after eradication

1 The information in this section comes from the report on Opium Poppy Cultivation in South East Asia (UNODC/Governments of Lao PDR, Myanmar and Thailand, December 2008), and can also be found on the Internet (http://www.unodc.org/unodc/en/crop-monitoring/index.html).

2 Source of cultivation, yield and production estimates: National monitoring systems supported by UNODC. The figures in brackets represent the lower and upper limits of the 90% confidence interval.

3 In the absence of a yield survey in 2008, the yield per hectare for 2007 was used.

4 Source: Lao PDR National Commission on Drug Control and Supervision (LCDC), Provincial authorities survey. Due to the limited market for opium, a clear distinction between farm-gate, wholesale and retail prices could not be established.

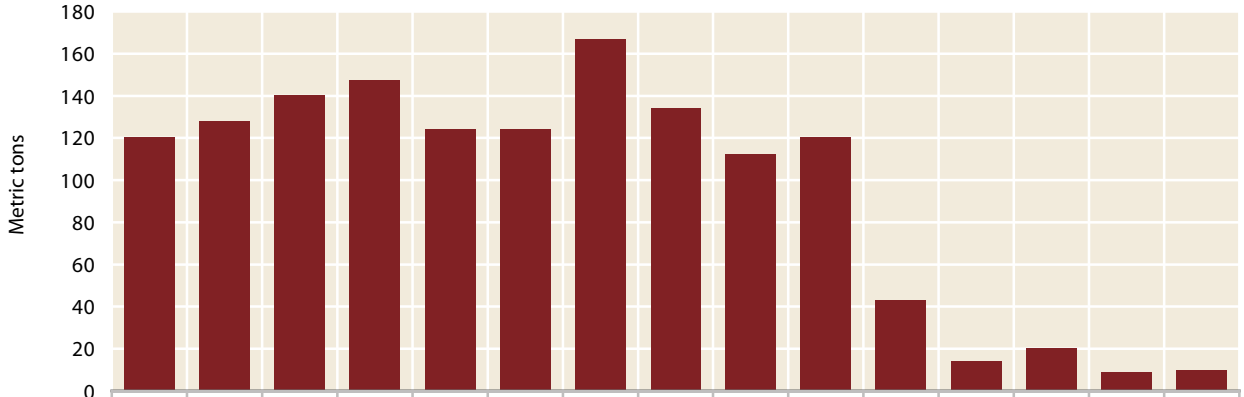
5 Source: LCDC. The 2006 and 2007 eradication campaigns were conducted before and after the survey. In 2008, eradication was mainly conducted during and after the survey.

6 The number does not take into account the possible relapse of recently treated addicts. There were 7,774 addicts, who had been treated since 2003, who relapsed. The total number (cumulative – since 2003) of current addicts in 2008 is 12,680. The relapse rate is 34%.

Production

The potential production of opium in the year 2008 was estimated at 9.6 mt, representing a 7% increase in production over 2007 based on the estimated area under cultivation. Bad weather conditions in northern Lao PDR did not permit the survey team to undertake a yield survey in 2008. Observations made from the helicopter indicated that the crop health was similar to that of 2007, that is, characterised by poor fields and low plant vigour. At the harvest stage, the capsules observed were small and capable of producing only a limited amount of opium gum. Therefore, the 2007 yield estimate of 6 kg/ha was also used to estimate production in 2008.

Lao PDR, potential opium production (mt), 1994-2008

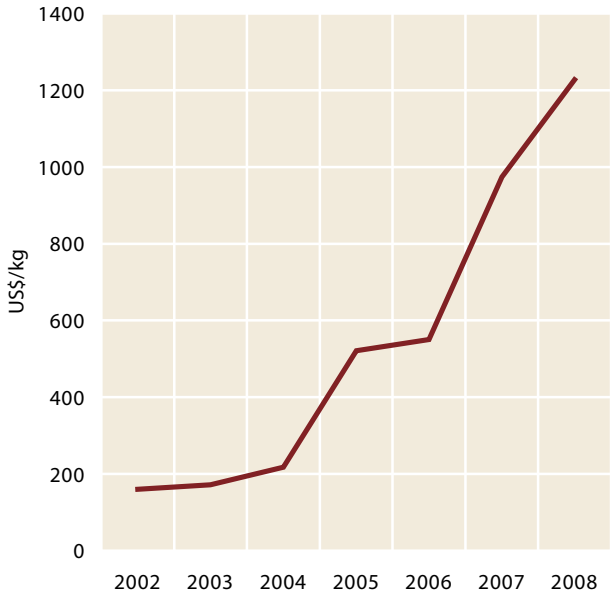


	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008
Production	120	128	140	147	124	124	167	134	112	120	43	14	20	9.0	9.6

Prices

Opium prices were collected at the provincial level by local authorities during or soon after the 2008 opium harvest.[7] The average opium price increased to US$ 1,227/kg in 2008, a 26% increase over the same period in 2007. Strong regional disparities in price indicated that there were significant local variations in supply and market access. Opium prices ranged between US$ 556/kg and US$ 744/kg in Phongsaly and Huaphanh provinces, where opium poppy production still exits, and reached record levels of US$ 2,209/kg and 2,124/kg in Vientiane, the capital city, and Luang Prabang province where opium poppy cultivation has been completely eliminated, or is very scarce, and while demand is high.

