

## 1.1 The evolution of the world drug problem

### The world drug situation in perspective

The *World Drug Report* tries to provide a comprehensive and up-to-date picture of the world drug situation. This is essential to assess the performance of drug control interventions and to guide policy-making. While data in this report is, in many cases, provided for at least the last ten years, most of its analysis emphasizes the most recent and most topical developments. Monitoring current developments is essential but it is also important to take a longer-term view to assess the performance of the multilateral drug control system.

The only real basis for an assessment has to be an answer to the question whether the drug problem is getting better or worse, and whether illicit drug production, trafficking and consumption are increasing or decreasing. Unfortunately, there is no definitive answer. Hard evidence – both qualitative and quantitative – is thin on the ground. The evidence becomes more and more patchy as one changes the time-span of the enquiry from a year, to a decade, to a century. Tracking a trend – changes between two points in time, usually the present and some point in the past – is difficult at the best of times, particularly when it concerns an illicit activity which is usually concealed. It is not enough to know the situation as it is now. Answering the question of whether the present situation is better or worse necessarily implies knowing what the situation was at the moment in the past with which one is comparing. This is usually called a baseline. It is obviously easier if the baseline and the present situation can be captured in some kind of quantitative measure. The trend can then be expressed in simple arithmetic: not just better or worse, but better or worse by a certain percentage. If there is no arithmetic, the trend can only be expressed by perception: when one is inclined to see the glass as half empty then the trend is worse; when one is inclined to see the glass as half full, then the trend is better.

There are thus at least three time-spans on which one can focus an assessment of trends in how the drug problem is evolving: changes from one year to the next, over a decade, and over a century. The first is appropriate, and possible, because the present Report is part of an

on-going series of publications which are designed to show an annual trend. Indeed, the rest of this Report details the year-on-year trend in production, trafficking and consumption of illicit drugs. The second temporal focus, on a decade, is appropriate because of the milestone of the twentieth special session of the United Nations General Assembly devoted to countering the world drug problem together (UNGASS) in 1998, and the assessment of its goals and targets in 2008. This is not dealt with here because it will doubtless be examined, in some detail, in subsequent issues of the *World Drug Report*. The third temporal focus, on a century, is examined in the following paragraphs.

The drug control system is one of the oldest forms of multilateralism, spanning nearly a century. The use of psychoactive plants may have been with us for millennia, but a series of local or national drug problems only turned into an international problem in the beginning of the 20<sup>th</sup> century. The Shanghai Opium Commission of 1909 was convened in recognition of the fact that the causes and consequences of the problem went well beyond China. This is why the histories of drug control and of multilateral regulatory regimes are so closely inter-linked. The Shanghai Commission spawned the first instrument of international law to deal with psychoactive drugs: the Hague Opium Convention of 1912. It required each signatory to enact domestic legislation controlling narcotic drugs so they could be restricted to medical use. From these origins came a still continuing process of expanding domestic legislation in countries. It illustrates a unique dimension of all multilateral regimes. They have a mandatory nature. When countries become signatories to an international convention, they incur an obligation to enact complementary legislation and thus have to measure their own policies against international standards. The Shanghai Commission and Hague Convention also began a process that has evolved into the multilateral drug control system. The scope of control over drugs has broadened and deepened over the years, from opium to cocaine to cannabis to psychotropic substances, and from the regulation of production and trade of medical drugs to the goal of international cooperation against the multi-faceted problems associated with illicit drugs.

The legal framework for this whole multilateral control system is provided by the three international drug conventions.<sup>1</sup>

### In the long-term, the drug problem has been contained

With regard to the performance of that multilateral system, there is evidence that, over the last hundred years, it has reduced and contained the drug problem at the global level. Tracking a long-term trend over a century is difficult because the evidence is in short supply. Some baselines can, however, be found. The best, in terms of detail, is for opium, because it was the opium problem which was investigated at the Shanghai Commission in 1909. Comparing the size of the opium problem in one country – China – at the beginning of the 20<sup>th</sup> century with the size of the opium problem in the world at large today, gives one some idea of how the problem has evolved over a century. Such a comparison has been made in a previous issue of this Report.<sup>2</sup> It is useful to recapitulate because it carries considerable explanatory power.

