

1.3 Opium / Heroin market

1.3.1 Production

Estimated area under illicit opium poppy cultivation decreases by 22 per cent

In 2005, the estimated area under illicit opium poppy cultivation in the world decreased by 22 per cent, due to less cultivation in the three main source countries of illicit opium in the world: Afghanistan, Myanmar and Lao People's Democratic Republic (Lao PDR).

This was particularly noteworthy, as in Afghanistan, in 2005, opium poppy cultivation decreased for the first time after three consecutive years of increases. The area under opium poppy cultivation in Afghanistan decreased by 21 per cent from about 131,000 hectares in 2004 to a level of 104,000 hectares in 2005. Opium poppy cultivation decreased in 19 provinces in 2005. The largest declines - in absolute terms - were found in Nangarhar (27,120 hectares), Badakshan (8,237 hectares) and in Uruzgan (6,475 hectares). There is considerable diversity in opium poppy cultivation in Afghanistan. While opium poppy cultivation in Central Afghanistan almost disappeared in 2005, declining from 4,600 hectares in 2004 to a mere 106 hectares in 2005, increases of more than 10 per cent were seen in 10 provinces. Altogether, five provinces (in order of magnitude: Helmand, Kandahar, Balkh, Farah and Badakshan) accounted for 65 per cent of the total area under opium poppy cultivation in 2005.

Sustained progress has been made by the Governments of Myanmar and Lao PDR in addressing the issue of illicit opium poppy cultivation. In 2005, Myanmar achieved a further reduction of the total area under opium poppy cultivation, by 26 per cent to 32,800 hectares. In Lao PDR, cultivation even dropped by a staggering 72 per cent, to 1,800 hectares. Since 1998, the year of the Twentieth Special Session of the General Assembly on countering the World Drug Problem together, opium poppy cultivation in these two South-East Asia countries has been reduced by 78 per cent.

In the Americas, opium poppy continues to be cultivated for use in the illicit markets in North America. In Colombia, opium poppy cultivation was introduced in the 1980s when coffee prices declined. Estimates by the Government of Colombia put the area under opium poppy cultivation at about 2,000 hectares, a reduction of 50 per cent compared to the 4,000 hectares recorded in 2004. The Government of the United States estimates that, in 2005, 3,300 hectares were devoted to opium poppy cultivation in Mexico. (The Government of Mexico did not provide any cultivation data to UNODC at the time of producing the present report.) The situation as regards opium poppy cultivation in Peru is difficult to quantify as the UNODC supported national illicit crop monitoring system has not yet established a reliable methodology for the detection of opium poppy in Peru. Colombia, Mexico and Peru all continue to eradicate opium poppy cultivation.

Low levels of opium poppy cultivation continue to exist in many regions and countries such as the Caucasus region, Russian Federation, Thailand, Ukraine and Viet Nam.

... but global opium production declines by only 5 per cent

Despite the decrease in the area under opium poppy cultivation, global opium production decreased by only 5 per cent to 4,620 metric tons in 2005. In Afghanistan, potential opium production was estimated at around 4,100 metric tons, representing a 2.4 per cent decrease compared to 2004. The clear discrepancy between the large decrease in cultivation and the relatively small decrease in production was primarily due to more favourable weather conditions during the growing season. In Afghanistan, the opium yield in 2005 was estimated at 39 kg/ha, an increase of 22 per cent compared to the 2004 yield figure of 32 kg/ha.

Higher yields were also reported from Myanmar. In Shan State, where ninety per cent of the total opium poppy cultivation in Myanmar takes place, yields ranged from 5.4 kg in East Shan State to 13.4 kg in South Shan State, where additional rain and improved cultivation practices resulted in significantly higher yields.

Opium prices mirror the supply situation

In Afghanistan, overall prices for fresh opium at harvest time remained essentially stable at around US\$100/kg in 2005. However, regional price differences are pronounced and mirror the supply situation throughout the country. While low prices in northern Afghanistan reflect strong production increases in that area, the highest prices can be found in central Afghanistan where cultivation practically ceased in 2005. In Myanmar, the average farm gate price of opium at harvest time was estimated at US\$ 187/kg which represents an increase of 22 per cent compared to 2004. In Lao PDR, the average farm gate price of opium increased by 139 per cent to US\$ 521, reflecting the scarcity of opium produced in a country that is on the verge of becoming opium poppy free.

Most opium processing laboratories dismantled in Russia, Moldova and Afghanistan

In 2004, 11 countries reported the destruction of opium processing laboratories involved in the illicit manufacture of products of the opium/heroin group in 2004 with a total of 787 sites destroyed. Most laboratories were reported destroyed by the Russian Federation (57 per cent), followed by Republic of Moldova (24 per cent), and Afghanistan (16 per cent). Laboratories in the Republic of Moldova mostly produced acetylated opium, whereas laboratories destroyed in Afghanistan and the Russian Federation mainly produced heroin and opium, respectively. Smaller numbers of destroyed laboratories were reported by Colombia (9), Australia (5), India (3), Myanmar (2), Belarus, Hong Kong Special Administrative Region of China, Mexico and Turkey (all 1 each).

Continuous decline of reported heroin processing laboratories in Turkey

Over the last couple of years, the number of destroyed laboratories belonging to the opium/heroin group has shown strong fluctuations without indicating a clear trend. Comparisons over several years, however, show the declining number of heroin processing laboratories

dismantled in Turkey, which was once considered one of the main heroin processing locations. Only one heroin processing laboratory was reported dismantled in 2004, down from 10 in 2002 and 14 in 1997. This appears to support information that opium is increasingly being processed into morphine and heroin in Afghanistan. While in 1992/93, 56 per cent of the morphine and heroin seizures of Turkey consisted of morphine, this proportion fell to 35 per cent over the 2000-2004 period and to just 2 per cent in 2005, also suggesting that there has been a downward trend in heroin manufacture in Turkey, while heroin manufacture in Afghanistan has increased.

OPIUM

Table 4. GLOBAL ILLICIT CULTIVATION OF OPIUM POPPY AND PRODUCTION OF OPIUM, 1990-2005

	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
CULTIVATION^(a) IN HECTARES																
SOUTH-WEST ASIA																
Afghanistan	41,300	50,800	49,300	58,300	71,470	53,759	56,824	58,416	63,674	90,583	82,171	7,606	74,100	80,000	131,000	104,000
Pakistan	7,488	7,962	9,493	7,329	5,759	5,091	873	874	950	284	260	213	622	2,500	3,100	2,400
Subtotal	48,788	58,762	58,793	65,629	77,229	58,850	57,697	59,290	64,624	90,867	82,431	7,819	74,722	82,500	134,100	106,400
SOUTH-EAST ASIA																
Lao PDR	30,580	29,625	19,190	26,040	18,520	19,650	21,601	24,082	26,837	22,543	19,052	17,255	14,000	12,000	6,600	1,800
Myanmar	150,100	160,000	153,700	165,800	146,600	154,070	163,000	155,150	130,300	89,500	108,700	105,000	81,400	62,200	44,200	32,800
Thailand ^(b)	1,782	3,727	3,016	998	478	168	368	352	716	702	890	820	750			
Viet Nam ^(b)	18,000	17,000	12,199	4,268	3,066	1,880	1,743	340	442	442						
Subtotal	200,462	210,352	188,105	197,106	168,664	175,768	186,712	179,924	158,295	113,187	128,642	123,075	96,150	74,200	50,800	34,600
LATIN AMERICA																
Colombia ^(c)		1,160	6,578	5,008	15,091	5,226	4,916	6,584	7,350	6,500	6,500	4,300	4,100	4,100	3,950	2,000
Mexico ^(d)	5,450	3,765	3,310	3,960	5,795	5,050	5,100	4,000	5,500	3,600	1,900	4,400	2,700	4,800	3,500	3,300
Subtotal	5,450	4,925	9,888	8,968	20,886	10,276	10,016	10,584	12,850	10,100	8,400	8,700	6,800	8,900	7,450	5,300
OTHER																
Combined ^(e)	8,054	7,521	2,900	5,704	5,700	5,025	3,190	2,050	2,050	2,050	2,479	2,500	2,500	3,000	3,590	5,200
GRAND TOTAL	262,754	281,560	259,686	277,407	272,479	249,919	257,615	251,848	237,819	216,204	221,952	142,094	180,172	168,600	195,940	151,500
POTENTIAL PRODUCTION IN METRIC TONS																
OPIUM^(f)																
SOUTH-WEST ASIA																
Afghanistan	1,570	1,980	1,970	2,330	3,416	2,335	2,248	2,804	2,693	4,565	3,276	185	3,400	3,600	4,200	4,100
Pakistan	150	160	181	161	128	112	24	24	26	9	8	5	5	52	70	61
Subtotal	1,720	2,140	2,151	2,491	3,544	2,447	2,272	2,828	2,719	4,574	3,284	190	3,405	3,652	4,270	4,161
SOUTH-EAST ASIA																
Lao PDR	202	196	127	169	120	128	140	147	124	124	167	134	112	120	43	14
Myanmar	1,621	1,728	1,660	1,791	1,583	1,664	1,760	1,676	1,303	895	1,087	1,097	828	810	370	312
Thailand ^(b)	20	23	14	17	3	2	5	4	8	8	6	6	9			
Viet Nam ^(b)	90	85	61	21	15	9	9	2	2	2						
Subtotal	1,933	2,032	1,862	1,998	1,721	1,803	1,914	1,829	1,437	1,029	1,260	1,237	949	930	413	326
LATIN AMERICA																
Colombia ^(c)		16	90	68	205	71	67	90	100	88	88	80	76	76	56	28
Mexico ^(d)	62	41	40	49	60	53	54	46	60	43	21	71	47	84	73	69
Subtotal	62	57	130	117	265	124	121	136	160	131	109	151	123	160	129	97
OTHER																
Combined ^(e)	45	45	-	4	90	78	48	30	30	30	38	18	14	24	38	36
GRAND TOTAL	3,760	4,274	4,143	4,610	5,620	4,452	4,355	4,823	4,346	5,764	4,691	1,596	4,491	4,765	4,850	4,620
HEROIN																
Potential HEROIN	376	427	414	461	562	445	436	482	435	576	469	160	449	477	495 ^(g)	472 ^(g)

(a) Opium poppy harvestable after eradication.

(b) Due to small production, cultivation and production were included in the category " Other countries", for Viet Nam as of 2000 and for Thailand as of 2003.

(c) According to the Government of Colombia, cultivation covered 7,350 hectares and 6,500 hectares and production amounted to 73 mt and 65 mt in 1998 and 1999 respectively.

(d) As its survey system is under development, the Government of Mexico indicates that it can neither provide cultivation estimates nor endorse those published by UNODC, which are derived from US Government surveys.

(e) Includes countries such as Russia, Ukraine, Central Asia, Caucasus region, other C.I.S. countries, Baltic countries, Guatemala, Peru, Viet Nam (as of 2000), Thailand (as of 2003), India, Egypt and Lebanon.

(f) All figures refer to dry opium.

(g) Heroin estimates are based on the Afghanistan Opium Survey (430 mt in 2004 and 420 mt in 2005). For other countries, a 10:1 ratio is used for conversion from opium to heroin.

Fig. 18: Global opium poppy cultivation 1990-2005 (ha)