Lao PDR, annual opium prices (US$/kg), 2002-2008



Addiction

In line with a decrease in opium cultivation, the Government reports a decline in the prevalence rate of opium use the northern provinces from 0.6% in 2006 to 0.3% in 2007 and 0.2% in 2008 (expressed as a percentage of the population aged 15 and above). Relapse, however, continues to be a problem. In 2008, 4,906 opium addicts were identified as having relapsed. The total number of addicts amounted to 12,680 persons.

7 Since 2006, no clear distinction can be made between retail, wholesale and farm-gate prices. Only limited amounts of opium are thought to be sold in or to markets outside the province of origin.

3.1.5 Myanmar

Fact Sheet - Myanmar Opium Survey 2008 [1]

	Year 2007	Change on 2007	Year 2008
Opium poppy cultivation in Myanmar[2]	27,700 ha (22,500-32,600 ha)	+3%	28,500 ha (17,900-37,000 ha)
Opium poppy cultivation in Shan State	25,300 ha	0%	25,300 ha
Average opium yield (weighted by area)	16.6 kg/ha	-13%	14.4 kg/ha
Potential production of dry opium in Myanmar (including the Shan State)	460 mt	-11%	410 mt
Opium poppy eradication in Myanmar[3]	3,598 ha	+34%	4,820 ha
Average farm-gate price of opium[4]	US$ 261/kg	+15%	US$ 301/kg
Total potential value of opium production	US$ 120 million	+2%	US$ 123 million
Estimated number of households involved in opium poppy cultivation in Myanmar	163,000	+3%	168,000
Number of persons involved in opium poppy cultivation in Myanmar	815,000	+3%	840,000
Estimated number of households involved in opium poppy cultivation in the Shan State	148,900	0%	148,900
Average yearly household income in opium producing households (Shan State) of which from opium sales Per capita income in opium producing households (Shan State)	US$ 501 US$ 227 US$ 100	+37% +11% +37%	US$ 687 US$ 253 US$ 137
Household average yearly income in non-opium poppy producing households (Shan State) Per capita income in non-opium producing households (Shan State)	US$ 455 US$ 91	+58% +58%	US$ 721 US$ 144
Addiction prevalence rate in Shan State and Kachin (population aged 15 and above)	0.75 %	+47%	1.1 %

1 The information in this section comes from the report on Opium Poppy Cultivation in South-East Asia (UNODC/Governments of Lao PDR, Myanmar and Thailand, December 2008), and can also be found on the Internet (http://www.unodc.org/unodc/en/crop-monitoring/index.html). Source unless otherwise indicated: National monitoring system supported by UNODC.

2 The figures in brackets represent the lower and upper limits of the 90% confidence interval.

3 Source: Central Committee for Drug Abuse Control, Myanmar (CCDAC).

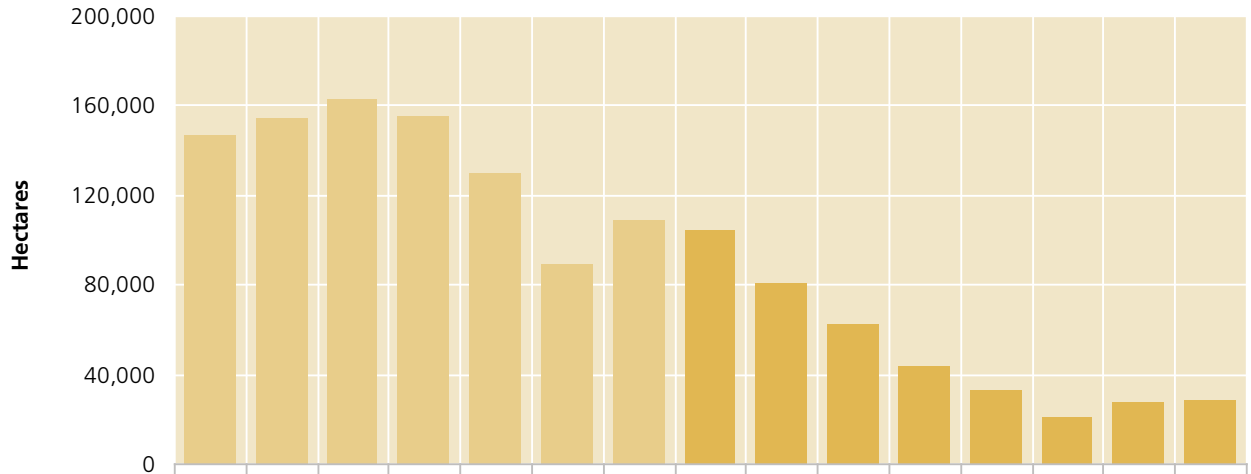
4 For 2007: yearly average price. For 2008: price at harvest time.

