

1.4 Cannabis Market

1.4.1 Summary trend overview

Cannabis is the largest illicit drug market by far and its size is one of its most important characteristics. Its consumer market is large, roughly 160 million people; its production centres are widely dispersed, existing in almost every country in the world and its factors of production can be both flexible, rudimentary and small scale and permanent, highly technical and large scale. The widespread nature of production and consumption make it very difficult to define and quantify. The consumer market for cannabis is also different. The size of the consumer market for cannabis could imply that consumers are more varied.

Production is pervasive. A total of 82 countries explicitly reported the illicit cultivation of cannabis on their territory over the 1995-2005 period. In addition, Member States identified 134 source countries for the production of cannabis. Moreover, 146 countries reported seizing cannabis plants over the 1995-2005 period, which is an indirect indicator for the existence of cannabis plant production in a country, as cannabis plants are usually not trafficked across borders (only the end-products; cannabis herb, cannabis resin or cannabis oil). Combining these data suggests that cannabis production is taking place in at least 172 countries and territories.

Although the insidiousness of cannabis renders effective monitoring of the supply side difficult, it is probable that the expansion of cannabis production ceased in 2005. Indications of an overall stabilisation in the market are extremely encouraging but whether this is sustainable or not will need to be confirmed with data from the next few years.

Some aspects of this market are evolving. Indoor cultivation is expanding in general and as this occurs several 'consumer countries' have emerged as important cannabis producing countries – supplying their local markets (at least to a limited extent). As this happens, the overall potency of cannabis (i.e. the THC content as engineered through horticultural innovations) has been rising in several countries.

The production of cannabis resin, also known as hashish

is concentrated in North Africa (Morocco) and in the South-West-Asia / Middle East region, particularly in Afghanistan and Pakistan.

In Morocco, UNODC surveys, conducted in collaboration with the authorities, revealed a fall in the area of cannabis resin cultivation from a peak of 134,000 ha in 2003 to 76,400 ha in 2005. Moroccan cannabis resin production, for years the main source of hashish for Western Europe, declined even more strongly, from 3,070 mt in 2003 to 1,070 mt by 2005.

Cannabis herb seizures continue to be mainly concentrated in North America (66% of global seizures in 2005), followed by Africa (16%). Global seizures of cannabis herb showed a strong increase over the 2000-2004 period, a probable reflection of rising cannabis herb production, trafficking and consumption. However, in 2005, cannabis herb seizures declined substantially to the levels reported back in 2000. The decline was reported across all continents. The factors which provoked this decline are not fully known; but eradication seems to have played a critical role.

Global cannabis resin seizures also declined in 2005 due to lower production of cannabis resin in Morocco. The world's largest cannabis resin seizures continued to be reported by Spain (52% of global hashish seizures in 2005), followed by Pakistan (7%) and Morocco (7%).

The consumer markets in North America appear to have contracted, but there has been an increase of cannabis use in Africa and in most countries of South America. The situation in Europe is mixed. A decline of cannabis use was found in the Oceania region, which has the world's highest levels of prevalence rates for cannabis. Countries of East & South-East Asia showed stable or declining cannabis consumption trends while in South-Asia, South-West Asia and Central Asia the reported trends suggest an increase.

The number of countries reporting increases in cannabis use fell from 56 per cent in 2000 to 49 per cent in 2005, while the number of countries reporting declines increased from 11 per cent in 2000 to 18 per cent in 2005.

1.4.2 Production

Cannabis cultivation remains pervasive throughout the globe

The pervasiveness of cannabis persists. Between 1995-2005, 82 countries provided UNODC with cannabis cultivation or production estimates. Unfortunately, reporting on cannabis cultivation is complex and resource intensive for a number of reasons and many countries do not have the capacity or resources to make estimations. Consequently, UNODC also analyses seizure reports which sometimes identify the source of cannabis trafficked in a country. On this basis, 134 pro-

ducer countries were identified over the 1995-2005 period. A third list of producer countries was generated by singling out those that reported the seizure of cannabis plants. The inefficiency of transporting whole plants internationally (as only some parts are useable as a drug) means that when whole plants are seized, it is very likely that they were locally produced. Seizures of whole cannabis plants were reported in 146 countries over the 1995-2005 period.

Combining the three lists of estimates, 172 countries and territories can be identified where cannabis is pro-

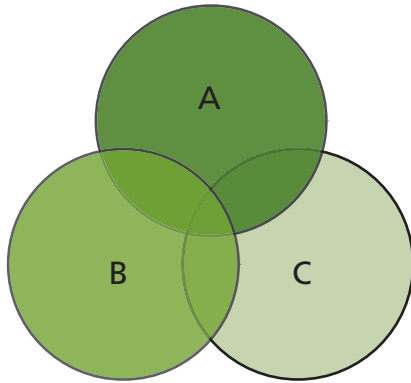
Cannabis continues to be the most widely produced, trafficked and consumed drug worldwide. It is produced for basically three different end products:

- Cannabis herb is comprised of the flowering tops and leaves of the plant, which are smoked like tobacco using a variety of techniques. Depending on the region, cannabis herb is known under many different names, including 'marijuana' (Americas; also referred to as 'grass', 'weed', 'ditch' or 'dope'), 'ganja' (South-Asia / Jamaica), 'dagga' (South Africa), 'dimba' (West Africa) or 'chira' (North Africa; usually cannabis resin powder). A very potent form of cannabis herb is sinsemilla, the flowering tops of the unpollinated female plant. Cannabis herb accounted for 77 per cent of global cannabis seizures in 2005.
- Cannabis resin consists of the secretions of the plant emitted in the flowering phase of its development. Depending on the region, cannabis resin is known as 'hashish' (North Africa / Europe) or as 'charas' (South-Asia). It accounted for close to 23 per cent of global cannabis seizures in 2005.
- Cannabis oil (hashish oil) is an oily mixture resulting from extraction or distillation of THC rich parts of the cannabis plant. It is less widely used, accounting for 0.01 per cent of all cannabis seizures in 2005.

In addition, a number of cannabis combinations are found on the markets, such as:

- 'Kif' (North-Africa), often understood to mean the chopped flowering tops of the female cannabis plant, mixed with tobacco, or 'Bhang' (South-Asia), often understood as a beverage prepared by grinding cannabis leaves in milk and boiling it with spices and other ingredients; or 'White pipe' (South Africa), the smoking of cannabis herb in combination with tobacco and Mandrax (consisting of methaqualone as the active ingredient and antihistamines). Various combinations of cannabis with other drugs such as cannabis/cocaine and cannabis/amphetamine, are reported inter alia from Eastern Africa. The combinations usually carry region/country specific or local names.¹

¹ In some parts of North America, for instance, the following combinations are found: 'Candy sticks: cannabis herb cigarettes laced with cocaine; 'Buddha': cannabis herb spiked with opium; 'Ace' or 'Zoom': cannabis herb mixed with PCP, etc.; use of cannabis in food items (e.g. in North Africa); 'Marijuana brownies' (e.g. in North America); as well as frequent use of both cannabis and alcohol (often reported from Europe and Australia).

Fig.71: Number of countries/territories identified as cannabis producers (1995-2005): N = 172

A: 82 countries/territories providing cultivation/production estimates

B: 134 countries/territories identified as source countries for cannabis that was trafficked

C: 146 countries reporting the seizure of whole cannabis plants

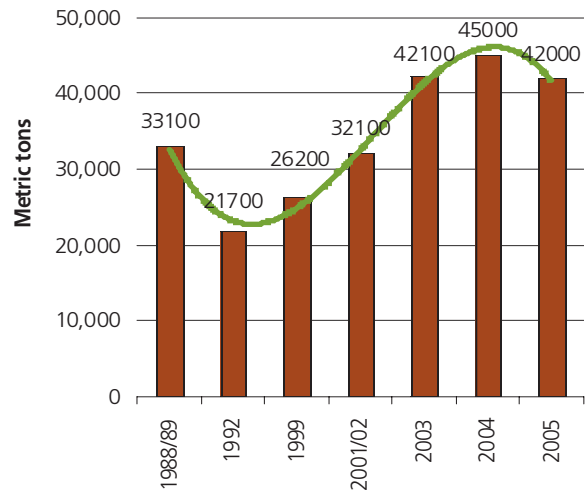
duced, equivalent to close to 90 per cent of the countries & territories which receive UNODC's Annual Reports Questionnaire (190-195).²

The analysis of the reported source countries (ARQ, 2002-2006 period) suggests that cannabis resin production takes place in some 58 countries while cannabis herb (marijuana) production occurs in at least 116 countries. The caveat here is that cannabis herb is thought to be "produced" even in countries where the main supply concentrates on resin. Cannabis herb production is globally far more dispersed than global cannabis resin production.

1.4.2 Cannabis herb production

Global production of cannabis herb is estimated to have declined to 42,000 mt in 2005

Based on information collected from Member States, UNODC estimates global cannabis herb production at 42,000 metric mt in 2005, dwarfing global heroin pro-

Fig. 72: Estimates of global cannabis herb production, 1988-2005

Sources: UNODC, Annual Reports Questionnaire Data and Govt. reports.

duction (472 mt in 2005) or global cocaine production (980 mt in 2005). This represents a decline of almost 3,000 mt (-7%) over 2004. While these data must be interpreted with caution, they seem to signal, that the upward trend in herb production observed since the early 1990s, may be coming to a halt. The cannabis herb estimate suggests that 10.6 per cent of cannabis herb production was seized in 2005.

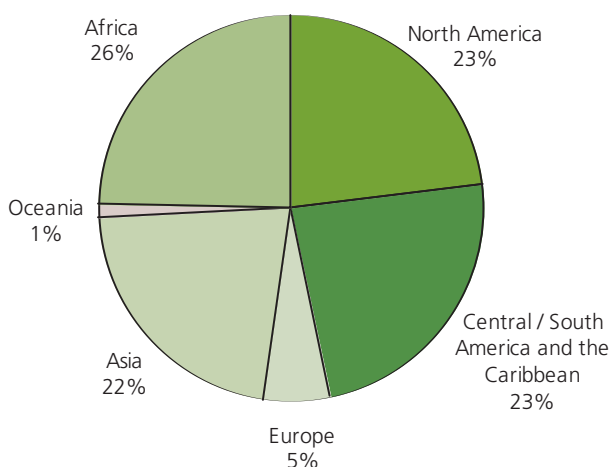
The area under cannabis cultivation is estimated to have amounted to 530,000 ha in 2005, which was again far more than the area under poppy cultivation (151,500 ha) or the area under coca cultivation (159,600 ha in 2006).³

The yields reported by Member States varied substantially, from as low as 5 kg/ha to 17,500 kg/ha. This is a reflection of the wide ranges of cannabis yields, e.g. from wild cannabis to hydroponically grown cannabis. Within reported estimates the median cannabis yield was 730 kg/ha and the (unweighted) average yield was 2,070 kg/ha. Despite the large difference, such yield fig-

² Cannabis production estimates must be viewed with caution: Although, production estimates for cannabis are systematically collected by UNODC from Member States as part of the replies to the annual reports questionnaire (ARQ), the lack of clear geographical concentrations of cannabis production (as with opium poppy or coca bush) makes it impracticable to introduce scientifically reliable crop monitoring systems. The fact that cannabis is a plant that grows in virtually every inhabited region of the world, that it can be cultivated with little maintenance on small plots, and that it can be also grown indoors, complicates matters. Resulting variations in cannabis yields are also huge. The majority of individual country estimates are thus still based on expert opinion, rather than on the results of scientific crop monitoring systems. Nonetheless, given a number of innovative approaches introduced by UNODC in recent years to arrive at estimates for countries that did not provide any estimates (see section on methodology), the resulting global estimates should provide, at least, reasonable orders of magnitude of the problem. As the methodology used to arrive at the estimates has remained basically the same in recent years, and as one should not under-rate the expertise of the authorities to come up with reasonable estimates (even without detailed surveys), one may assume that resulting changes in the global production estimates basically reflect underlying changes in cultivation and production. The fact that global cannabis production estimates largely mimic global seizures tends to support this view.

³ The estimate of area under cultivation for cannabis herb includes some, but not all, wild cannabis. Were there any practical way to measure wild cannabis this figure would be much higher.

Fig. 73: Breakdown of global cannabis herb production in 2005 (N = 42,000 metric tons)



Sources: UNODC, Annual Reports Questionnaire Data and Govt. reports.

ures are consistent with those reported in UNODC's last extensive survey of the global cannabis market⁴. That study suggested that typical yields for cultivated outdoor cannabis range from 470 kg/ha in non-irrigated areas to 5,000 kg/ha in well tended gardens, with figures around 2,000 kg/ha typical for the situation in the USA⁵, and levels around 1,000 kg/ha typical for the situation in developing countries. In contrast, the yields of hydroponically grown cannabis ranged from 15,000 to 30,000 kg per hectare.

In 2005 the bulk of cannabis herb was produced in the Americas (46%) and in Africa (26%), followed by countries in Asia and in Europe. Internationally, most cannabis herb was produced for the domestic market and/or for exports to neighbouring countries. Countries in which cannabis is produced for extra regional export are limited. They include a number of West, South and North African countries (including South Africa, Nigeria and Morocco) and few East, West and Central Asian countries (including Thailand, Pakistan and Kazakhstan). Most of these exports are destined for Europe.

Production by region

The largest producers in North America continue to be Mexico and the United States of America followed by Canada. Estimates made available to UNODC suggest that Mexico and the USA may be the world's largest cannabis herb producers. Production in Mexico is mainly concentrated in states along the Pacific coast

(Sinaloa, Michoacán, Guerrero, Jalisco, Oaxaca and Nayarit) which account for about 53 per cent of total cannabis eradication, and in the Center/North region (Chihuahua, and Baja California), where 42 per cent of cannabis eradication took place in 2005. Cannabis production in the USA is particularly widespread in the states of California, Kentucky, Tennessee, Hawaii, and Washington.⁶ Cannabis production in Canada is mainly concentrated in British Columbia (40%), Ontario (25%) and Quebec (25%).

Cannabis production takes place in practically all countries in South America and the Caribbean. The largest producers in South America are Paraguay, followed (now) at far lower levels, by Colombia, Brazil and the Caribbean region. Declines of cannabis production in Colombia in recent years appear to have been offset by increases in other parts of South America, notably in Paraguay. Though Brazil is an important cannabis producer, it is not 'self-sufficient' so that large quantities are trafficked from Paraguay into that country. Frequently mentioned source countries in the Caribbean region are St. Vincent & the Grenadines as well as Jamaica. Guatemala is frequently cited as a source country for cannabis from Central America.

