

## 3.1 Production

### 3.1.1 Afghanistan

#### Fact Sheet – Afghanistan Opium Survey 2007<sup>1</sup>

	2006	Change on 2006	2007
Net opium poppy cultivation (after eradication)	165,000 ha	+17%	193,000 ha
in per cent of agricultural land	3.65%		4.27%
in per cent of global cultivation	82%		82%
Number of provinces affected by poppy cultivation	28		21
Number of poppy free provinces	6		13
Weighted average opium yield	37.0 kg/ha	+15%	42.5 kg/ha
Potential production of opium	6,100 mt	+34%	8,200 mt
in per cent of global production	92%		92%
Average annual farm-gate price of dry opium	US\$ 140/kg	-21%	US\$ 111/kg
Current Afghanistan GDP <sup>2</sup>	US\$ 6.9 billion	+12%	US\$ 7.5 billion
Total farm-gate value of opium production	US\$ 0.76 billion	+32%	US\$ 1 billion
in per cent of GDP <sup>3</sup>	11%		13%
Total export value of opiates to neighbouring countries	US\$ 3.1 billion	+29%	US\$ 4.0 billion
in per cent of GDP <sup>4</sup>	45%		53%
Number of households involved in opium cultivation	448,000	+14%	509,000
Number of persons involved in opium cultivation	2.9 million	+14%	3.3 million
in per cent of total population (23 million) <sup>5</sup>	12.6%		14.3%
Household average yearly gross income from opium of opium poppy growing families	US\$ 1,700	+16%	US\$ 1,965
Per capita average yearly gross income from opium in opium poppy growing families	US\$ 260	+17%	US\$ 303
Current Afghanistan GDP per capita <sup>6</sup>	US\$ 290	+7%	US\$ 310
Indicative gross income from opium per ha	US\$ 4,600	+13%	US\$ 5,200
Indicative gross income from wheat per ha	US\$ 530	+3%	US\$ 546
Eradication	15,300 ha	+24%	19,047 ha

1 The information in this section comes from the Afghanistan Opium Survey 2007 (UNODC/Ministry of Counter Narcotics, Afghanistan, October 2007). The full report can be found at (<http://www.unodc.org/unodc/en/crop-monitoring/index.html>).

2 Data for Afghan year 1384 (March 2005 - March 2006) and preliminary estimates for Afghan year 1385 (March 2006 - March 2007) (Afghan Government, Central Statistical Office).

3 Based on weighted average farm-gate price of dry opium at harvest time (US\$ 122/kg in 2007, US\$ 125/kg in 2006) and Afghan Govt.

GDP estimates. Based on IMF GDP projections: farm-gate value: 9% of GDP in 2006; 10% in 2007.

4 Based on Afghan Govt. GDP estimates. Using IMF GDP projection the percentage of the opiate sector would be: 37% of GDP in 2006; 40% in 2007.

5 Population based on estimates by the Afghan Central Statistical Office (22.2 million in 2003).

6 Afghan Govt. estimates; IMF projections: current GDP per capita: US\$ 335 in 2006 and US\$ 383 in 2007.



## Cultivation and eradication

The area under opium poppy cultivation in Afghanistan increased 17% in 2007, with cultivation expanding to a record high of 193,000 hectares in 2007. Global opium poppy cultivation, as a result, rose 17% in 2007 to almost over 236,000 ha. Afghanistan's share of global cultivation remained 82%.

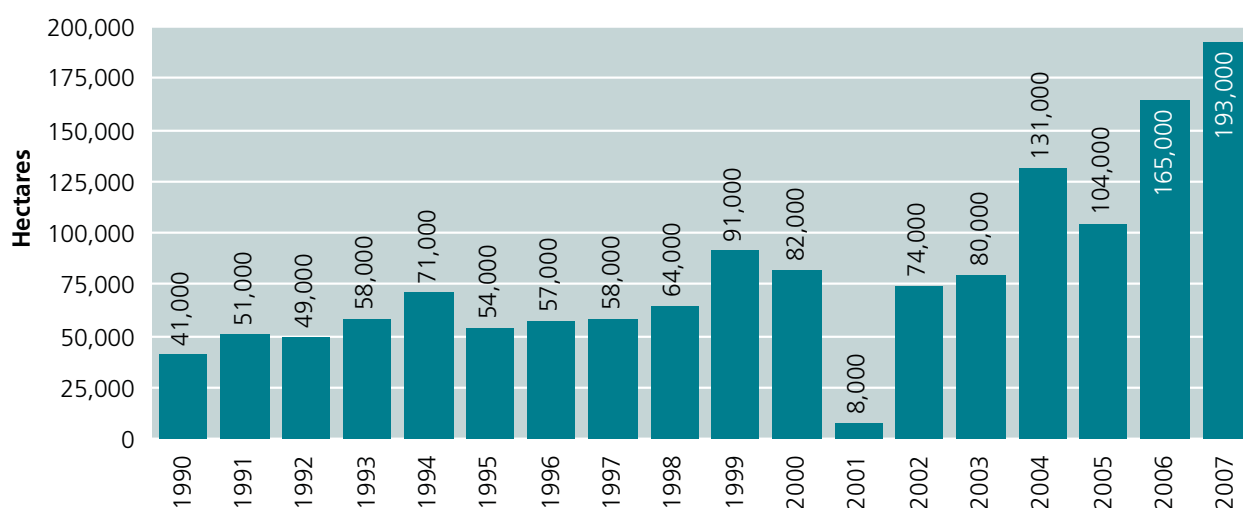
Regionally, growth was not uniform. Sharp increases occurred in the South, West and East, and significant decreases took place in the North and North-East of the country. Fifty-three per cent of total opium poppy cultivation of Afghanistan was located in the southern province of Hilmand.

The number of opium poppy free provinces rose from 6 in 2006 to 13 in 2007<sup>7</sup>.

UNODC does not conduct a cannabis cultivation survey in Afghanistan. However, based on observations made during the annual opium survey, the area under cannabis cultivation in 2007 was estimated at about 70,000 hectares, compared to 50,000 ha one year earlier.

In 2007, total opium poppy eradication (including Governor-led and AEF-led eradication) rose to 19,047 ha. On average, 63% of cultivated poppy was left standing after eradication teams had carried out their activities, though there was considerable regional variation.

Afghanistan, opium poppy cultivation (ha), 1990 to 2007



Afghanistan, regional distribution of opium poppy cultivation (ha), 2006 to 2007

Region	2006 (ha)	2007 (ha)	Change 2006-2007	2007 as % of total
Southern	101,900	133,546	31%	69%
Northern	19,267	4,882	-75%	3%
Western	19,820	28,619	44%	15%
North-Eastern	15,336	4,853	-68%	3%
Eastern	8,312	20,581	148%	11%
Central	337	500	48%	0.3%
Rounded Total	165,000	193,000	17%	100%

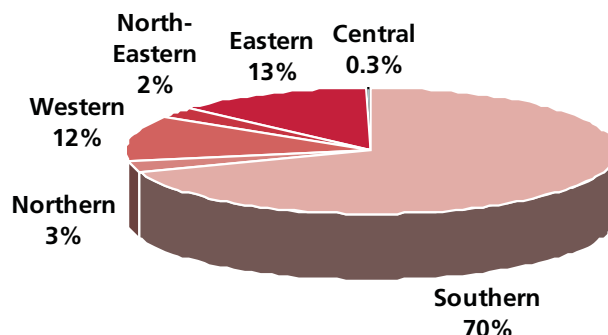
<sup>7</sup> In 2007, provinces with less than 100 hectares opium poppy were considered to be free of poppy, while in 2006, only provinces with zero cultivation were counted as poppy-free.

## Production

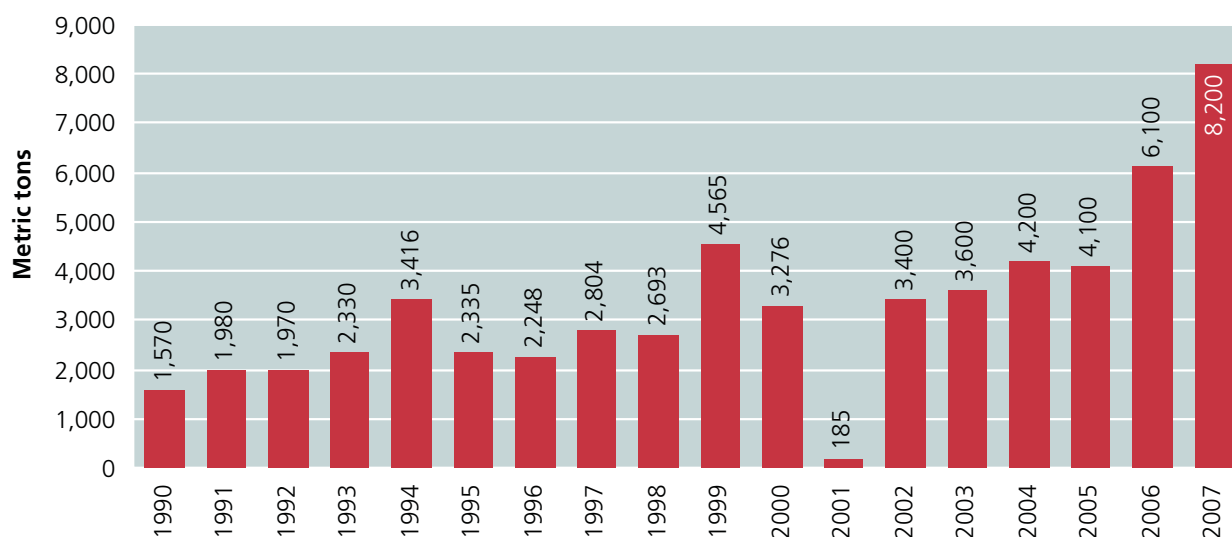
In 2007, opium production in Afghanistan reached 8,200 mt: 24% higher than *global* opium production in 2006 (6,610 mt). Record levels of cultivation and a high yield led to the 34% increase in potential opium production in 2007. Taking domestic consumption of opium, seizures and opium exports into account, Afghanistan's morphine and heroin production is estimated to have reached 666 mt in 2007, up from 555 mt in 2006.

Reaching its highest point since 1990, global opium production rose to more than 8,800 mt in 2007. The proportion of Afghanistan in global opium production remained 92%.

Afghanistan, potential opium production by region, 2007



Afghanistan, potential opium production (mt), 1990 to 2007



## Prices

The second straight year of large production increases had a dampening effect on prices in 2007. The average annual farm-gate price for dry opium fell from US\$ 140/kg in 2006 to US\$ 111/kg in 2007 (-21%). In 2007 the lowest monthly farm-gate price occurred in September with US\$ 91/kg. This occurred much later than in the three previous years when price falls took place closer to harvest time.

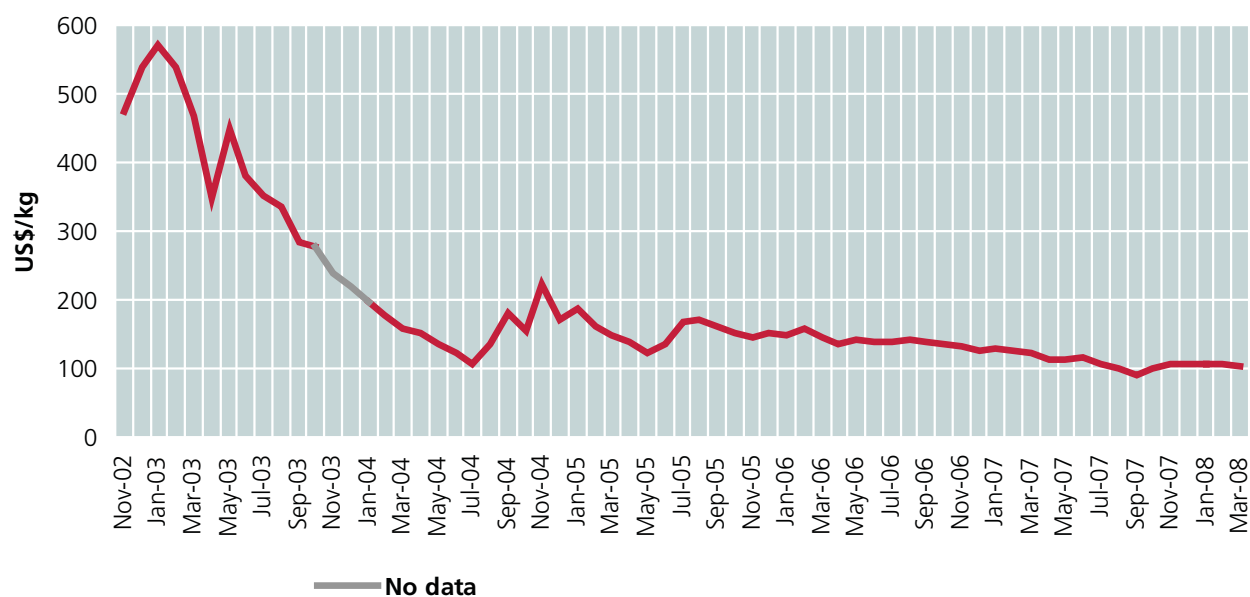
In 2007, regional price differences continued to exist but were less pronounced than in 2006. Trader prices in the Northern, Western and Southern regions remained relatively stable, while prices in the North-eastern and Eastern regions were more dynamic. Following a significant post-harvest price decrease in the Eastern region prices in the two main production regions, South and

East, tended to converge in 2007. This markedly contrasts with the 2006 situation when monthly price differences exceeded US\$ 100/kg. There is still some unexplained price inflation in the Southern region where prices remained close to the national average throughout the years, and, consequently, did not fall as much as would have been expected given the production increases.