Cultivation and eradication

In 2008, the total area under opium poppy cultivation in Myanmar was estimated at 28,500 ha. Despite the small increases observed in the past two years, opium poppy cultivation in Myanmar remains far below the levels reached in the 1990s. The vast majority of the opium poppy cultivation in Myanmar continued to take place in South Shan (53%) and East Shan State (33%). In 2008, the most important increase in opium poppy cultivation was observed in East Shan State, with 36% more opium poppy under cultivation as compared to 2007, whereas in South Shan State cultivation decreased by 17%.

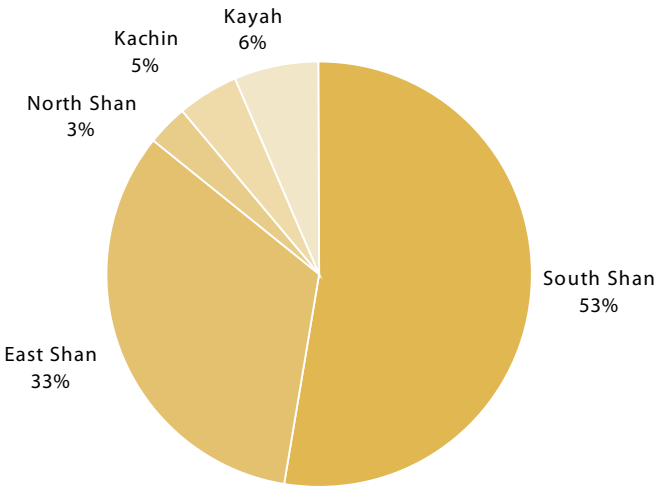
According to official reports from the Government of Myanmar, a total of 4,820 ha were eradicated in 2007-2008, which is an increase of 34% compared to the eradication in 2006-2007 when 3,598 hectares were eradicated. Eradication in Kachin State was four times higher than a year earlier but still below the level reported in 2005. Eradication in East Shan State increased by 13% and in South Shan State by 33%. In Chin State, eradication teams eradicated all the opium poppy found in the region, which was mainly concentrated in the border areas.

Myanmar, opium poppy cultivation (ha), 1994-2008



	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008
UNODC								105,0	81,40	62,20	44,20	32,80	21,50	27,70	28,50
US Dept of State	146,6	154,0	163,0	155,1	130,3	89,50	108,7								

Myanmar, distribution of opium poppy cultivation by region, 2008



Opium poppy eradication as reported by the Government, 2002-2008

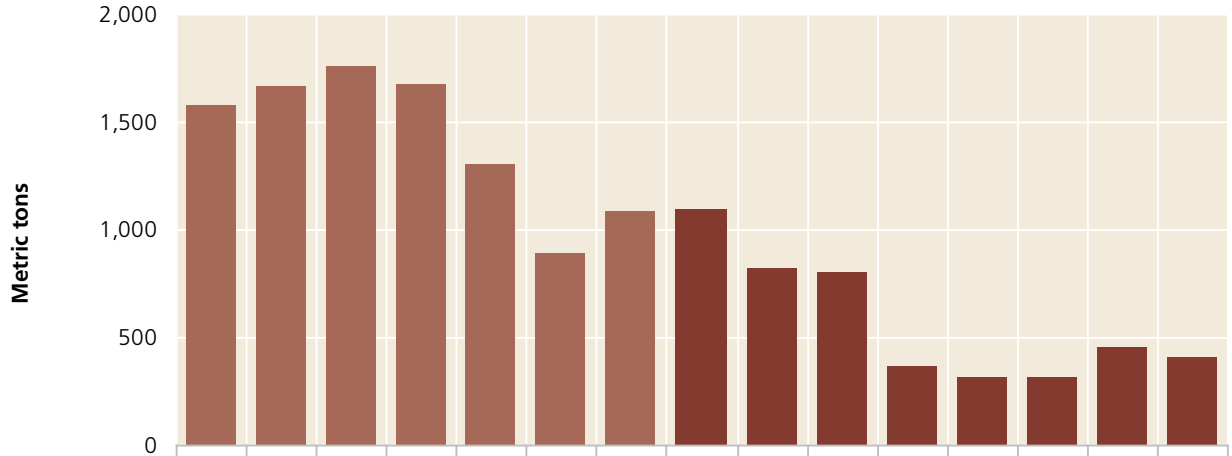
Administrative Unit	2002	2003	2004	2005	2006	2007	2008
North Shan State	6,223	235	172	1,211	76	916	932
South Shan State	511	182	2,170	1,203	3,175	1,316	1,748
East Shan State	14	91	195	124	32	1101	1,249
Special Region 2 (Wa)	94	55	0	0	0	0	0
Shan State	6,842	563	2,537	2,538	3,283	3,333	3,929
Kachin State	97	56	126	1,341	678	189	790
Kayah State	527	9	83	8	0	12	12
Other States	3	8	74	20	9	64	89
Total	7,469	638	2,820	3,907	3,970	3,598	4,820