Cannabis is grown in almost all of the countries of Africa. The largest cannabis herb producers in Africa include South Africa (as well as a number of other countries in the region, including Malawi, Zambia and Swaziland), Nigeria, Ghana & several other West-African countries (including Benin and Togo), the Democratic Republic of the Congo in central Africa, Tanzania in eastern Africa as well as Morocco in northern Africa (though the latter country is mainly known as a cannabis resin producer).

Despite growing levels of domestic production, Europe remains a region which still relies, to a significant extent, on the importation of cannabis. The largest cannabis producers in Europe are Albania and the Netherlands, though significant amounts are also being produced in most other European countries, including Germany, Switzerland and the UK.

The largest cannabis producers among the C.I.S countries are Kazakhstan, the Russian Federation and Kyrgyzstan. The Russian Federation and Kazakhstan contain the world's largest areas of wild cannabis.

The largest producers in the Near East & South-West Asia region are Afghanistan, followed by Lebanon and

⁴ UNODC, *2006 World Drug Report*, Vol. 1, pp. 193-195.

⁵ As identified through the analysis of data from court cases

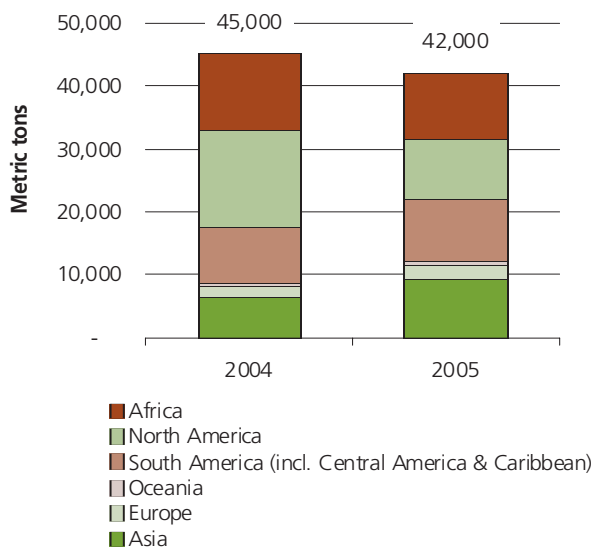
⁶ National Drug Intelligence Center, *National Drug Threat Assessment 2007*, October 2006

Pakistan (in all of these countries, however, cannabis herb production is far less important than the production of cannabis resin). Important producers in South-Asia are India, Nepal and Sri Lanka; and important producers in South & South-East Asia include the Philippines and Indonesia, followed, at lower levels, by Thailand. The largest cannabis producer in the Oceania region is Australia.

Changes in the regional breakdown suggest that cannabis production increased in Asia, Europe and South America (including Central America and the Caribbean) but declined in North America and in Africa.

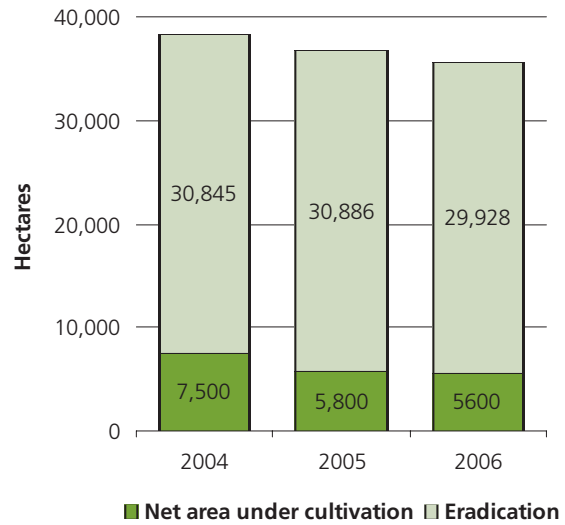
The decline of cannabis production in North America was mainly due to lower cannabis production levels in Mexico, which reflect the strong eradication efforts made in that country. Mexico has been extremely efficient in eradicating cannabis, having eradicated some 85 per cent of the area under cultivation. The net area under cultivation thus declined by 23 per cent in 2005 (from 7,500 to 5,800 ha) with a further decline reported

Fig. 74: Regional breakdown of global cannabis herb production in 2004 and in 2005



Sources: UNODC, Annual Reports Questionnaire Data and Govt. reports

Fig. 75: Area under cannabis cultivation in Mexico, 2004-2006



Sources: US State Dept., 2007 International Narcotics Control Strategy Report and UNODC, Annual Reports Questionnaire Data.

for the year 2006 (to 5,600 ha). Given differences in yield estimates, production estimates for Mexico range from 4,480 mt to 10,100 mt⁷ (for 2005).

In parallel, cannabis eradication efforts in the USA were significantly stepped up in recent years. According to data of the Domestic Cannabis Eradication/Suppression Program the number of eradicated cannabis plants in the USA rose from 3.2 million in 2004 to 4.2 million in 2005 (+31%) and 4.9 million plants (+17%) in 2006. Including eradication efforts made by other government agencies, total eradication amounted to 6.3 million plants in the USA in 2006. Applying the DEA estimate of, on average, 1 pound of cannabis herb per plant⁸, eradication may have removed some 2,825 mt from the US market in 2006, i.e. more than is produced in most other countries of the world. Law enforcement reports indicate that between 30 and 50 per cent of all cannabis grown in the USA is now being eradicated.

⁷ No official Mexican cannabis production estimates exist. The first estimate is based on INCSR cultivation estimates and a yield figure of 800 kg/ha, provided to UNODC by the Mexican authorities; the second figure reflects the US INCSR estimate for cannabis production in the year 2005. (US State Department, *International Narcotics Control Strategy Report*, March 2007).

⁸ The DEA (US Drug Enforcement Agency) ratio of 1 pound (448 grams) per plant has been widely used in the USA. In contrast, the United States Sentencing Commission has identified a 100 grams a plant figure to be more appropriate when looking at mixed gender crops. "The one plant = 100 grams of marijuana equivalency used by the Commission for offenses involving fewer than 50 marihuana plants was selected as a reasonable approximation of the actual yield of marihuana plants taking into account (1) studies reporting the actual yield of marihuana plants ... (2) that all plants regardless of size are counted for guideline purposes (while, in actuality, not all plants will produce useable marijuana) ...; and (3) that male plants, which are counted for guideline purposes, are frequently culled because they do not produce the same quality of marijuana as do female plants." Federal Register 60 (May 10, 1995): 25078. This figure was extended to all crops, including those involving more than 50 plants. See also United States Sentencing Commission, 1995 Annual Report, p. 148. USSG SS 1B1.10, 2D1.1(c)(E) (Nov. 1995). DEA and the National Drug Intelligence Center of the US Department of Justice, however, continue using a yield figure of 1 pound per plant. (U.S. Department of Justice, National Drug Intelligence Center, *Domestic Cannabis Cultivation Assessment 2007*.)

Table 10: Number of cannabis plants eradicated in the USA, 2000 -2006

	2000	2001	2002	2003	2004	2005	2006
Outdoor ^a	2,597,798	3,068,632	3,128,800	3,427,923	2,996,225	3,938,151	4,083,433
Indoor ^a	217,105	236,128	213,040	223,183	203,896	270,935	403,322
Total^a	2,814,903	3,304,740	3,341,840	3,651,106	3,200,121	4,209,086	4,486,755
Outdoor ^b	-	-	-	-	-	5,546,509	5,901,800
Indoor ^b	-	-	-	-	-	270,935	403,322
Total^b	-	-	-	-	-	5,817,444	6,305,202

Source: ^aDomestic Cannabis Eradication/Suppression Program.

Source: ^bDomestic Cannabis Eradication/Suppression Program & U.S. Department of the Interior & U.S. Department of Agriculture and Forest Service.

Rising levels of eradication in the USA have been interpreted by some analysts as an indication of growing levels of cannabis cultivation⁹. There has been an increase in indoor cultivation, with the proportion of eradicated indoor cannabis rising from 4.7 per cent in 2005 to 6.4 per cent of all eradicated cannabis in 2006. Taking only the data from the DEA's Domestic Cannabis Eradication/Suppression (DCE/SP) Program, the proportion of indoor cultivation rose from 6.4 per cent in 2005 to 9 per cent in 2006. Moreover, the actual identified locations where cannabis is grown (and eradicated) suggest that cannabis cultivation has been spreading to more remote areas, including national parks. In fact, the DEA's DCE/SP program has forced many traffickers to abandon large outdoor marijuana plots in favour of smaller, better concealed illicit gardens¹⁰. Rapidly rising levels of eradication thus may have contributed to a stabilization, or even a reduction, in overall US cannabis production. While US seizure data for the 2002-2005 period point to a stabilization, US demand data indicate a reduction. Published US

cannabis production estimates also point to a stabilization or reduction. Estimates for the year 2002 suggested that cannabis herb production ranged from 5,580 to 16,730 mt¹¹ with a mid-range estimate of 11,150 mt. After deducting eradication, this would leave net production of close to 10,000 mt. The 2006 estimates ranged from 5,650 to 9,420 mt with a mid range estimate of some 7,530 mt. Estimates of net production (after eradication) ranged from 2,830 to 6,590 mt¹² with a mid-range estimate of 4,710 mt.

In 2005, following several years of strong increases, the US authorities also reported slightly less trafficking of cannabis via Canada into the USA.¹³ This could indicate that cannabis production stabilized, or even declined slightly, in Canada, following large production increases in previous years: between 2000 and 2004 production in Canada more than doubled¹⁴. The Royal Canadian Mounted Police estimate a marijuana production of 800 to 2,000 mt¹⁵. Other estimates see the level of cannabis herb production at between 960 and 2,400 mt in Canada.¹⁶ All of these estimates suggest that while

⁹ U.S. Department of Justice, National Drug Intelligence Center, *Domestic Cannabis Cultivation Assessment 2007*.

¹⁰ ONDCP, *National Drug Control Strategy*, Feb. 2007.

¹¹ Drug Availability Steering Committee, Drug Availability Estimates in the United States, December 2002 and Office on National Drug Control Policy, *National Drug Control Strategy*, Feb. 2003.

¹² U.S. Department of Justice, National Drug Intelligence Center, *Domestic Cannabis Cultivation Assessment 2007*.

¹³ The total marijuana seizures in the northern border states of the USA increased from 13.6 mt in 2002 to 31.4 mt in 2004 but then declined again to 26.4 mt in 2005. See National Drug Intelligence Centre, *2007 National Drug Threat Assessment*, Oct. 2006

¹⁴ According to Government of Canada estimates, cited by the US Drug Intelligence Centre, production in Canada more than doubled from 2000 through 2004 (National Drug Intelligence Centre, *2007 National Drug Threat Assessment*, Oct. 2006).

¹⁵ These estimates were, inter alia, based on seizures of, on average, 1.1 million cannabis plants per year; see Royal Canadian Mounted Police, Drug Situation in Canada in 2003, Ottawa, July 2004; see also National Drug Intelligence Centre, *National Drug Threat Assessment 2005*, Feb. 2005.

¹⁶ Public Safety Canada, *Canada-United States Border Drug Threat Assessment*, Oct. 2004.

cannabis production in Canada is important it remains significantly lower than in the USA or in Mexico. Canada is, however, an important source country for high THC cannabis consumed and trafficked into the USA. Such cannabis production in Canada is controlled by Asian crime groups (often ethnic Chinese and Vietnamese). Some of these groups are thought to have relocated their indoor activities into the US¹⁷ Pacific Northwest and to California¹⁸, in order to avoid tightened border controls.

Despite some increase of cannabis herb production in South America (including Central America and the Caribbean), the overall proportion of cannabis herb production in the Americas declined from 54 per cent to 47 per cent of global production in 2005. This pattern of growing production in South America and declining production in North America is inconsistent with the long-term trend which shows strong increases in the North American proportion of global production.

Cannabis production in Africa appears to have declined slightly in 2005. This is also in contrast to a long-term trend which showed strong increases of cannabis production in that continent. The current estimate suggests that Africa accounts for 25 per cent of global cannabis herb production in 2005, slightly down from 26 per cent in 2004. The decline of cannabis cultivation in Africa has been mainly due to reductions reported from Morocco (though most of this cannabis is used for cannabis resin production). The area under cannabis cultivation in Morocco, as identified in joint UNODC and Government of Morocco surveys (based on remote sensing techniques), declined by 37 per cent on a year earlier in 2005. This followed a decline of 10 per cent in 2004. In addition, eradication efforts in Nigeria, one of the main cannabis producing countries in Western Africa, dramatically increased. After having eradicated 255 ha of cannabis in 2004, the Nigerian authorities reported the eradication of 14,316 ha in 2005 - which is close to half the size of the eradications reported from Mexico. This downward trend is not uniform in Africa with several other countries reporting increases. Overall cannabis production in Africa is expected to resume its expansionary trend shortly.

Cannabis production reported from Asia is increasing. The proportion of Asia in global cannabis production increased from 15 per cent in 2004 to 22 per cent in 2005, with a significant increase reported from Afghanistan, where the area under cannabis cultivation is partially surveyed as a part of UNODC's annual opium surveys. Results are based on farmers' reports of the areas cultivated. Most of the cannabis cultivation in Afghanistan is produced as cannabis resin.

Cannabis herb production also increased in Europe, with Europe's share in global cannabis herb production rising from 3 per cent in 2004 to 5 per cent in 2006. The increase in domestic production of cannabis herb in Europe seems to have offset some of the decline of cannabis resin imports from Morocco. Understanding how this happened could yield some interesting and important information on the cannabis market.

4.2.2 Cannabis resin production

Geographically, the production of cannabis resin is far more concentrated than production of cannabis herb. The world's largest cannabis resin producer continues to be Morocco, supplying the illicit markets of North Africa and Western Europe. Western Europe is the world's largest market for cannabis resin, accounting for some 70 per cent of global resin seizures in 2005; North Africa accounts for another 8 per cent.