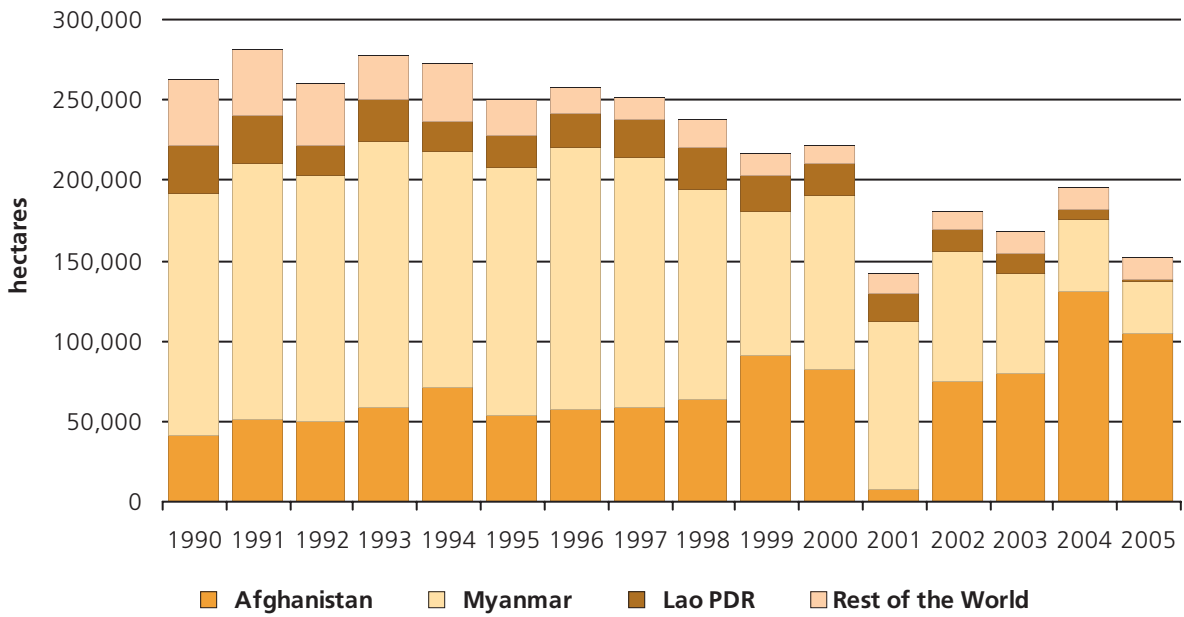
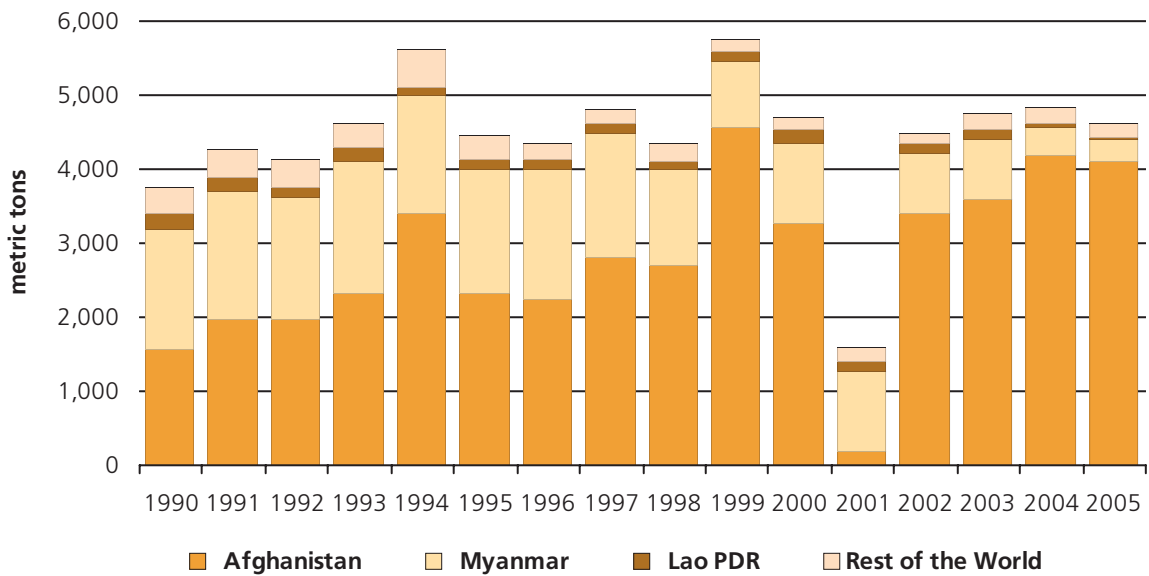
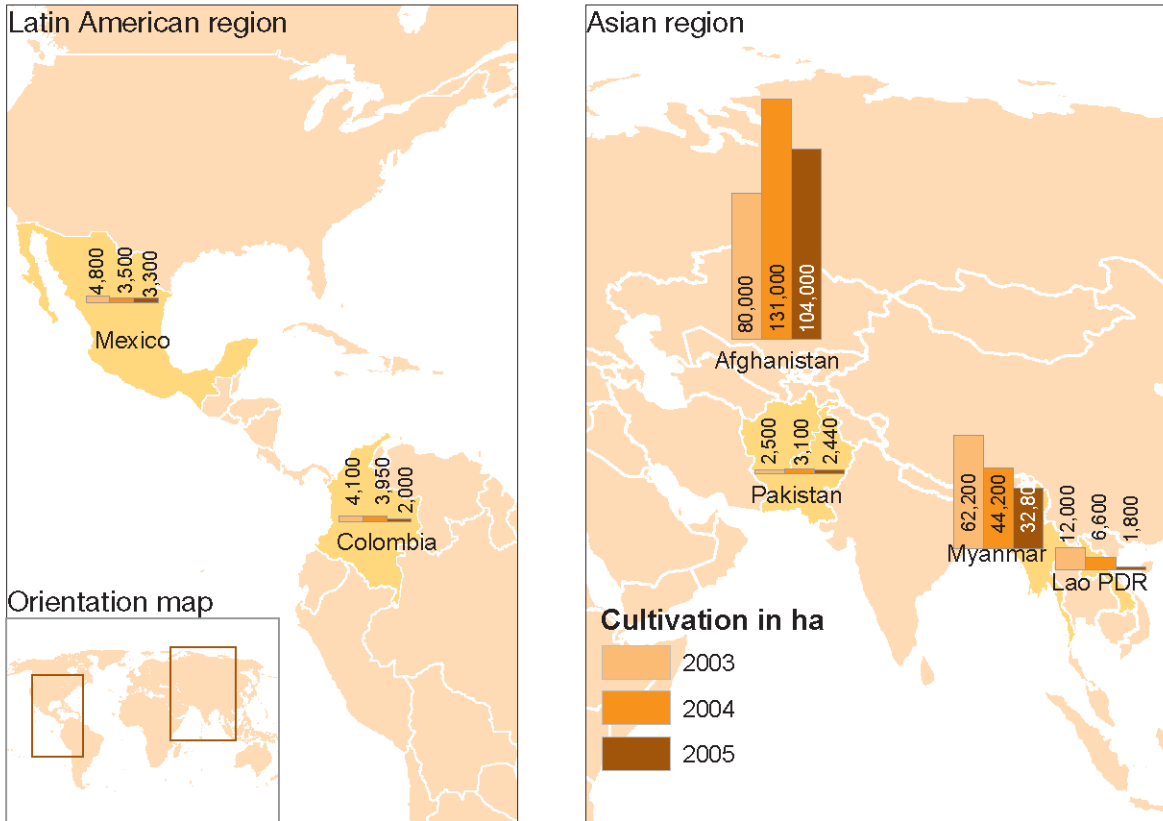


Fig. 19: Global opium production 1990-2005 (metric tons)



Map 2. Opium poppy cultivation (2003 - 2005)



Map 3. Opium production (2003 - 2005)

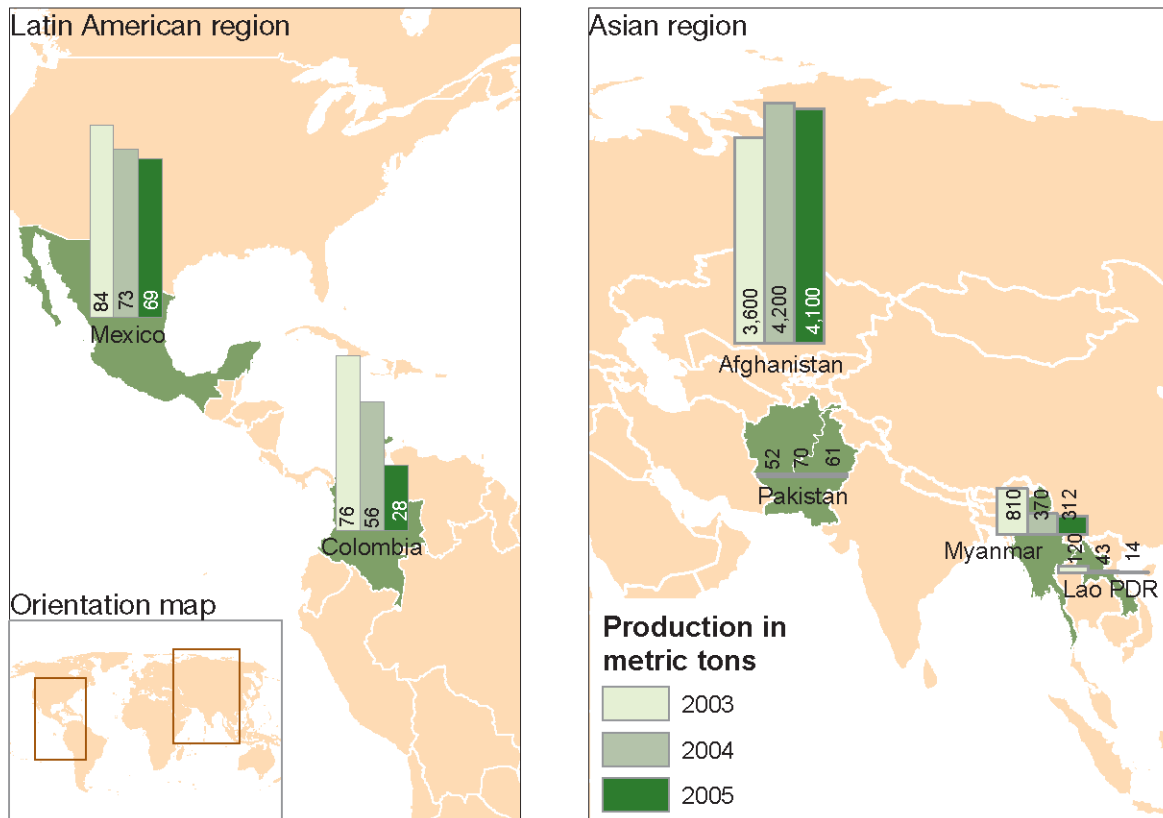
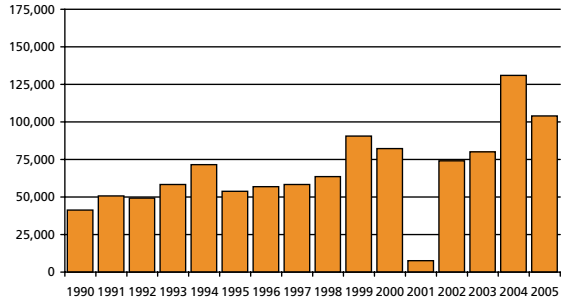
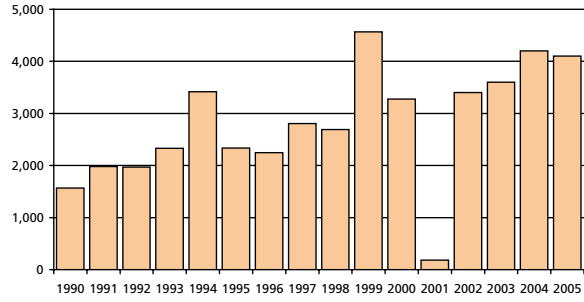


Fig. 20:
Annual opium poppy cultivation and opium production in main producing countries, 1990 - 2005

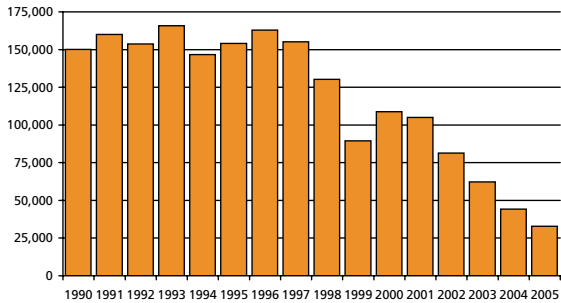
AFGHANISTAN - OPIUM POPPY CULTIVATION (ha), 1990-2005



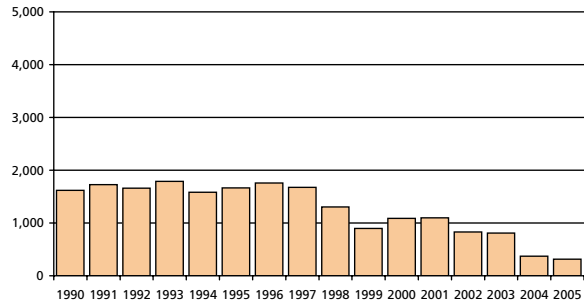
AFGHANISTAN - OPIUM PRODUCTION (metric tons), 1990-2005 (metric tons)



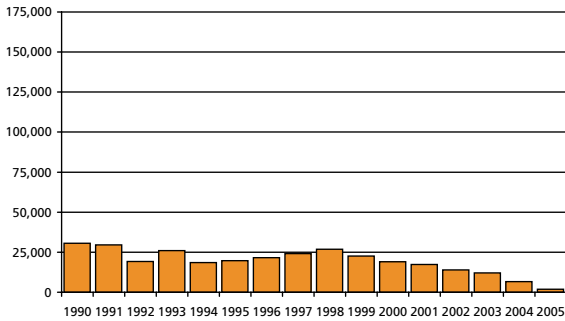
MYANMAR - OPIUM POPPY CULTIVATION (ha), 1990-2005



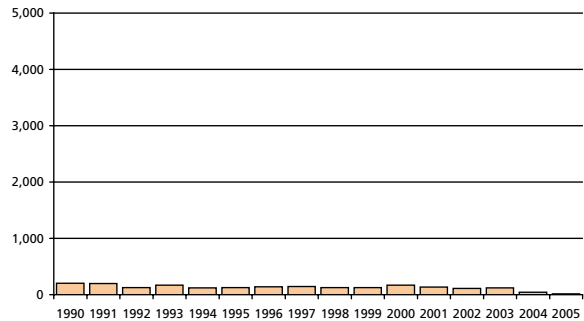
MYANMAR - OPIUM PRODUCTION (metric tons), 1990-2005



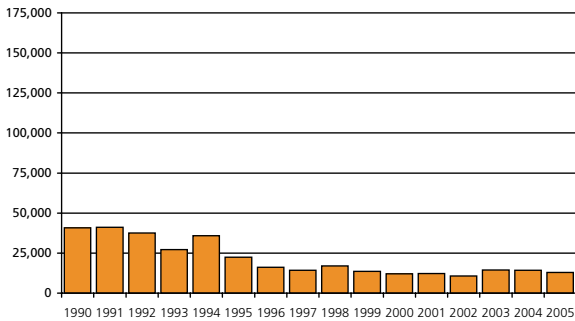
LAO PDR - OPIUM POPPY CULTIVATION (ha), 1990-2005