Production

Based on a total of 312 fields measured in the survey, the weighted national average opium yield for 2008 is estimated at 14.4 kg/ha, leading to an estimated potential opium production of 410 mt. In 2007, the estimated yield was 16.6 kg/ha and the estimated potential opium production was 460 mt.

Due to the lower yield, opium production in 2008 was lower than in 2007 although the area under opium poppy cultivation was roughly the same. Most opium was produced in the Shan State (88%), particularly in South Shan (56%) and East Shan (30%).

Myanmar, potential opium production (mt), 1994-2008

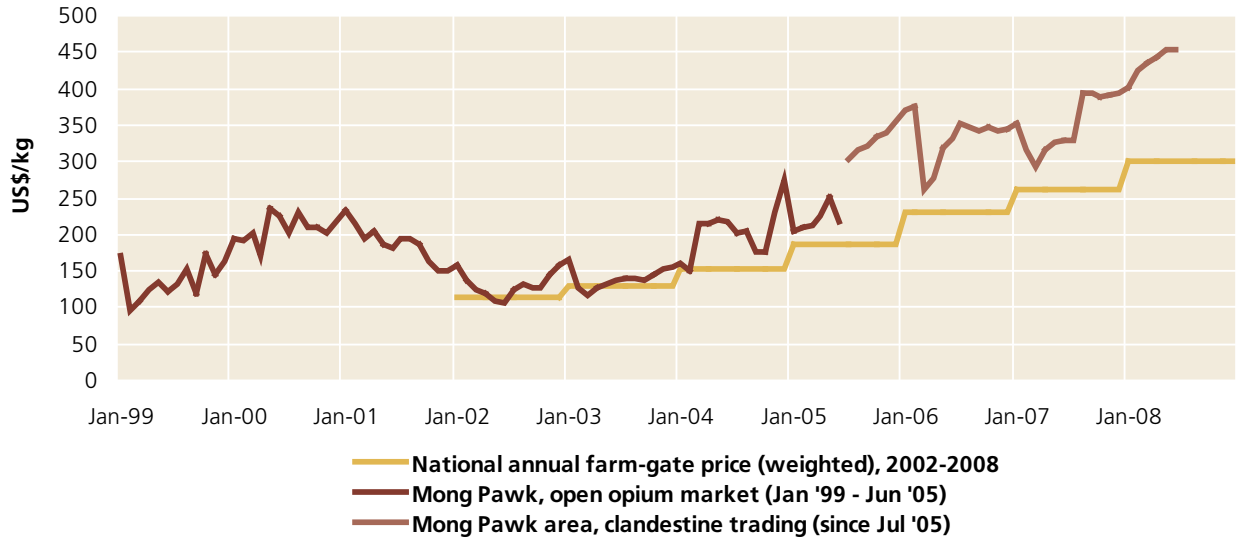


	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008
UNODC								1,097	828	810	370	312	315	460	410
US Dept of State	1,583	1,664	1,760	1,676	1,303	895	1,087								

Prices

In 2008, the average farm-gate price of opium at harvest time was estimated at US$ 301/kg. This represents an increase of 15% compared to the average price reported in 2007 (US$ 261/kg). A similar price increase was observed between 2006 and 2007. In 2008, prices continued to differ strongly across states, with Kachin State reporting the highest price (US$ 518/kg) and South Shan State reporting the lowest (US$ 265/kg). The largest increase in price compared to last year was observed in Kachin and North Shan States; both states where little opium poppy cultivation took place. Whereas in South Shan and East Shan States, which together produced 88% of the opium, the price increase was less pronounced.

Myanmar, prices for dry opium (US$/kg), 1999-2008



The wholesale opium prices collected in the Mong Pawk area, which is located in Special Region 2 (Wa region), Shan State, by and large reflect the increase in farm-gate prices. The monthly opium wholesale prices, which were close to the average farm-gate price before the opium ban in the Wa region, seemed to have increased more rapidly than the farm-gate prices. This could be due to the higher risk premium, which traders have to consider in a region where opium poppy is banned. However, it has to be noted that wholesale prices were collected on the open opium market in Mong Pawk town until an opium ban was introduced by the authorities in mid-2005, but had to be collected from a wider range of places and under more difficult conditions after the ban. This limits comparability.