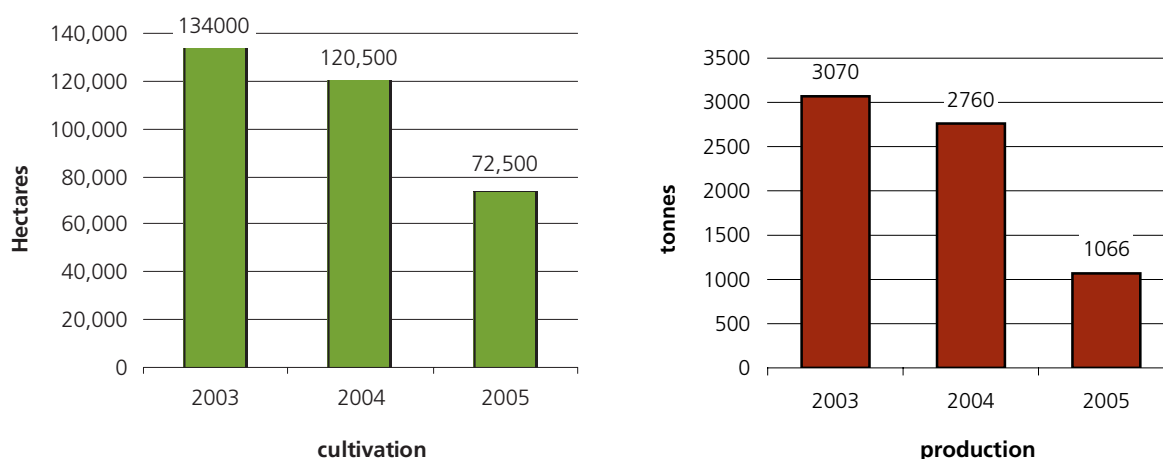
The importance of Morocco as a source country for cannabis resin is, however, declining. In 2003, the year of the first UNODC/Government of Morocco survey total resin production amounted to 3,060 mt, cultivated on 134,000 ha of land in the Rif region of northern Morocco by some 96,600 families. The 2004 survey showed a 10 per cent decline in land under cannabis cultivation (120,500 ha), with an estimated production of 2,760 mt.¹⁹ In 2005 cultivation declined further to 72,500 ha, and production fell to 1,066 mt²⁰, reflecting the intensified efforts of the Moroccan authorities to eliminate cannabis production from their territory. Cannabis resin production in Morocco is concentrated in the provinces of Chefchaouen (56 % of total in 2005), Taunate (17 %) and Al Hoceima (16 %).

¹⁷ U.S. Department of Justice, National Drug Intelligence Center, Domestic Cannabis Cultivation Assessment 2007, Oct. 2006 and ONDCR, National Drug Control Strategy, Feb. 2007.

¹⁸ U.S. State Department, 2007 International Narcotics Control Strategy Report, March 2007.

¹⁹ Some of the decline appears to have been a consequence of an earthquake, resulting in increased attention being given by the national authorities and the international community to the region concerned.

²⁰ UNODC, Morocco Cannabis Survey 2005, Executive Summary 2005, June 2005.

Fig. 76: Morocco – cannabis cultivation and production, 2003-2005

Source: UNODC/Government of Morocco, Maroc, Cannabis Survey 2005, Jan. 2007 and previous years.

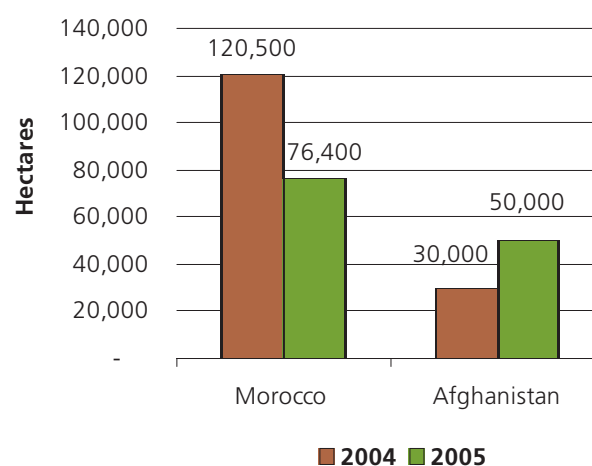
The decline of the importance of Morocco is also reflected in the number of countries citing Morocco as the source country of the cannabis resin found on their markets. Over the 1999-2003²¹ period 31 per cent of countries reporting the origin of cannabis resin cited Morocco as the origin of the hashish found on their markets. By 2005, the proportion of Morocco (including the subsequent transit countries, Spain and Portugal) fell to 20 per cent, reflecting the massive decline of Moroccan cannabis resin production in recent years.

Reports of country of origin are based on the information from 40 countries responding to this part of the Annual Reports Questionnaire in 2005. In order to expand the information base for the analysis of the importance of less frequently mentioned producer countries, the time period was increased to the 2003-05 period. This raised the information base to a sample of 61 countries (equivalent to almost a third of all countries). Considering the broader 2003-2005 period, 27 per cent²² of countries cited Morocco as the main source country of the cannabis resin encountered on their domestic market.

The next most frequently mentioned countries were Afghanistan/Pakistan, accounting for 8 per cent of such mentions. Overwhelmingly, cannabis cultivation in these countries is for the production of cannabis resin. UNODC's estimates suggest that the area under

cannabis cultivation in Afghanistan increased from 30,000 ha in 2004/05 to 50,000 ha in 2005/06 - equivalent to 30 per cent the area under opium poppy cultivation.²³

The next most frequently mentioned source countries for cannabis resin are Nepal/India (mentioned by 7 per

Fig. 77: Area under cannabis cultivation in Afghanistan* and Morocco, 2004-2005

* data for Afghanistan refer to 2004/05 and 2005/06

Sources: UNODC, 2006 Afghanistan Opium Survey (and previous years) and UNODC/Government of Morocco, Maroc, Cannabis Survey 2005, Jan. 2007.

²¹ UNODC, *2005 World Drug Report*, Volume I.

²² Over the 2003-05 period, Morocco was mentioned 48 times as a source country for cannabis resin in replies by member states to UNODC's ARQ. Including Spain and Portugal, which are mainly transit countries of Moroccan hashish, the number of mentions increases to 70. The total number of all mentions of source countries (by the 61 reporting countries) amounted to 257. (Countries can mention more than one country as a source country). The proportion of Morocco (including the mentions of Spain and Portugal) was thus 27.2 per cent in all mentions.

²³ UNODC, *Afghanistan Opium Survey* 2006, October 2006.

cent of the countries) and the Central Asian and other C.I.S. countries (5%), reflecting large areas of cannabis in Kazakhstan (mainly wild cannabis) and Kyrgyzstan. Significant levels cannabis production exist in the Chuy valley and around the Lake Issyk-Kul in Kyrgyzstan and in Zhambyl province of Kazakhstan bordering Kyrgyzstan. Both cannabis herb and resin are produced in these areas.

The Netherlands is also frequently mentioned as a country of origin (5% of global mentions). It is, however, not clear to what extent the cannabis resin actually originates in the Netherlands and to what extent it is smuggled into the country (from Morocco and other countries) for subsequent re-export. Though the Netherlands is an important producer of cannabis herb, other information suggests that resin production is limited. Similarly, the situation for Albania is not straightforward. This country is also frequently mentioned as a cannabis resin source country (5% of all mentions, mainly from neighbouring countries). What seems to be clear, however, is that Albania's role as a cannabis herb producer clearly exceeds its role as cannabis resin producer.

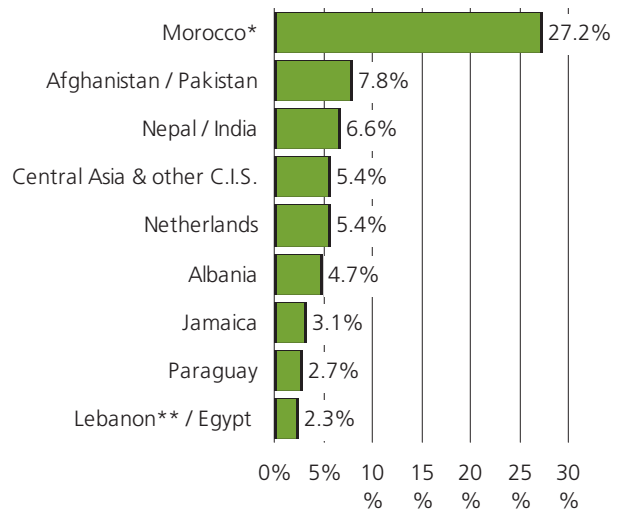
The most important cannabis resin producer in the Americas continues to be Jamaica (3% of global mentions), followed by Paraguay. Overall, production (and consumption) of cannabis resin in the Americas remains limited.

The most important cannabis resin producer in the Near East remains Lebanon (2% of global mentions). Following successful eradication campaigns, production in Lebanon is drastically down as compared to the early 1990s. Production of cannabis resin in Lebanon is concentrated in the Bekaa valley.

Global cannabis resin production estimated at around 6,600 mt

Tentative estimates²⁴ suggest that some 6,600 mt of cannabis resin were produced in 2005 (range: 3,800-9,500). The previous year's estimate, based on the same methodology, resulted in an estimate of some 7,500 mt (range: 4,200-10,700), indicating that, following years of increases, global cannabis resin production actually declined in 2005. The decline was largely due to the lower cannabis resin production reported from Morocco. A production of some 6,600 mt of cannabis resin results in a calculated cannabis resin interception rate of close to 20 per cent.

Fig. 78: Main source countries of cannabis resin, 2003-2005 (based on information from 61 countries)

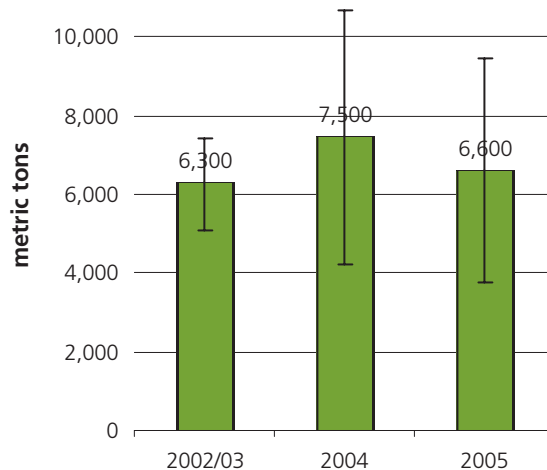


* including mentions of the transit countries Spain and Portugal; ** including mentions of Syria

number of times countries were identified as source countries as a proportion of countries reporting

Source: UNODC, Annual Reports Questionnaire Data.

Fig. 79: Global cannabis resin production estimates, 2002/03 – 2005



Sources: UNODC and Govt. of Morocco, Cannabis Surveys 2003, 2004 and 2005 and UNODC, Annual Reports Questionnaire Data.

²⁴ Which are based on extrapolating the results from Moroccan cannabis resin production data and extrapolating global resin production from herb production estimates with the help of seizure statistics

Table 11: Tentative estimates of global cannabis resin production, 2005

1. Estimate based on Moroccan cannabis resin production 2005 and seizures					
	Seizures in tons (2005)	Estimated proportion of seizures related to cannabis resin originating in Morocco	Estimated proportion from 2005 harvest	Potential seizures in tons related to Moroccan cannabis resin production in 2005	Cannabis resin production estimates
West & Central Europe	912.8	70%	50%	319.5	-
North Africa	109.1	90%	50%	49.1	-
Seizures related to Moroccan cannabis resin	-	-	-	368.6	-
Other seizures	-	-	-	930.5	-
Global seizures	-	-	-	1,299.1	-
in %	-	-	-	28%	-
Cannabis resin production in Morocco (2005) in tons					1,070
Global cannabis resin production estimate I					3,771
2. Estimate based on cannabis herb production estimates and seizures					
	Cannabis herb	Cannabis resin	Proportion		Cannabis resin production estimates
Seizures in tons (2005)	4,472	1,299	23%		
Global cannabis production estimate II	42,000		23%		9,455
3. Combined estimate					
Rounded					6,600

1.4.3 Trafficking

Seizures of both cannabis herb and resin decline in 2005

Cannabis products remained the most widely trafficked drugs worldwide in 2005, accounting for 57 per cent of all global seizure cases (856,000 out of 1.5 million). Practically all countries in the world are affected by cannabis trafficking. Out of 165 countries and territories which reported seizures to UNODC, 99 per cent reported seizures of cannabis.

Cannabis herb seizures amounted to 4,600 mt and cannabis resin seizures to 1,300 mt in 2005. Small quantities of cannabis oil (700 litres) were also seized. Seizures of all three products declined in 2005 as compared to a year earlier, thus reversing the upward trend observed until 2004. Herb seizures dropped by 35 per cent, resin seizures by 11 per cent and cannabis oil seizures by 15 per cent. While changes in law enforcement priorities in some countries may have played a role, for the majority of countries lower seizures meant less trafficking as compared to the previous year. Taken together, cannabis herb and resin seizures are now back to the levels reported over the 2000-2002 period.

Most cannabis herb seizures in 2005 were reported from Mexico (38% of the world total), followed by the

United States (24%), South Africa (6%), Brazil (3%), Tanzania (3%) and India (3%).

Most seizures of cannabis resin were made by Spain (51%), followed by Pakistan and Morocco (7% each), France (6%), Iran (5%), the UK (5% in 2004) and Afghanistan (3%).

Most cannabis oil seizures were made in the Russian Federation (34%) and the Ukraine (10%), followed by Canada (7%) and Morocco (5%).

Cannabis herb remains by far the most widely trafficked drug

Despite of the strong decline in global seizures (-35%), cannabis herb remains the most widely trafficked substance in terms of volume and geographic spread. Ninety per cent of all countries reporting seizures (148 out of 165 countries) seized some cannabis herb. In contrast to other drugs, trafficking in cannabis herb is primarily intra-regional, not inter-regional. Exceptions to this are cannabis herb exports: from Africa (mainly western and southern Africa) to West and Central Europe; from South-East Asia (mainly Thailand) and South-West Asia (mainly Pakistan) to Europe (mainly the Netherlands); from Central Asia to East Europe (notably the Russian Federation); and from South America (mostly Colombia) to North America (mainly the USA).

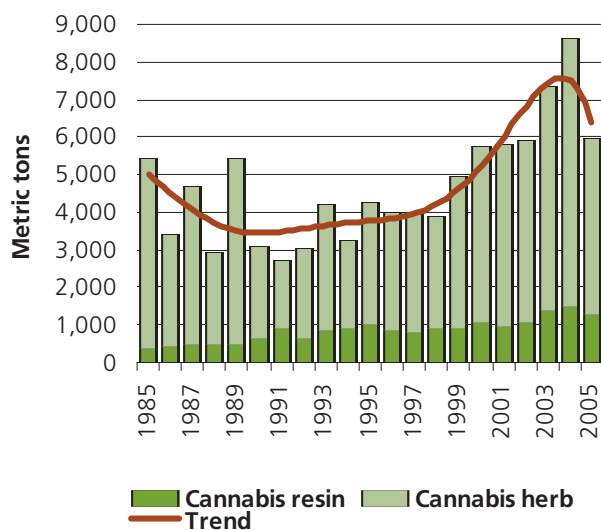
Close to two thirds of global cannabis herb seizures were made in North America (64%) in 2005, notably by the authorities of Mexico (1,781 mt) and the United States (1,112 mt). This reflects the magnitude of the North American cannabis market, both in terms size and of enforcement effort.