LAO PDR - OPIUM PRODUCTION (metric tons), 1990-2005



REST OF THE WORLD - OPIUM POPPY CULT. (ha), 1990-2005



REST OF THE WORLD - OPIUM PRODUCTION (metric tons), 1990-2005

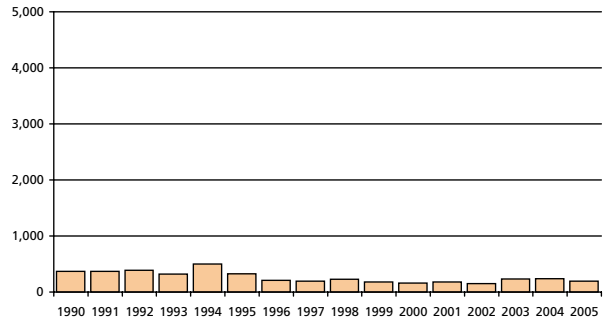


Fig. 21: Opium poppy cultivation

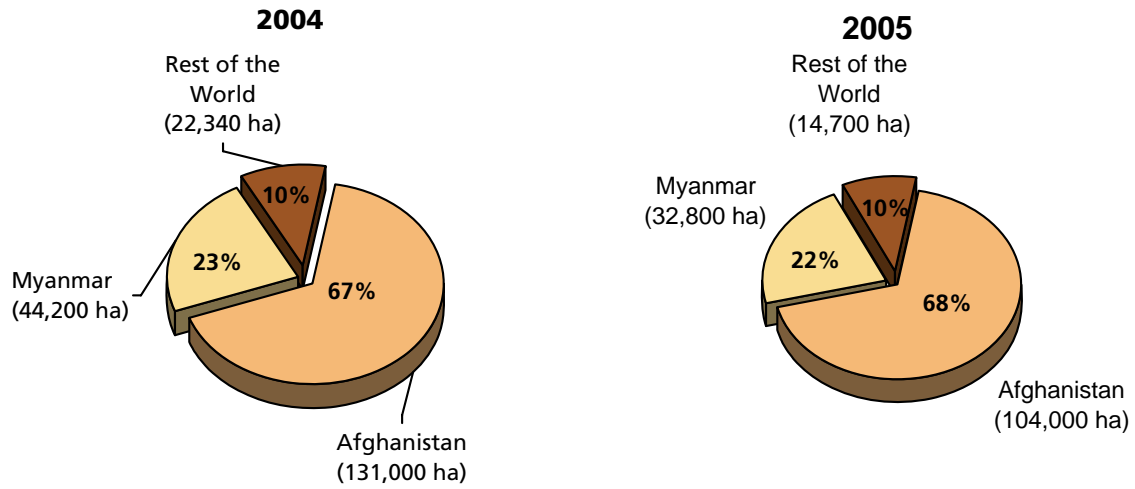
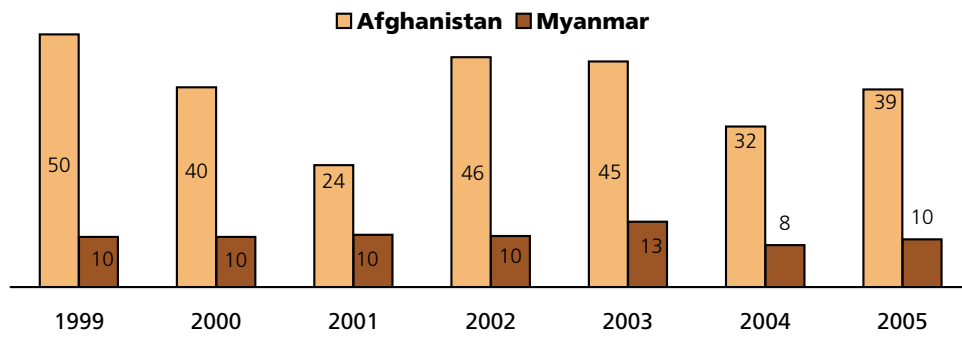


Fig. 22: Opium yields in Afghanistan and Myanmar (kg/ha), 1999-2005



Differences in opium yield between Afghanistan and Myanmar are due to differences in opium poppy varieties and growing conditions. Variations of yields from year to year in the same country are mostly caused by changes in weather conditions and/or, as in the case of Afghanistan in 2001, by a shift in the relative distribution of cultivation from irrigated to rain-fed land.

Fig. 23: Opium production

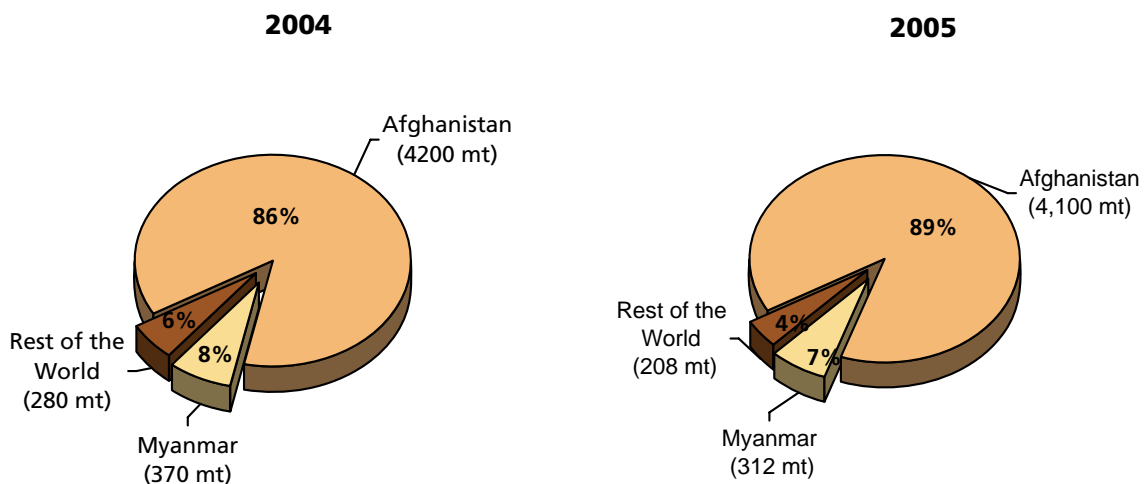


Table 5. Significant opium poppy eradication reported (ha), 1995-2005

	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
Afghanistan					400	121			21,430		5,103
Colombia	5,074	7,412	7,333	3,077	8,434	9,279	2,583	3,371	2,994	3,865	2,108
Egypt										65	
Lao PDR									4,134	3,556	2,575
Mexico	15,389	14,671	17,732	17,449	15,461	15,717	15,350	19,157	20,034	15,926	20,803
Myanmar	3,310	1,938	3,093	3,172	9,824	1,643	9,317	7,469	638	2,820	3,907
Pakistan		867	654	2,194	1,197	1,704	1,484		4,185	5,200	707
Peru				4	18	26	155	14	57	98	92
Thailand	580	886	1,053	716	808	757	832	507	767	122	110
Venezuela										87	154
Vietnam	477	1,142	340	439		426				32	

1.3.2 Trafficking

Opiates are trafficked along three major routes ...

There are currently three distinct production centres for opiates which supply three distinct markets. Trafficking flows are as follows:

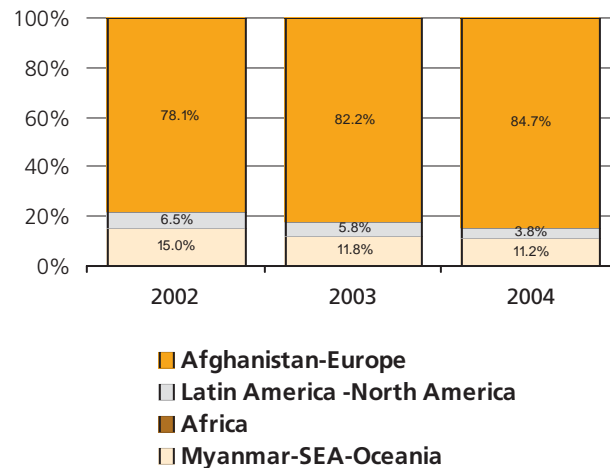
- from Afghanistan to neighbouring countries, the Middle East and Europe;
- from Myanmar/Laos to neighbouring countries of South-East Asia, (notably China) and to the Oceania region (mainly Australia);
- from Latin America (Mexico, Colombia and Peru) to North America (notably USA)

The bulk of global opiate seizures (heroin, morphine and opium, expressed in heroin equivalents¹⁸) takes place in the countries surrounding Afghanistan (South-West Asia, South and Central Asia: 60 per cent of global seizures in 2004). Including Europe, such seizures amounted to almost 85 per cent of the global total. Remaining opiate seizures are made in East & South-East Asia and Oceania, accounting for 11 per cent of the global total; the Americas (4 per cent of the global total) and Africa (0.3 per cent). Africa is supplied from both South-West Asia and South-East Asia.

... with most seizures being made along the Afghanistan-Europe trafficking route.

Between 2002 and 2004, the proportion of opiate seizures along the Afghanistan–Europe trafficking route increased from 78 per cent to 85 per cent, reflecting rising levels of opium production in Afghanistan and thus rising levels of opiate trafficking from Afghanistan. The volume of opiate seizures along the other two main routes showed a downward trend (from 7 per cent to 4 per cent in the Americas, and from 15 to 11 per cent for the South-East Asia/Oceania route). These declines in the proportions in total opiate seizures in the latter two markets are in line with reports of actual declines of production in South-East Asia and in Latin America.

Fig. 24: Distribution of opiate seizures (expressed in heroin equivalents¹⁸), 2002-2004



Source: UNODC, Annual Reports questionnaire Data/DELTA.

While there is some opiate trafficking from South-East Asia to North America and to Europe and from South-West Asia to South-East Asia (notably China) and to North America, the amounts trafficked across the various markets tend to be rather small.

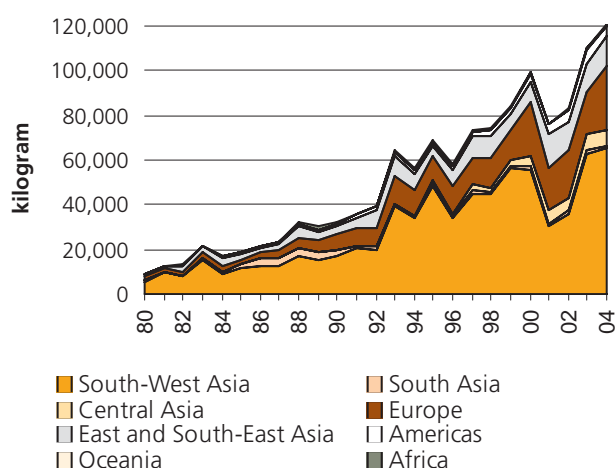
Global seizures of opiates continue to increase ...

Global seizures of opiates (heroin, morphine and opium, expressed in heroin equivalents) reached 120 metric tons in 2004, an increase of 9 per cent as compared to the previous year. Following a decline of opium and morphine seizures in 2001, the year of the opium poppy cultivation ban in Afghanistan, and of heroin in 2002 (mainly reflecting a delay of about a year in the production of opium in Afghanistan and the arrival of heroin in the West European markets), opiate seizures grew again strongly in subsequent years. Global opiate seizures in 2004 were 21 per cent higher than in 2000. Over the 1994-2004 period opiate seizures grew, on average, by 8 per cent per year.

¹⁸ Opium, morphine and heroin, expressed in heroin equivalents using a 10 : 1 ratio for opium to heroin (i.e. 10 kg opium for the manufacture of 1 kg of heroin) and a 1:1 conversion rate for morphine to heroin.

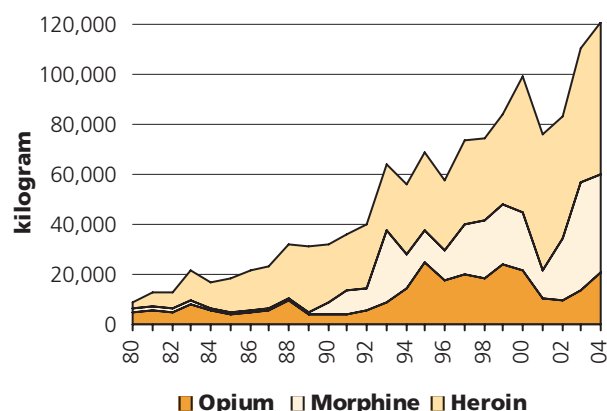
The increases in opiate seizures in 2003 had been particularly pronounced in South-West Asia (+75 per cent) and Central Asia (+33 per cent), i.e. in the countries surrounding Afghanistan, reflecting the large scale resumption of opium production in Afghanistan in 2002 and 2003. In 2004, increases in opiate seizures were particularly strong in South-East Europe (Turkey and the Balkan countries: +109 per cent) reflecting the resumption of large-scale trafficking along the Balkan route.

Fig. 25: Global opiate seizures, expressed in heroin equivalents, regional breakdown, 1980-2004



Source: UNODC, Annual Reports questionnaire Data/DELTA.

Fig. 26: Global opiate seizures, expressed in heroin equivalents, by substance, 1980-2004



Source: UNODC, Annual Reports questionnaire Data/DELTA.

... and exceed the rise in global opium production

If opium, heroin and morphine seizures for 2004 are transformed into opium equivalents, opiate interception ratios for Afghanistan are equivalent to 1.1 per cent of domestic opium production. They rise to 15.5 per cent if seizures of South-West Asia are considered and to 17 per cent if seizures of Central Asia are included as well. At the global level, an estimated 25 per cent of globally produced opiates were seized in 2004, up from 23 per cent in 2003 and just 10 per cent in 1994, indicating that global enforcement efforts improved over the last decade.

Significant increase of global opium seizures in 2004 ...

Opium seizures increased by 57 per cent to 210 metric tons in 2004 and are thus approaching the peak levels of 1999 and 2000 (the years prior to the 2001 opium ban in Afghanistan), reflecting – *inter alia* – increases of opium production in Afghanistan.

The large majority of opium (94 per cent) continues to be seized in South-West Asia. Seizures in this subregion increased by 77 per cent in 2004. The increase in opium seizures outpaced the increase in opium production in Afghanistan, which amounted to 17 per cent in 2004.

Most opium continues to be seized in the Islamic Republic of Iran, which in 2004, with seizures of 35 metric tons, accounted for 83 per cent of all opium seizures in the world. Compared to 2003, opium seizures in Iran increased by 34 per cent in 2004. The level of opium seizures in Afghanistan also increased strongly, from 8.4 metric tons in 2003 to 21.5 metric tons in 2004, thus approaching the seizures reported from Pakistan (25 metric tons).

... and seizures of heroin and morphine reaching a new record high

Global heroin seizures rose by 13 per cent in 2004 while morphine seizures declined by 10 per cent, reflecting a trend towards trafficking the end-product rather than the intermediary product. Heroin and morphine seizures together rose by 3 per cent to close to 100 metric tons in 2004, a new record high.

Seizures of heroin and morphine more than doubled in Afghanistan, from 0.9 metric tons in 2003 to 2.5 metric tons in 2004, reflecting strengthened law enforcement capacity. For South-West Asia as a whole, heroin and

morphine seizures amounted to 45 tons, with the bulk seized in Pakistan (25 tons) and in Iran (18 tons). Seizures in Central Asia amounted to 6 metric tons in 2004.