Household income and strategies

In 2008, the average annual cash income of an opium poppy growing household was estimated at US$ 687, while that of a non-opium poppy cultivating household was slightly higher, at US$ 721. As in past years, in most states, the average household cash income in villages that never grew opium poppy was higher than the average household income in villages in the same region that were still growing poppy in 2008 or had grown in the past. Villages reporting opium poppy cultivation were also characterised by lower food security compared to opium poppy-free villages. The survey findings suggest that non-poppy growing villages could achieve a higher level of food security through cultivation of rice. The importance of rice cultivation for food security and poppy cultivation is emphasized by the fact that villages with access to paddy land (irrigated rice fields) were less likely to grow opium poppy. The situation was different in South Shan State, where the average income in poppy growing villages was higher than non-poppy growing villages and over half of the average household cash income in poppy growing villages was reported to stem from opium. This may be due to the relatively large scale of poppy cultivation and higher than average opium yields in this region.

In 2008, the survey findings also indicated that households in former poppy growing villages could not find adequate means of substituting their lost cash income from opium. Villages growing opium poppy showed a significantly higher intensity of shifting cultivation, both in terms of acreage of forest cleared and duration of fallow periods, compared to non-growing villages. The most common coping strategy for the farmers who had stopped opium poppy cultivation was to grow more rice and maize and to sell livestock. There is also some evidence of migration occurring in the Wa region where opium poppy cultivation was abandoned in 2005.

Addiction

Within the surveyed area in 2008, the average level of addiction was higher in villages with opium poppy cultivation compared to non-growing villages. As in previous years, opium addiction continues to be a predominantly male phenomenon. The level of amphetamine-type stimulant (ATS) and heroin addiction was low compared to opium abuse in both growing and non-growing villages. The survey did not cover urban areas where these types of addiction are thought to be higher.

3.1.6 Peru

Fact sheet – Peru Coca Survey 2008[1]				
		2007	Change on 2007	2008
Coca cultivation		53,700 ha	+4%	56,100 ha
Of which in	*Alto Huallaga*	*17,200 ha*	*+3%*	*17,800 ha*
	Apurímac-Ene	*16,000 ha*	*+4%*	*16,700 ha*
	La Convención-Lares	*12,900 ha*	*+2%*	*13,100 ha*
	Elsewhere	*7,600 ha*	*+12%*	*8,500 ha*
Weighted average sun-dried coca leaf yield		2,200 kg/ha		2,200 kg/ha
Potential production of sun-dried coca leaf[2]		116,800 mt	+5%	122,300 mt
Potential production of sun-dried coca leaf available for cocaine production		107,800 mt	+5%	113,300 mt
Potential production of cocaine HCl		290 mt	+4%	302 mt
Average farm-gate price of sun-dried coca leaf		US$ 2.5/kg	+36%	US$ 3.4/kg
Average farm-gate price of sun-dried coca leaf (weighted)[3]		US$ 2.5/kg	+24%	US$ 3.1/kg
Average farm-gate price of coca paste		US$ 600/kg	+21%	US$ 723/kg
Average price of cocaine HCl*		US$ 851/kg	+10%	US$ 940/kg
Potential farm-gate value of sun-dried coca leaf		US$ 292 million		US$ 379 million
Reported eradication of coca cultivation*		12,072 ha	-16%	10,143 ha
Reported seizure of sun-dried coca leaves*		1,858 mt		n.a.
Reported seizure of coca paste*		6,260 kg	+82%	11,375 kg
Reported seizure of cocaine HCl*		8,119 kg	+107%	16,836 kg
Reported destruction of coca laboratories[4]*		665	+84%	1,224
Of which cocaine HCl processing laboratories		16	+19%	19
Reported seizure of opium latex*		126 kg		n.a.

* As reported by the Government of Peru.

1 The information in this section comes from the report on Coca Cultivation in Peru (UNODC/Government of Peru, June 2009), and can also be found on the Internet (http://www.unodc.org/unodc/en/crop-monitoring/index.html). Source unless otherwise indicated: National monitoring system supported by UNODC.

2 Includes all coca leaf potentially produced. For the calculation of coca leaf available for cocaine production, 9,000 mt of sun-dried coca leaf were deducted from this figure, which, according to Government sources, is the amount used for traditional purposes.

3 The weighted average price takes into account that different amounts of coca leaf are sold in different coca cultivation regions at different price levels. The exact volume of coca leaf traded and the prices of the transaction are not known. As an approximation, the annual average prices of the main coca cultivation regions were multiplied with the potential annual coca leaf production in these regions to calculate the weights. These regions represent 82% of estimated amount of coca leaf available for cocaine production.