The next largest cannabis herb seizures were made in Africa, accounting for 18 per cent of global seizures. The largest seizures here were reported by South Africa (292 mt), Tanzania (150 mt) and Nigeria (126 mt).

South America, including the Caribbean and Central America, accounted for 11 per cent of global cannabis herb seizures. The main seizures in this region were reported by Brazil (152 mt), Colombia (129 mt) and Paraguay (67 mt).

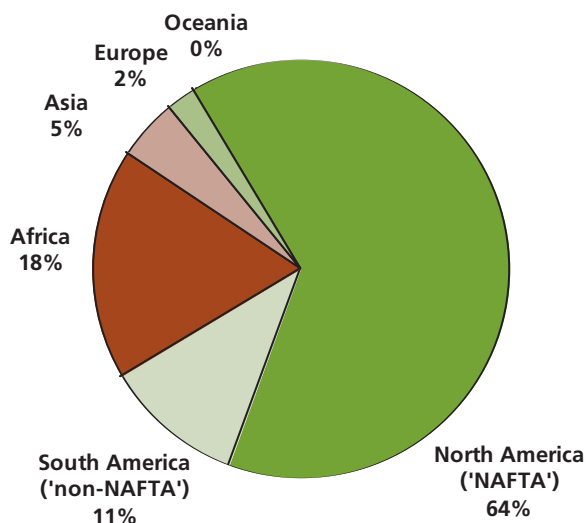
Cannabis herb seizures made in Asia accounted for 5 per

Fig. 80: Cannabis seizures, 1985-2005



Source: UNODC, Annual Reports Questionnaire Data / DELTA

Fig. 81: Distribution of global cannabis herb seizures in 2005 (N=4,644 metric tons)



Source: UNODC, Annual Reports Questionnaire Data / DELTA

cent of the world total. The largest seizures here were reported by India (147 mt), Indonesia (23 mt) and Kazakhstan (22 mt).

Europe’s cannabis herb seizures were equivalent to 2 per cent of the world total. The largest seizures were made by the Russian Federation (30 mt) and the UK (21 mt)¹. Europe is the only region which also ‘imports’ significant amounts of cannabis from other regions.

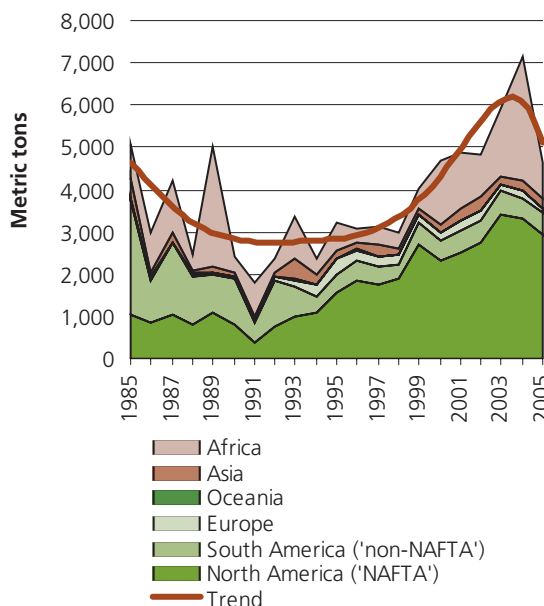
The overall decline of cannabis herb seizures in 2005 (-35%) meant that they were at their lowest level since 1999. A decline in cannabis herb seizures was reported from several regions: Oceania (-6%), North America (-11%), Europe (-39%) and Africa (-71%). Seizures were reported to be increasing, however, by countries of South America (+4%) and Asia (+9%).

Trafficking in cannabis resin

Global cannabis resin seizures decline, notably in West and Central Europe

In terms of quantities seized (1300 mt in 2005), cannabis resin is the second most widely trafficked drug worldwide, after cannabis herb. Resin seizures were reported in 104 countries in 2005, which is 63 per cent of all countries reporting seizures to UNODC. The

Fig. 82: Regional breakdown of cannabis herb seizures, 1985-2005



Source: UNODC, Annual Reports Questionnaire Data / DELTA.

geographical scope of cannabis resin trafficking is thus more limited than for herb trafficking.

In contrast to herb, trafficking in resin is not intra-regional but, significantly inter-regional. This applies, in particular, to trafficking of resin from North Africa (Morocco) to West and Central Europe, from Central Asia to East Europe (notably the Russian Federation) and from the Caribbean (notably Jamaica) to North America (notably Canada).

Global cannabis resin seizures declined by 11 per cent in 2005. Most of the decline, in absolute terms, was due to lower seizures reported by countries of West & Central Europe (-15%). This was linked to the decline of cannabis resin production in Morocco in 2004 and 2005. Data on individual seizures collected by the World Customs Organization (WCO)² in West Europe show that resin seizures declined by a further 30 per cent in 2006. Most of the decline, in both 2005 and 2006, was reported from Spain and France.

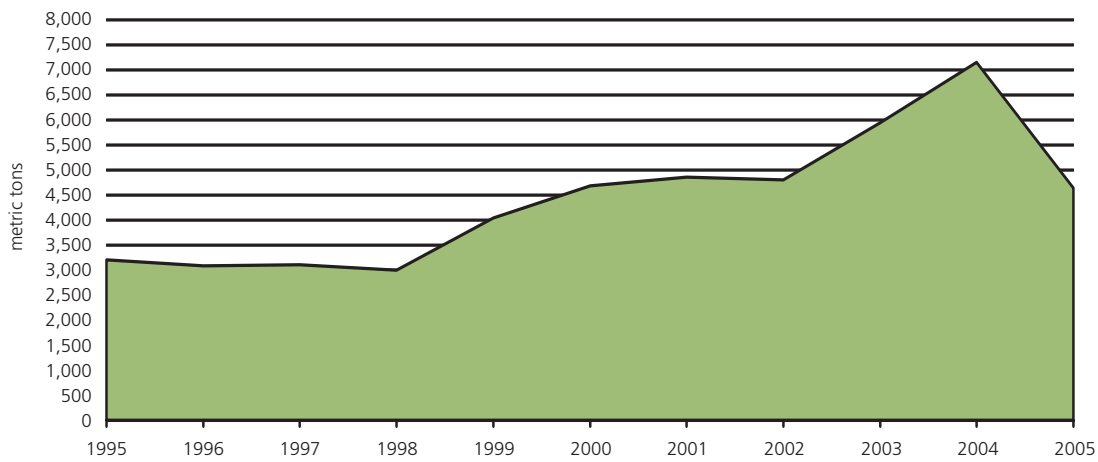
In 2005 Cannabis resin seizures made in North Africa increased slightly on a year earlier (+6%), but were still 5 per cent lower than in 2003 and 25 per cent lower than in 2000. For 2006, WCO data on individual seizures³ suggest that resin seizures declined by 18 per cent.

¹ Data for 2004; no UK seizure data for the year 2005 are available as yet.

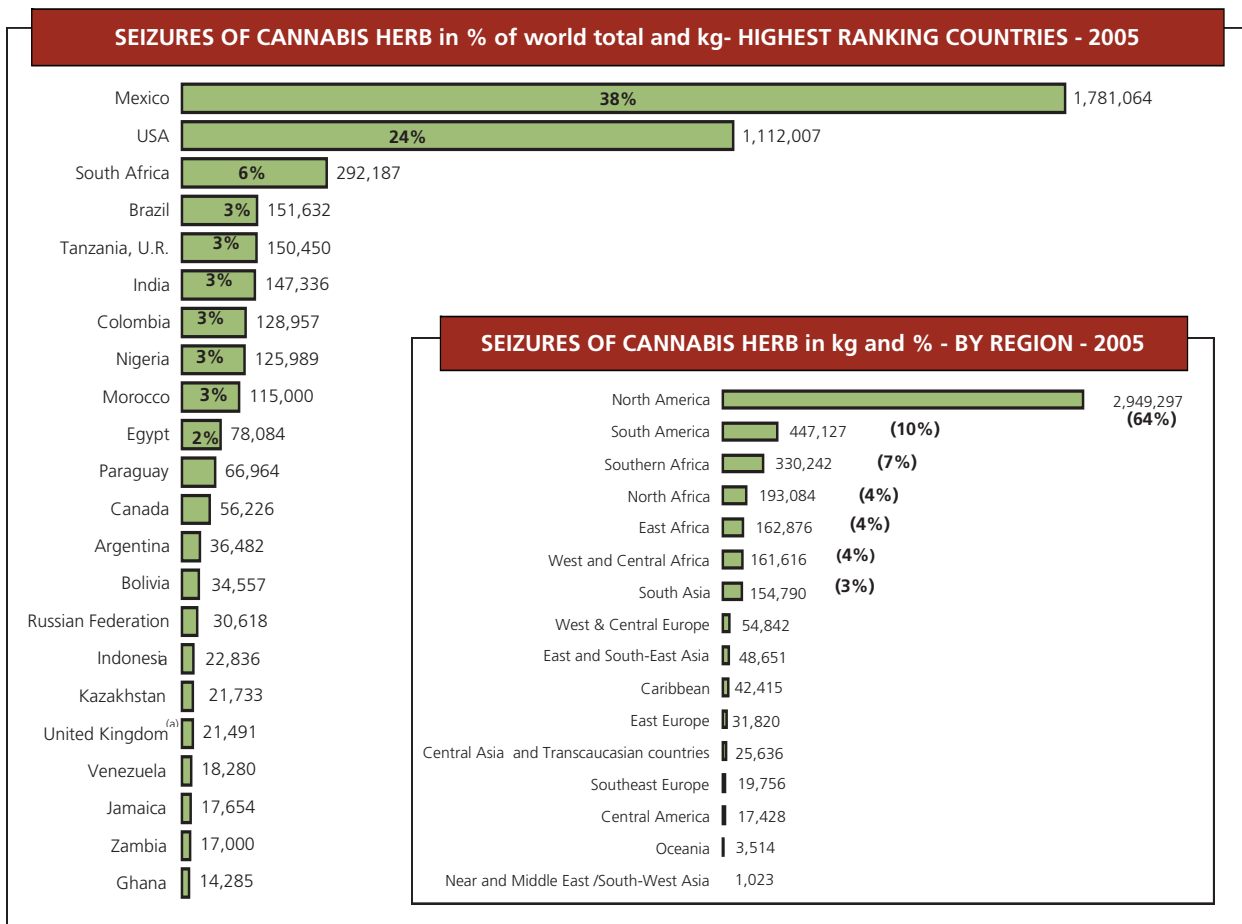
² World Customs Organization, Individual Drug Seizure Database, 27 April 2007.

³ World Customs Organization, Individual Drug Seizure Database, 27 April 2007.

Fig. 83: Global seizures of cannabis herb, 1995 - 2005

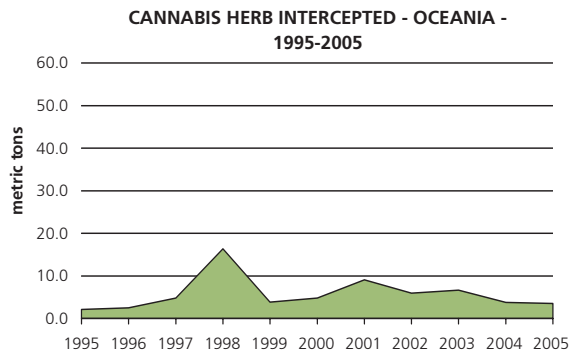
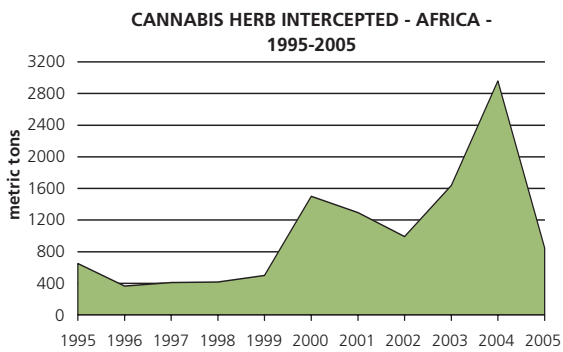
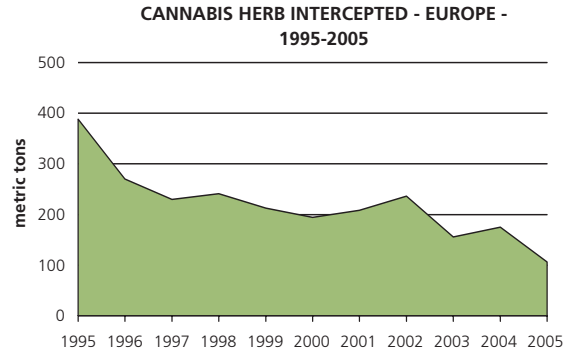
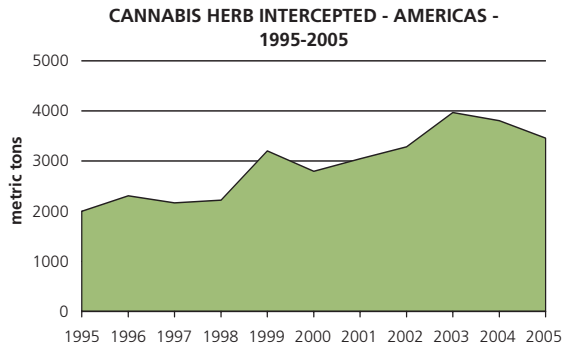
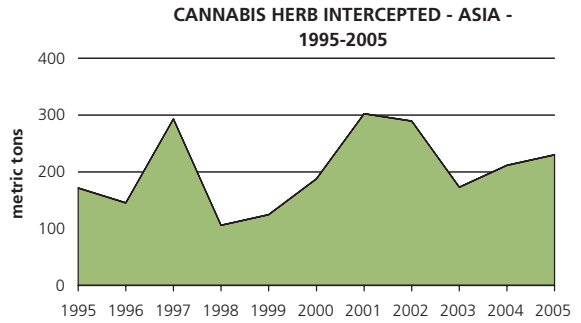
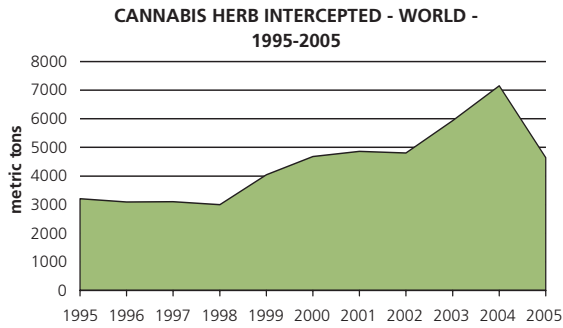


Year	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
Metric tons	3,209	3,090	3,105	2,998	4,042	4,674	4,860	4,805	5,940	7,152	4,644