The shift in opium production centres in Afghanistan affected the way opium and heroin was trafficked to neighbouring countries. Already in 2004, it was observed that seizures in Pakistan and in the Central Asian countries bordering Afghanistan fell, while seizures in Iran rose, indicating a possible shift in long-established trafficking patterns. This development continued and became even more pronounced in 2005.

Decreasing opium production in Badakshan (north-eastern Afghanistan) affected the level of trafficking to countries in Central Asia (19 per cent, down from 24 per cent of the opiates leaving Afghanistan in 2004). Most of the opiates trafficked via Central Asia are destined for the Russian Federation, with only some 15 per cent being trafficked onwards to other illicit drug markets in Europe.

Declining opium production in eastern Afghanistan also reduced the amounts of opiates trafficked towards Pakistan. In 2004, about 20 per cent of all opiates are estimated to have left Afghanistan via Pakistan, down from 37 per cent a year earlier. Strengthened controls along the Afghanistan/Pakistan border also appear to have contributed to the decline. On the other hand, opiate trafficking towards Iran continued to increase (close to 60 per cent, up from 40 per cent of the opiates leaving Afghanistan in 2004). While these results for 2005 may have been exceptional, ongoing production increases of opium in southern Afghanistan in 2006²³ are likely to put an additional burden on law enforcement authorities of Iran in their efforts to prevent the trafficking of Afghan opiates to and through their country.

Strong increases of opiate seizures in Europe...

Europe's opiate seizure rose by 49 per cent in 2004 and reached almost 29 metric tons (in heroin equivalents), the highest such figure ever recorded.

While most of the opiates for the C.I.S. countries and some of the opiates for the Nordic countries are trafficked via Central Asia, most of the opiates for Western Europe are trafficked from Afghanistan to Turkey and then along various branches of the Balkan route. More than 90 per cent of opiates in Europe originate in

Afghanistan.

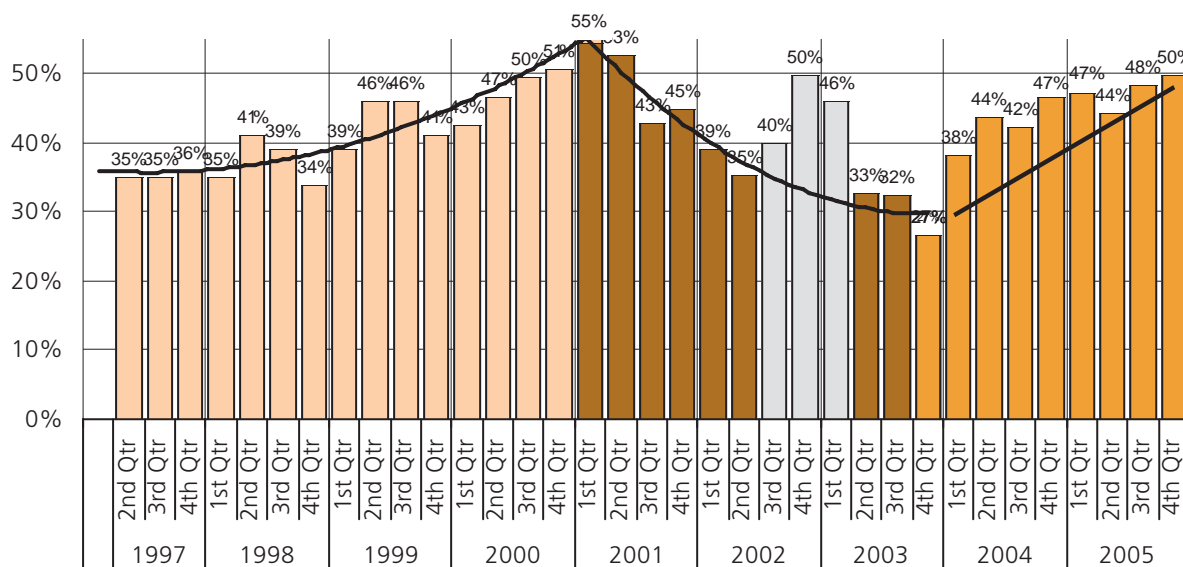
The largest amounts of opiates over the last decade were trafficked from Turkey via Bulgaria, Romania and Hungary to Slovakia, the Czech Republic, Germany and the Netherlands, or via Hungary and/or Slovakia to Austria and then to Germany and the Netherlands. In addition, a southern branch developed as of 1999/2000, with heroin smuggled from Turkey via Bulgaria and the former Yugoslav Republic of Macedonia (FYROM) to Albania, Italy, Austria and Germany. Since 2003/04, the traditional Balkan route from Turkey via Bulgaria, FYROM, Serbia & Montenegro, Bosnia Herzegovina, Croatia, Slovenia, Austria, Germany and the Netherlands has re-emerged and gained in importance, while trafficking via the more eastern Balkan route (Hungary) has lost in importance. In addition, trucks transported on ferries from Turkey to Albania, Croatia, Slovenia and northern Italy (Trieste) are frequently used to traffic opiates to Western Europe, often transiting Austria and Germany. The German Federal Criminal Police Office reports that in 2004, 45 per cent of all German heroin seizures took place close to the Austrian border. There have been also reports of shipments from Iran via the Caucasus region to the Ukraine and then to Romania for final destinations in Western Europe.

The increase in European seizures was primarily due to the doubling of opiate seizures in South-East Europe (Balkan route countries). The largest increases in South-East Europe were reported by Turkey, Serbia & Montenegro, Croatia and Albania. More than 15 metric tons were seized in South East Europe, exceeding the total seizures made in West & Central Europe (9 metric tons) and Eastern Europe (4 metric tons in European C.I.S. countries).

Turkey more than doubled its seizures and accounted with more than 13 metric tons for 47 per cent of all European opiate seizures in 2004. Thus, the Turkish authorities reported, once again, most opiate seizures in Europe, a position the country has held without interruption since 1987. The use of improved risk assessment tools also appears to have contributed to this increase.

The second largest opiate seizures in Europe, for the second year in a row, were reported by the Russian Federation (4 metric tons or 14 per cent of European opiate seizures).

Fig. 27: Average purity* of heroin in the England & Wales: 1997 to 4th quarter of 2005



*unweighted results of police and customs
Source: UK Forensic Science Service.

The largest seizures among West European countries were made by the authorities in United Kingdom¹⁹, Italy, Netherlands, Germany and France. United Kingdom, Italy and Netherlands accounted for close to 70 per cent of all opiate seizures in West & Central Europe in 2004. If Germany and France are included, that proportion rises to close to 85 per cent.

The United Kingdom is Europe's main opiate market and a final destination country. Usually, opiates are trafficked to the United Kingdom via the Balkan route. However, for 2004, it has been reported that heroin has also been trafficked by air from Pakistan. An estimated 25 per cent of total trafficked opiates is estimated to enter the United Kingdom that way. Further reports received in 2005/2006 indicate that heroin shipments are trafficked from Bangladesh to Pakistan for onward trafficking to the United Kingdom. The increased trafficking of heroin towards the United Kingdom has already become apparent in the increases in heroin purity for England & Wales, an indicator for improved supply.

Italy is Europe's second largest market for opiates as well as an important transit country. In 2004, an estimated 71 per cent of all seizures were destined for domestic use, with the remaining portion destined for transit to

other countries, mainly Germany (26 per cent). Fifty eight per cent of the identified heroin deliveries entered Italy via Albania and 21 per cent were brought to Italy directly via Turkey. Eighty five per cent of all opiates enter Italy by sea. Seizures in Italy – in contrast to many other countries - remained unchanged in 2004.

The Netherlands is primarily an important transshipment location of opiates to other countries in West Europe, primarily France, Belgium, United Kingdom and Germany. The involvement of Dutch groups in this trade is, however, limited. Seizures in the Netherlands tripled in 2004, like seizures in neighbouring Belgium.

Increases in opiate seizures in 2004 were also reported from several countries in West and Central Europe, e. g. Poland (6-fold), Austria (5-fold), Czech Republic (4-fold), the Nordic countries: Denmark, Norway and Sweden (2-fold); Luxembourg (+70 per cent), Germany (+20 per cent), Spain (+12 per cent) and France (+5 per cent).

These seizures – in combination with hardly any noticeable heroin price changes - indicate a rising supply and thus higher availability of opiates in Europe. However, this has not – as yet – entailed an increase in the demand for opiates in Western Europe.

19 Latest data available for the UK refer to the year 2003.

Opiate seizures in Africa increase by 60 per cent

Opiate seizures in Africa also showed a strong increase in 2004 (+60 per cent). The bulk of this increase is due to seizures made in West and Central Africa which more than doubled between 2003 and 2004. West and Central Africa accounted for 63 per cent of all African heroin seizures in 2004. Increases were also reported and from Eastern Africa (+18 per cent), which accounts for 20 per cent of African seizures and from Northern Africa (+30 per cent), which accounts for 12 per cent of African opiate seizures. Heroin is trafficked through African states for markets in Europe and, to a lesser extent, North America. Sources of the opiates are both countries in South-West Asia (mainly Pakistan) and South-East Asia (mainly Thailand). The overall amounts of opiates seized in Africa are, however, still very modest (0.3 per cent of global opiate seizures), mainly reflecting inadequate law enforcement capabilities.

In South-East Asia, opiate seizures remain stable...

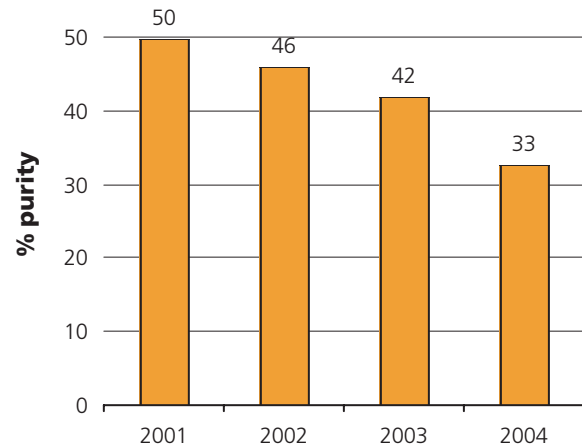
Opiates seizures in East and South-East Asia remained essentially stable in 2004 at 13 metric tons. China accounted for 82 per cent of these seizures, followed by Myanmar (8 per cent) and Thailand (6 per cent). With a seizure level of 11 metric tons, China reported the third largest opiate seizures worldwide after Iran and Pakistan. If only heroin is considered, China had with 10.8 metric tons – for the fourth year in a row – the world's largest heroin seizures.

...Sharp fall in Oceania ...

A sharp drop in opiate seizures was recorded for Oceania. Opiate seizures in Australia in 2003-2004 dropped by 86 per cent and were the lowest since 1986. Most of the heroin seized in Australia continues to originate in South-East Asia.

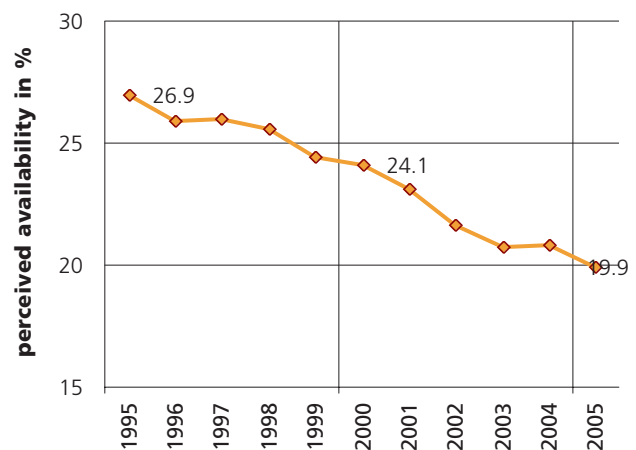
... Decline in the Americas.

Opiates seizures declined in the Americas in 2004 (-29 per cent), primarily reflecting lower levels of opiate seizures in Mexico (-80 per cent) and in the United States (-22 per cent). The main trafficking routes for heroin are from Mexico and from Colombia to the United States. The largest seizures of opiates in the Americas in 2004 were made by the United States, followed by Colombia. At the global level, the USA ranked 10th in terms of opiate seizures in 2004.

Fig. 28: Retail purity of Colombian heroin in the USA 2001-2004

Source: ONDCP, *National Drug Control Strategy 2006*.

In line with declining levels of supply, heroin prices started rising in the USA in 2004. Retail purity of Colombian heroin in the USA showed a clear downward trend over the 2001-2004 period. Availability of heroin, as perceived among US high-school students, has even shown a downward trend over the last decade.

Fig. 29: Perceived availability of heroin among US high-school students (unweighted average of 8th, 10th and 12th graders seeing it 'fairly easy' or 'very easy' to get heroin)

Source: NIDA, *Monitoring the Future*.