4 Excluding coca leaf macerations pits.

Cultivation and eradication

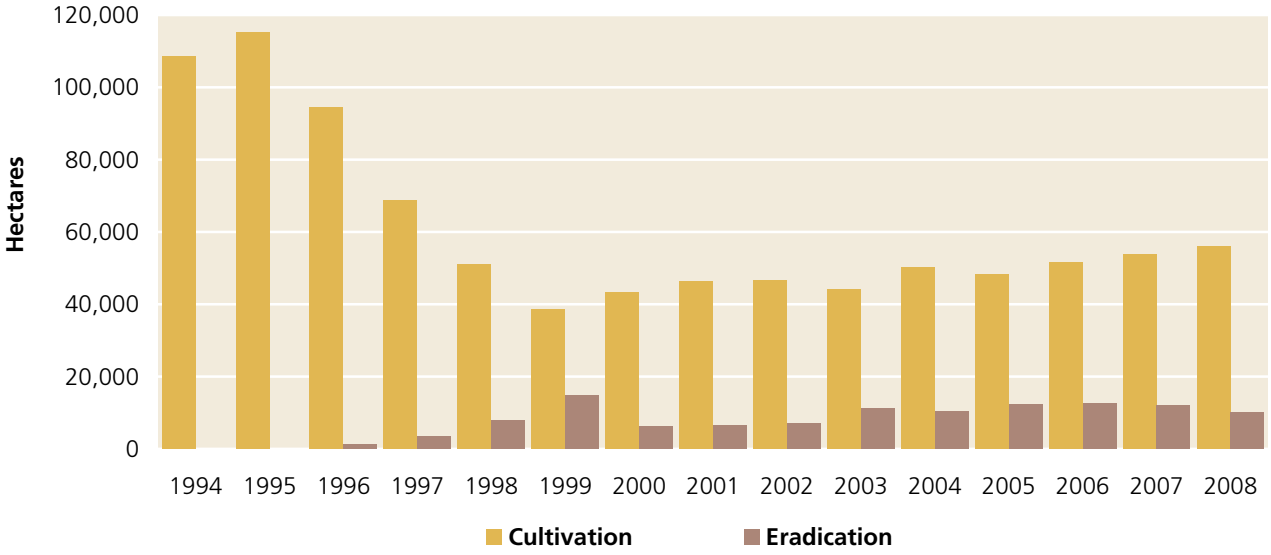
In 2008, the area under coca cultivation in Peru increased by 4% or 2,400 ha to 56,100 ha, which is the third, albeit relatively small, consecutive increase in three years. Peru remains the world's second largest cultivator of coca bush after Colombia. Peru's three largest cultivation region, Alto Huallaga, Apurímac-Ene and La Convención-Lares, represented 85% of the area under coca cultivation in 2008. The rate of expansion was average or below average in these regions, which nonetheless contributed most to the increase in absolute terms, and even more in most of the smaller production areas.

The area under coca cultivation eradicated, 10,430 ha in 2008, decreased by 16% compared to 2007 and was lower than in any year since 2003.

Government reports on eradication indicate that opium poppy cultivation continues to exist in Peru. However, the area currently cultivated with opium poppy is not known.

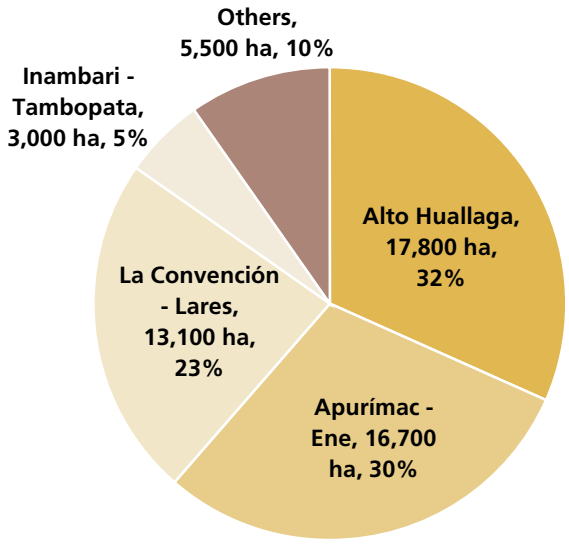
Peru, coca cultivation and eradication (ha), 1994 to 2008

Sources: Cultivation: 1994-1999, US Department of State. Since 2000, National monitoring system supported by UNODC.
Eradication: CORAH (Coca Eradication in the Upper Huallaga Valley), DEVIDA (Peru National Comission for a Drug-Free Life).