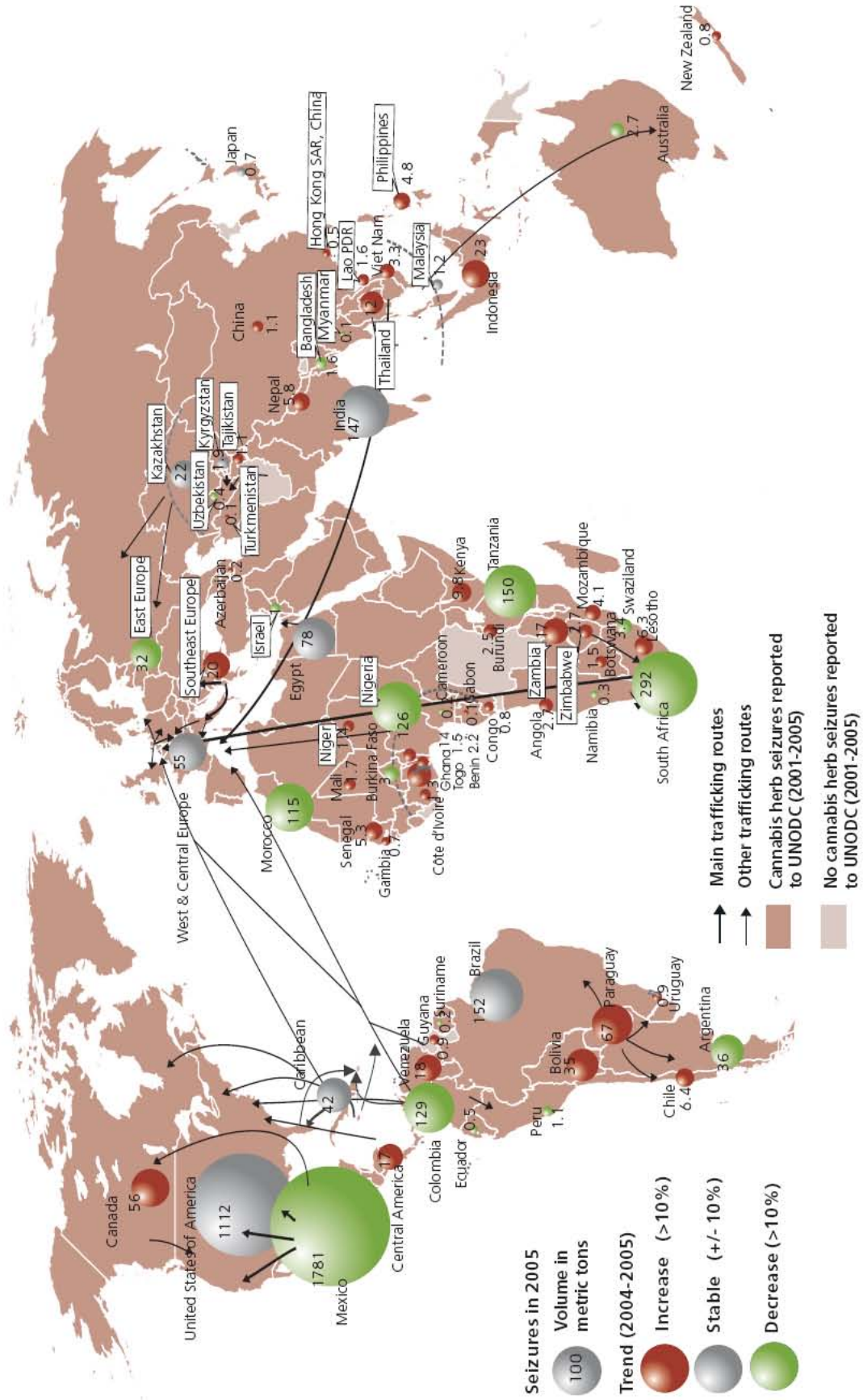


^(a) data refer to 2004

Fig. 84: Global seizures of cannabis herb, 1995 - 2005



Map 15: Trafficking in cannabis herb, 2005 (countries reporting seizures of more than 100 kg)



Source: UNODC Annual Reports Questionnaires data/DELTA.

Seizures also declined in the Near & Middle East / South-West Asia sub-region (-16% in 2005). In contrast, there was an almost tenfold increase of cannabis resin seizures in the Americas (notably in the Caribbean). But, as a whole, the Americas still account for less than 1 per cent of world resin seizures.

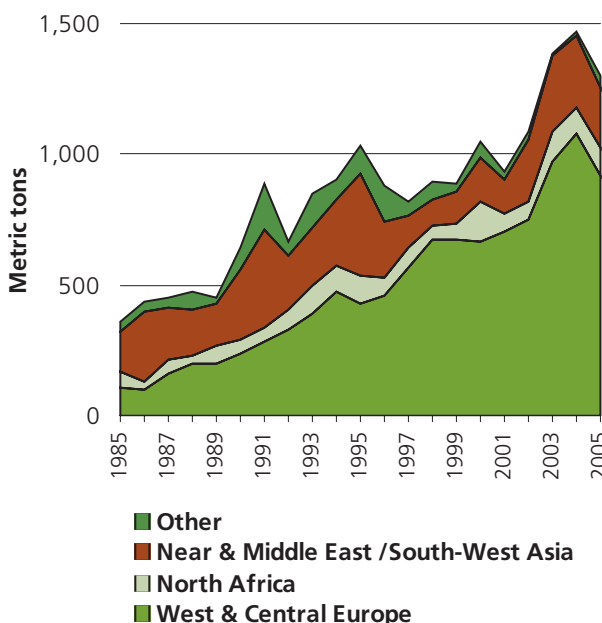
... but West and Central Europe remains the largest cannabis resin market

The world's largest cannabis resin market continues to be West and Central Europe, with the bulk of global seizures (71%) made there. Spain accounts for 73 per cent of all European cannabis resin seizures, ahead of France (9%), the UK (7% in 2004), Portugal (3%) and Italy (2½ %). Spain plays a key role in limiting the supply of cannabis resin for the European market.

The next largest resin seizures were made in the Near & Middle East / South-West Asia region (18% of the world total). The largest seizures here were reported by Pakistan (40% of all Asian cannabis resin seizures), followed by Iran (30%) and Afghanistan (18%). The Near East (defined as the Arabian peninsula, Lebanon, Syria, Jordan, Israel and Iraq) accounted for 10 per cent of cannabis resin seizures made in Asia; the remaining 2 per cent were made in other parts of Asia.

North Africa accounted for 8 per cent of global seizures. Including other parts of Africa, total cannabis resin seizures in Africa add up to 10 per cent of the world total. The largest seizures here were reported by

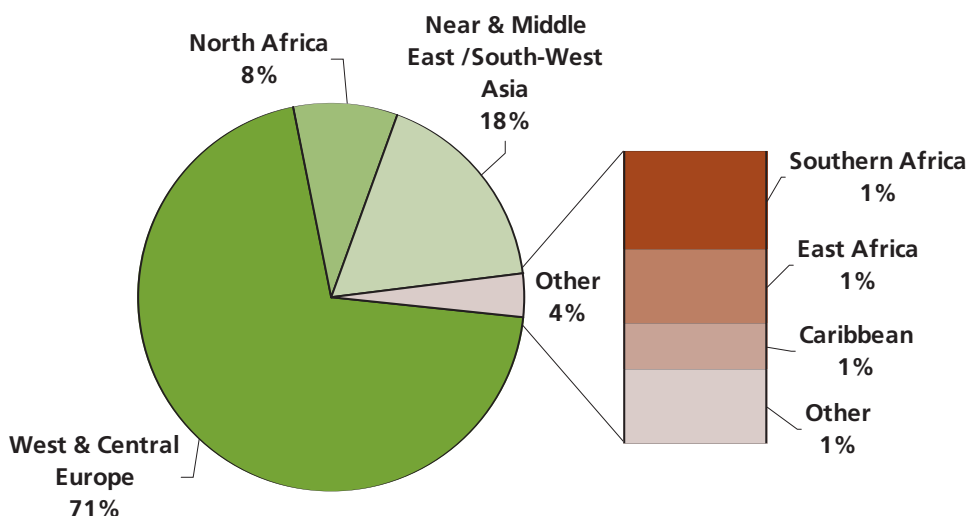
Fig. 87: Regional breakdown of cannabis resin seizures, 1985-2005



Source: UNODC, Annual Reports Questionnaire Data / DELTA.

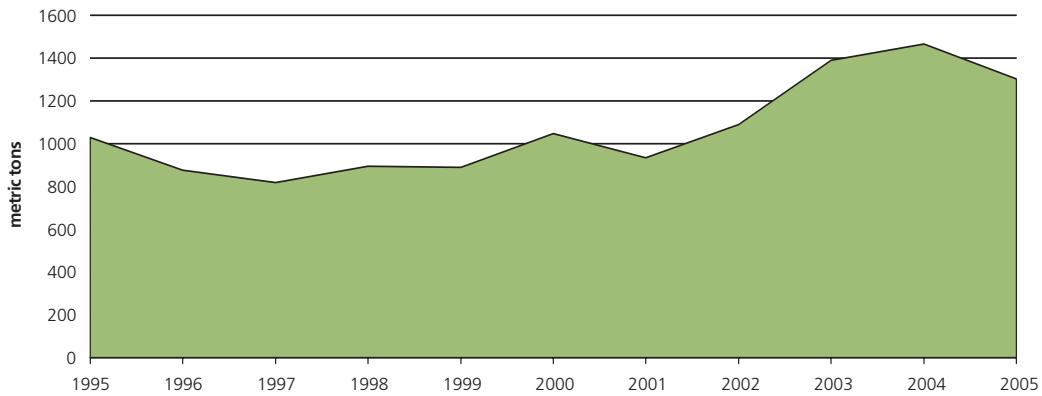
Morocco, accounting for 67 per cent of all African cannabis resin seizures or 85 per cent of all cannabis resin seizures made in North Africa in 2005.

Fig. 86: Distribution of global cannabis resin seizures in 2005 (N = 1,302 metric tons)

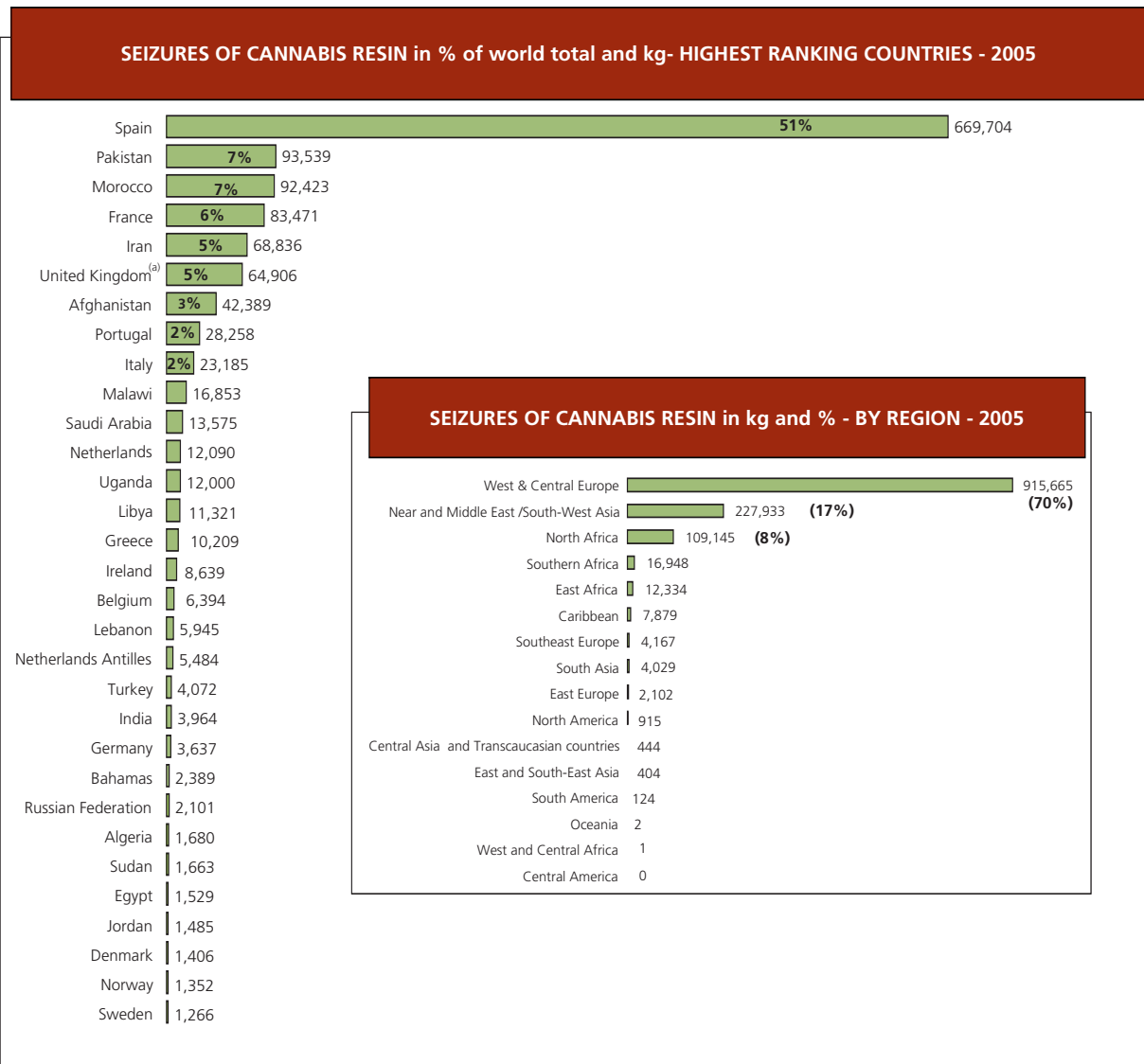


Source: UNODC, Annual Reports Questionnaire Data / DELTA.