Just before the convening of the Shanghai Opium Commission, in 1907/1908, world opium production was estimated to have been at least 30,000 metric tons. Almost three quarters of this was produced in China, one-sixth in India and the rest in Indochina, Persia and Turkey.<sup>3</sup> Nearly a hundred years later, world opium production declined by more than 80% to around 5,000 tons in 2005, including 4,620 tons of illegal opium and some 400 tons of licit medical opium<sup>4</sup>. Over the same period, the population of the world grew three fold, from less than 2 billion to over 6 billion. Opium production is thus eighty per cent smaller in a world which is three times larger. There are of course, many other drugs today. But the trend is a powerful illustration of the containment of illicit drug production over a century, notably for the opiates which, despite this

decline, are still the main problem drugs in the world, responsible for most drug related morbidity and mortality.

Another illustration of containment in the long-term can be derived from comparing the consumption of opium over a century. At the beginning of the 20<sup>th</sup> century, China alone is said to have had about 25 million opium users<sup>5</sup>.

Today, at the beginning of the 21<sup>st</sup> century, there are less than 16 million opiate users in the world (of which some 11 million use heroin). Again, there are many other psychoactive drugs available, and heroin is more dangerous than opium, but containment of the problem over a century still appears to be a sustainable argument.

A third argument in support of long-term containment is to compare illicit drugs with other licit, legitimately available, psychoactive drugs. The most instructive comparison would be between illicit drugs and tobacco. Though it is both psychoactive and addictive, nicotine was never put under the drug control regime. The recent World Health Organization Framework Convention on Tobacco Control does control tobacco products, but the approach is fundamentally different. Compared to illicit drugs, tobacco markets are relatively unregulated, relying on taxation, advertising and age-related controls of consumption. Comparing these markets with the much more strictly regulated markets for illicit drugs is, as noted above, instructive. The annual prevalence of tobacco use in the world is about one quarter (age 15+) of the world population – some 1.7 billion people. The annual prevalence of illicit drug use – taking all illicit drugs – is only 5 per cent of the world population (age 15-64) – some 200 million people. Tobacco consumption is thus eight-fold more than illicit drug consumption. Even more telling, tobacco claims 25 times as many lives as illicit drug abuse.<sup>6</sup> Had there been no drug control system, the size of the drug

1 The Single Convention on Narcotic Drugs of 1961 (United Nations *Treaty Series*, vol. 520, No.7515), the Convention on Psychotropic Substances of 1971 (*Ibid*, vol.1019, No. 14956) and the United Nations Convention Against Illicit Traffic in Narcotic Drugs and Psychotropic Substances (*Ibid*, vol. 1582, No. 27627).

2 United Nations Office on Drugs and Crime, *World Drug Report 2004*, (United Nations publication, Sales No. E.04.XI.16) pp. 26- 27

3 International Opium Commission, Shanghai, China, 1-26 February 1909.

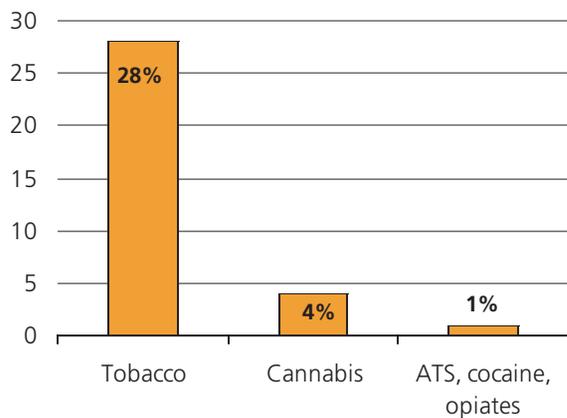
4 Licit opium estimate from the International Narcotics Control Board, as published in *Narcotic Drugs: Estimated World Requirements for 2006, Statistics for 2004* (United Nations publication, Sales No.E. 06.XI.3), p. 175. The estimate of licit opium production for the 2005 amounts to 374.3 tons, but may change. Illicit opium estimates are detailed in this Report in the chapter 'Opium/heroin market'.