Fig. 30: USA: Heroin retail and wholesale prices (US\$/gram), 1990-2004

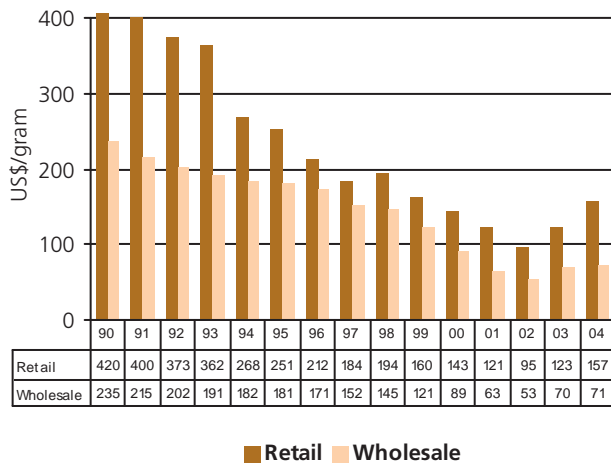
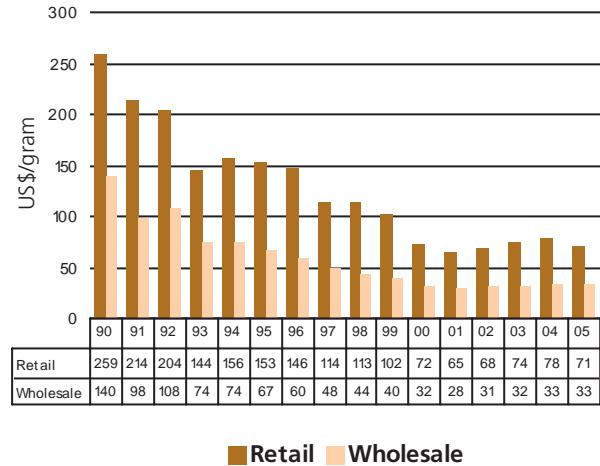
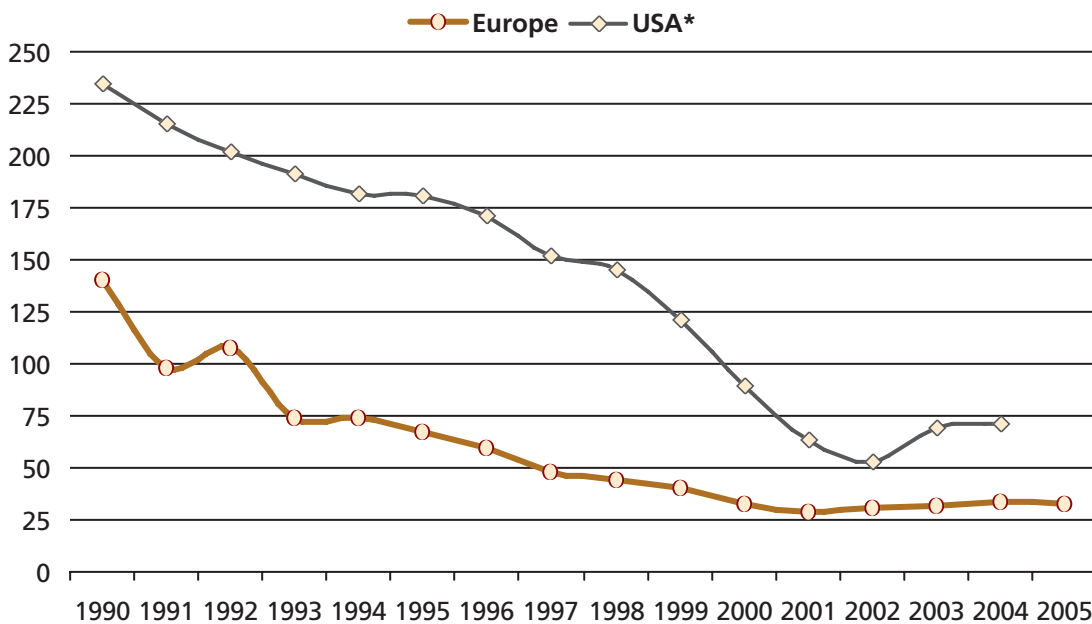


Fig. 31: Europe: Heroin retail and wholesale prices (US\$/gram), 1990-2005



Note: Retail and wholesale prices are not directly comparable because purity levels differ.

Fig. 32: Wholesale heroin prices in Europe and the USA (US\$/gram, 1990-2005, at street purity)



* 2005 data not available

Map 4. Seizures of opium in Asia in 2004 (only highest ranking countries represented)

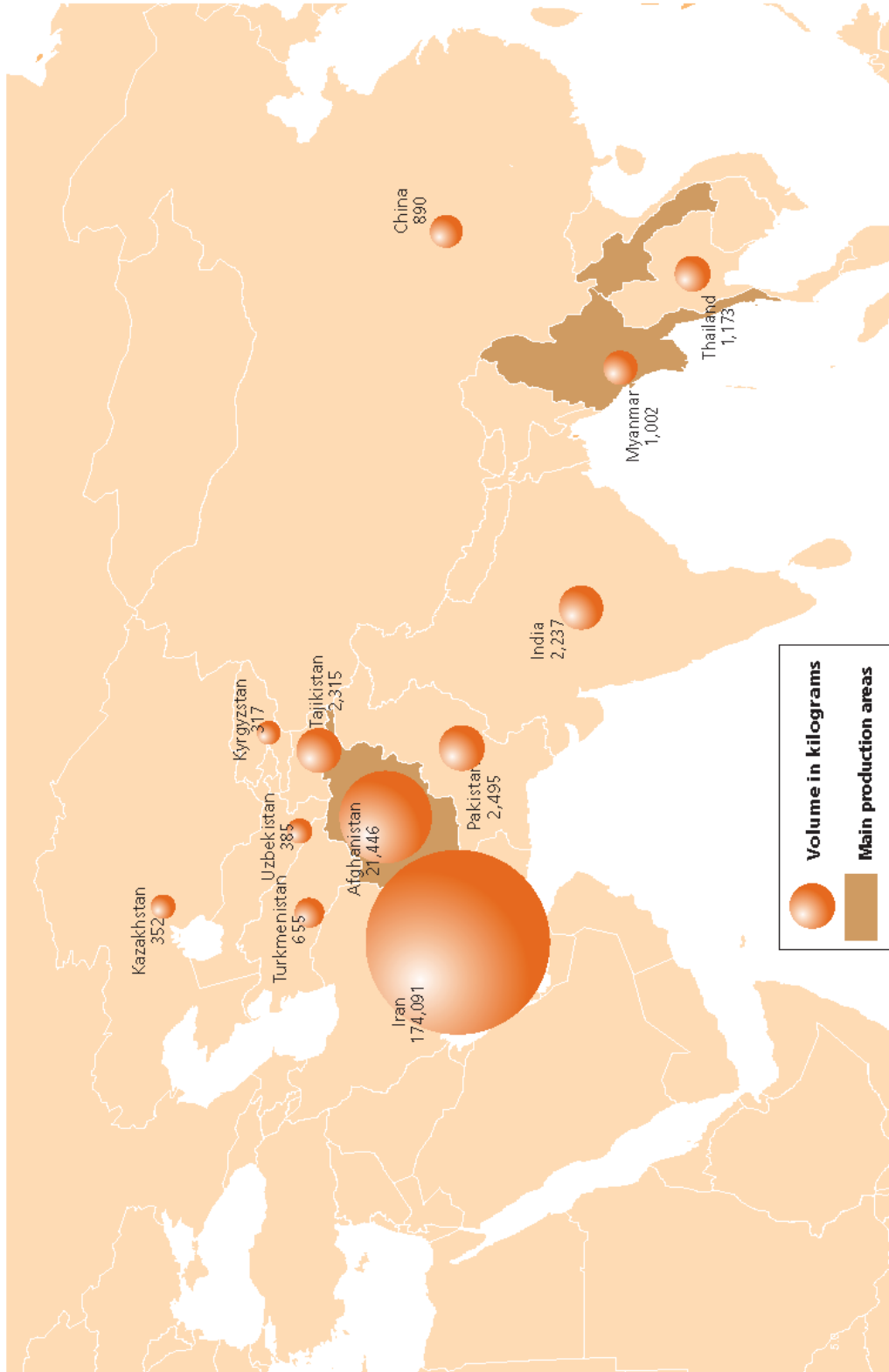


Fig. 33: Global illicit supply of opiates, 1994 - 2004

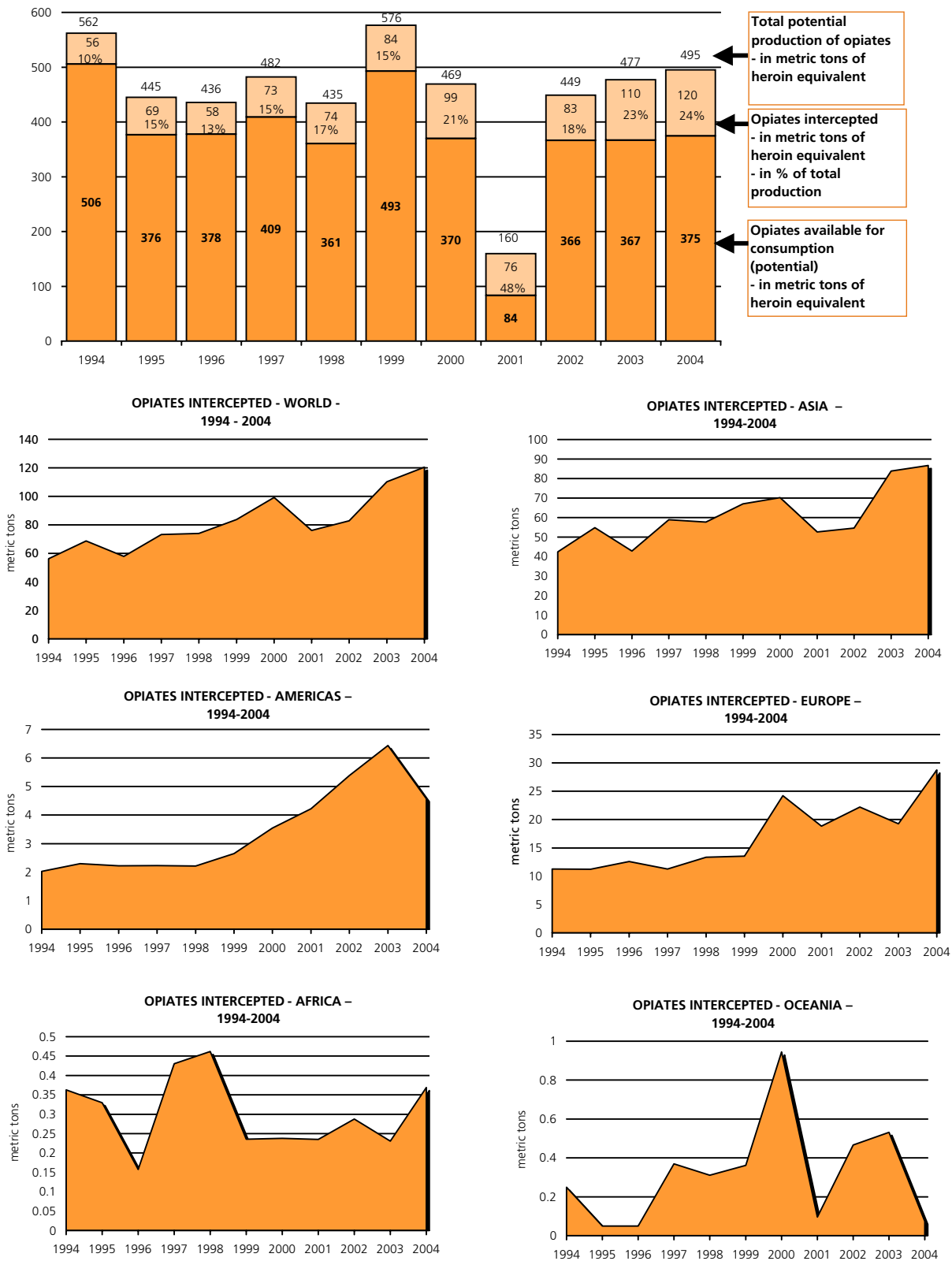
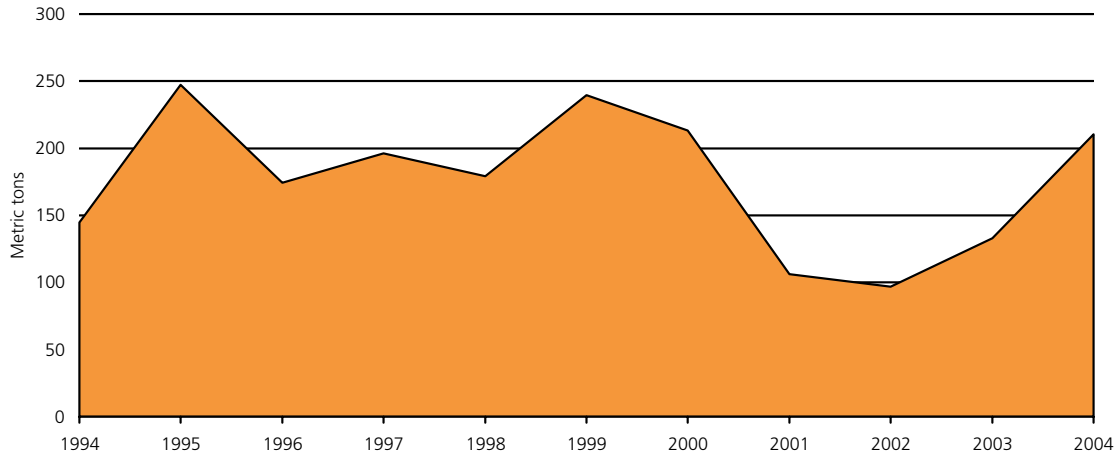


Fig. 34: Global seizures of opium, 1994 - 2004



Year	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004
Metric tons	145	247	174	196	179	239	213	106	97	133	210