Fig. 88: Global seizures of cannabis resin, 1995 - 2005

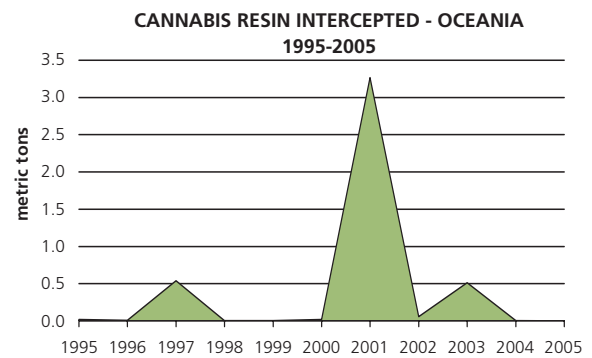
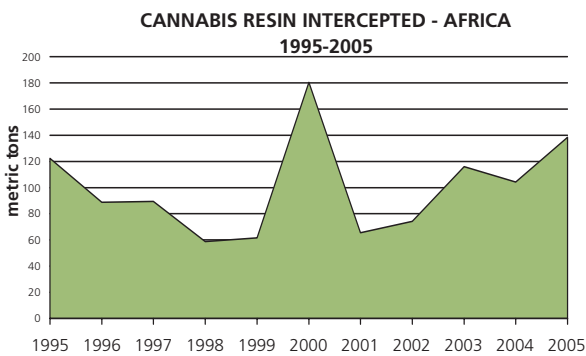
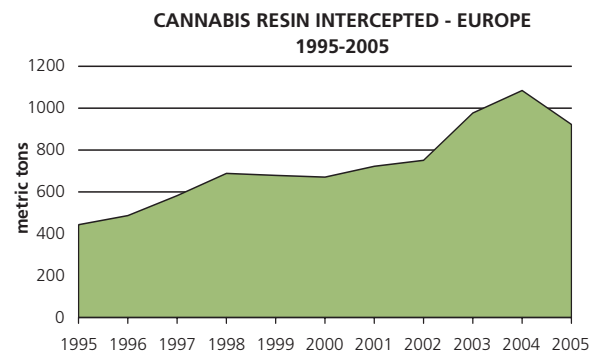
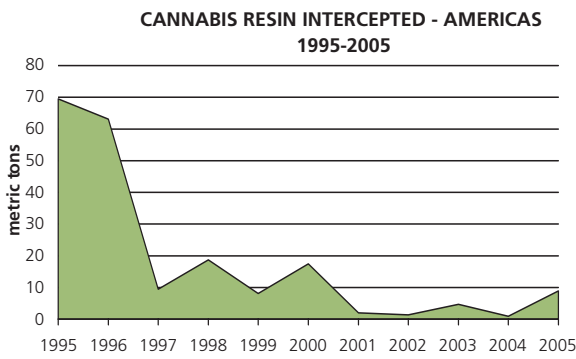
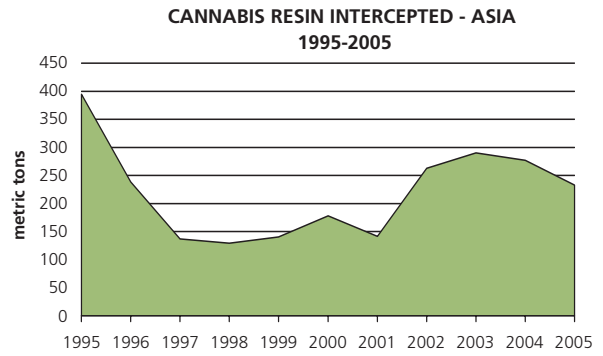
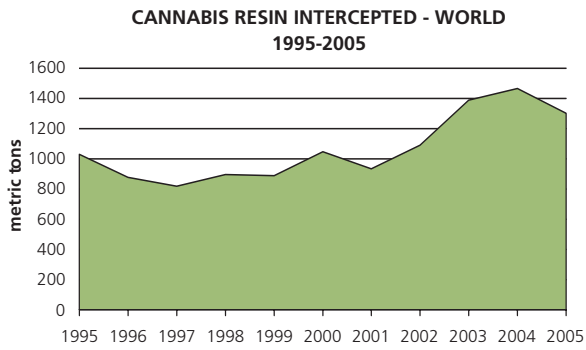


Year	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
Metric tons	1,030	877	818	896	889	1,047	934	1,090	1,389	1,466	1,302

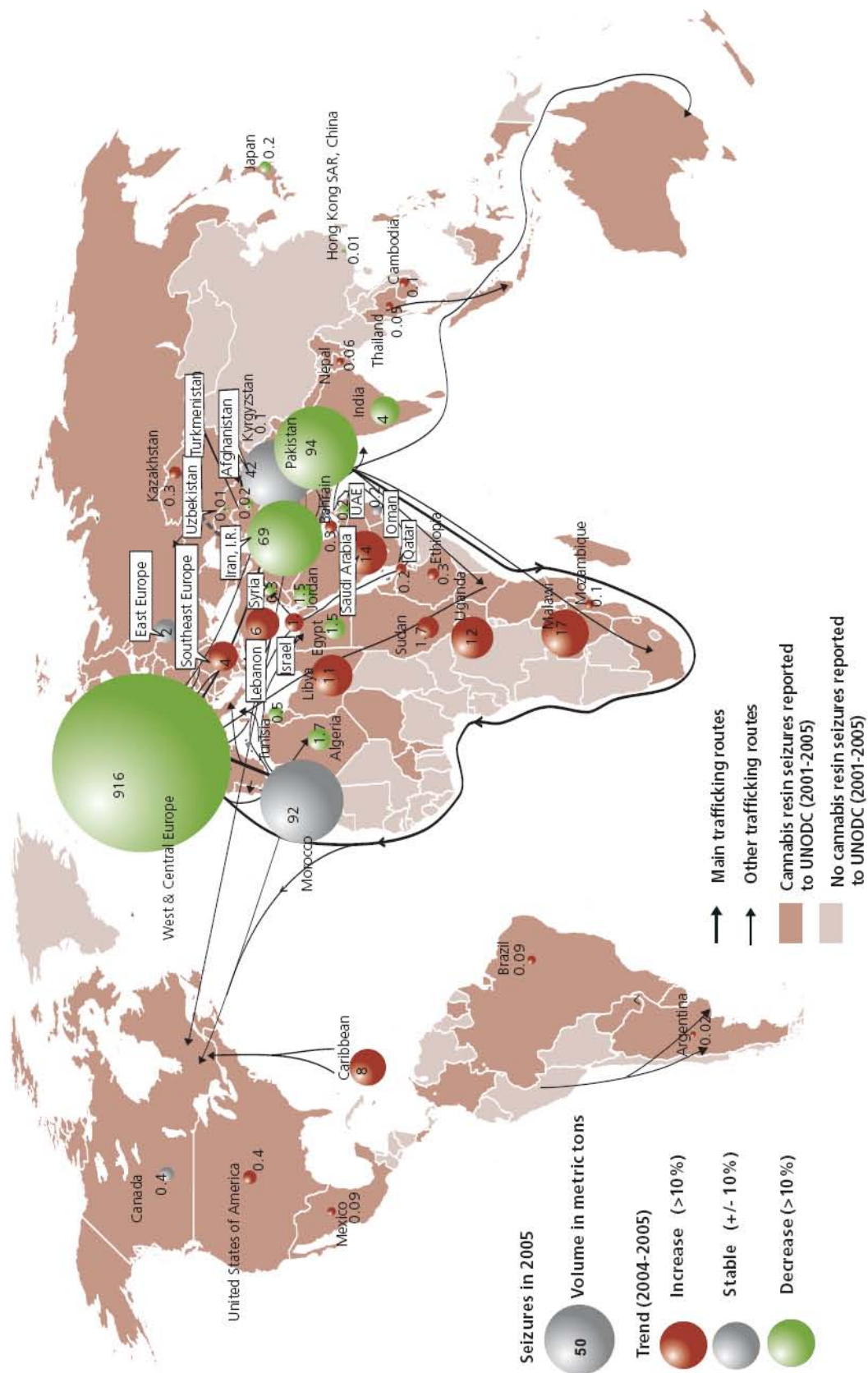


^(a) data refer to 2004

Fig. 89: Global seizures of cannabis resin, 1995 - 2005



Map 16: Trafficking in cannabis resin, 2005, (countries reporting seizures of more than 10 kg)



Source: UNODC. Annual Reports Questionnaires data/DELTA

1.4.4 Abuse

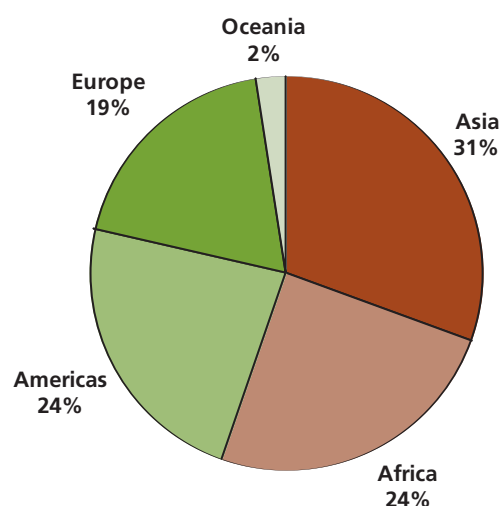
Cannabis remains the most widely used drug world-wide ...

Cannabis remains by far the most commonly used drug in the world. Almost 160 million people used cannabis in 2005, equivalent to 3.8 per cent of the global population aged 15 to 64.

In relative terms, cannabis use is most prevalent in Oceania (15.8%), followed by North America (10.7%), Africa (7.7%) and West and Central Europe (7.4%). The highest rates within Africa are found in West and Central Africa (13%) and in southern Africa (8.5%).

Asia has the lowest prevalence rates (1.9%), reflecting low levels reported from East and South-East Asia (0.9%). For South Asia, estimates show an average prevalence rate of 3.2 per cent; for the Near and Middle East region 3.5 per cent and for Central Asia 4.2 per cent, i.e. all regions in Asia, except for East-South-East Asia, are close to the global average.

Fig. 90: Cannabis consumption in 2005 – regional breakdown (N = 158.8 million)



Sources: UNODC, Annual Reports Questionnaire Data, UNODC Field Offices, UNODC Drug Abuse Information Network for Asia and the Pacific (DAINAP), UNODC Global Assessment Programme on Drug Abuse (GAP), Govt. reports, EMCDDA, CICAD, HONLEA reports, local studies, UNODC estimates.

Fig. 12: Annual prevalence of cannabis use, 2005 or latest year available

	No. of users	in % of population 15-64 years
EUROPE	30,500,000	5.6
West & Central Europe	23,400,000	7.4
South-East Europe	1,700,000	2.0
Eastern Europe	5,400,000	3.8
AMERICAS	37,600,000	6.5
North America	30,900,000	10.7
South America	6,700,000	2.3
ASIA	49,100,000	1.9
OCEANIA	3,400,000	15.8
AFRICA	38,200,000	7.7
GLOBAL	158,800,000	3.8

Above global average



Around global average



Below global average



Sources: UNODC, Annual Reports Questionnaire Data, UNODC Field Offices, UNODC Drug Abuse Information Network for Asia and the Pacific (DAINAP), UNODC Global Assessment Programme on Drug Abuse (GAP), Govt. reports, EMCDDA, CICAD, HONLEA reports, local studies, UNODC estimates.

In absolute terms, 49 million cannabis users, almost a third of the estimated total, live in Asia. Africa, with 38 million and the Americas, also with 38 million, each account for a about a quarter of global cannabis use. Europe, with about 30 million users, accounts for a fifth of global cannabis use and Oceania for 2 per cent.

... but the recent trend is difficult to measure

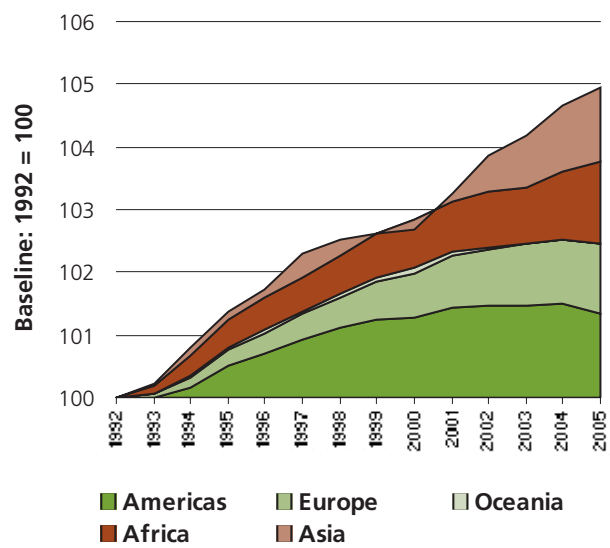
After years of increases, this year's cannabis use estimates of 159 million people are slightly lower than those published in last year's *World Drug Report* (162 million). It would be premature, however, to categorize this as a downward trend. Some of the lower figures come from a few new household surveys. They replace previous UNODC estimates which were slightly higher. At the same time, the new survey results did not, in general, show a further growth in cannabis use. There thus appears to be a general stabilization in cannabis use.

In contrast to this, the trend indicator, which shows the perceptions of experts and officials in Member States, suggests that cannabis use continued to grow in 2005. It is difficult to evaluate the accuracy of these perceptions. It can be argued that it is harder to report against a long-standing and generally accepted trend – in this case the trend of virtually universal increases in cannabis use over the last decade. Such perceptions do not change easily, even when new data, for instance from household surveys, would appear to indicate an improving situation. There could be thus some bias towards reporting an ongoing increase in cannabis use, and this has to be taken into account when interpreting the perception trend indicator for cannabis.

The general rise in the cannabis trend indicator was due to increasing cannabis use perceived by the authorities in most of Africa, several parts of Asia (South-Asia, South-West Asia and Central Asia) and most of South America. This more than offset declines perceived in North America and some European countries, as well as the stabilization or declines perceived in several countries of East and South-East Asia. Trend data for Oceania suggest stabilization at lower levels, after cannabis use had fallen for several years, though there are some indications that the downward trend in the region actually continued. Cannabis use trends in Europe showed a mixed picture, with increases perceived in East and South-East Europe and stabilization or decline reported from several West European countries.

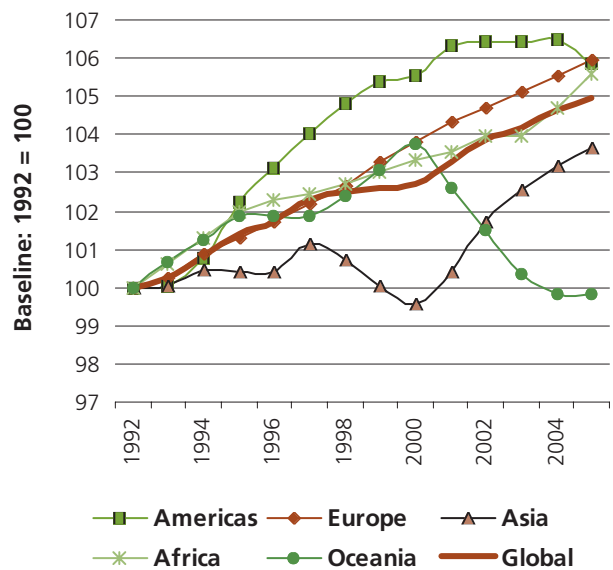
Over the 1992 to 2005 period, the cannabis trend indicator shows that the rates of increase were similar in the Americas, in Europe and in Africa. Over time, however, the patterns differed. Following increases in the Americas in the 1990s, the trend stabilized and a net decline

Fig. 91: Cannabis use trends as perceived by experts: regional contribution to global change, 1992 - 2005



Sources: UNODC, Annual Reports Questionnaire Data, UNODC Field Offices, UNODC Drug Abuse Information Network for Asia and the Pacific (DAINAP), UNODC Global Assessment Programme on Drug Abuse (GAP), Govt. reports, EMCDDA, CICAD, HONLEA reports, local studies, UNODC estimates.