5 International Opium Commission, Shanghai, China, 1-26 February 1909; Vol. 1, *Report of the Proceedings*, p.68.

6 The World Health Organization estimates that some 200,000 people died from drug abuse in the year 2000, equivalent to 0.4 per cent of all deaths worldwide. Tobacco, on the other hand, is said to claim about 5 million annually. United Nations Office on Drugs and Crime, *World Drug Report 2004*, (United Nations publication, Sales No. E.04.XI.16), Vol. 1, pp. 25-26.

using population, as well as the burden of disease associated with it, would have been much greater – perhaps even at levels close to tobacco. The multilateral drug control system therefore helped to contain the problem at 5 per cent of the world population (age 15-64) or less than one per cent if only problem drug use is considered. This is an achievement that should not be underrated and provides a useful perspective within which more recent developments can be analysed.

**Fig. 1a: Use of all illicit drugs compared to use of tobacco (in % of world population age 15-64)**



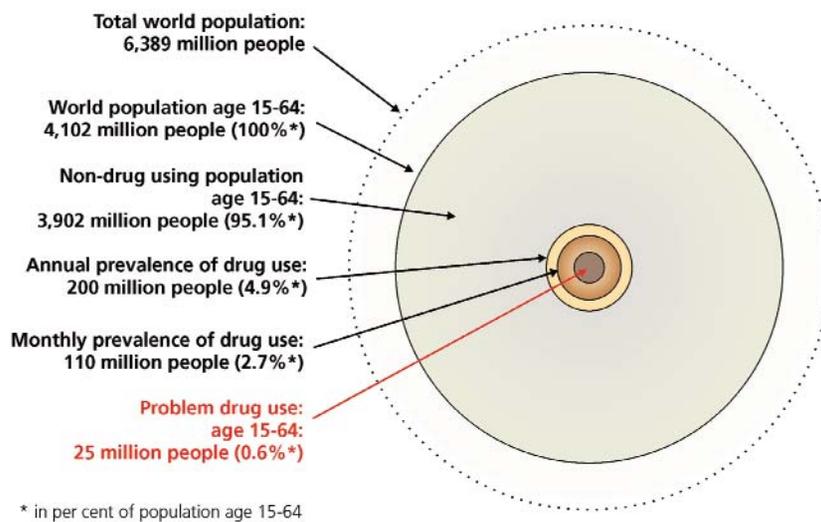
**Estimated overall level of drug use in the world remains stable**

Some 200 million people or 5 per cent of the world’s population aged between 15 and 64 years have used drugs at least once in the previous 12 months. The global estimate of drug users thus remains the same as the estimate published in the 2005 *World Drug Report*. Increases in some drug categories (cannabis and ecstasy) were offset by some declines in others and by an observed tendency towards poly-drug abuse. However, changes in the estimates must be interpreted with caution because they not only reflect actual changes in the number of drug users but, to an unknown and probably large extent, changes in data collection and reporting methods as well.

Of all illicit drugs, cannabis remains by far the most widely used illicit drug. The number of cannabis users in the world surpassed the 160 million mark in 2005 and is now estimated at some 162 million people, or 4 per cent of the world’s population in the 15-64 age group.

With some 35 million users, amphetamine-type stimulants (ATS)<sup>7</sup> are the second most widely used group of drugs in the world. Estimates for the 2006 *World Drug Report* are slightly higher than those presented in the previous year, reflecting an increase in the estimate of ecstasy users (22 per cent), due to increased reporting of ecstasy use in developing countries. The increase was particularly pronounced in Asia. The number of ecstasy

**Fig. 1b: Illegal drug use at the global level**



<sup>7</sup> The group of amphetamine-type stimulants (ATS) encompasses amphetamines (amphetamine, methamphetamine), ecstasy (MDMA and related substances) and other synthetic substances (such as methcathinone, phentermine, fenetylline etc.).

**Table 1: Extent of drug use (annual prevalence\*) estimates 2004/05(or latest year available)**

	All illicit drugs	Cannabis	Amphetamine-type stimulants		Opiates	of which heroin	Cocaine
			Amphetamines	Ecstasy			
(million people)	200	162.4	25	9.7	15.9	11.3	13.4
in % of global population age 15-64	4.9%	3.9%	0.5%	0.2%	0.4%	0.3%	0.30%
Annual prevalence is a measure of the number/percentage of people who have used an illicit drug at least once in the 12 month-period preceding the assessment. The annual prevalence estimate is derived from national survey results and extrapolations from partial information on the drug situation in the various countries.							
Note: As drug users frequently take more than one substance (poly-drug use), the world total for all illicit drugs together is not equal to the sum of the estimates for each individual drug group.							
Sources: UNODC, Annual Reports Questionnaire data, National Reports, UNODC estimates.							

users in North America, on the other hand, is now clearly lower than a few years ago, reflecting successes in curbing supply and raising the awareness of the risks related to ecstasy consumption. Ecstasy use in Europe remained largely stable.