## Farm-gate value

Based on opium production and reported opium prices,

Afghanistan, monthly farm-gate prices of dry opium (US\$/kg), November 2002 to March 2008

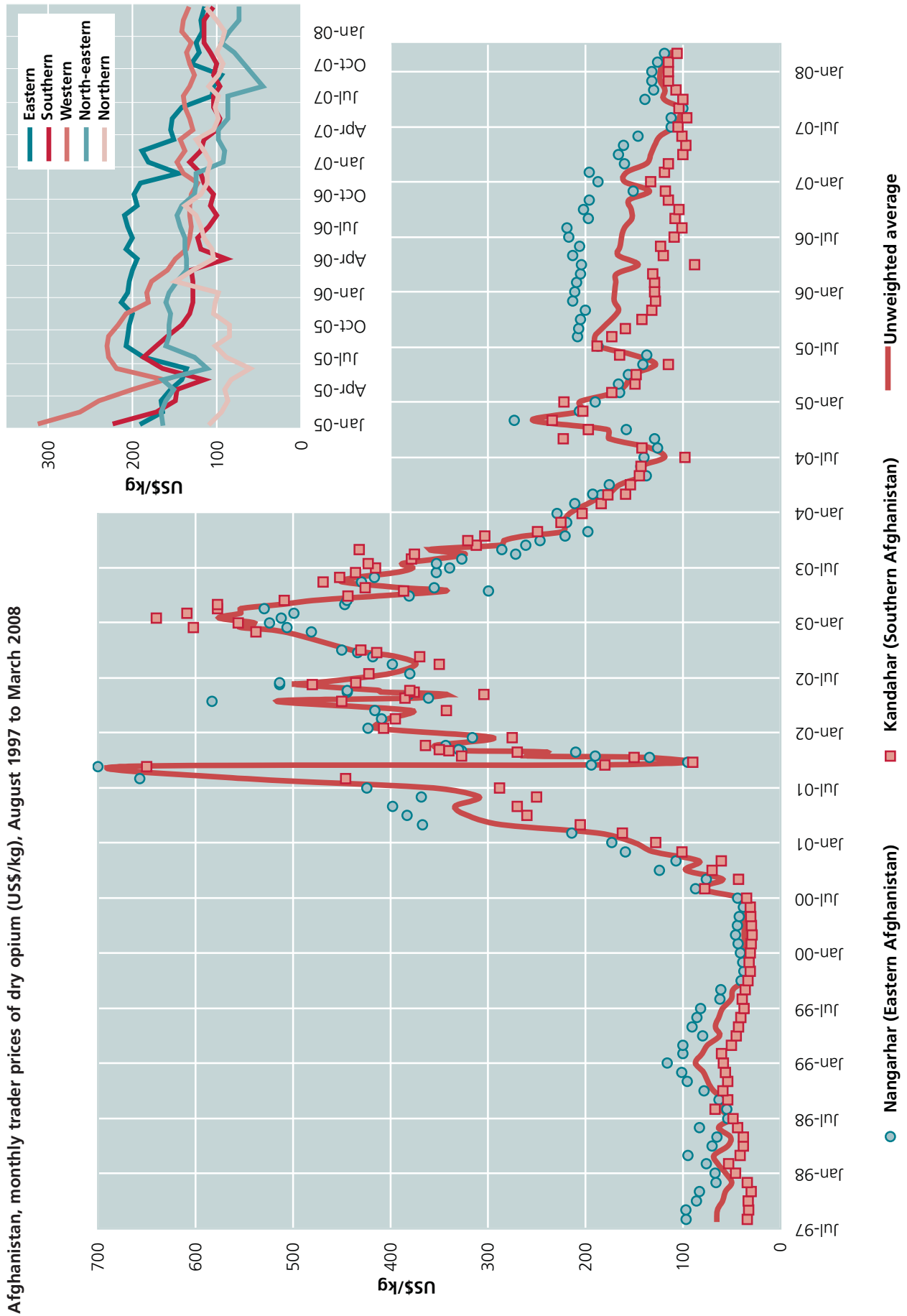


the farm-gate value of the opium harvest amounted to US\$ 1 billion in 2007. Higher production and only slightly lower prices resulted in a 32% increase of the overall farm-gate value of opium production over 2006 (US\$ 760 million). The farm-gate value of opium as a proportion of GDP (US\$ 7.5 billion<sup>8</sup>) increased from 11% in 2006 to 13% in 2007. In 2007, gross income from opium accruing to farmers in Hilmand amounted to US\$ 528 million - more than half of total opium-related farmer's income.

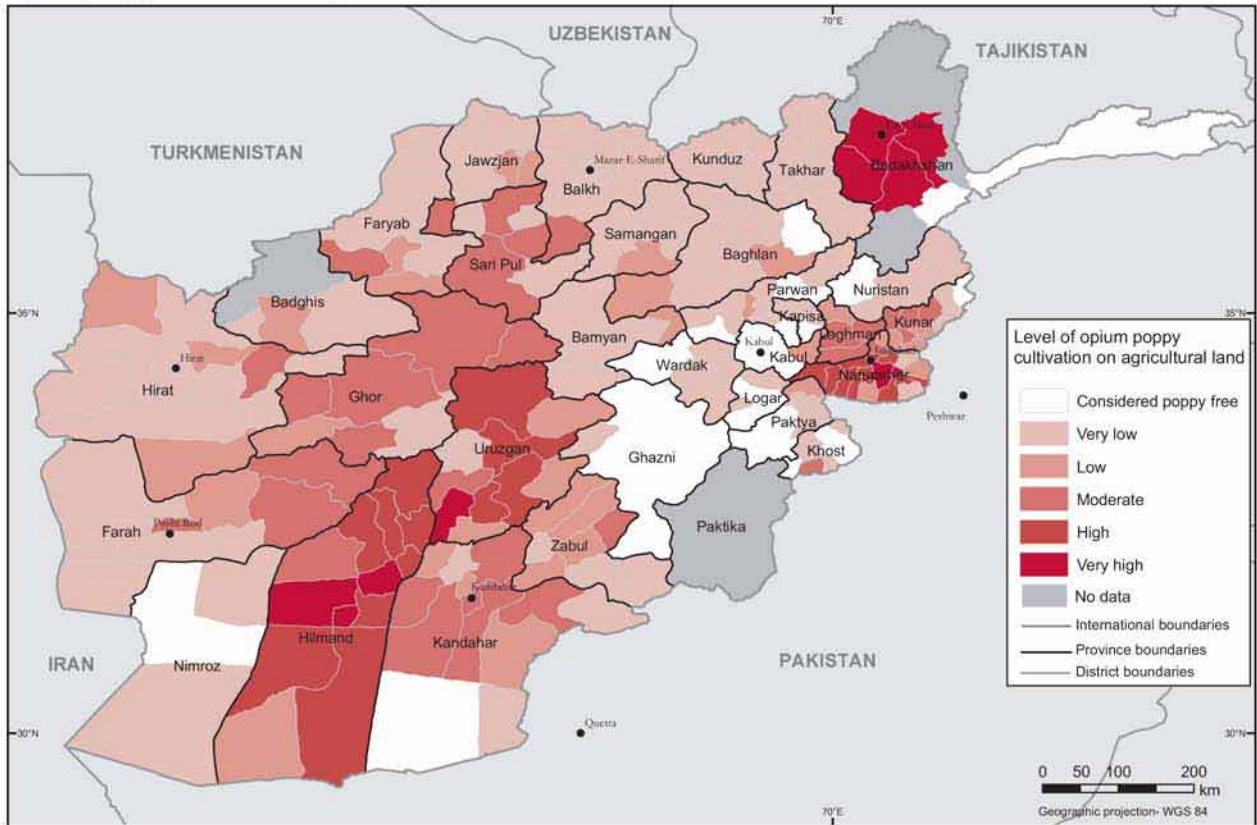
### Households involved

In 2007, the survey estimated that 509,000 families were involved in opium poppy cultivation compared to 448,000 families in 2006 (a 14% increase). Given an average of 6-7 members per family, this represents an estimated total of about 3.3 million persons, or 14.3 % of Afghanistan's 23 million population. The 14% increase in opium cultivating households in 2007 does not correspond directly to 'new' opium poppy growing farmers, as it includes farmers who are returning to cultivation after skipping one or more years. In the Southern and Eastern Regions, where opium poppy cultivation increased by 31% and 44% respectively, very few farmers had cultivated for the first time and many did not cultivate every year.

<sup>8</sup> Data for Afghan year 1384 (March 2005 - March 2006) and preliminary estimates for Afghan year 1385 (March 2006 - March 2007) (Afghan Government, Central Statistical Office).

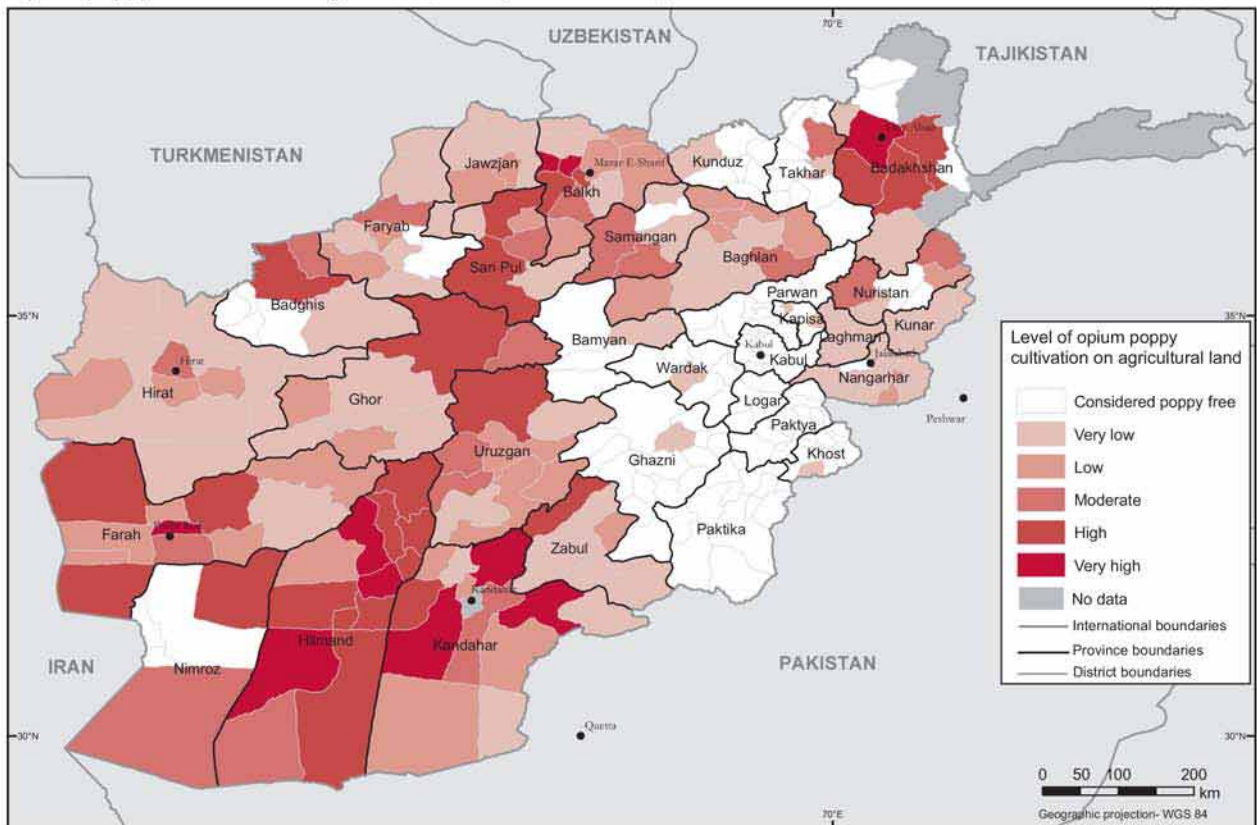


Opium poppy cultivation in Afghanistan, 2004 (at district level)



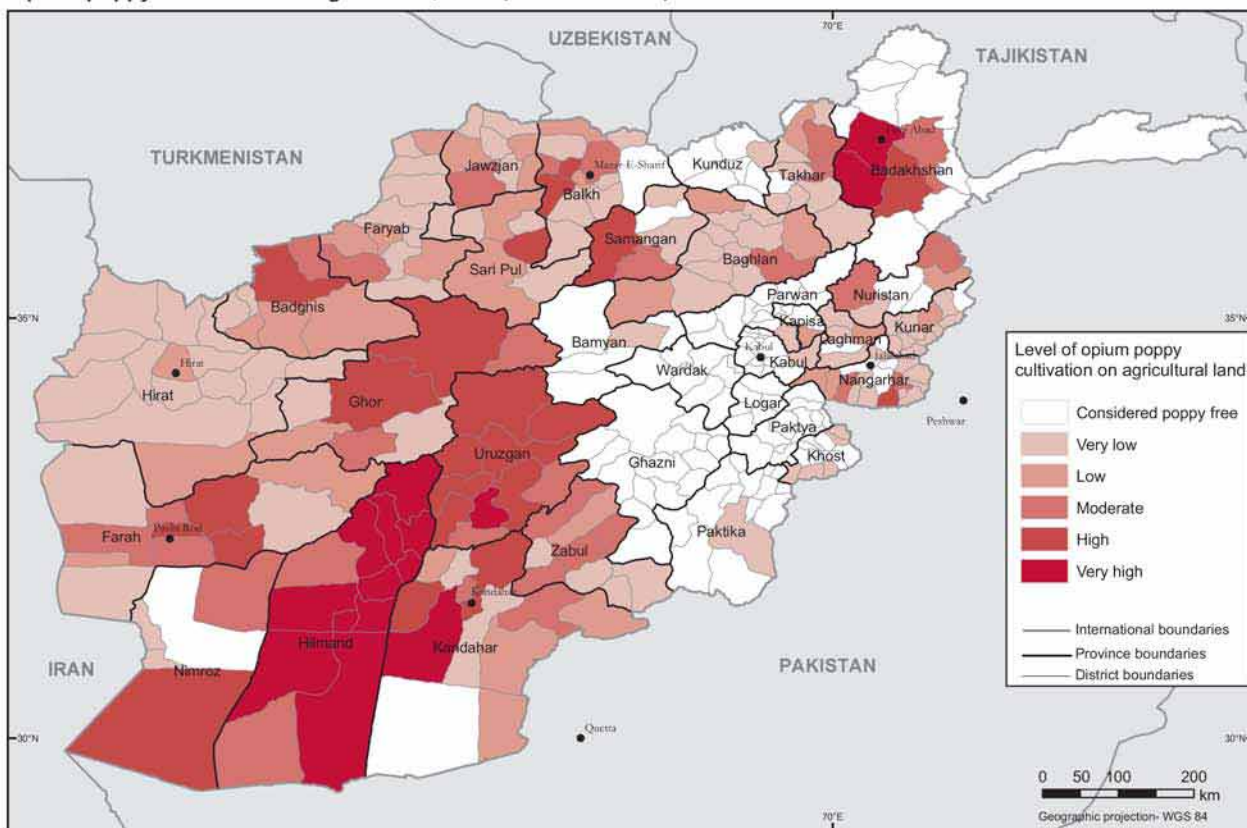
Source: MCN - UNODC Afghanistan Opium Survey 2004  
 Note: The boundaries and names shown and the designations used on this map do not imply official endorsement or acceptance by the United Nations.