Peru, coca cultivation by region, 2008

Source: National monitoring system supported by UNODC

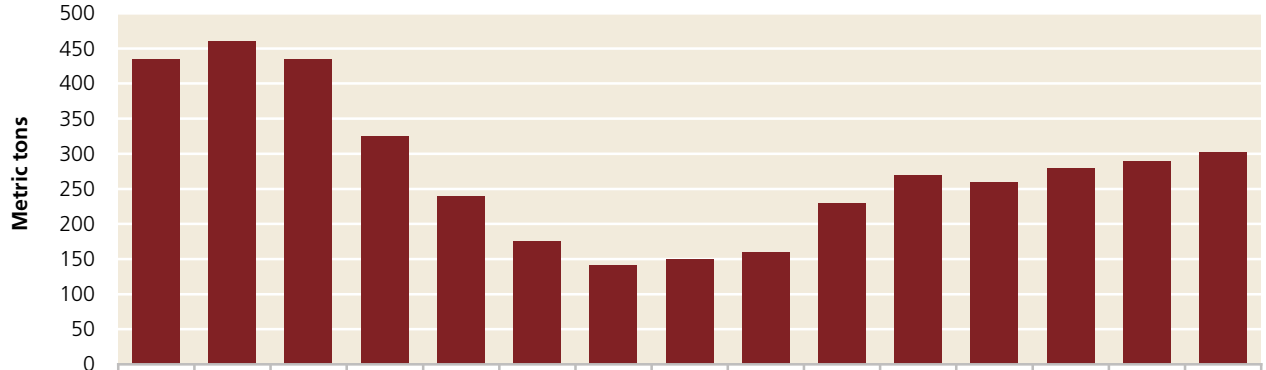


Production

In 2008, total production of sun-dried coca leaf was estimated at 122,300 mt. After a deduction of 9,000 mt, which, according to Government reports, is the amount used for traditional purposes, 113,300 mt would be available for cocaine production. Based on a conversion rate of 375 kg of sun-dried coca leaf for one kilogram of pure cocaine, this corresponds to a potential cocaine production of 302 mt.

Peru, potential cocaine production (mt), 1994 to 2008

Sources: US Dept. of State (1994-1999), National monitoring system supported by UNODC (since 2000) based on conversion rates for coca leaf to cocaine from US Dept. of State.



	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008
Production	435	460	435	325	240	175	141	150	160	230	270	260	280	290	302

Note: Production estimates from 2003 to 2005 were revised in 2007 based on updated information available on the amount of coca leaf necessary to produce 1 kg of cocaine.

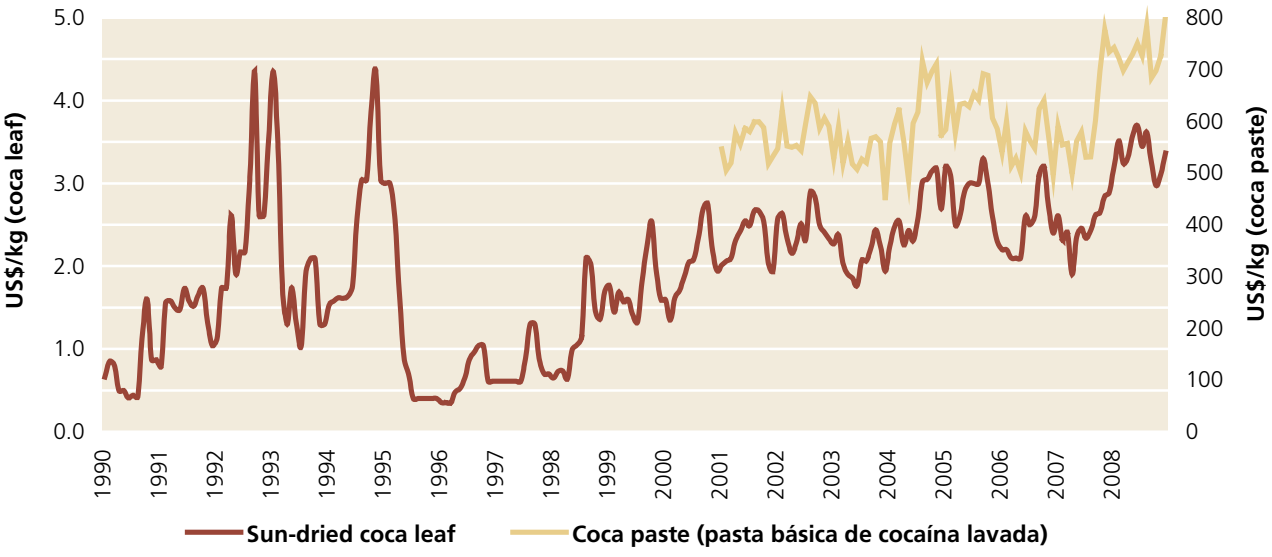
Prices

In 2008, prices for coca leaf - which in Peru is traded as sun-dried leaf - coca paste and cocaine all increased compared to 2007, despite increases in coca leaf production.