Fig. 92: Cannabis use trends as perceived by experts - regional changes, 1992-2005



Sources: UNODC, Annual Reports Questionnaire Data, UNODC Field Offices, UNODC Drug Abuse Information Network for Asia and the Pacific (DAINAP), UNODC Global Assessment Programme on Drug Abuse (GAP), Govt. reports, EMCDDA, CICAD, HONLEA reports, local studies, UNODC estimates.

was reported for 2005. Europe and Africa showed an upward trend throughout the period with Africa showing higher growth rates in recent years. For Asia, the indicator shows, in contrast, lower than average increases. This was due to an apparent decline in the popularity of cannabis in the late 1990s. In the new millennium this changed and Asia, together with Africa, showed some of the strongest increases in recent years. Starting from high levels, Oceania showed higher than average increases in the 1990s, but a clear downward trend thereafter. Oceania is thus the only region in the world where the cannabis consumption fell back to levels reported in the early 1990s.

Cannabis use continues declining in North America

Cannabis use among 12th graders in the USA declined by 18 per cent between 1997 and 2006 and is significantly lower than three decades ago (-29%). As compared to the peak in 1979, annual prevalence data for 12th graders show a decline of 38 per cent.

A strong decline in cannabis use was also reported among high-school students in Ontario (-19% over the 2003-2005 period). The previous upward trend was thus reversed.

A decline was also noticed for cannabis use among the general population. General population household

survey data show that cannabis use in the USA declined from 11 per cent in 2002 to 10.4 per cent in 2005¹. As compared to the peak in 1979 (16.6%)², cannabis use is 37 per cent lower.

Declines in cannabis use were also reported from Mexico for the year 2005.

... but increases in South America

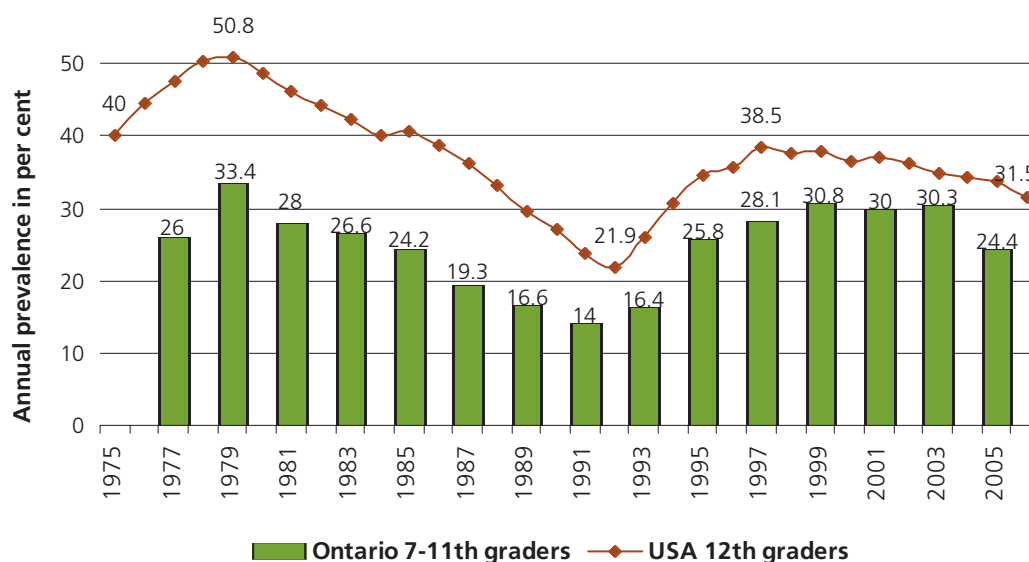
A clear increase in cannabis use was reported from countries in South America. Seven countries reported rising use in 2005 and only one country reported a decline. Nine countries described the situation as stable. The rate of increase thus appears to have declined: a year earlier 11 countries reported rising levels of cannabis use.

The most important increase – though starting from very low levels – was reported from the continent's largest country, Brazil. This probably reflects increased availability of cannabis products from neighbouring Paraguay. The annual prevalence of cannabis use increased from 1 per cent in 2001 to 2.6 per cent in 2005³.

... and shows a mixed picture in Europe with stabilization/decline in the main West European markets

The majority of countries of West and Central Europe (14) reported cannabis use has stabilized. Nonetheless,

Fig. 93: Annual prevalence among high-school students in the USA and in Ontario, Canada, 1975-2006



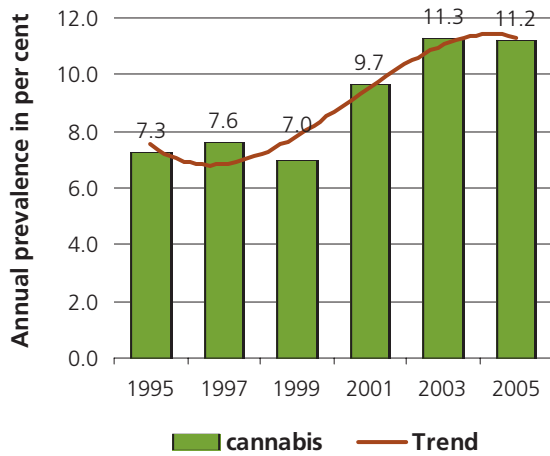
Sources: NIDA, *Monitoring the Future*, 2006 and CAMH, *Ontario Drug Use Survey* 2005.

¹ SAMHSA, *2005 National Survey on Drug Use & Health*, Rockville MD, Sept. 2006.

² Data quoted in SAMHSA, *Preliminary Results from the 1996 Household Survey on Drug Abuse*, August 1997.

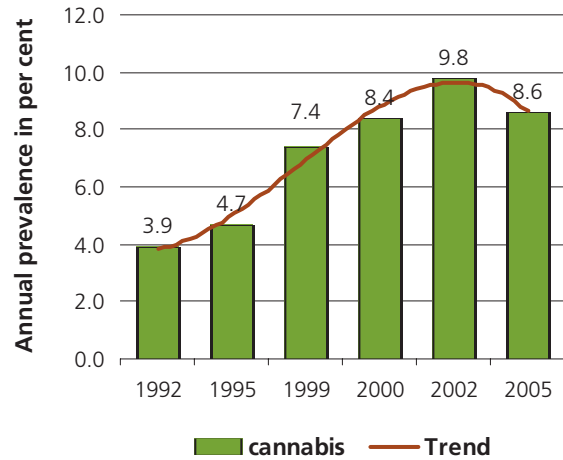
³ CEBRID, *Il Levantamento Domiciliar sobre o Uso de Drogas Psicotrópicas no Brasil: Estudo Envolvendo as 107 Maiores Cidades do País, Sao Paulo 2002*; CEBRID, *Il Levantamento Domiciliar sobre o Uso de Drogas Psicotrópicas no Brasil: Estudo Envolvendo as 108 Maiores Cidades do País, Sao Paulo 2006*.

Fig. 94: Spain: annual prevalence of cannabis use among the general population (age 15-64), 1995-2005



Sources: EMCDDA and UNODC, Annual Reports Questionnaire Data.

Fig. 96: France: annual prevalence of cannabis use among the general population (age 15-64), 1992-2005



Sources: EMCDDA and UNODC, Annual Reports Questionnaire Data.

the number of countries reporting increases (11) was still nearly double those reporting declines (6).

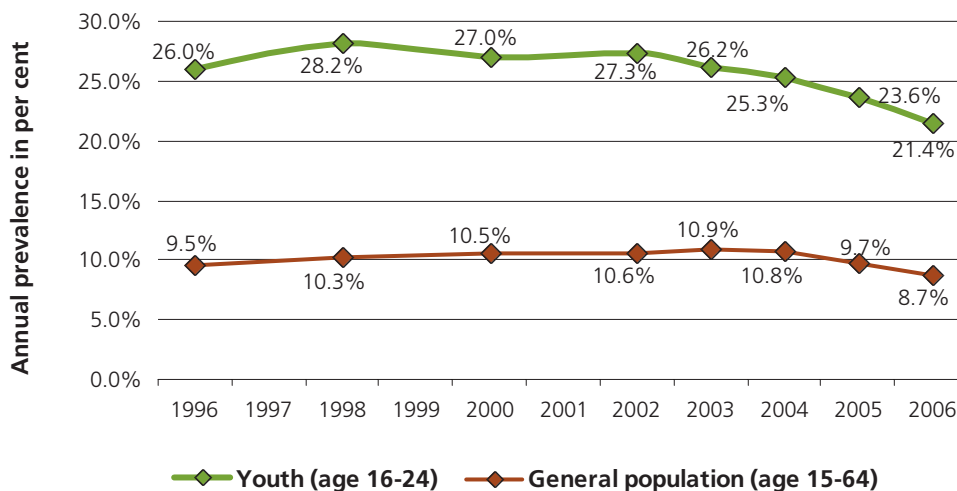
In Europe's main cannabis markets, however, cannabis has now either stabilized or started to decline. Growing awareness of the negative effects of the high THC cannabis found in many European markets seems to have contributed to this stabilization/decline.

The authorities in Spain, one of Europe's largest cannabis markets, still reported some increase in

cannabis use for the year 2005⁴. This perception, however, may be too pessimistic. Household survey data actually indicate stabilization of the market from 2003 to 2005 (11.3% in 2003 and 11.2% in 2005), following strong growth over the 1999-2003 period. The stabilization went in parallel with a growing awareness of the dangers of cannabis use among young people in Spain.⁵

Authorities in France reported a stabilization of cannabis use. Analysis of national household surveys in

Fig. 95: England & Wales: annual prevalence of cannabis use among the general population (age 16-59) and among youth (16-24), 1996 - 2006



Source: UK Home Office, British Crime Survey, 2005/06, London 2006.

⁴ UNODC, Annual Reports Questionnaire Data for the year 2005 for Spain.

⁵ A study done by Eurobarometer among 15-24 year olds in Spain found the perception that occasional use of cannabis was harmless falling from 44 per cent in 2002 to 31 per cent in 2004. European Commission, Eurobarometer, *Young people and drugs*, Brussels, June 2004).

the country suggests, however, that cannabis use declined. Annual prevalence fell from 9.8 per cent in 2002 to 8.6 per cent in 2005 and is almost back to the levels reported at the beginning of the new millennium. The decline in France also went in parallel with a growing awareness of the dangers of cannabis use among young people.⁶

For the United Kingdom, which was Europe's largest cannabis market for many years, cannabis use is now showing a downward trend. Use among the general population (age 16-59) declined in England and Wales from 10.8 per cent in 2003/04 to 8.7 per cent in 2005/06. Including data from Scotland and Northern Ireland, the UK has now a prevalence rate of 8.4 per cent and thus ranks behind Spain and France.

The downward trend among young people in England and Wales appears to have started shortly after 1998, as the UK drug prevention budget was expanded and a number of new activities targeting youth became operational. The trend then became more pronounced in the new millennium, probably because extensive discussion about re-scheduling cannabis brought new scientific findings on the potential harm of cannabis into the

limelight. Growing awareness of the dangers of cannabis use among young people⁷ went in parallel with declining cannabis use.

Most of the stabilization or decline in Europe was in the mature and saturated cannabis markets. There have also been some positive exceptions, notably among the Nordic countries. Data for Finland show stabilization of cannabis use among the general population at a level of 2.9 per cent between 2002 and 2004. Similarly, in Norway cannabis use remained de-facto unchanged in recent years (4.5% in 1999, 4.6% in 2004). Even though Sweden already has among the lowest levels of cannabis use in Europe, data show some declines. Lifetime prevalence of cannabis use among military recruits (typically age 18), declined from 16.7 per cent in 2002 to 12.6 per cent in 2005. Annual prevalence of cannabis use among the general population declined from 2.2 per cent in 2004 to 2.0 per cent in 2005.

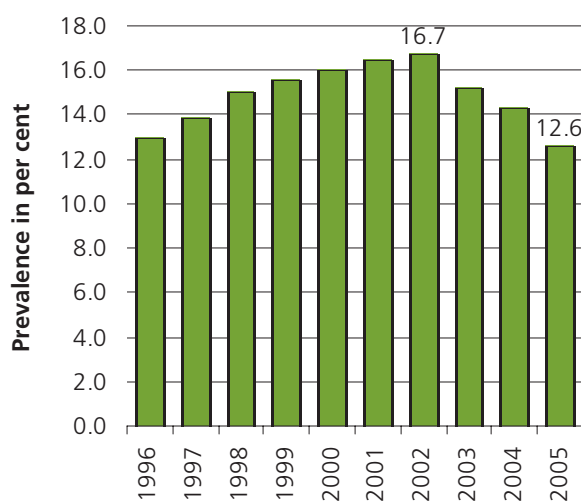
Cannabis use shows an upward trend in Africa ...

A total of 17 African countries reported rising levels of cannabis use in 2005, and only 4 countries saw a decline; a further 4 countries described the cannabis situation as stable. As compared to a year earlier, the upward trend appears to have lost at least some of its momentum. For 2004, 20 countries saw cannabis use rising, only 3 reported a decline and 4 reported stabilization.

...while the situation in Asia is more complex

The cannabis trend indicator, weighted by the cannabis using population, showed a clear upward trend for Asia in 2005. In terms of the number of countries reporting changes in cannabis use, however, the picture is more complex. In fact, only 8 countries reported rising cannabis use for 2005, while 12 reported a decline and a further 12 saw their cannabis markets as stable. Data from Thailand, one of the few countries in the region which conducts regular household surveys, show that the annual prevalence of cannabis use among the general population (age 12-65) declined from 1.5 per cent in 2001 to 0.9 per cent in 2006⁸. Several other countries in East and South-East Asia may well have similar patterns.