Opium poppy cultivation in Afghanistan, 2005 (at district level)



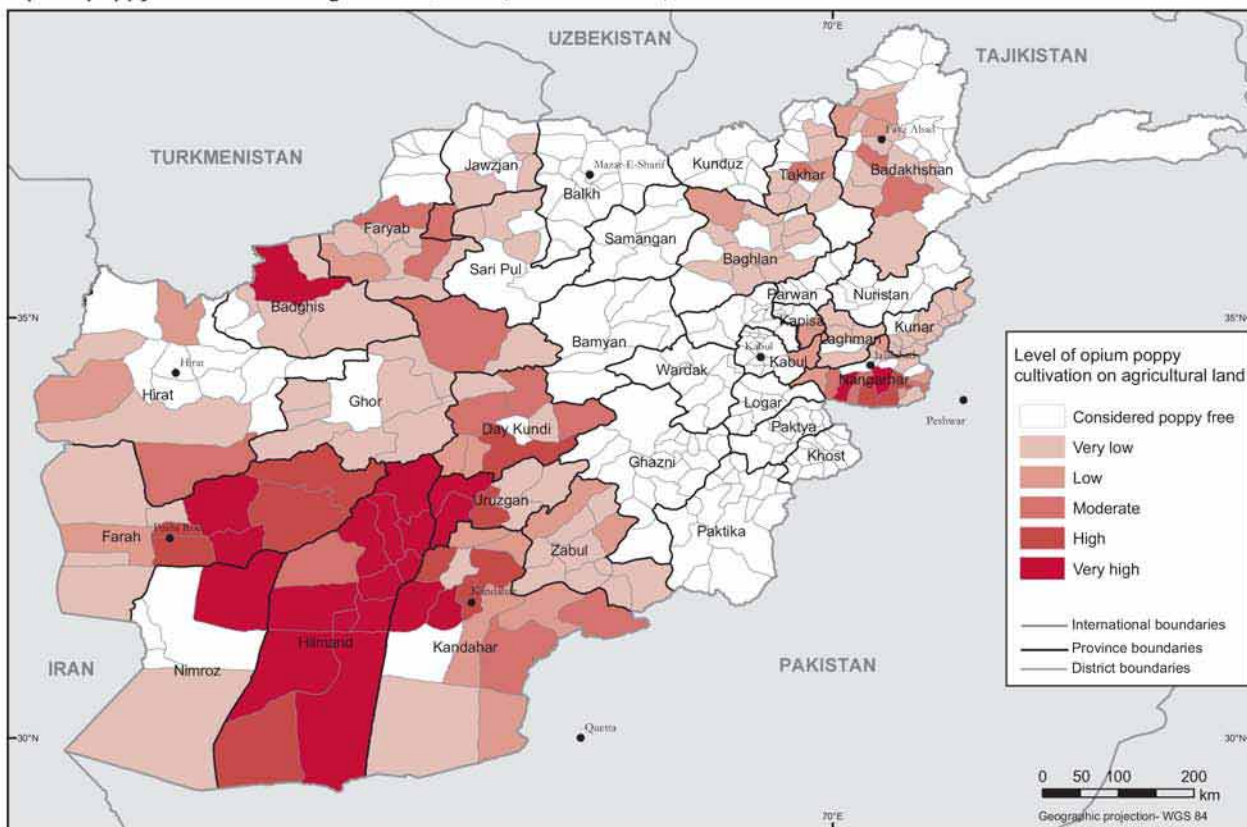
Source: MCN - UNODC Afghanistan Opium Survey 2005  
 Note: The boundaries and names shown and the designations used on this map do not imply official endorsement or acceptance by the United Nations.

Opium poppy cultivation in Afghanistan, 2006 (at district level)



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, 2007 (at district level)



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.



### 3.1.2 Bolivia

#### Fact sheet – Bolivia Coca Survey 2007<sup>1</sup>

	2006	Change on 2006	2007
Coca cultivation	27,500 ha	+5%	28,900 ha
<i>Of which</i>			
<i>in the Yungas of La Paz</i>	18,900 ha	+5%	19,800 ha
<i>in Chapare</i>	8,300 ha	+6%	8,800 ha
<i>in Apolo</i>	300 ha	0%	300 ha
<i>Of which permitted by Bolivian law 1008</i>	12,000 ha		12,000 ha
Production of sun-dried coca leaf	48,000 mt		
Potential production of cocaine HCl	94 mt	+9%	104 mt
In per cent of the global cocaine production	10%		10%
National weighted average farm-gate price of coca leaf (outside state market)	US\$ 3.9/kg	+5%	US\$ 4.1/Kg
Total farm-gate value of coca leaf production	US\$ 180 million	+19	US\$ 214 mn
GDP <sup>2</sup>	US\$ 8.7 billion	+4.5	US\$ 9.1 mn
Farm-gate value of coca leaf production in per cent of GDP	2.0%		2.3%
Farm-gate value of coca leaf production in per cent of value of 2003 agricultural sector	13%		16%
Reported eradication of coca bush	5,070 ha	+24%	6,269 ha
Reported seizure of sun-dried coca leaves	1,364 mt	+27%	1,730 mt
Reported seizure of cocaine base	12,779 kg	+17%	14,912 kg
Reported seizure of cocaine HCl	1,309 kg	+123%	2,923 kg
Reported destruction of coca laboratories <sup>3</sup>	4,073	+0.3%	4,087
<i>Of which cocaine HCl processing laboratories</i>	3	+100%	6

#### Cultivation and eradication

In 2007, 16% of global coca cultivation took place in Bolivia. The total area under cultivation increased by 5% in 2007 to 28,900 ha. Overall, cultivation levels

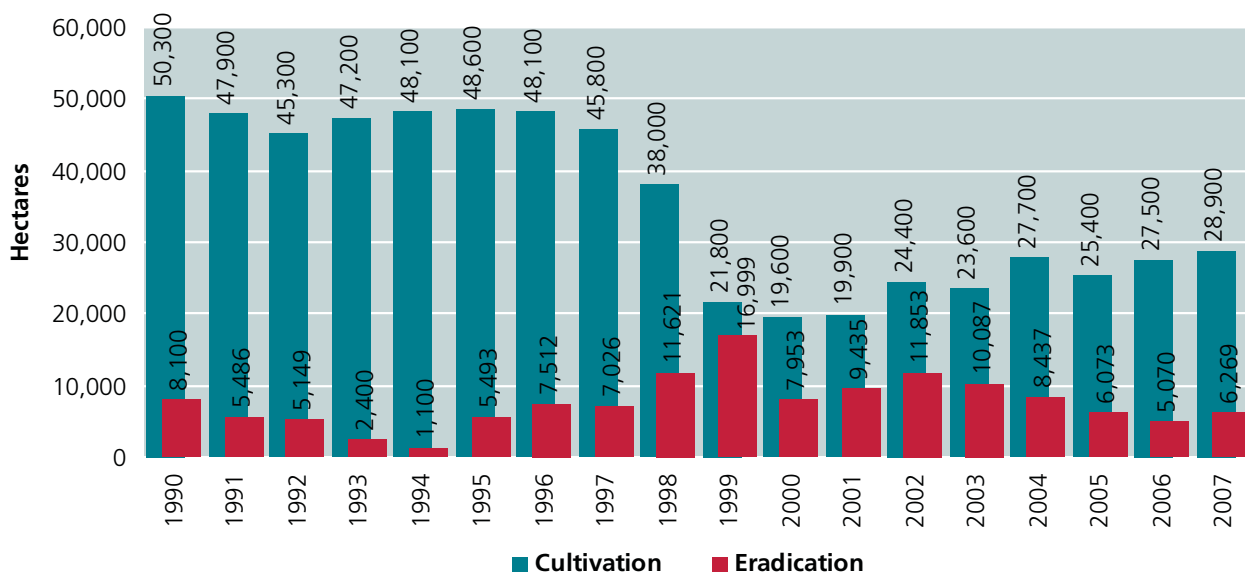
remained well below the levels reached in the early and mid-1990s. Increases in area under coca cultivation in the country's two largest cultivation regions, the Yungas of La Paz and Chapare, occurred at roughly the same rate. As in 2006, 69% of the coca area was located in the Yungas of La Paz, 30% in Chapare, and only 1% in Apolo.

<sup>1</sup> The information in this section comes from the report on Coca Cultivation in Bolivia (UNODC/Government of Bolivia, June 2008), and can also be found at [www.unodc.org](http://www.unodc.org).

<sup>2</sup> Source: INE 2006.

<sup>3</sup> Excluding coca leaf maceration pits.

**Bolivia, coca cultivation and eradication (hectares), 1990 to 2007**

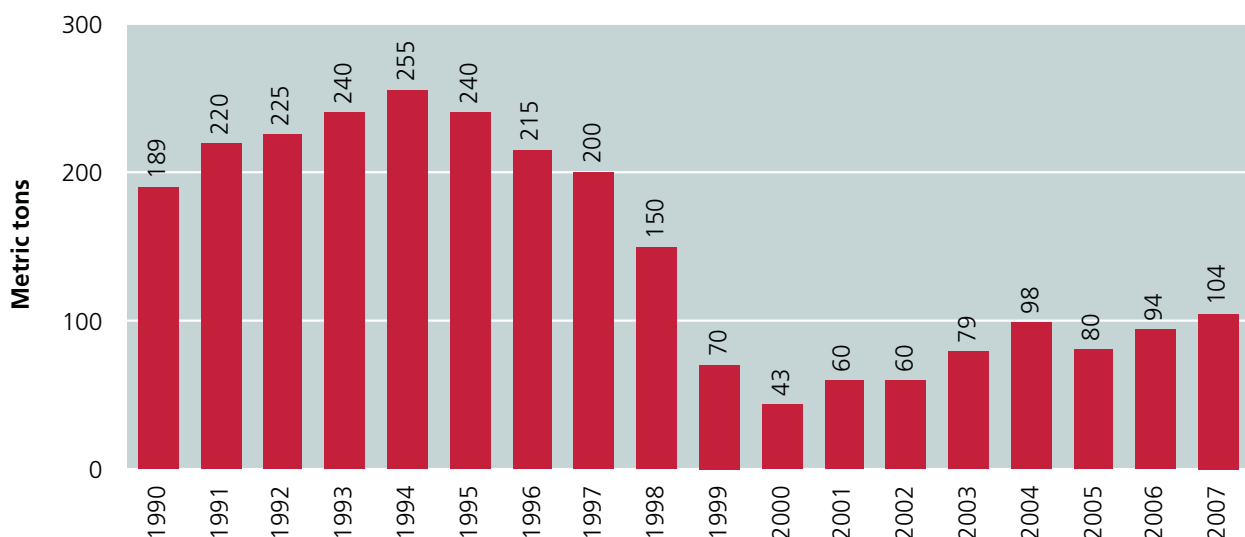


The Government of Bolivia reported 6,269 ha of eradication in 2007, an increase of 24%. This was higher than levels reached in 2005 (5,070 ha) and 2006 (6,073 ha). As in the past, most of the eradication (95%) was carried out in the Chapare region.

### Production

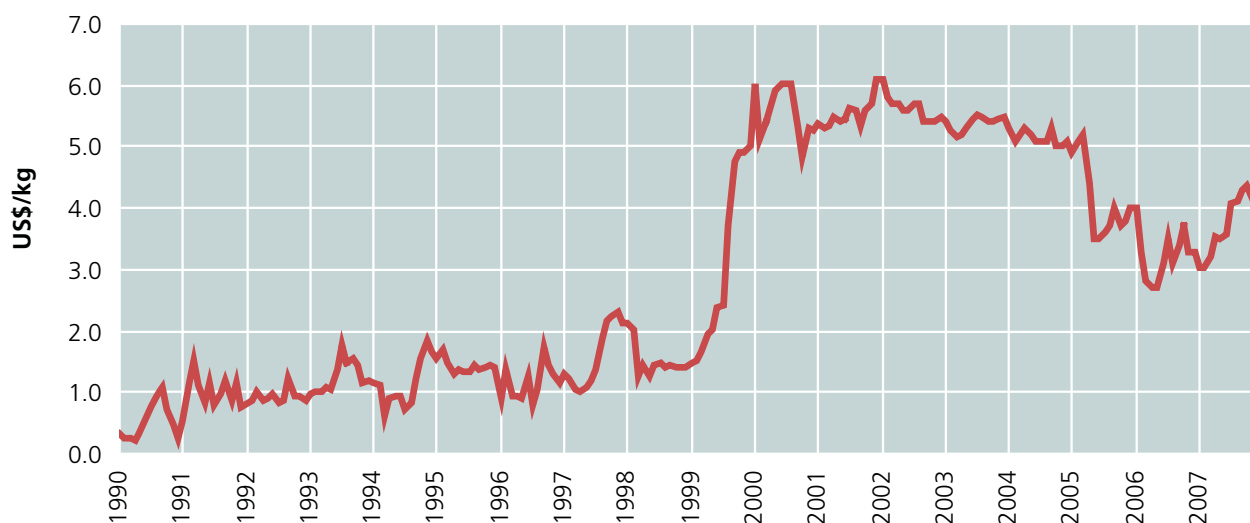
In 2007, potential cocaine production in Bolivia increased by 9 % to 104 mt. The increase in potential cocaine production is more pronounced than for the area under coca cultivation because the relatively low yielding areas where coca leaf is produced for traditional purposes have not been included.