The global estimates of amphetamines users are now slightly lower, reflecting lower estimates for Asia, where more than 60 per cent of the world's amphetamines users are found. The lower overall estimate masks, however, ongoing increases of methamphetamine use in a number of Asian countries and in some African countries. Amphetamines use in Europe and in the Americas remained largely stable.

The number of opiate users in the world remains stable at around 16 million people (of which 11 million people abuse heroin). This mainly reflects increasing levels of opiate abuse in some parts of Asia (countries surrounding or close to Afghanistan) and Eastern Europe (C.I.S. states) which exceeded the declines reported from a number of countries in East and South-East Asia and from Australia. In Africa, the estimated number of heroin users now approaches the one million mark, reflecting spillover effects from increased heroin trafficking through that region.

Estimates of the number of cocaine users – some 13 million people – are slightly lower than last year, though almost unchanged from those made for the late 1990s. The estimates suggest that at the global level, at least, the upward trend in cocaine consumption has come to

a halt, notably in the Americas. This positive trend, however, goes hand in hand with the observation that in a number of other countries cocaine consumption continues rising.

#### Trends in annual prevalence estimates show moderate increases

UNODC global prevalence estimates suggest that overall drug use has been rising, over the last few years, mainly due to increased levels of cannabis and ecstasy use.

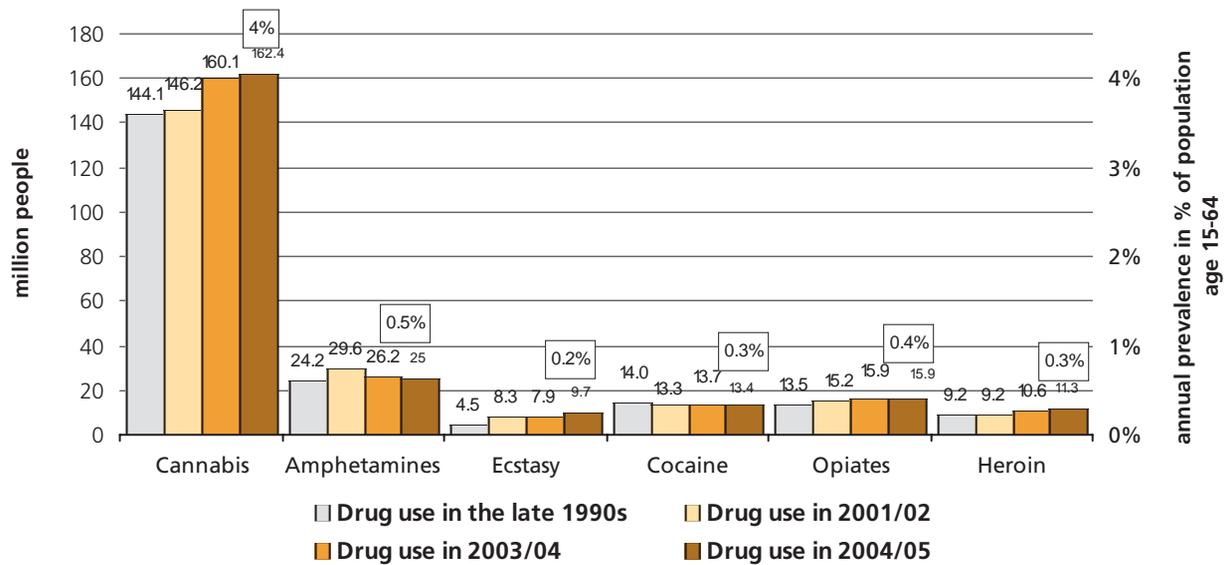
No significant changes were observed for most other drugs. Use of amphetamines is more widespread than in the late 1990s but seems to have declined as compared to the early years of the new century.