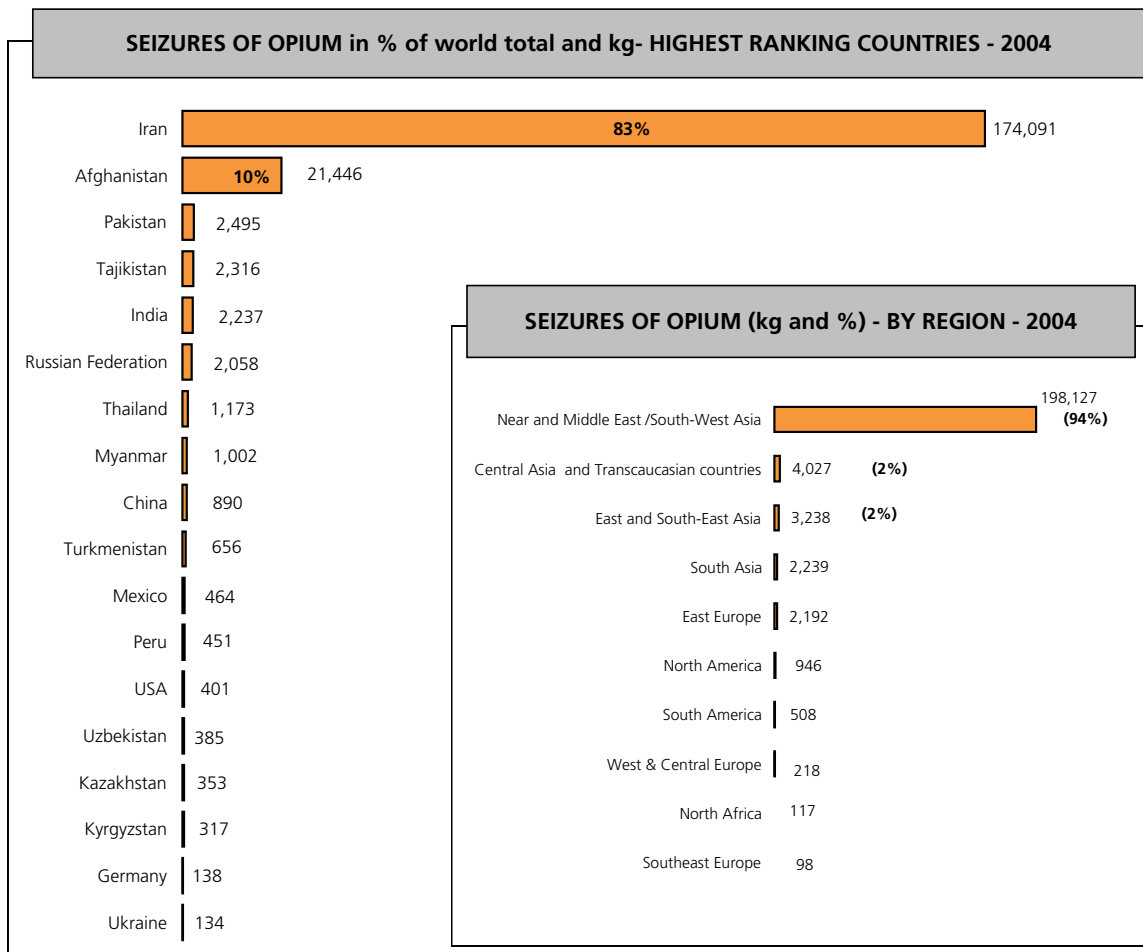
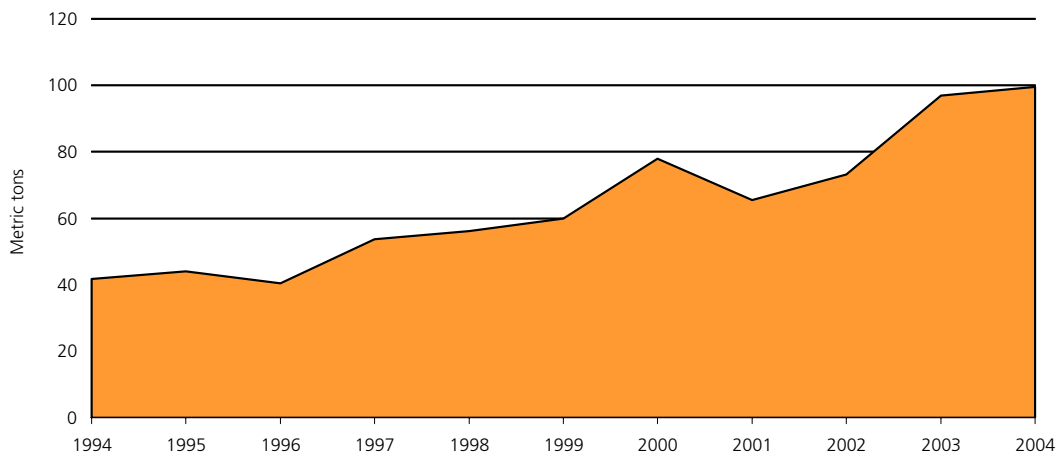
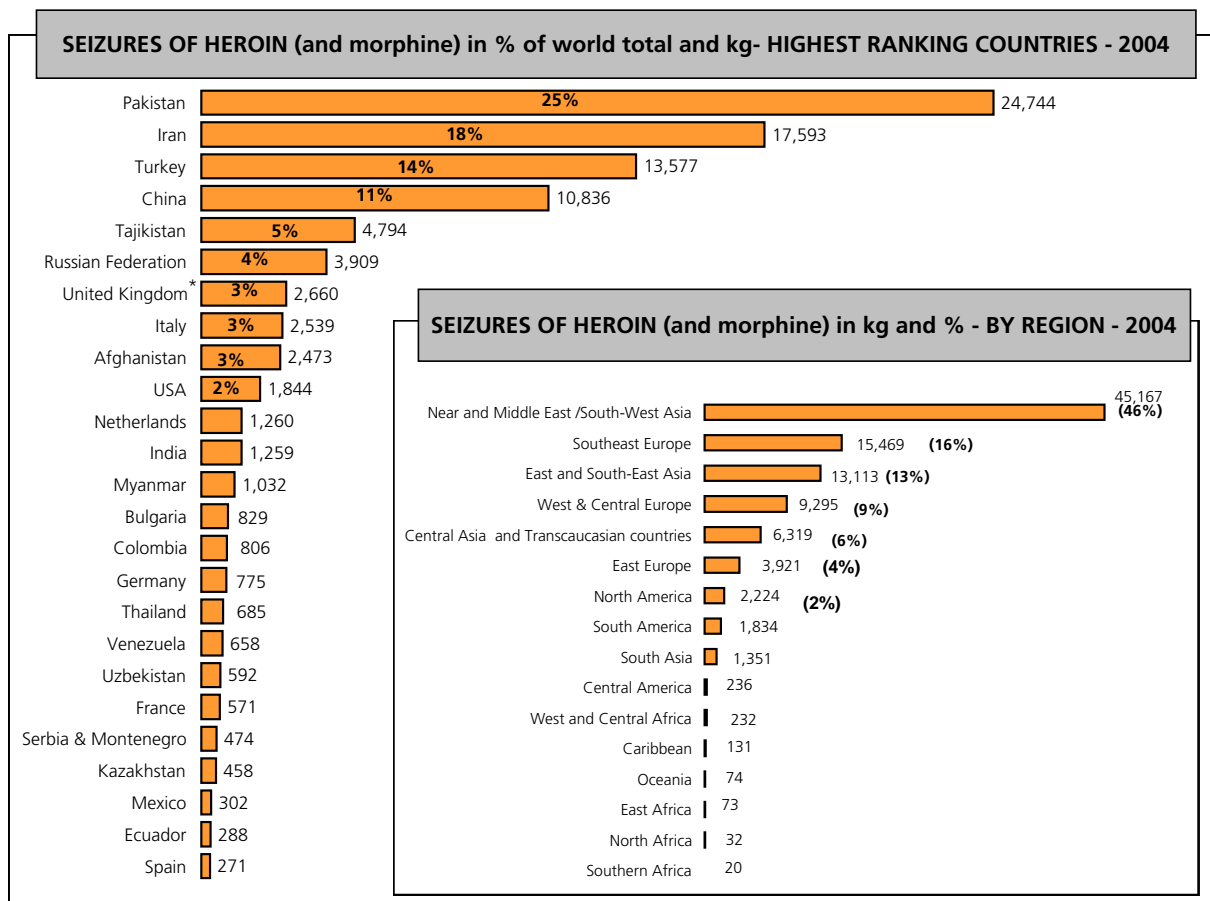


Fig. 35: Global seizures of heroin and morphine*, 1994 - 2004



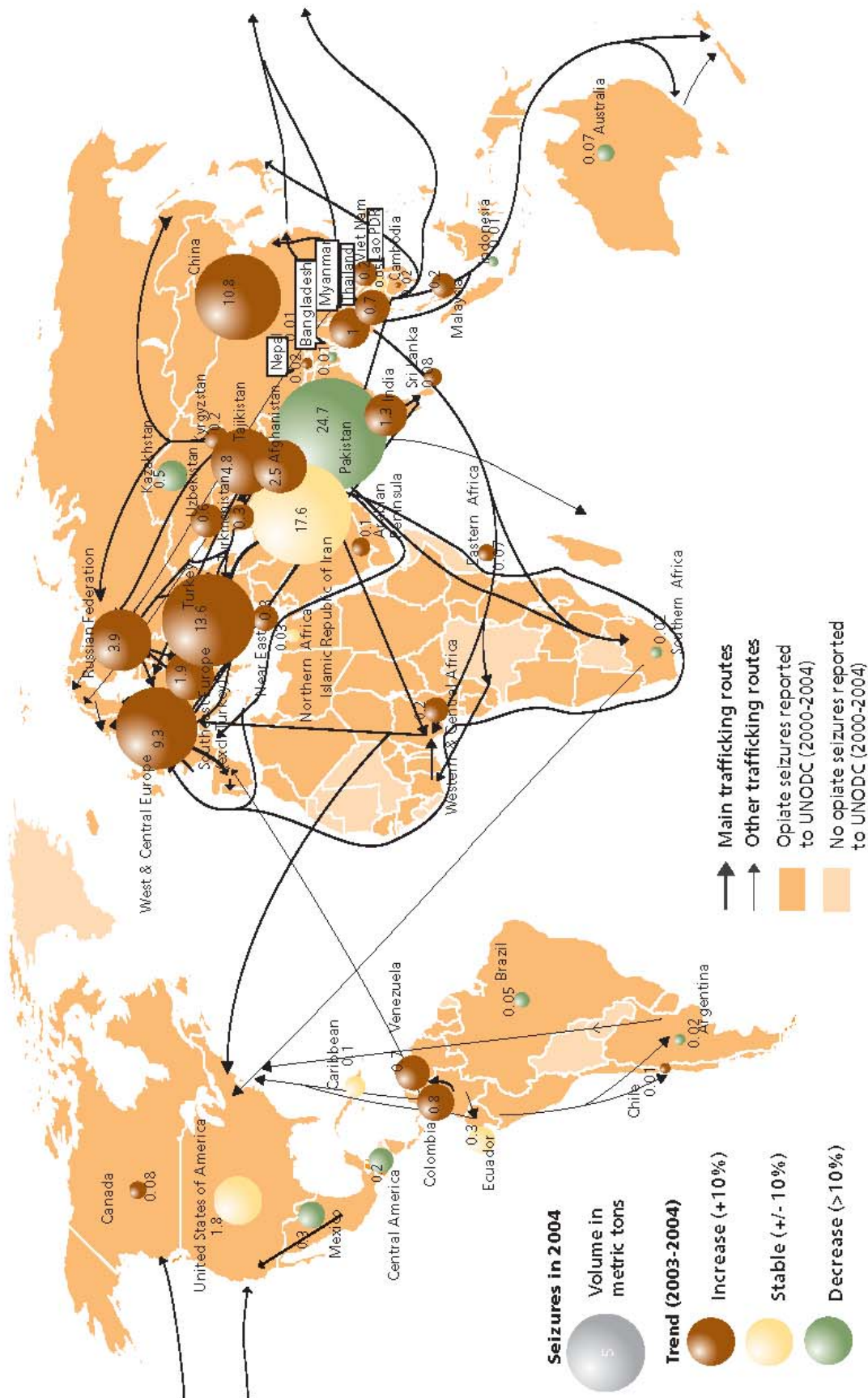
* metric ton equivalents. 1 kilogram of morphine is assumed to be 1 kilogram of heroin.

Year	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004
Metric tons	42	44	40	54	56	60	78	66	73	97	99



* data refer to 2003

Map 5: Heroin and morphine seizures 2003 - 2004 : extent and trends (countries reporting seizures of more than 0.01 mt (10 kg.))



Note: Routes shown are not necessarily documented actual routes, but are rather general indications of the directions of illicit drug flows.

1.3.3 Abuse

Global abuse of opiates remains essentially stable

Almost 16 million people in the world, or 0.4 per cent of the world's population age 15-64, are abusers of opiates. The prevalence estimate has remained essentially stable compared to the one published in the 2005 World Drug Report.

Opiates continue to be the main problem drug worldwide, accounting for almost two thirds of all treatment demand in Asia and close to 60 per cent of treatment demand in Europe.

Highest level of opiates abuse along the main opiate trafficking route

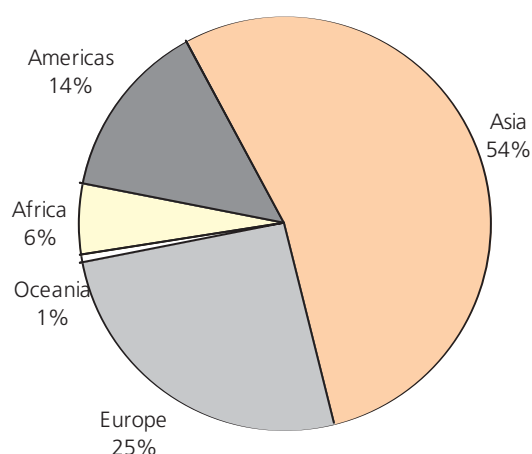
More than half of the world's opiates abusing population live in Asia and the highest levels of opiates abuse are along the main drug trafficking routes originating from Afghanistan. Annual prevalence of opiates, including heroin, is high, for example, in the Islamic Republic of Iran where the number of drug abusers is said to exceed 1.2 million (2.8 per cent of the general population age 15-64). It is also high in Kyrgyzstan (2.3 per cent of the population age 15-64) and Kazakhstan (1.3 per cent), and the number of registered drug users has continued to rise. The number of opiate users in Pakistan is estimated at around 0.7 million, including half a million using heroin (based on study results of 2000/2001). A study published in India in 2004 revealed prevalence rates of around 0.7 per cent for males²⁰, which is equivalent to an annual prevalence of around 0.4 per cent of the general population age 15-64 or slightly less than 3 million people. While abuse estimates for China show a rather low prevalence rate of less than 0.2 per cent, this is still equivalent to 1.7 million people.