**Bolivia, potential cocaine production (metric tons), 1990 to 2007**



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.

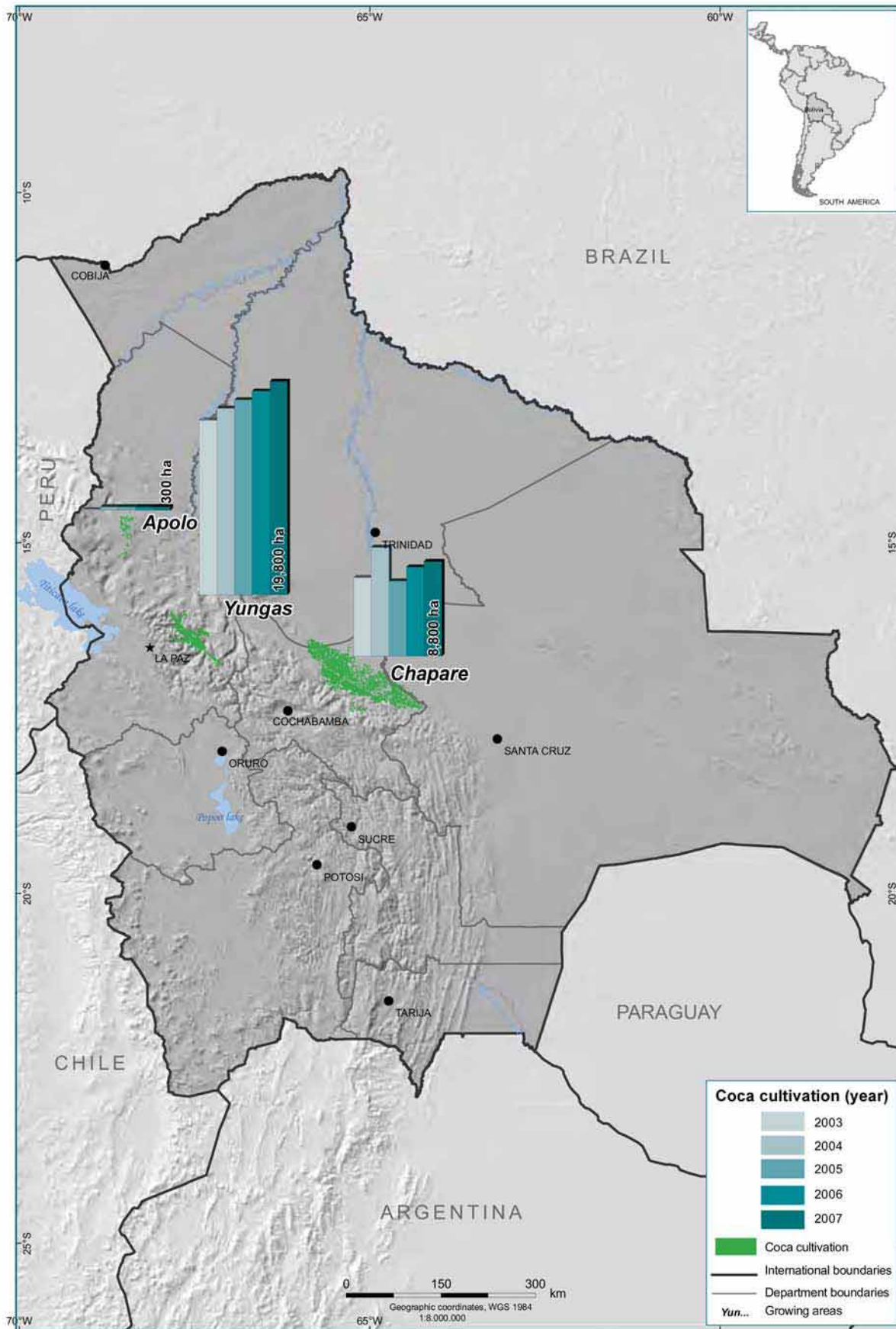
Bolivia, monthly farm-gate prices of sun-dried coca leaf in Chapare region (US\$/kg), 1990 to 2007



## Prices

Farm-gate prices for sun-dried coca leaf decreased, with annual averages declining from US\$ 5.6/kg in 2002 to only US\$ 3.2/kg in 2006 in the Chapare region. In 2007, however, after four years of decline, the annual coca leaf price increased by 16 % from US\$ 3.2/kg in 2006 to US\$ 3.8/kg. Prices for coca leaf in the Yungas of La Paz region, as well as in the state-controlled coca leaf markets, all showed increases of similar magnitude, indicating an increased demand for sun-dried coca leaf. Significantly higher seizures of coca leaf and derivatives in 2007 (cocaine HCl in particular) indicate that this increased demand can be attributed to trafficking.

Bolivia, coca cultivation by region, 2003-2007



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 – Colombia Coca survey 2007<sup>1</sup>

	2006	Change on 2006	2007
Net coca cultivation (rounded total)	78,000 ha	+27%	99,000 ha
<i>Of which</i>			
<i>Pacific region</i>	18,810 ha	+38%	25,960 ha
<i>Putumayo-Caquetá region</i>	17,220 ha	+23%	21,130 ha
<i>Central region</i>	12,130 ha	+73%	20,950 ha
<i>Meta-Guaviare region</i>	20,540 ha	-4%	19,690 ha
<i>Elsewhere</i>	9,170 ha	+23%	11,170 ha
Potential production of cocaine	610 mt	-2%	600 mt
In % of global cocaine production	62%		60%
Average farm-gate price of coca paste	US\$ 879/kg COP 2,070,000/kg	+7% -5%	US\$ 943/kg COP 1,959,000/kg
Average wholesale price of cocaine	US\$ 1,762/kg COP 4,155,000/kg	+25% +10%	US\$ 2,198/kg COP 4,567,000/kg
Total farm-gate value of the production of coca leaf and its derivatives	US\$ 683 million	+37%	US\$ 934 million
in per cent of GDP	0.5%		0.5%
in per cent of agricultural sector	5%		5%
Reported aerial spraying of coca bush	172,026 ha	-11%	153,134 ha
Reported manual eradication of coca bush	43,051 ha	+55%	66,805 ha
Reported seizure of cocaine	127,326 kg	-1%	126,641 kg
Reported destruction of coca processing laboratories	2,247	+5%	2,360
<i>Of which cocaine HCl processing lab.</i>	202	+31%	265
Reported opium poppy cultivation	1,023 ha	-30%	714 ha
Potential opium latex production	31 mt	+10%	34 mt
Potential heroin production (rounded)	1.3 mt	+10%	1.4 mt
Average farm-gate price of opium latex	US\$ 251/kg	14%	US\$ 286/kg
Average heroin price	US\$ 10,103/kg	-7%	US\$ 10,780/kg
Reported seizure of heroin	442 kg	+21%	537 kg

<sup>1</sup> The information in this section comes from the report on Coca Cultivation in Colombia (UNODC/Government of Colombia, June 2008), and can also be found on the internet (<http://www.unodc.org>).

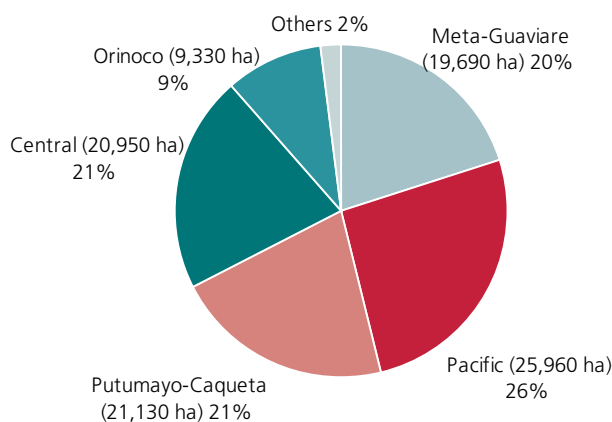
## Cultivation and eradication

In 2007, cultivation in Colombia increased 27% to 99,000 ha on the strength of cultivation increases in the Pacific and Central regions. These were responsible for over three quarters of the total area increase overall. The Pacific was the largest coca region in 2007 with 25,960 ha, followed by Putumayo-Caquetá, Central and Meta-Guaviare. Together, these four regions represented 89 % of the total area under coca bush in Colombia. Putumayo-Caquetá, once by far the largest coca region, had seen a considerable decrease in area under coca cultivation between 2000 and 2004. However, since then, coca cultivation has gradually increased and, in 2007, approached the 2002 level. Meta-Guaviare, in 2001 the second largest coca region, ranked only fourth in 2007, having experienced the sixth consecutive decrease in area under coca bush in six years. This decrease and other decreases in smaller cultivating regions such as Amazonia and Sierra Nevada could not offset the increase in the larger regions.

In 2007, the Colombian authorities continued to intensify manual eradication efforts, successfully eradicating 66,805 ha. Eradication by spraying also continued at high levels (153,134 ha). Both manual eradication and spraying activities were concentrated in the departments of Antioquia (Central region), Nariño (Pacific region) and Putumayo.

While opium poppy is cultivated in Colombia it remains a small cultivator in global terms. According to Government reports, the area under opium poppy cultivation continued to decline in 2007 to 714 ha.

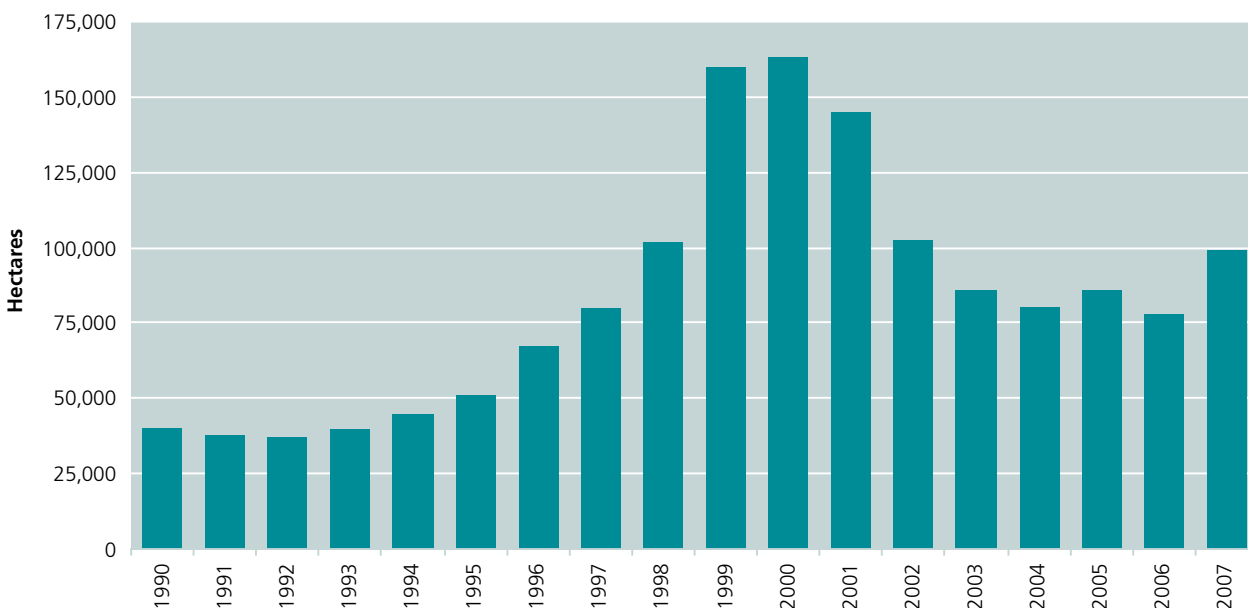
Colombia, coca cultivation by region, 2007



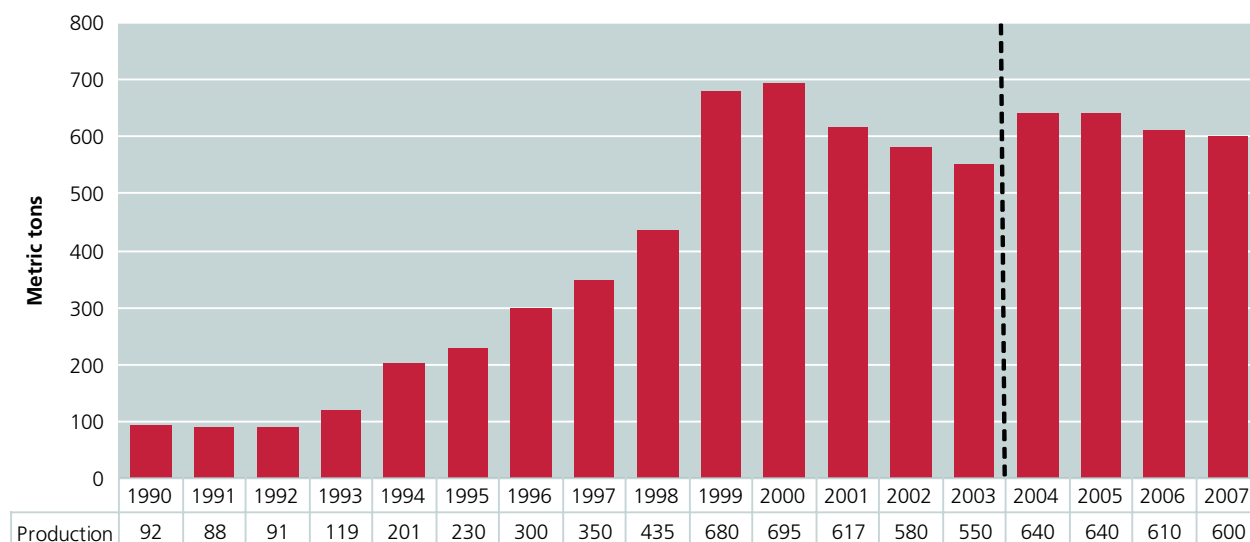
## Production

Despite the significant increase in coca cultivation in 2007, the potential production of cocaine HCl in Colombia amounted to 600 mt, roughly the same level as in 2006 (610 mt). There are several possible explanations for this. First, the increase in cultivation occurred in regions with under-average coca leaf yields, while reductions took place in high yielding regions such as Meta-Guaviare. In addition, new research revealed lower coca leaf yields in the Central region, the region that contributed most to the overall increase in cultivation.