Fig. 97: Sweden: life-time prevalence of cannabis use among military recruits



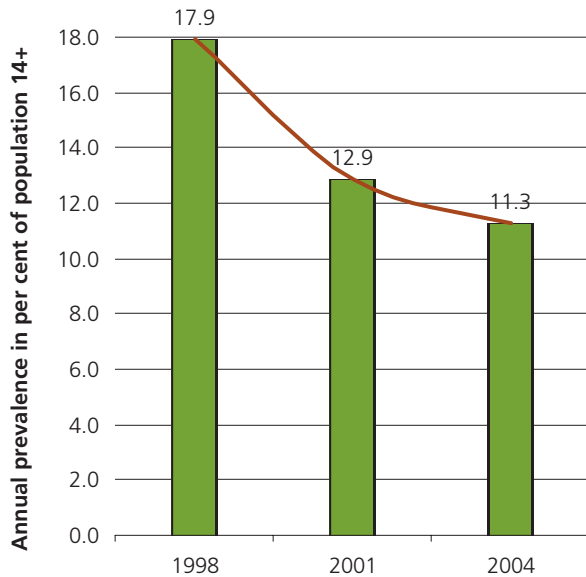
Source: Swedish Council on Information on Alcohol and other Drugs (CAN).

⁶ A study done by Eurobarometer among 15-24 year olds in France found the perception that occasional use of cannabis was harmless falling from 48 per cent in 2002 to 30 per cent in 2004, the strongest decline observed in Europe. (European Commission, Eurobarometer, *Young people and drugs*, Brussels, June 2004.)

⁷ While 47 per cent of youth (age 15-24) in the UK considered the occasional use of cannabis to be harmless in 2002, this proportion declined to 40 per cent by 2004. (European Commission, Eurobarometer, *Young people and drugs*, Brussels, June 2004.)

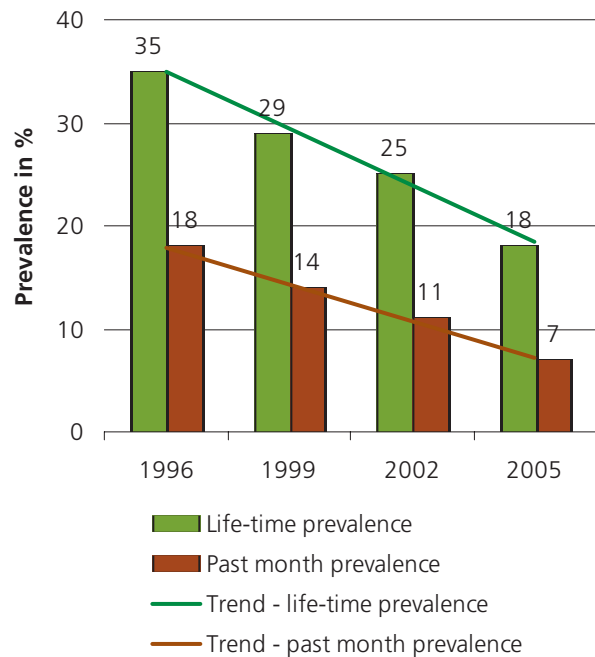
⁸ UNODC (Regional Centre for East Asia and the Pacific), *Amphetamine-type Stimulants in East Asia and the Pacific: Analysis of 2003 Regional ATS Questionnaire*, Bangkok 2004 and UNODC (Regional Centre for East Asia and the Pacific), Drug Abuse Information Network for Asia and the Pacific (DAINAP), 2007.

Fig. 98: Australia: annual prevalence of cannabis use among the general population (age 14+), 1998-2004



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

Fig. 99: Australia: cannabis use among secondary school students (age 12-17) in Australia, 1996-2005



Source: The Cancer Council Victoria, Australian secondary school students' use of over-the-counter and illicit substances in 2005, June 2006

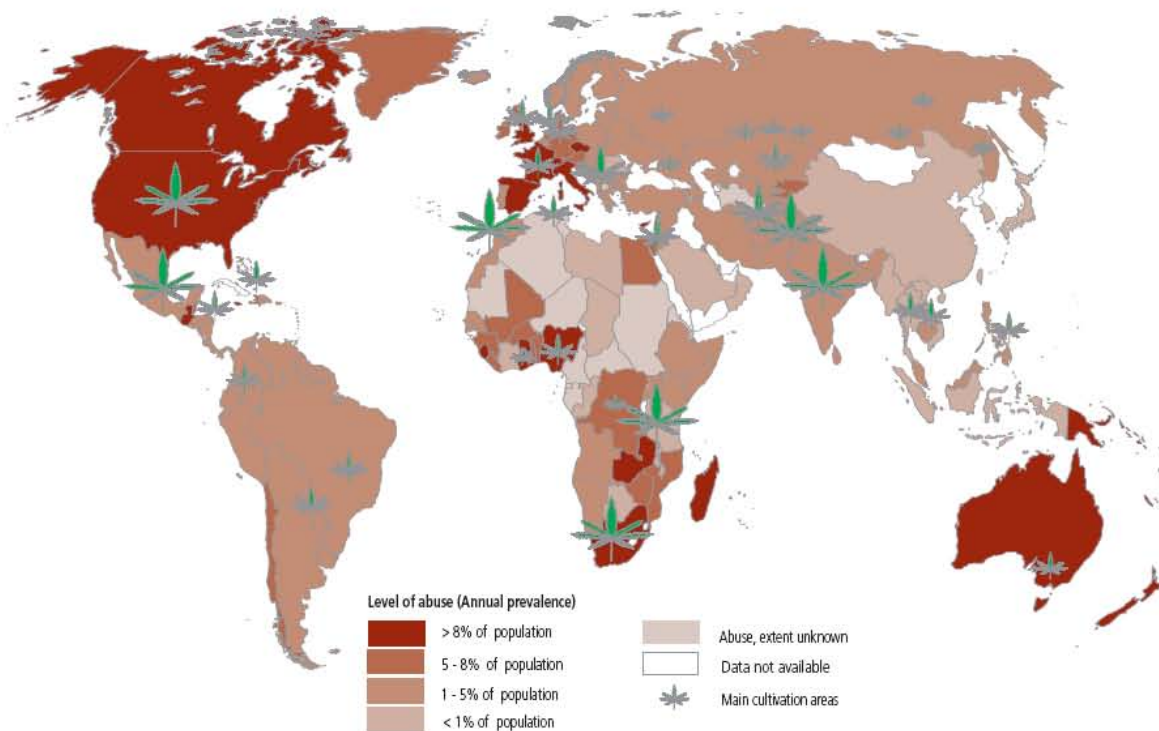
... and a clear downward trend is observed in Oceania

The Australian Household Survey data show that cannabis use declined by some 37 per cent between 1998 and 2004 and use levels are now below those in 1993. Though changes in the methodology may, to some extent, hinder direct comparison between 1998 and 2001, there is hardly any doubt that a significant decline has occurred since the late 1990s. Student surveys, conducted in regular intervals between 1996 and 2005, show an even stronger decline, from a monthly prevalence rate of 18 per cent in 1996 to 7 per cent in 2005, which would indicate that school prevention programmes have been working. While general population data show that cannabis use is still marginally higher in Australia than in the USA (10.6% in 2004), Australian school survey data⁹ show that cannabis prevalence among high-school students is lower than in the USA (31.8% life-time and 13.9% monthly prevalence among 8-12th graders in the USA, 2005; 18% life-time and

7% monthly prevalence among secondary school students aged 12-17 in Australia, 2005). The opposite was true a decade earlier. Though there are no definitive explanations for the decline, it appears that, as in other parts of the world, cannabis is beginning to lose some of its benign image among young people.

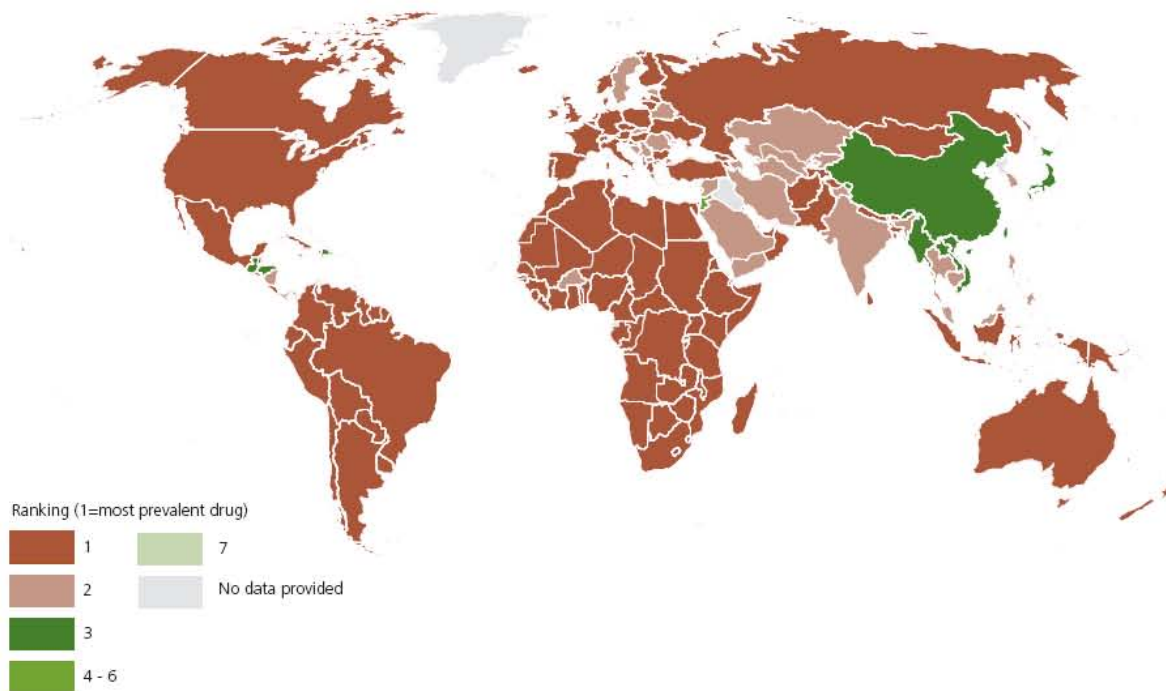
⁹ The Cancer Council Victoria, Report for Drug Strategy Branch, Dept of Health and Ageing, Government of Australia, Australian secondary school students' use of over-the-counter and illicit substances in 2005, June 2006

Map 17: Use of cannabis 2005 - 2006



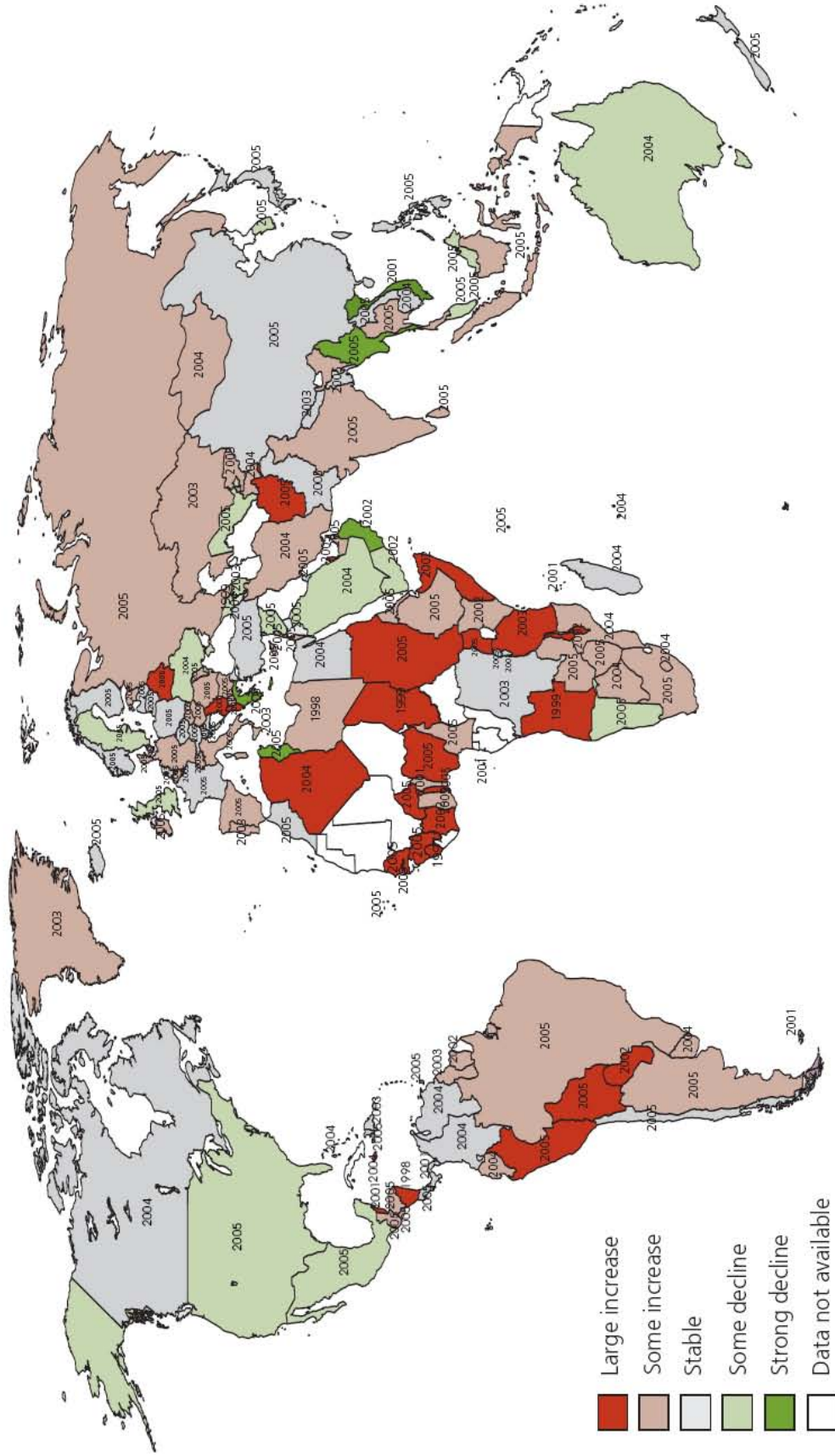
Source: Sources: UNODC Annual Reports Questionnaires data and national reports, UNODC Global Assessment Programme on Drug Abuse (GAP)

Map 18: Ranking of cannabis in order of prevalence in 2005 (or latest available)



Source: UNODC Annual Reports Questionnaires data/DELTA; Government Reports, US Department of State; European Monitoring Centre for Drugs and Drug Addiction (EMCDDA); Drug Abuse Information Network for Asia and the Pacific (DAINAP); UNODC Global Assessment Programme on Drug Abuse (GAP), Inter-American Drug Abuse Control Commission (CICAD)

Map 19: Changes in the use of cannabis 2005, (or latest year available)



Source: Sources: UNODC Annual Reports Questionnaires data and national reports, UNODC Global Assessment Programme on Drug Abuse (GAP)