The West and Central European opiates market is estimated to encompass some 1.6 million people. Major opiates markets in Western Europe are the United Kingdom (some 340,000), Italy (300,000), Spain (190,000),

Germany and France (about 170,000 persons each) and Portugal (50,000).

In the Americas, the largest opiates market is the United States with less than 1.2 million heroin users. According to national household survey results, Brazil is the largest opiates market in South America, with an estimated 700,000 users. It should be noted that most opiates users in Brazil use synthetic opiates and heroin abuse levels are very low.

Fig. 36: Regional breakdown of opiates abusers



Sources: UNODC, Annual Reports Questionnaire Data, Govt. reports, reports of regional bodies, UNODC estimates.

Heroin abusers make up about 71 per cent of opiate abusers

Globally about 71 per cent of the world's 16 million opiates abusers are abuse heroin, an estimated 11 million people. However, the proportions vary by region. Whereas almost all opiate consumers in Africa are reportedly abusing heroin, about two thirds of opiate

20 UNODC and Ministry of Social Justice and Empowerment, Government of India, The Extent, Pattern and Trends of Drug Abuse in India, National Survey, 2004.

abuses abusers consume heroin in Asia where use of opium is still widespread in a number of countries. Asia and Europe together account for 80 per cent of the world's heroin abusers.

The number of heroin abusers in West and Central Europe has been stable over the past few years and is estimated at around 1½ million. The number of heroin abusers in East Europe is estimated to be already higher than the corresponding number for West & Central Europe. Estimates of heroin abuse in Europe as a whole (3.3 million people) are higher than the corresponding estimates for the Americas as a whole (1 ½ million people). The largest numbers of heroin abusers are, however, found in Asia, accounting with 5.4 million for almost half of all heroin users worldwide.

Heroin abuse, by injection, exposes drug users to HIV/AIDS. Injecting drug use has propelled HIV/epidemics, inter alia, in India, Indonesia, Iran (Islamic Republic of), Libyan Arab Jamahiriya, Pakistan, Spain, Ukraine, Uruguay and Viet Nam, according to the Joint United Nations Programme on HIV/AIDS. In China, Central Asia and several countries of East Europe injecting drug use has been the most frequently cited mode of

transmission for HIV among HIV/AIDS cases in recent years.

Countries in East Africa, particularly Kenya, Mozambique and United Republic of Tanzania, have reported large increases in heroin abuse. A large increase of opiate abuse has been also reported by some countries in West Africa, including Côte d'Ivoire and Senegal. These increases are possibly a spillover effect due to increased availability of heroin which is trafficked through the region destined towards markets in Europe and North America.

Opiate abuse continues rising in Asia, mainly among countries close to Afghanistan - though falling in East and South-East Asia

UNODC's drug use perception trend, based on expert opinion gathered from Member States, suggests that opiate use continued growing in Asia in 2004, mainly reflecting increases in opiate abuse reported from neighbouring countries of Afghanistan, including the central Asian countries and most countries in South and South-West Asia.

Table 6. Annual prevalence of opiate abuse, 2003-2005

	Abuse of opiates		of which abuse of heroin	
	Number of abusers	in % of population age 15-64	Number of abusers	in % of population age 15-64
EUROPE	4,030,000	0.7	3,340,000	0.6
West & Central Europe	1,565,000	0.5	1,445,000	0.5
South-East Europe	180,000	0.2	175,000	0.2
Eastern Europe	2,285,000	1.6	1,720,000	1.2
AMERICAS	2,280,000	0.4	1,540,000	0.3
North America	1,300,000	0.5	1,240,000	0.4
South America	980,000	0.3	300,000	0.1
ASIA	8,530,000	0.3	5,430,000	0.2
OCEANIA	90,000	0.4	30,000	0.2
AFRICA	910,000	0.2	910,000	0.2
GLOBAL	15,840,000	0.4	11,250,000	0.3

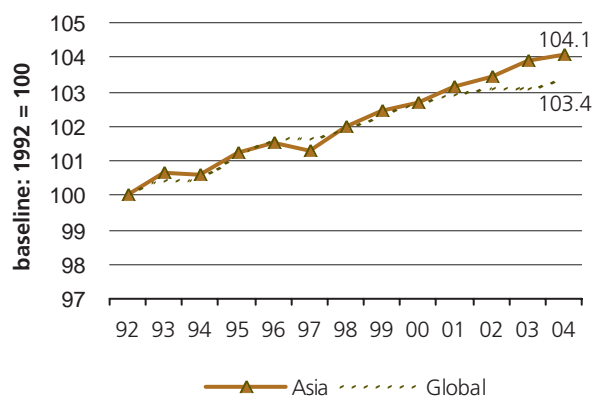
Above global average
 Around global average
 Below global average

Sources: UNODC, Annual Reports Questionnaire data, various Govt. reports, reports of regional bodies, UNODC estimates.

In contrast, most countries of East and South-East Asia reported declines in opiate abuse in 2004, apparently reflecting the strong declines of opium production in Myanmar and Lao PDR. These declines were, however, not sufficient to offset the increases in opiate use among neighbouring countries of Afghanistan.

Over a 12-year period (1992-2004) the drug use trend for Asia followed the global trend line, except for the last few years in which the increase was far more important in Asia than at the global level. Thus, by 2004, the drug use perception indicator for Africa was already clearly above the global average and above the threshold line of a 'significant increase'.

Fig. 37: Twelve-year opiate use trends as perceived by experts : Asia



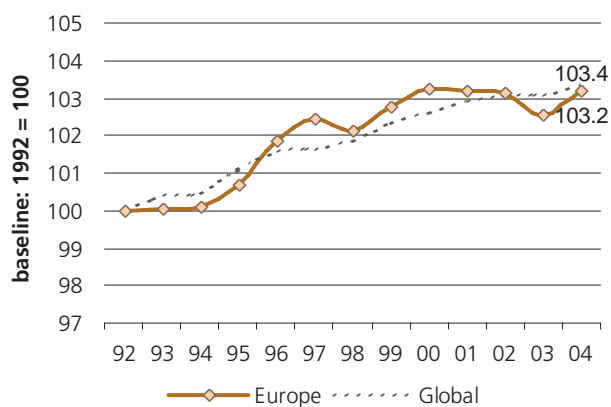
Sources: UNODC, Annual Reports Questionnaire Data, Government reports, UNODC Field Offices, UNODC's Drug Abuse Information Network for Asia and the Pacific (DAINAP), EMCDDA, CICAD, HONLEA reports and local studies.

Stable to declining use levels in West and Central Europe but rising abuse levels in East Europe

Opiate abuse remained largely stable or declined in West and Central Europe in 2004 according to reports received from Member States. A number of indirect indicators (treatment demand, arrest figures, drug-related deaths etc.) seem to confirm this assessment. This ongoing positive trend was, however, offset by rising levels of opiate abuse reported from East Europe (C.I.S. countries) as well as some countries of south-eastern Europe along the Balkan route, which are already suffering from a supply push of Afghan opiates. The net result was a small increase in UNODC's drug use perception trend for opiates in Europe. Nonetheless, the drug use perception trend for Europe is still mar-

ginally below the global average and basically at the same levels as in 2000 suggesting that consumption of opiates - overall - has stabilized in recent years, following years of strong increase in the 1990s.

Fig. 38: Twelve-year opiate use trends as perceived by experts: Europe

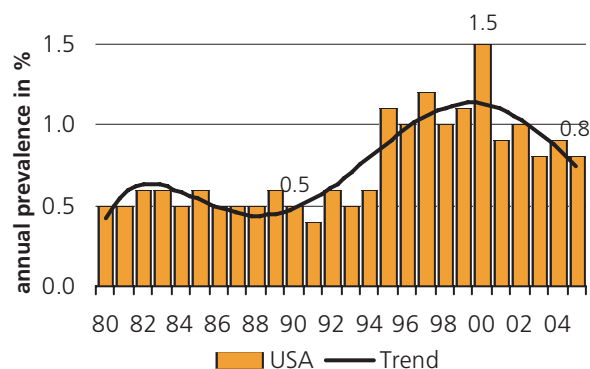


Sources: UNODC, Annual Reports Questionnaire Data, Government reports, UNODC Field Offices, UNODC's Drug Abuse Information Network for Asia and the Pacific (DAINAP), EMCDDA, CICAD, HONLEA reports and local studies.

Stable to declining trend of opiate abuse in the Americas

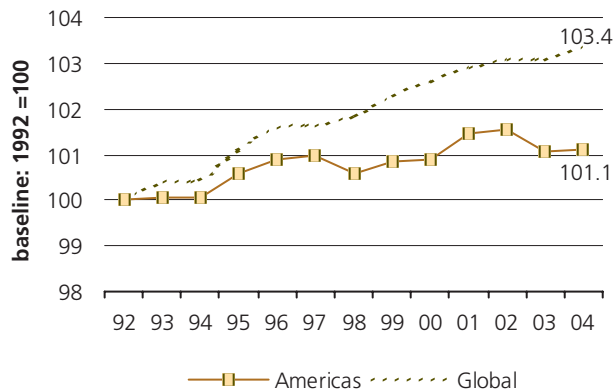
UNODC's drug use perception trend shows essentially stable results for opiate abuse in the Americas for 2004 and some decline since 2001/02. This trend is reflected

Fig. 39: Annual prevalence of heroin use among 12th graders in US high-schools, 1980-2005



Source: NIDA, Monitoring the Future, Overview of Key Findings 2005.

Fig. 40: Twelve-year opiate use trends as perceived by experts: Americas



Sources: UNODC, Annual Reports Questionnaire Data, Government reports, UNODC Field Offices, UNODC's Drug Abuse Information Network for Asia and the Pacific (DAINAP), EMCDDA, CICAD, HONLEA reports and local studies.

in school survey results from the United States and Canada which show that after increases in the 1990s, heroin use is declining again. In the United States, heroin remained essentially stable, at the lower levels, over the 2003-2005 period. Falling opium production levels in Latin America as well as in South-East Asia - the two main traditional supply lines for the North American market - may have contributed to this.

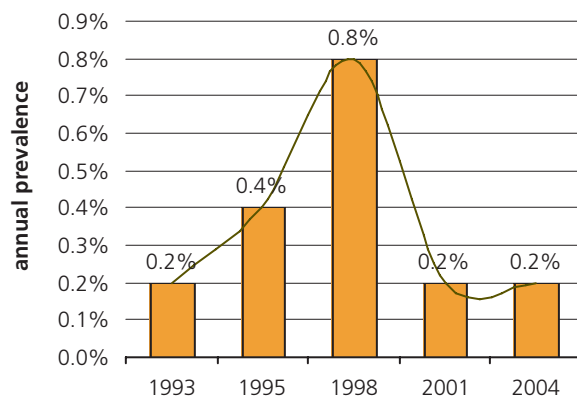
Opiate use in Oceania continues to remain below levels recorded in 2000

The most striking shifts in UNODC opiate drug use perception trend were reported from Oceania. Following strong increases in the 1990s, expert perception on the trends declined after 2000.

Oceania, and notably Australia, used to have some of the highest opiate prevalence rates worldwide. This changed after a major heroin shortage in 2001, prompted by the dismantling of some major heroin trafficking networks which had supplied the Australian market with heroin from South-East Asia. The 'heroin drought' prompted a fall in the purity levels while heroin prices rose strongly, thus squeezing large sections of heroin users out of the market. The number of drug-related deaths declined substantially. Fears that higher prices for heroin would result in higher crime did not materialize. Contrary to some concerns, the changes were not short-lived but the reduced availability of heroin lasted until well into 2005.

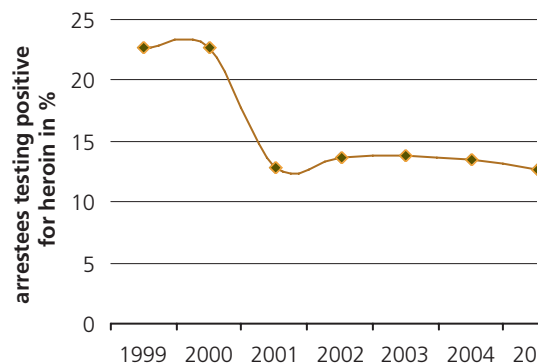
The 2004 National Drug Strategy Household Survey showed that annual prevalence of heroin use - after having fallen drastically in 2001 - remained stable at the lower levels in 2004. In addition, first results of the ongoing Drug Use Monitoring in Australia project (DUMA), where arrested people at selected police stations across the country are regularly tested for drug abuse, suggest that this positive trend also continued in 2005.

Fig. 41: Australia: heroin use among the general population (age 14 and above), 1993-2004



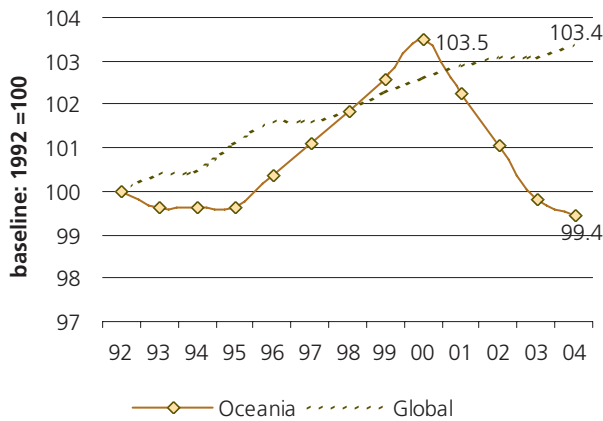
Source: Australian Institute of Health and Welfare, 2004 National Drug Strategy - Household Survey.

Fig. 42: Testing of arrestees for heroin abuse in Australia*



* unweighted average of results from Western Australia (East Perth), South Australia (Adelaide), New South Wales (Sydney) and Queensland (Brisbane and Southport).
Source: Australia Institute of Criminology, Drug Use Monitoring in Australia (DUMA).