Colombia, coca cultivation (hectares), 1990 to 2007



### Colombia, potential cocaine production (metric tons), 1990 to 2007



Note: Cocaine production estimates for 2004 and later are not directly comparable with previous years.

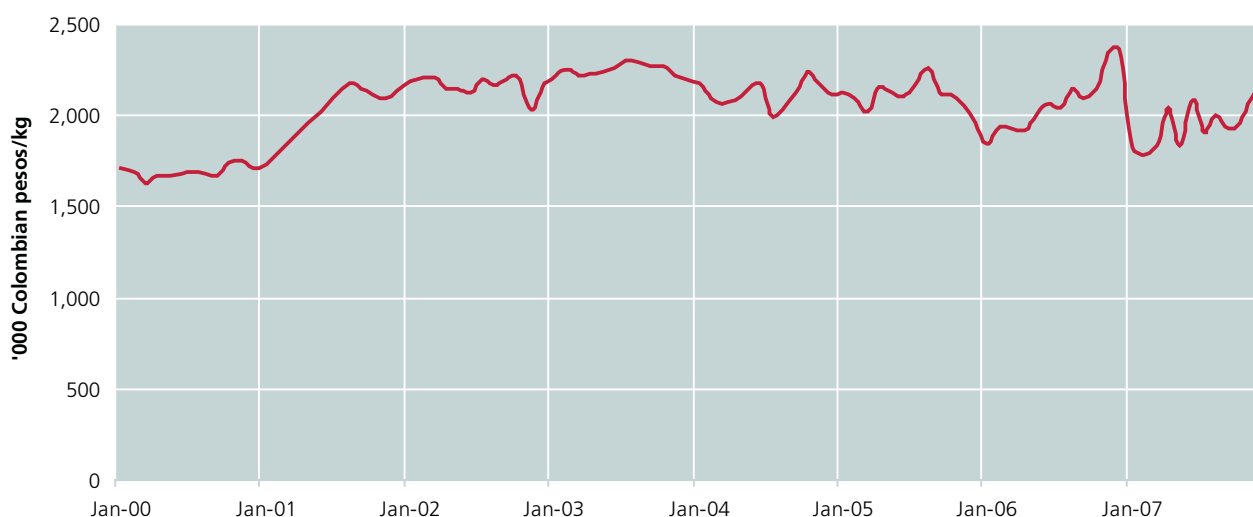
### Prices for coca leaf, cocaine and opium

In 2007, the average price for coca paste at the farm-gate decreased by 5 % to COP 1,959,000/kg, but increased by 7 % in US dollar terms due to a strengthening of the Colombian peso against the US dollar. Annual average prices of coca paste at the farm-gate have been relatively stable at COP 210,000/kg between 2004 and 2006. However, since 2005, differences between monthly averages varied more widely than at any other time since the start of systematic price monitoring. This coincides with a massive up-scaling of manual eradication campaigns in coca cultivation areas in 2005. Farm-gate prices in Colombia are thought to be influenced by armed groups who are able to control prices in their region of influence.

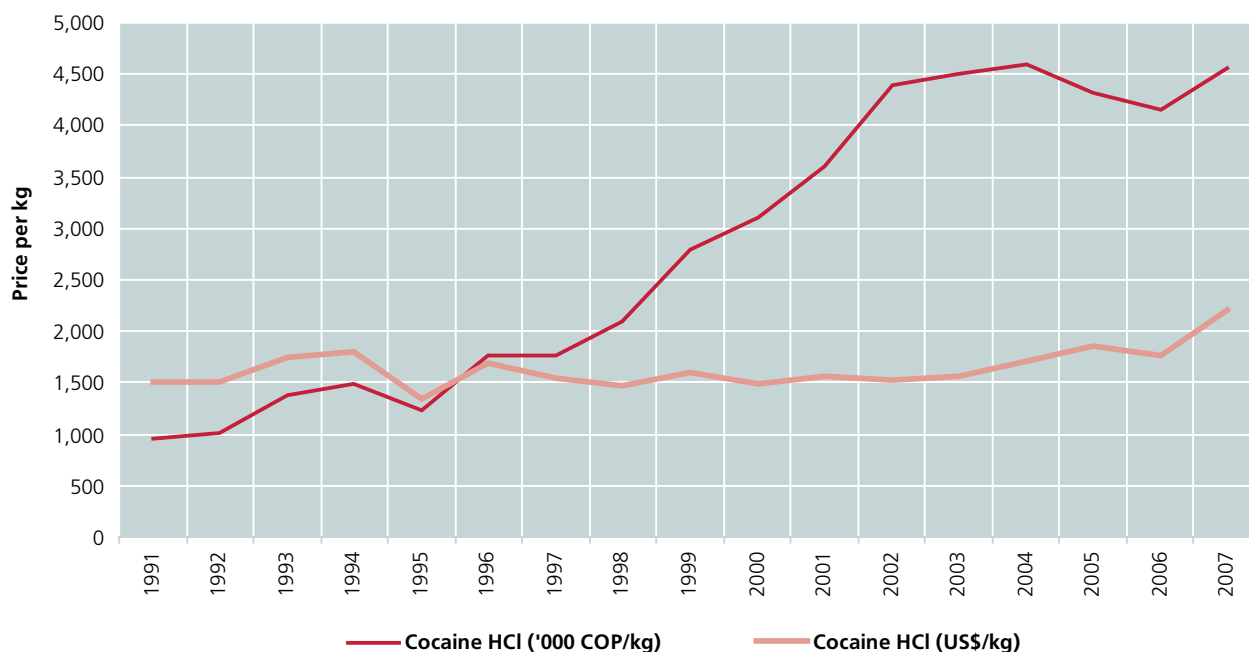
In 2007, the wholesale price of cocaine HCl increased in both Colombian peso and US dollar terms and reached US\$ 2,198/kg, an increase of 25% over 2006. This is the highest US dollar price recorded since 1991. It is similar in level to the Colombian peso prices in the years 2003 and 2004.

The price increase observed over the last two to three years for opium latex and heroin did not continue in 2007. In Colombian pesos, the price of opium latex at the farm-gate remained stable at COP 591,000/kg, the wholesale price of heroin fell by 5% to COP 22,294/kg. In US dollar terms, however, prices for both products increased.

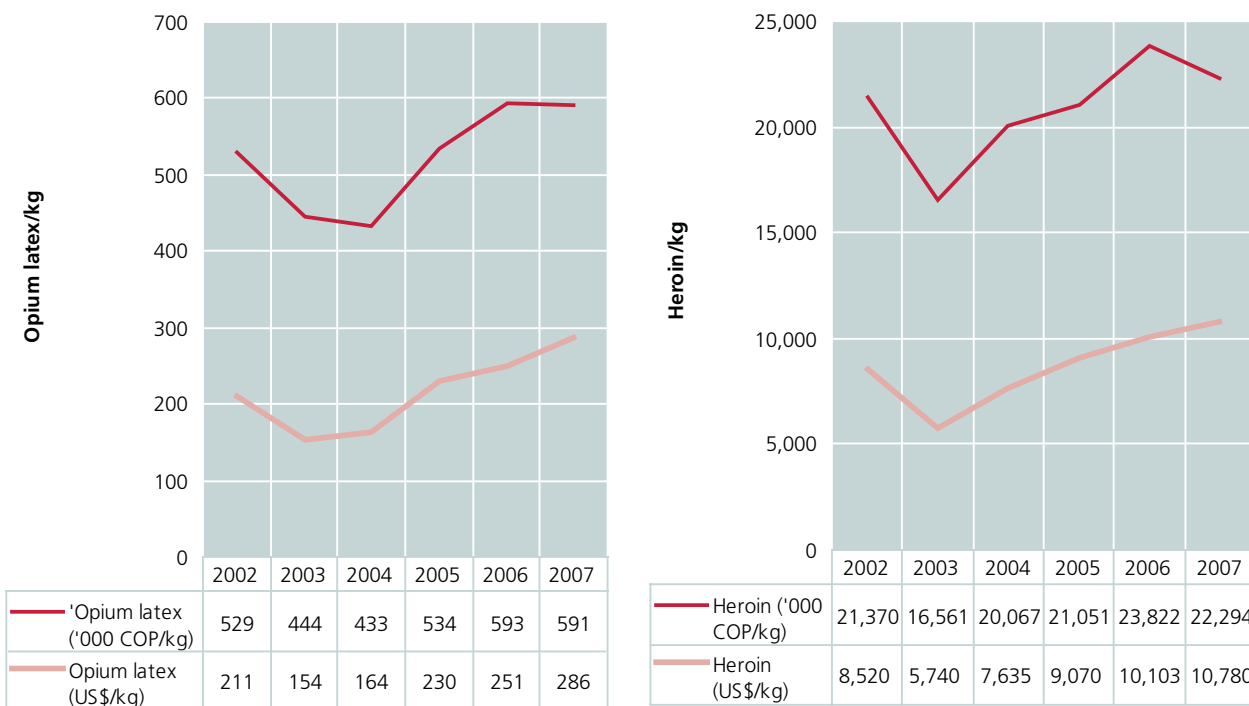
### Colombia, monthly farm-gate prices of coca paste ('000 COP/kg), Jan. 2000 to Dec. 2007



Colombia, annual wholesale prices of cocaine HCl (US\$ and '000 COP), 1991 to 2007

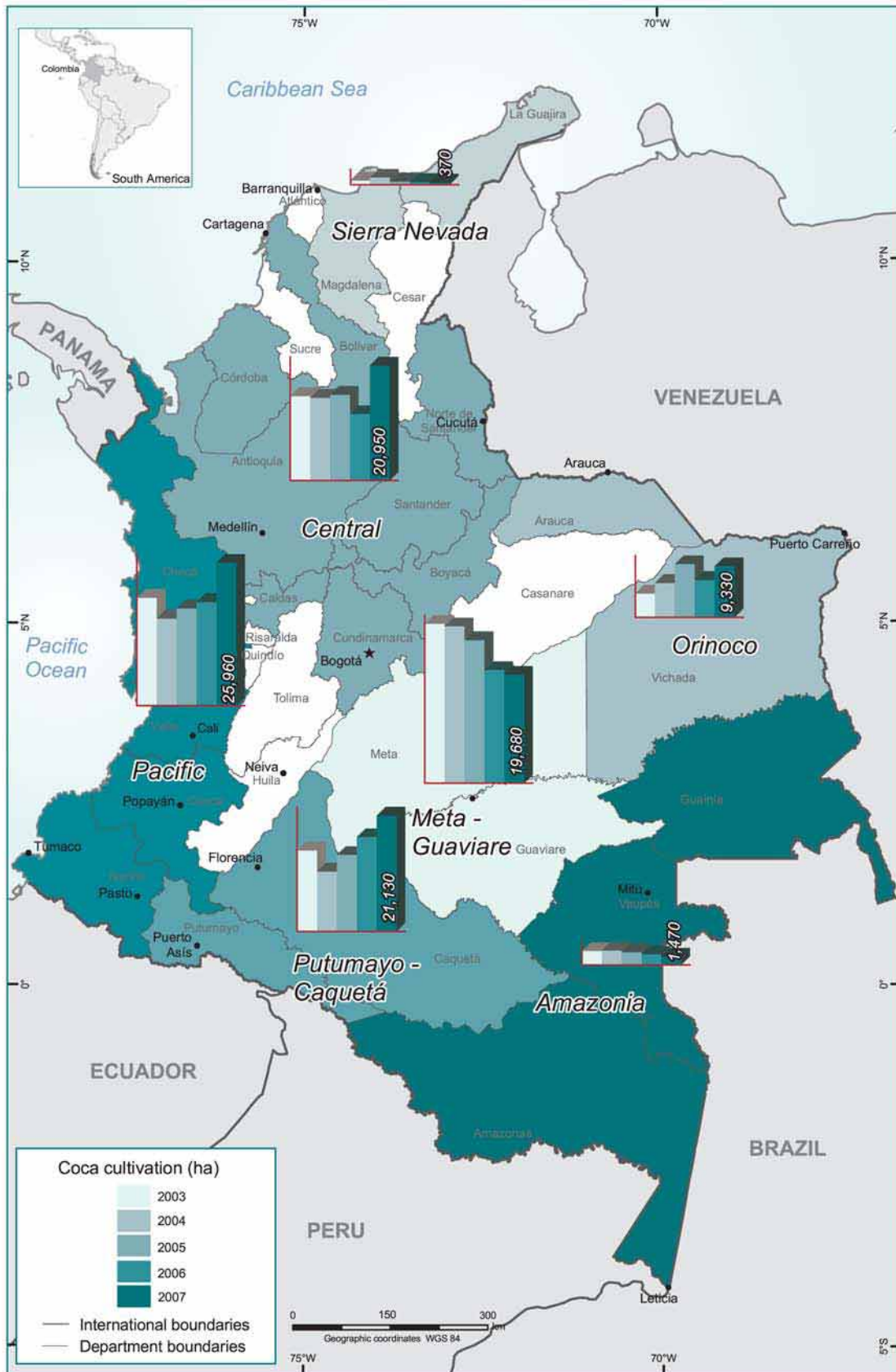


Colombia, opium latex (farm-gate) and wholesale heroin prices, 2002 to 2007





Colombia, coca cultivation by region, 2003 to 2007



### 3.1.4 Lao PDR

#### Fact Sheet – Laos Opium Survey 2007<sup>1</sup>

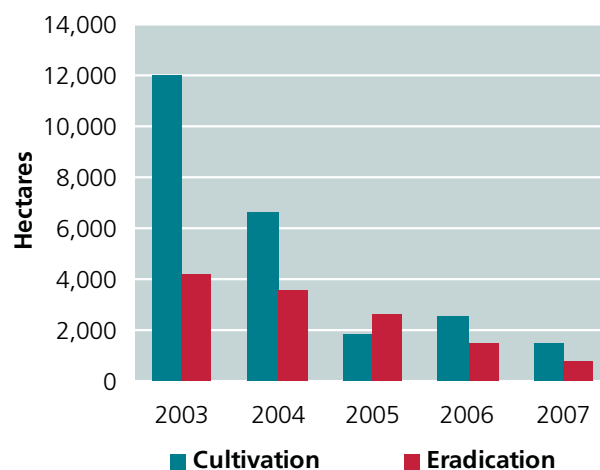
	2006	Change on 2006	2007
Opium poppy cultivation	2,500 ha	-40%	1,500 ha
Average dry opium yield	8 kg/ha	-25%	6 kg/ha
Potential production of dry opium	20 mt	-54%	9.2 mt
No. of households growing opium poppy	5,800		n/a
Average price of opium <sup>2</sup>	US\$ 550/kg	+77%	US\$ 974/kg
Eradication <sup>3</sup>	1,518 ha	-49%	779 ha
Number of opium addicts	11,200	-31%	7,700 <sup>4</sup>
Average drug prevalence rate <sup>5</sup>	0.58%		0.30%

#### Cultivation and eradication

The total area under opium poppy cultivation in the Lao PDR in 2007 was estimated at 1,500 ha – a 40% decrease over production in 2006 (2,500 ha). This brings cultivation to its lowest level since 1998 when opium poppy cultivation peaked at 26,600 ha. Although opium cultivation has been virtually eliminated, the geographical pattern of the remaining cultivation is dynamic. In 2007, opium poppy cultivation was found in five of the six northern provinces surveyed.