These results are indicative of underlying drug use trends but, due to frequent lack of data availability, they should not be mistaken as scientific proof of such trends<sup>8</sup>.

#### Drug Use Trends move upwards

In addition to estimates of the total number of drug users, UNODC collects Government experts' perception of national drug use trends as part of the Annual Reports Questionnaire (ARQ). Based on this information, UNODC establishes drug trend indicators for the four main drug categories: opiates, cocaine, cannabis, amphetamine-type stimulants.

<sup>8</sup> Scientifically valid prevalence studies - even 8 years after UNGASS where Governments pledged to undertake such studies in regular intervals - are still very limited and lacking in many countries or must be considered outdated (in some countries the most 'recent' studies date back to the mid 1990s). Thus, changes in the underlying data material could also reflect availability of new studies or better estimates rather than changes in drug consumption.

**Fig. 2: UNODC estimates of illicit drug use, late 1990s to 2004/2005**

Sources: UNODC, Annual Reports Questionnaire data, National Reports, UNODC estimates, UNODC, World Drug Report 2000, 2004 and 2005.

Drug use trends are reported by Government experts for the following categories: 'large increase', 'some increase', 'no great change', 'some decrease', 'large decrease'. These reported trends are then weighted by the size of the countries' drug using populations, in order to more accurately reflect the overall trend at the global level<sup>9</sup>.

The main advantage of this method is that far more countries are in a position to provide perceptions of drug use trends rather than actual estimates of the number of drug users in their countries. The underlying problem remains, however, that without proper drug monitoring systems in place, perception is not necessarily a very reliable measure of actual drug use trends. These caveats must be kept in mind in interpreting the following results.

Compared to the estimates published in 2005 *World Drug Report*, the drug use perception trends were as follows:

- Cannabis use is perceived to be increasing further;
- For the first time in years, cocaine use was perceived as declining slightly;
- Upward trends are perceived for both opiate use and ATS use, including ecstasy.

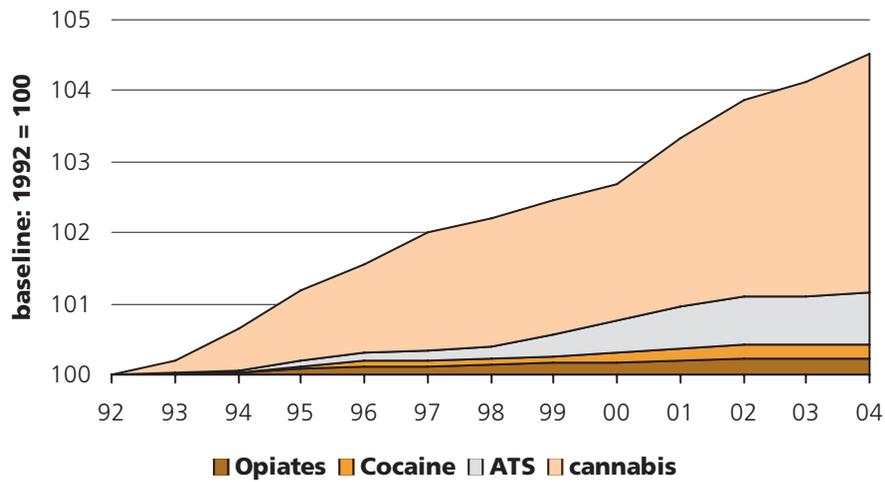
Over the last twelve years, the strongest increases in drug use were perceived for cannabis and amphetamine-type stimulants. Increases in opiates and cocaine were less pronounced.

In addition to respective individual drug trends, an overall drug use perception trend indicator was established, based on the results of the main drug categories and weighted by their importance for overall drug consumption. This composite index (figure 3) suggests that cannabis was responsible for most of the increase in global drug use over the last decade, followed by the amphetamine-type stimulants.

The perceived increase in drug use over the last decade must be also seen in a wider context. If all Governments had reported 'some increase' in each year, the trend data would have shown a value of 112 after 12 years (1 point per year); and if all countries had report 'strong increases' the value would have amounted to 124 (2 points per year). The actual composite index, based on the drug trend data reported by Member States, shows a value of 104.5 after 12 years, reflecting the fact that drug use did not increase in all countries, but remained stable or declined in some countries. The actual drug use perception trend after 12 years lies in between 'not much change' and 'some increase' and is actually closer

<sup>9</sup> A detailed explanation on the establishment of the drug use perception trends is shown in the section on methodology in Volume 2 of the present report.