Fig. 43: Twelve-year opiate use trends as perceived by experts: Oceania



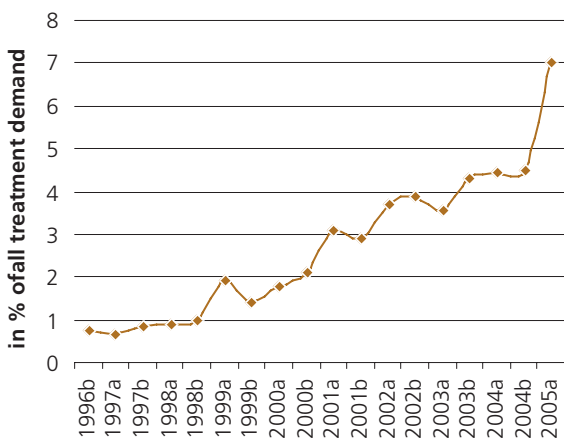
Sources: UNODC, Annual Reports Questionnaire Data, Government reports, UNODC Field Offices, UNODC's Drug Abuse Information Network for Asia and the Pacific (DAINAP), EMCDDA, CICAD, HONLEA reports and local studies.

Opiate use in Africa starts rising

Drug use trends reported from Africa suggest that opiate abuse has started rising, notably in countries of Eastern and Southern Africa and some countries in West Africa, apparently linked to trafficking activities and resulting spill-over effects. The upward trend is particularly noted in South Africa where heroin used to account for less than 1 per cent of treatment demand (including alcohol). By the first two quarters of 2005, this proportion had increased to 7 per cent.

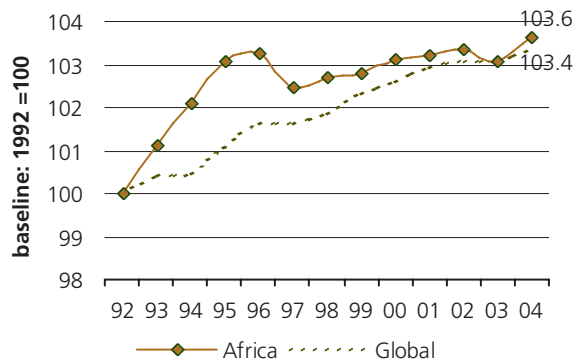
For the 1992-2004 period as a whole, opiate use trends,

Fig. 44: South Africa - heroin as primary drug in treatment demand*



* unweighted average of treatment (incl. alcohol) in 6 provinces. Source: SACENDU, Research Brief, Vol. 8 (2), 2005.

Fig. 45: Twelve-year opiate use trends as perceived by experts: Africa



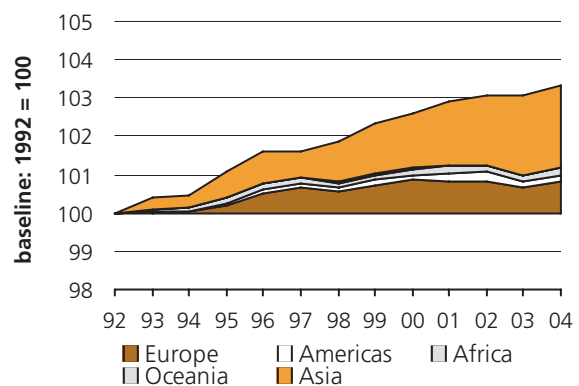
Sources: UNODC, Annual Reports Questionnaire Data, Government reports, UNODC Field Offices, UNODC's Drug Abuse Information Network for Asia and the Pacific (DAINAP), EMCDDA, CICAD, HONLEA reports and local studies.

as reported by African States to UNODC, show a marginally higher level of increase than at the global level. The increase in 2004 was the strongest over the last few years.

Composite opiate use perception trends increase reflecting higher use in Asia

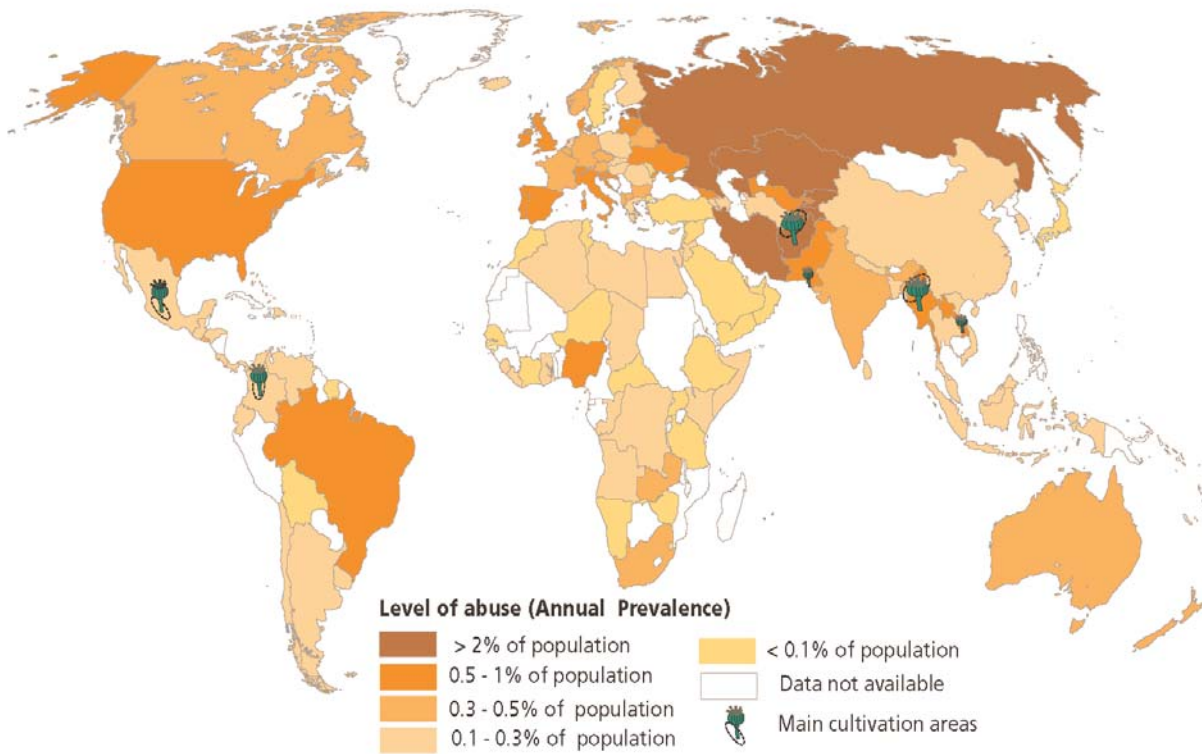
If the composite indicator is broken down by regions, data show that the increase over the last decade was primarily due to higher use of opiates in Asia. In contrast, for the other regions, notably for Europe, and the Americas, the markets appear to have been rather stable since 2000.

Fig. 46: Twelve-year drug use trends as perceived by experts: opiates

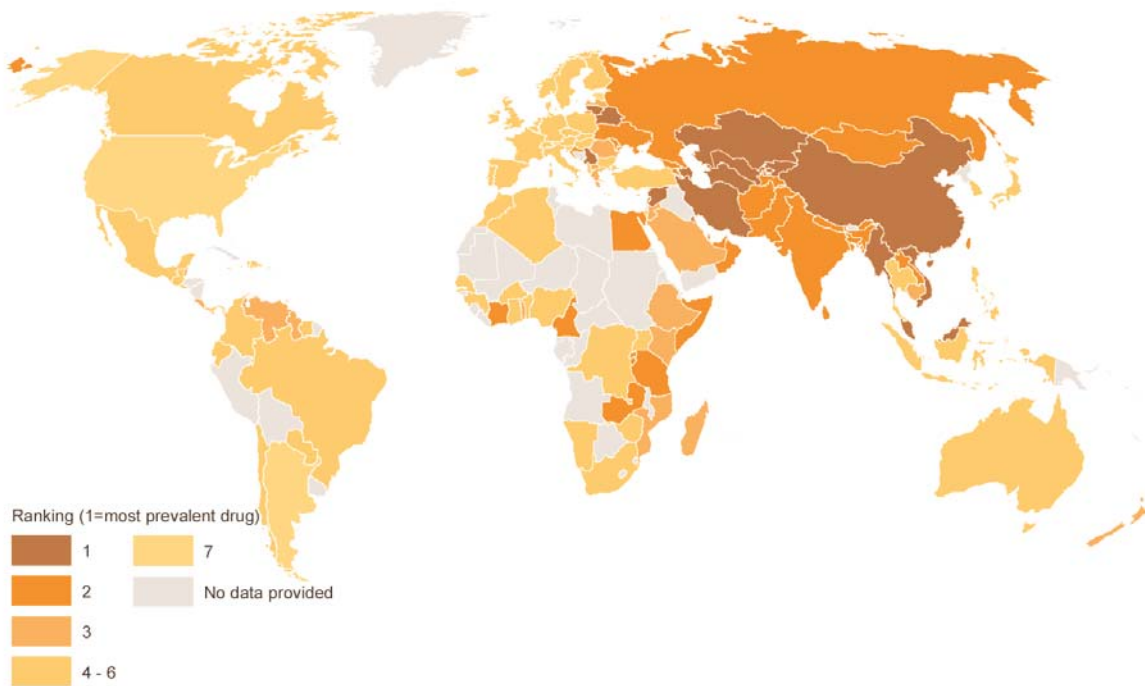


Sources: UNODC, Annual Reports Questionnaire Data, Government reports, UNODC Field Offices, UNODC's Drug Abuse Information Network for Asia and the Pacific (DAINAP), EMCDDA, CICAD, HONLEA reports and local studies.

Map 6: Abuse of opiates (including heroin) 2003 - 2005 (or latest year available)

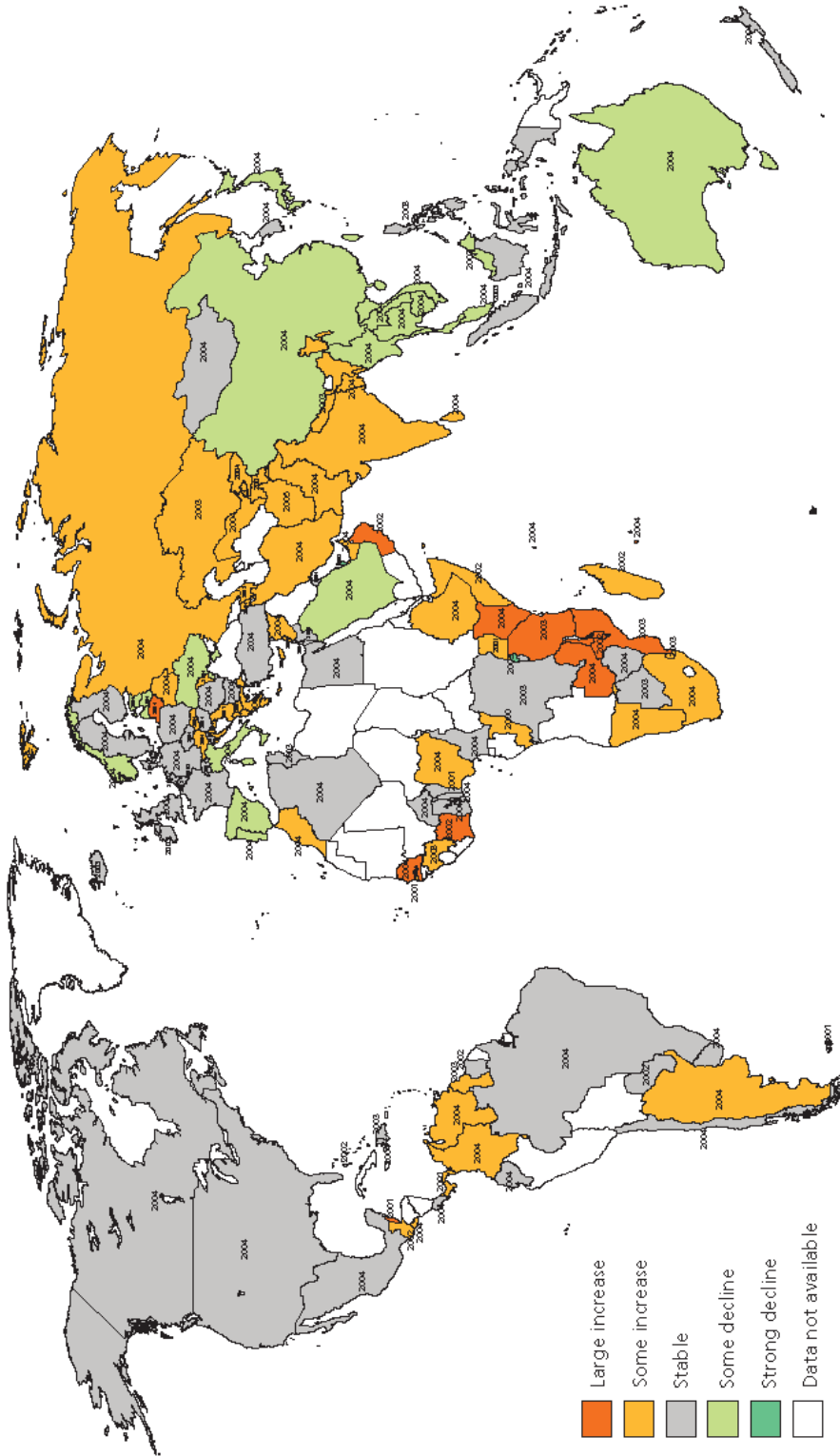


Map 7: Ranking of opiates in order of prevalence in 2004



Sources: UNODC Annual Reports Questionnaires data, SAMSHA US National Household Survey on Drug Abuse, Iranian Ministry of Health, Rapid Assessment Study and UNODC ARQ, Council of Europe, ESPAD.

Map 8: Change in abuse of heroin and other opiates, 2004 (or latest year available)



Sources: UNODC Annual Reports Questionnaires data, National Household Surveys submitted to UNODC, United States Department of State (Bureau for International Narcotics and Law Enforcement Affairs), International Narcotics Control Strategy Report, Law Enforcement Reports, SACENDU (South African Community Epidemiology Network, UNODC, Meetings of Heads of Law Enforcement Agencies (HONLEA), UNODC Opium Surveys.