According to Government reports, 779 ha were eradicated. Levels of eradication were highest in Phongsaly with 264 ha, followed by Huapanh (209 ha) and Luang Prabang (143 ha).

Lao PDR, opium poppy cultivation\* and eradication (ha), 2003 to 2007



\* after eradication

<sup>1</sup> 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, October 2007), and can also be found on the internet (<http://www.unodc.org/unodc/en/crop-monitoring/index.html>).

<sup>2</sup> Source LCDC, Provincial authorities survey. Due the limited market for opium, a clear distinction between farm-gate, wholesale and retail price levels could not be established.

<sup>3</sup> Source: LCDC. The 2006 eradication campaign was conducted before and after the survey. In 2007, eradication was conducted after the survey.

<sup>4</sup> The figure does not take into account possible relapse of recently treated addicts (normally > 20%).

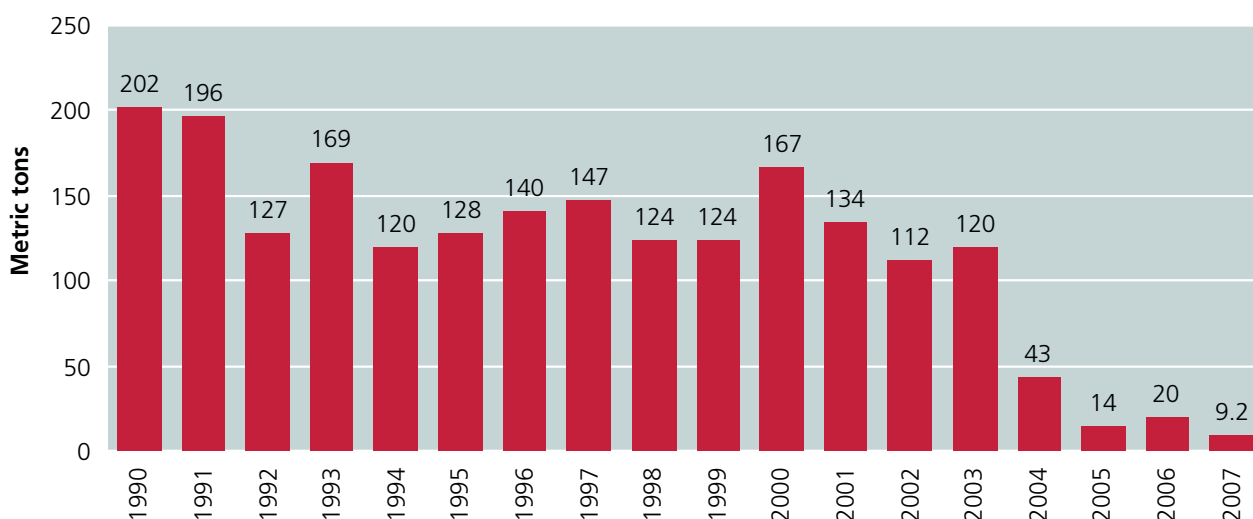
<sup>5</sup> Based on 6 northern provinces in 2006 and on 10 in 2007.

## Production

Opium production in 2007 reached its lowest level since the start of surveying and corresponds to only 5% of the potential opium production of the year 2000 (or 7% of 1998 production).

Based on the estimated area under cultivation, the potential production of opium in 2007 was 9.2 mt, which represents a 54% decrease over 2006. The national opium yield for 2007 averaged an estimated 6 kg/ha.

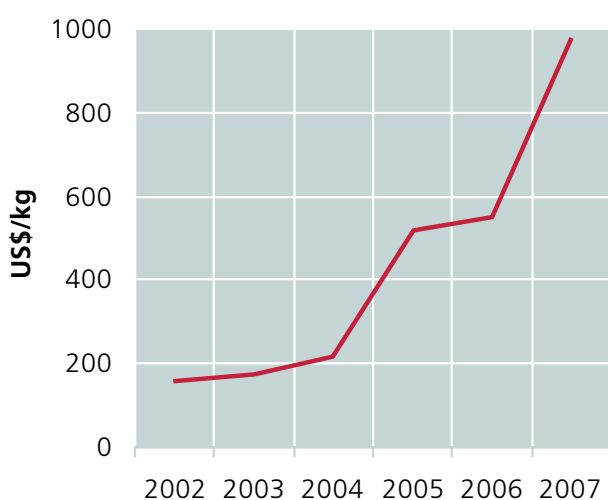
Lao PDR, potential opium production (metric tons), 1990 to 2007



## Prices

Opium prices reached US\$ 974/kg, representing an increase of 57% over 2006. Prices showed strong regional disparities, varying between US\$ 537/kg in Namore district, Oudomxay, to US\$ 1,613 in Nan district, Luang Prabang. Virtually all of the opium produced in Lao PDR is thought to be consumed locally. Due to this limited market for opium, a clear distinction between farm-gate, wholesale and retail price levels could not be established.

Lao PDR, annual opium prices (US\$/kg), 2002 to 2007



## Addiction

In 2007, opium addiction rates decreased. The reported number of addicts in the 10 northern provinces was 7,706. The figure does not take into account the possible relapse of recently treated addicts, which is estimated at 20%. Opium prevalence rates remained higher in the two main opium producing provinces (Phongsaly and Huaphanh) than in the rest of the country.

### 3.1.5 Myanmar

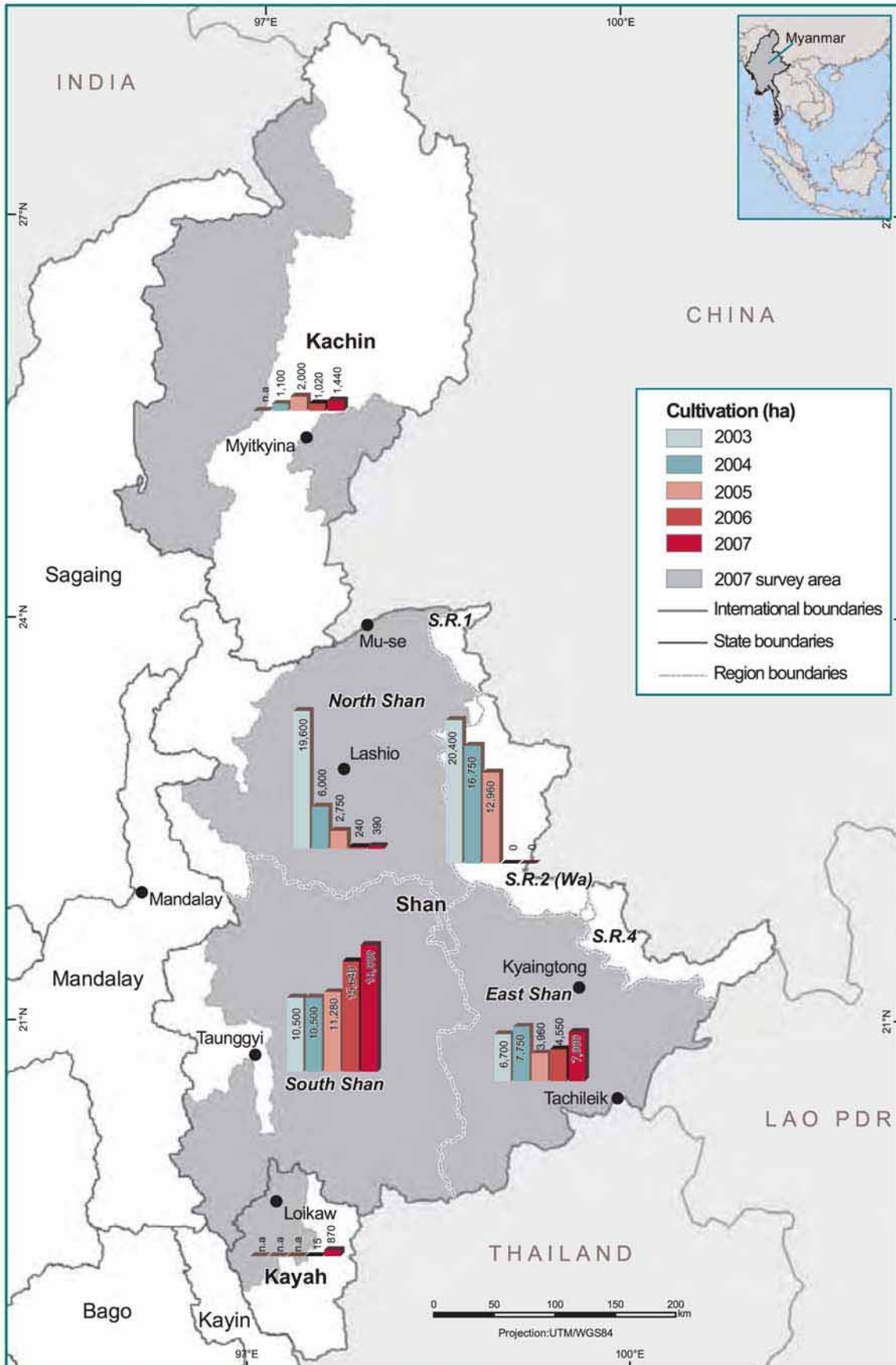
#### Fact Sheet – Myanmar Opium Survey 2007<sup>1</sup>

	2006	Change on 2006	2007
Opium poppy cultivation in Myanmar	21,500 ha	+29%	27,700 ha
Of which in Shan State	20,500 ha	+24%	25,400 ha
Average opium yield (weighted by area)	14.6 kg/ha	+14%	16.6 kg/ha
Potential production of dry opium in Myanmar (including Shan State)	315 mt	+46%	460 mt
Average farm-gate price of opium <sup>2</sup>	US\$ 230/kg	+15%	US\$ 265/kg
Total potential value of opium production	US\$ 72 million	+67%	US\$ 120 million
Estimated number of households involved in opium poppy cultivation in Myanmar	126,500	+29%	163,000
Number of persons involved in opium poppy cultivation in Myanmar	632,500	+29%	815,000
Estimated number of households involved in opium poppy cultivation in the Shan State	120,000	+24%	148,900
Average yearly household income in opium producing households (Shan State)	US\$ 437	+15%	US\$ 501
Of which from opium sales	US\$ 217	+5%	US\$ 227
Per capita income in opium producing households (Shan State)	US\$ 87	+15%	US\$ 100
Household average yearly income in non-opium poppy producing households (Shan State)	US\$ 318	+43%	US\$ 455
Per capita income in non-opium producing households (Shan State)	US\$ 64	+43%	US\$ 91
Addiction prevalence rate in Shan State and Kachin (population aged 15 and above)	0.60 %	+25%	0.75 %
Reported opium poppy eradication in Myanmar	3,970 ha	-9%	3,598 ha

<sup>1</sup> 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, October 2007), and can also be found on the internet (<http://www.unodc.org/unodc/en/crop-monitoring/index.html>).

<sup>2</sup> For 2007: price at harvest time.

Myanmar, opium poppy cultivation, 2004 - 2007



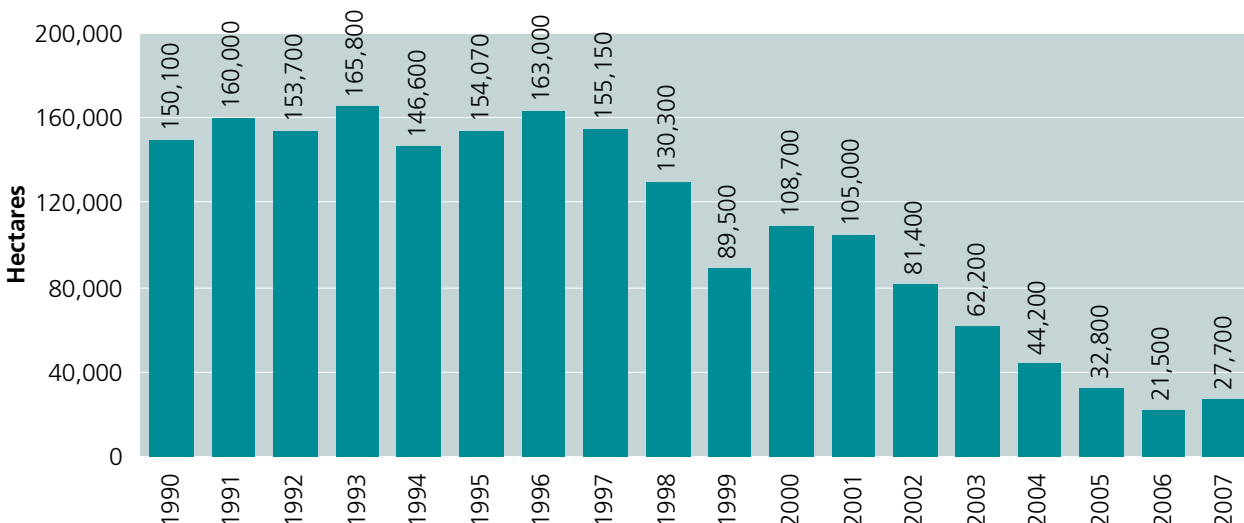
Source: Government of Myanmar - National monitoring system supported by UNODC  
 The boundaries and names shown and the designations used on this map do not imply official endorsement or acceptance by the United Nations.