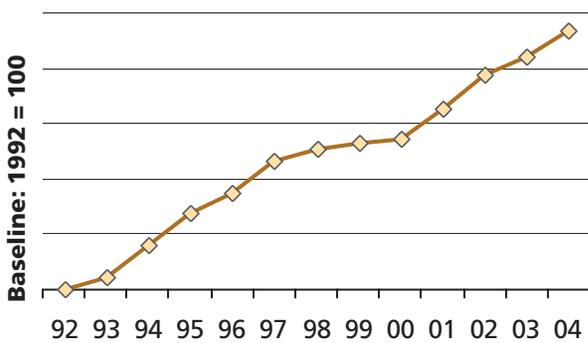
Fig. 3: Drug use trends - all drugs (based on expert opinion, weighted by the estimated number of users)



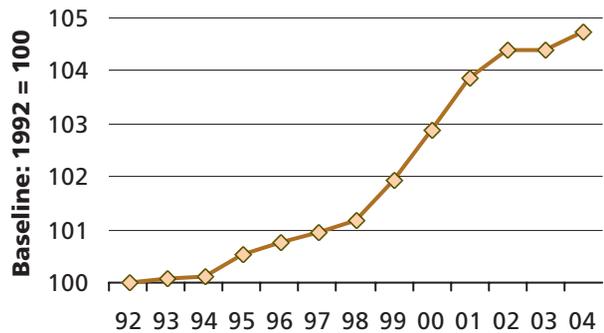
Sources: UNODC, Annual Reports Questionnaire Data (for trends) and UNODC drug use estimates (World Drug Report).

Fig. 4: Twelve year trends (as perceived by expert, weighted by the estimated number of users)

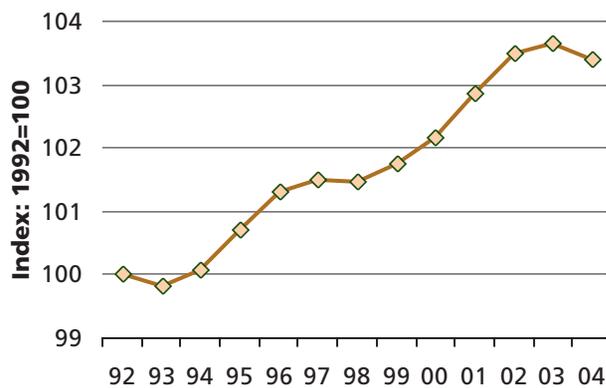
Cannabis



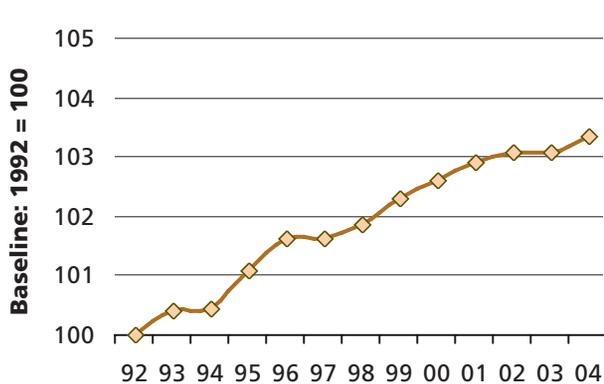
Amphetamine-type stimulants



Cocaine



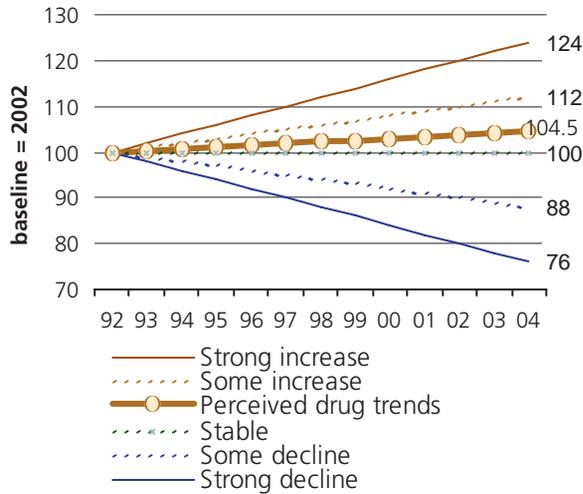
Opiates



Sources: Annual Reports Questionnaire Data for trends and UNODC, WDR 2005 estimates of the number of drug users.

to a stable (100) trend than to a rising trend ('some increase': 112).