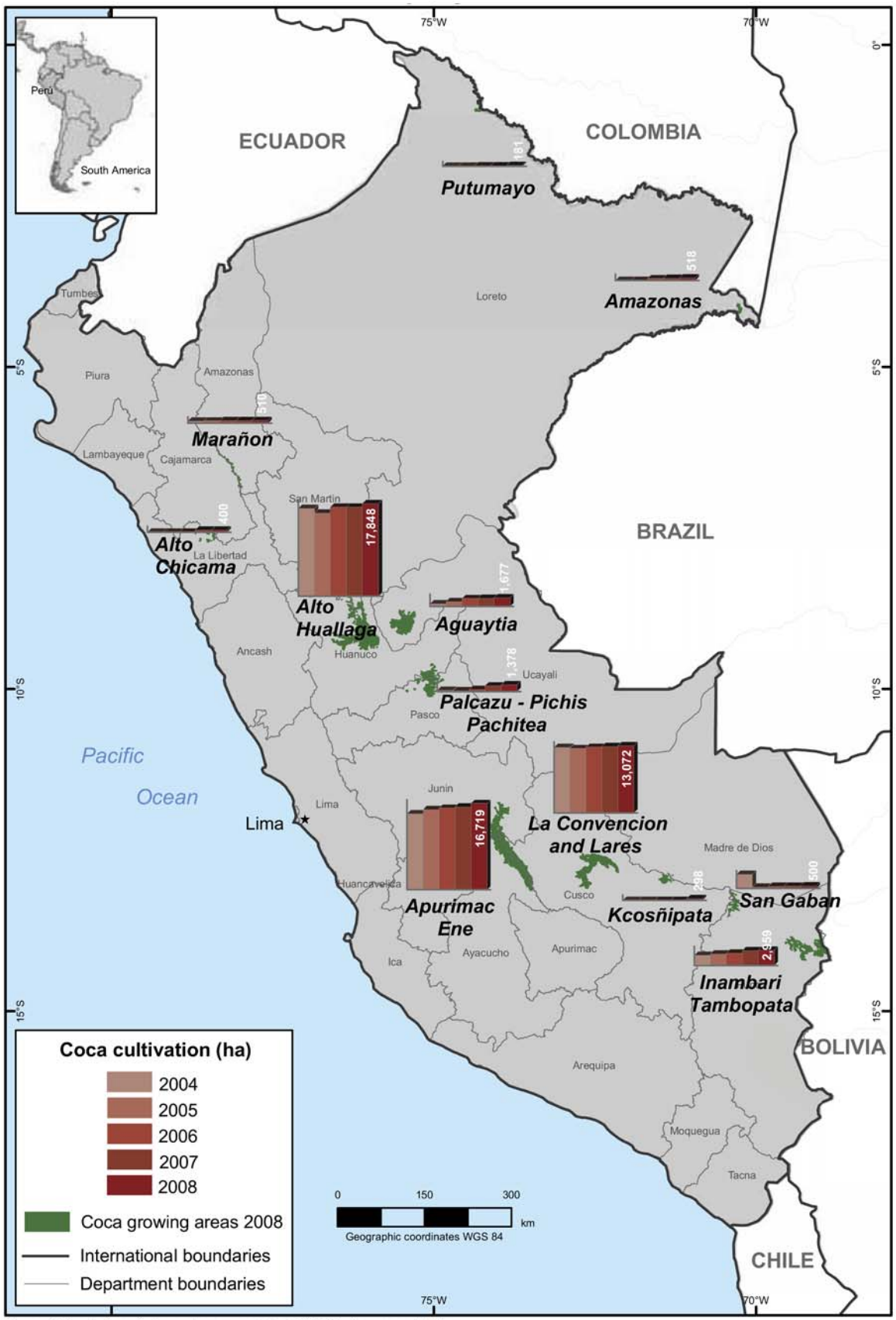
The simple average farm-gate price of sun-dried coca leaf traded outside the Government-controlled market was US$ 3.4/kg, over one third more than in 2007, compared to just US$ 1.7/kg for coca leaf traded under Government control. Wage labour costs for coca harvesting increased noticeably in the main coca cultivation regions, for example in Monzón in Alto Huallaga from under 14 Peruvian soles per day in 2007 to more than 23 soles in 2008. Costs of other agricultural inputs such as fertilizer (urea) also went up, which may explain at least partly the price increase in coca leaf.

Some farmers produce coca paste, called locally pasta básica de cocaína lavada. Farm-gate prices of coca paste increased by 21% in 2008 and reached US$ 723/kg. Higher prices for precursor chemicals were observed in coca cultivating regions, which may have contributed to the increase. Production costs and price mechanisms for illicit trading and trafficking of coca derivatives are not well understood and are thought to be influenced by the presence of armed groups in coca cultivating regions. However, the proportional price increase in 2008 was smaller the more refined the product, that is largest at the level of the coca leaf (36%) and smallest at the level of cocaine HCl (10%), which may indicate that local factors played a more important role than external ones.

Peru, monthly farm-gate prices of sun-dried coca leaf and coca paste (US$/kg)



Peru, coca cultivation by region, 2004-2008



Source: National of monitoring system supported by UNODC - Government of Peru
The boundaries and names shown and the designations used on this map do not imply official endorsement or acceptance by the United Nations