### Cultivation and eradication

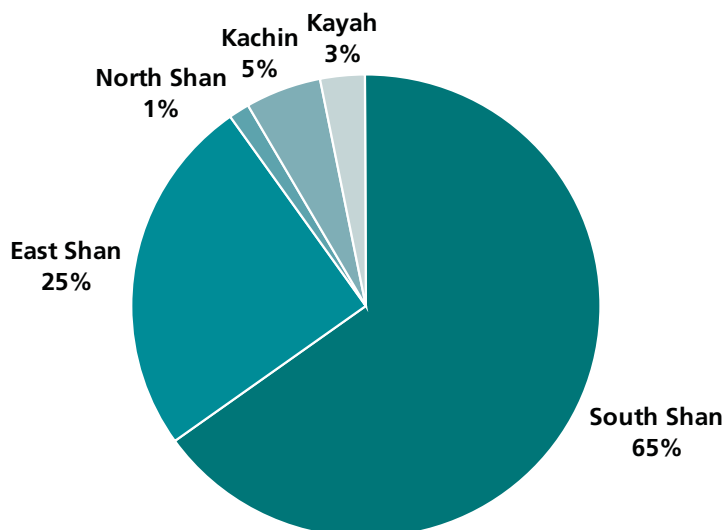
In 2007, opium poppy cultivation in Myanmar increased, for the first time in seven years, to 27,700 ha. This was a 29% increase over 2006. The largest increases in absolute terms took place in East and South Shan State, which contain 25% and 65% (respectively) of national cultivation. In Kayah State, which was surveyed for first time in 2006, opium poppy cultivation also increased. The same trend was seen in Kachin State, which accounted for 5% of national cultivation. In North Shan State, cultivation remained very low. In Special Region 2 (Wa), opium elimination has been effectively sustained.

Official reports from the Myanmar Government indicate that 3,598 ha of opium poppy were eradicated in 2007. The level of eradication varied greatly between regions. It increased by 33 times in East Shan State, and decreased by 58% in South Shan State. In North Shan State, eradication increased 11 times over 2006 reflecting the Government's efforts to control opium poppy cultivation at a time of renewed cultivation. Efforts by local authorities to control cultivation along the Chinese border has pushed opium poppy fields into the more remote areas and townships of Kachin State.

Myanmar, opium poppy cultivation (hectares), 1990 to 2007



Myanmar, distribution of opium poppy cultivation by region, 2007



## Opium poppy eradication as reported by the Government of the Union of Myanmar (ha), 2002 to 2007

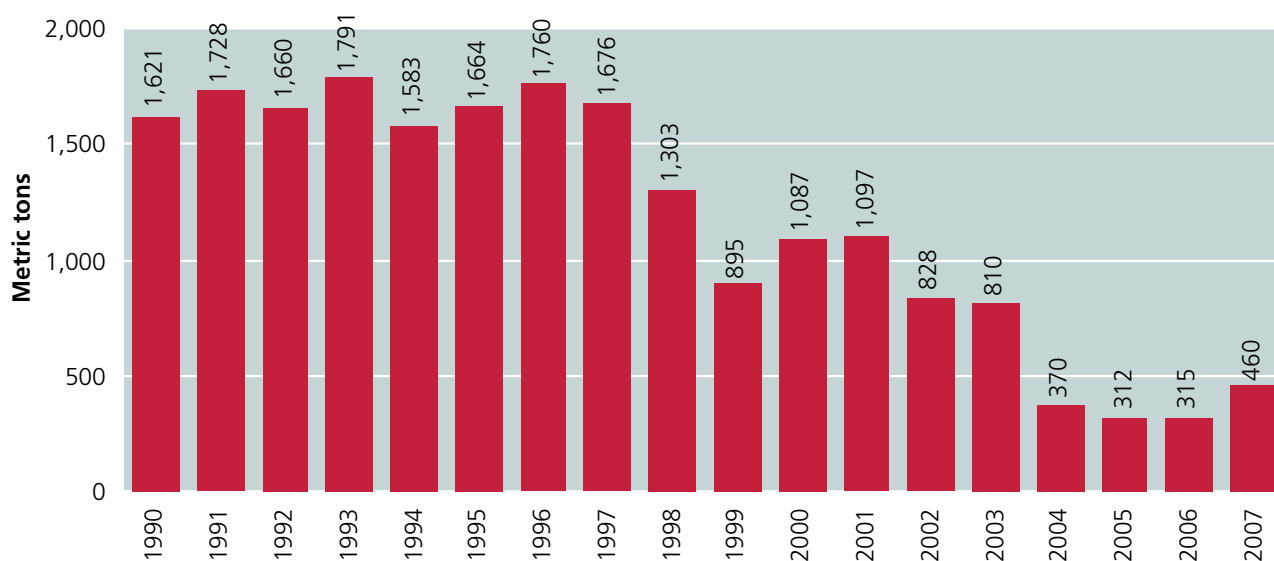
Administrative Unit	2002	2003	2004	2005	2006	2007
North Shan State	6,223	235	172	1,211	76	916
South Shan State	511	182	2,170	1,203	3,175	1,316
East Shan State	14	91	195	124	32	1101
Special Region 2 (Wa)	94	55	0	0	0	0
<b>Shan State</b>	<b>6,842</b>	<b>563</b>	<b>2,537</b>	<b>2,538</b>	<b>3,283</b>	<b>3,333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

## Production

In 2007, the total estimated production of opium amounted to 460 mt, which is a 46% increase in comparison to 2006. The rise was mainly due to increased cultivation in South and East Shan State, where the

plant has relatively high yields, and which experienced favourable weather conditions. South Shan State, with the largest area under cultivation, produced 65% of Myanmar's total opium production in 2007.

## Myanmar, potential opium production (metric tons), 1990 to 2007



## Prices

The average farm-gate price of opium at harvest time was US\$ 265/kg. This represents an increase of 15% compared to the average price reported by farmers for the year 2006. The highest prices were found in North Shan State and the lowest in South Shan State. The highest price increases compared to last year were observed in East Shan State, whereas in Kachin, South Shan and North Shan, price increases were moderate.

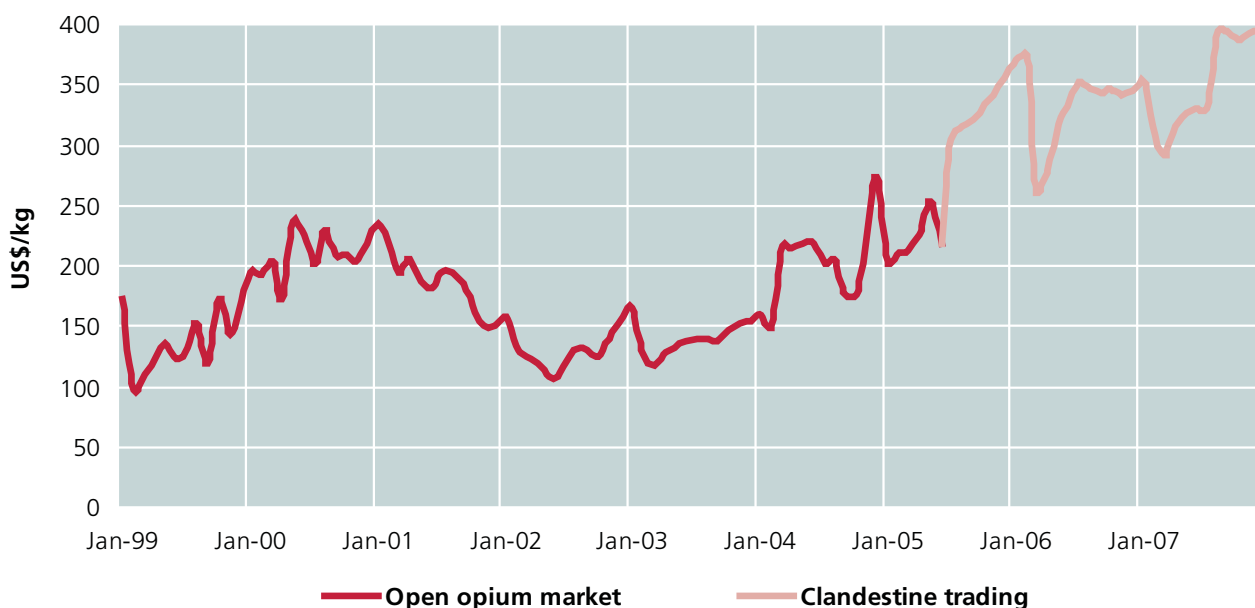
Price differences seem to reflect regional supply differentials, as well as the fragmentation of the country's opium market.

Overall, prices in Mong Pawk have shown an increasing trend since 2003. Although in 2007, the highest monthly average price since start of the monitoring was recorded, the year-on-year increase has been considerably less pro-

nounced in 2007 than in the three preceding years. As in 2006, monthly trader prices reported from Mong Pawk showed seasonal fluctuations with price minimums recorded early in the year around opium harvest time. Mong Pawk is located in the Wa Special Region 2

bordering China and has been free of opium poppy cultivation since 2006. Formerly a major opium market, trading has taken place clandestinely since the opium ban by local authorities in 2005.

Monthly prices for dry opium at Mong Pawk, Wa Special Region 2, Shan State (US\$/kg), Jan. 1999 to Dec. 2007



### Household income and strategies

The average annual cash income of an opium poppy cultivating household was estimated at US\$ 501, approximately US\$ 56 higher than the average annual income of a non-opium poppy cultivating household. This year, a larger number of households (+29%) was able to produce an even larger amount of opium (+46%) at a higher price (+15%) compared to 2006. As a consequence, the total value of national opium production increased by 67% to US\$ 120 million. Because the income from opium was distributed among a larger number of households, this only led to a moderate income increase for opium poppy growers (+15%).

The 2007, the average cash income of households was higher for villages that never grew opium poppy, compared to those that had stopped opium poppy cultivation. The findings also showed that households in former poppy growing villages did not find adequate ways of substituting their lost income from opium. The survey showed that villages reporting opium poppy cultivation continue to have significantly lower food security com-

pared to opium poppy-free villages. Villages with access to paddy land tend to cultivate less opium poppy since they can achieve a higher level of food security with rice cultivation. The most common coping strategy for farmers who had ceased opium poppy cultivation, was to grow more rice and maize and to sell livestock. Some emigration occurred from the Wa region where opium poppy cultivation was abandoned in 2005.

### Addiction

The overall proportion of opium users in Shan State, Kachin and Kayah represents 0.75% of the total adult population. Within the surveyed area, the average level of addiction was higher in villages with opium poppy cultivation (2.5%), compared to non-growing villages (0.3%). As in previous years, opium addiction continued to be a predominantly male phenomenon: 1.3% of the male population was addicted compared to 0.2% of the female population.



### 3.1.6 Peru

#### Fact Sheet – Peru Coca Survey 2007<sup>1</sup>

	2006	Variation on 2006	2007
Coca cultivation	51,400 ha	+4%	53,700 ha
<i>Of which in</i>			
Alto Huallaga	17,100 ha	+1%	17,200 ha
Apurímac-Ene	15,800 ha	+1%	16,000 ha
La Convención-Lares	12,700 ha	+1%	12,900 ha
Elsewhere	5,800 ha	+31%	7,600 ha
Weighted average sun-dried coca leaf yield	2,200 kg/ha	0%	2,200 kg/ha
Potential production of sun-dried coca leaf <sup>2</sup>	114,100 mt	2%	116,800 mt
Potential production of cocaine HCl	280 mt	+4%	290 mt
In per cent of global production	28%		29%
Average farm-gate price of sun-dried coca leaf	US\$ 2.5/kg	0%	US\$ 2.5/kg
Average farm-gate price of coca paste	US\$ 551/kg	+9%	US\$ 600/kg
Average price of cocaine HCl	US\$ 825/kg	+3%	US\$ 851/kg
Potential farm-gate value of sun-dried coca leaf	US\$ 285 million	+2%	US\$ 292 million
Reported eradication of coca cultivation	12,688 ha	-5%	12,072 ha
Reported seizure of sun-dried coca leaves	1,067 mt	+74%	1,858 mt
Reported seizure of coca paste	5,044 kg	+24%	6,260 kg
Reported seizure of cocaine HCl	14,749 kg	-45%	8,119 kg
Reported destruction of coca laboratories <sup>3</sup>	718	-7%	665
Of which cocaine HCl processing laboratories	11	+45%	16
Reported seizure of opium latex	109 kg	+14%	126 kg

### Cultivation and eradication

In 2007, coca cultivation in Peru expanded by 4 % to 53,700 hectares. Despite experiencing the second consecutive increase in two years, coca cultivation remained

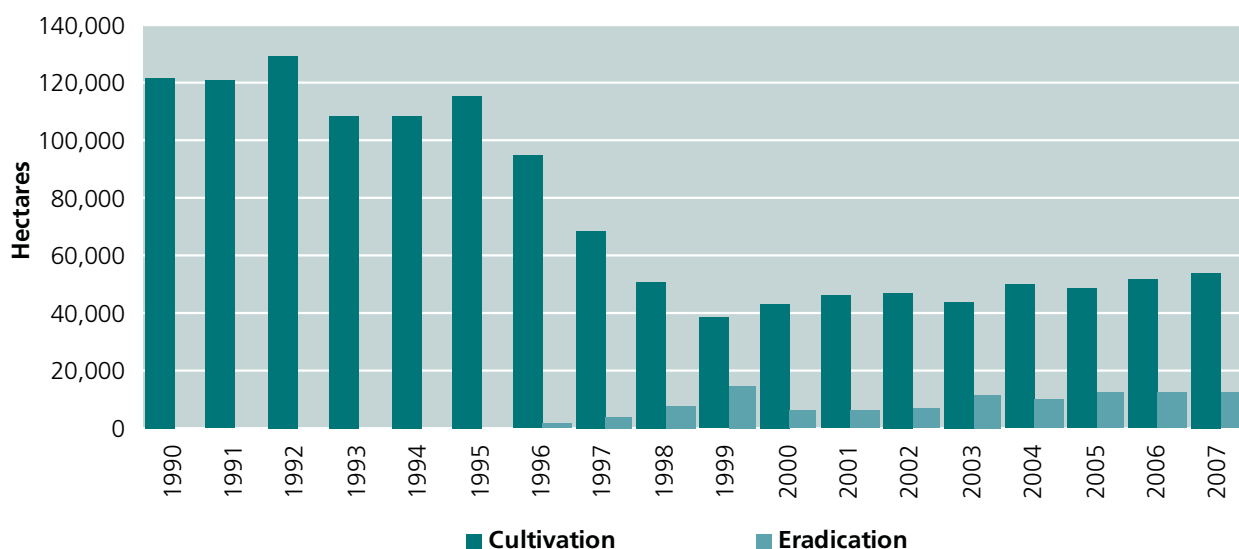
well below the levels registered in the mid 1990s, when Peru was the world's largest cultivator of coca bush. Peru remains the world's second largest coca cultivating country.

<sup>1</sup> The information in this section comes from the report on Coca Cultivation in Peru (UNODC/Government of Peru, June 2008), and can also be found on the internet (<http://www.unodc.org>).

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

<sup>3</sup> Excluding coca leaf macerations pits.

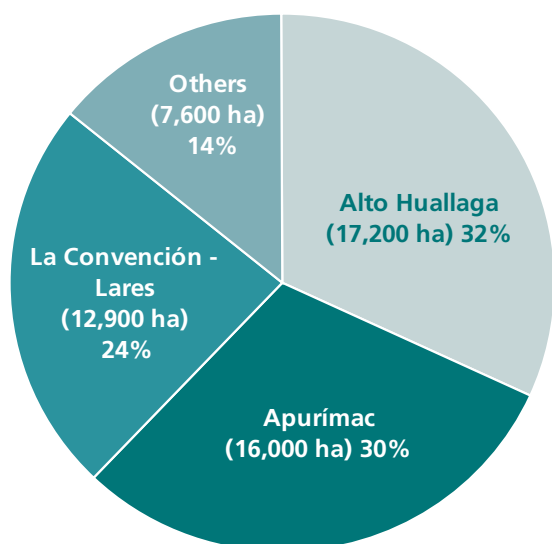
Peru, coca cultivation and eradication (hectares), 1990 to 2007



Peru's three largest coca regions represented 86 % of the total area under coca bush cultivation in 2007. Cultivation levels in each region remained relatively stable, increasing only marginally. In Alto Huallaga, the largest cultivating region, the expansion of the area under cultivation in some localities was offset by the eradication of coca fields in others.

In 2007, the smaller coca cultivating regions contrib-

Peru, coca cultivation by region, 2007



uted much more to the overall increase both in percentage and absolute terms (over 1,800 ha). The coca area in Inambari-Tambopata, a region close to the border with Bolivia, increased significantly, by 21% or 500 ha. This region now contains 2,900 ha under coca cultivation, and has experienced its third consecutive increase in three years. The small and partly new coca cultivation

areas in the North and North East of the country increased moderately and continued to constitute only a small proportion of the overall area under cultivation. Eradication of coca bush, which in Peru is done manually, decreased slightly but remained at the relatively high level of over 12,000 ha.

Government reports on eradication indicate that opium poppy cultivation exists in Peru. When the last estimate was released by the Government in 2004, the level of opium poppy cultivation was estimated at 1,400 ha.<sup>4</sup>

### Production

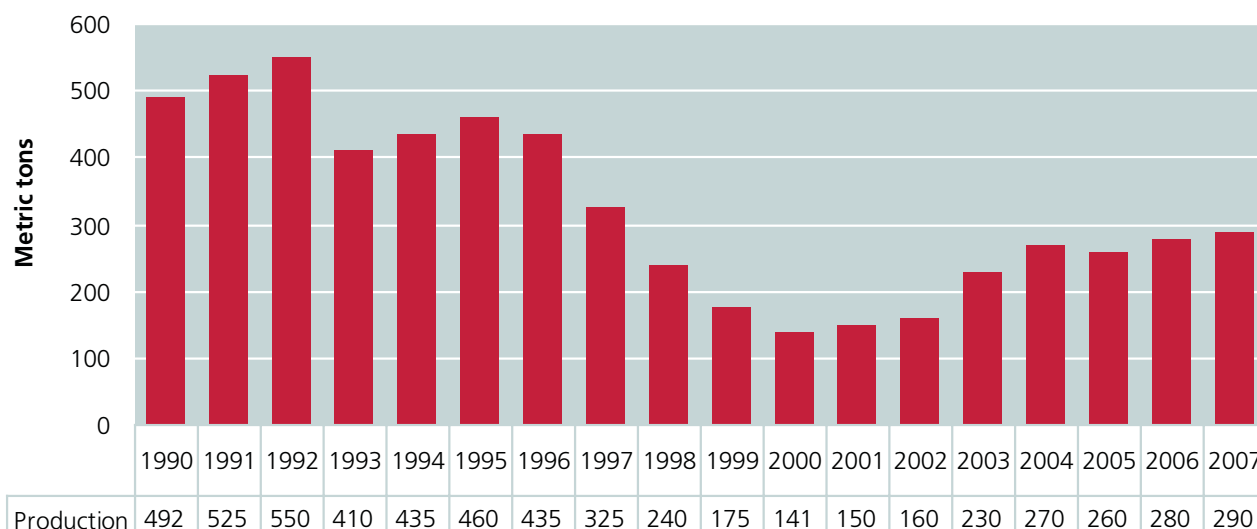
Total cocaine production was 290 mt in 2007, an increase by 4 % over 2006. While this is the highest production figure since 1997, it is still much lower than the amounts registered during the first half of the 1990s. In 2007, Peru accounted for 29 % of global cocaine production.

### Prices

Although prices of coca leaf and derivatives had fallen between 2005 and 2006, prices were stable to increasing between 2006 and 2007. On average, farm-gate prices for sun-dried coca leaf remained unchanged at US\$ 2.5/kg in 2007. Seasonal variation and regional price differences continue to exist. Inambari-Tambopata, a region en route to Bolivia where coca leaf is traded at a higher price level, had the highest average price of US\$ 3.1/kg, while the lowest average price (US\$ 2.0/kg) was recorded

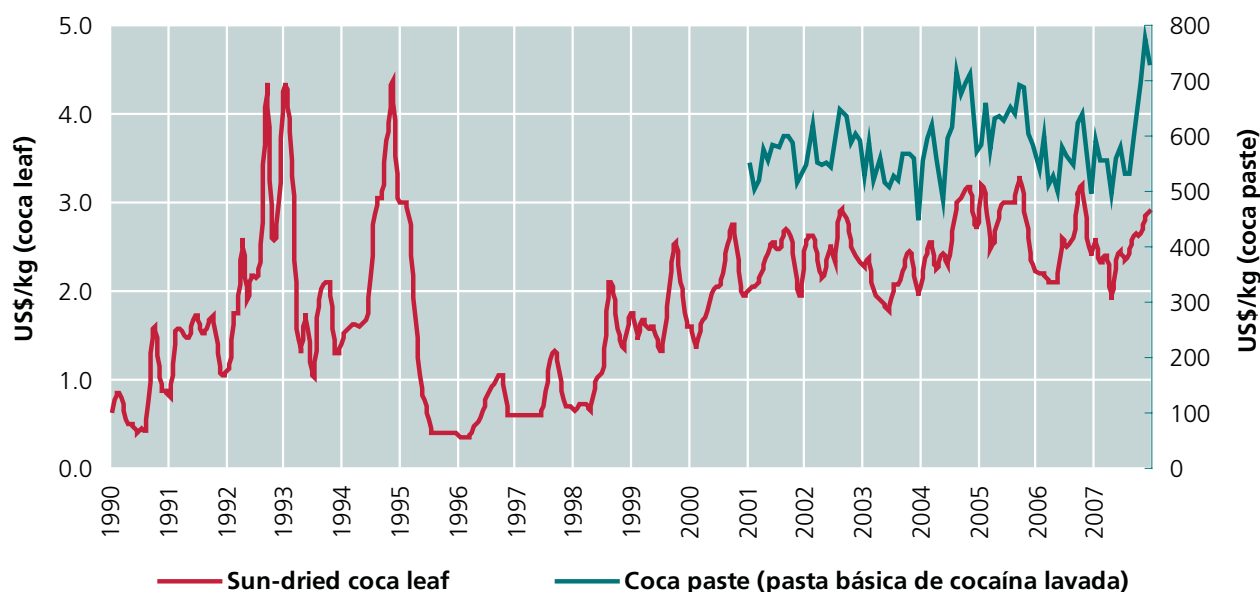
<sup>4</sup> UNODC and the Government of Peru are currently working to establish a methodology for measuring the extent of opium poppy cultivation in Peru.

## Peru, potential cocaine production (metric tons), 1990 to 2007



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

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

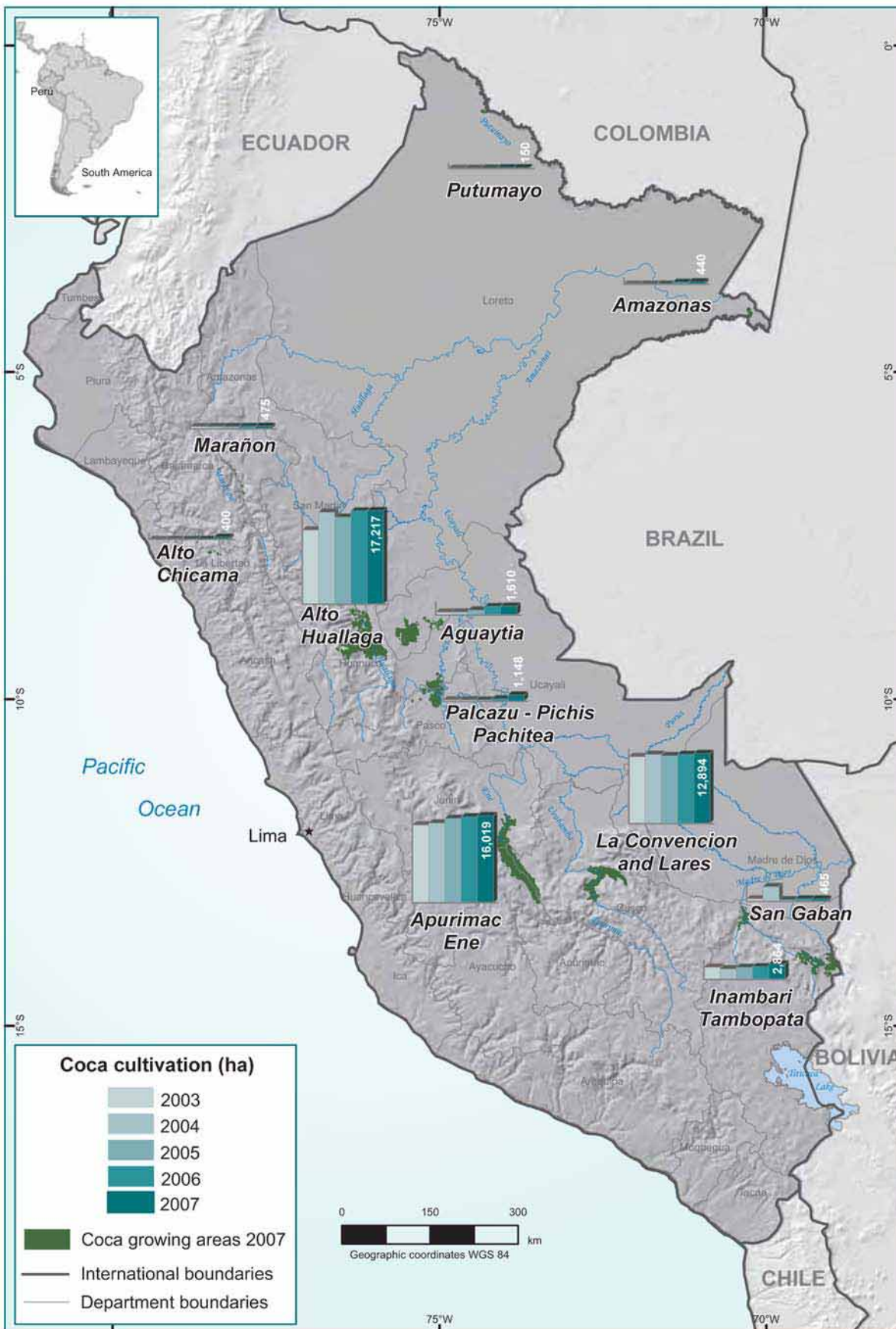


in Apurímac, a large, centrally located coca region linked to cocaine production.

Unlike coca leaf prices, the price for coca paste increased on average by 9% from US\$ 551/kg in 2006 to US\$ 600/kg in 2007, mainly due to a steep rise in the last quarter of the year (This occurred paralleled to an appreciation of the Sol against the dollar.) Despite this increase, the average price of coca paste remained at a lower level than in 2004 and 2005. The wholesale price of cocaine in production regions increased only slightly

by 3% from US\$ 825/kg in 2006 to US\$ 851/kg in 2007.

Peru, coca cultivation by region, 2003 to 2007



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