**Fig. 5: Twelve year drug use, as perceived by experts**



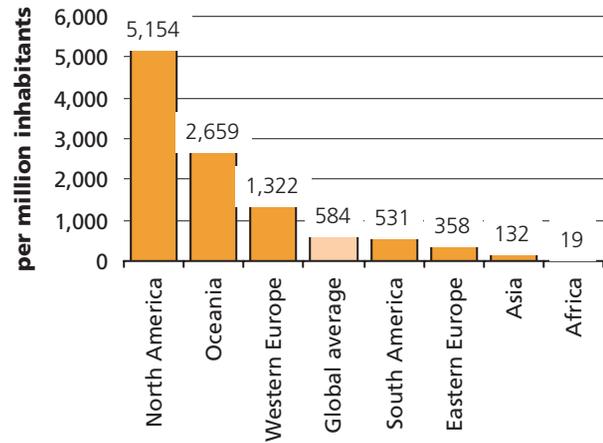
Sources: UNODC, Annual Reports Questionnaire Data (for trends) and UNODC drug use estimates (World Drug Report).

**Treatment demand is highest in North America, Oceania and Western Europe**

The demand for drug abuse treatment is an important indicator for assessing the world drug situation and provides an idea of the type of drugs that cause the biggest burden on national health systems. Member States reported a total of 3.7 million people under treatment for drug abuse to UNODC. The actual world total is likely to be larger as many countries do not have comprehensive treatment registry systems. For comparison, UNODC estimates that some 25 million (0.6 per cent of the world's population age 15-64) are drug dependent.

Based on reported data, some 580 persons per one million inhabitants were treated for drug abuse in 2004. The highest numbers of drug treatment per million inhabitants are found in North America (5,200), followed by Oceania (2,700) and Western Europe (1,300). All other regions show values below the global average.

**Fig. 6: Drug treatment per million inhabitants in 2004**



Source: UNODC, Annual Reports Questionnaire data / DELTA.

The lowest numbers have been reported from Asia (132) and from Africa (19), reflecting the lack of appropriate treatment structures in many of the countries of these regions.

**Treatment demand for opiate abuse continues to be highest in Asia and Europe**

In Asia and Europe - home to more than 70 per cent of the world's total population - opiates account for the bulk of drug-related treatment demand (65 per cent and 59 per cent respectively in 2004<sup>10</sup>). The proportion of opiate-related treatment demand has been on the decline, in both Europe and Asia since the late 1990s<sup>11</sup>. This reflects increasing abuse of other drugs (cannabis, cocaine and ATS in Europe and ATS and cannabis in Asia) as well the decline of opium production in South-East Asia and, in 2001, in Afghanistan. It should be noted, however, that since the resumption of opium production in Afghanistan, opiate-related treatment demand in Asia has grown slightly (from 63 per cent in 2002/03 to 65 per cent in 2004).

In Oceania, opiates used to be the primary drug resulting in treatment demand (66 per cent in the mid

10 Difficulties faced here are that some countries only have data available from a few clinics whereas others have country-wide monitoring systems in place. Simply adding up the number of people treated for the various drugs would give a strong bias in favour of the countries which have nationwide monitoring systems in place while disregarding the information provided by others. In order to overcome this problem, the proportions at the country level were first calculated and, based on these results, the (unweighted) averages for the respective region were derived. The data shown are those reported for 2004; in case no data for a specific country were reported for 2004, data obtained from previous years were used or, if available, data for 2005.

11 The subsequent comparisons are based on treatment data statistics compiled and published in the 2000 *World Drug Report*.

1990s). This proportion declined in the wake of the Australian heroin shortage of 2001. In 2004, demand for opiate related treatment was thus considerably lower (34 per cent). Interestingly, treatment demand for opiate use was even lower than that for cannabis-related treatment (36 per cent).

#### **Treatment for cocaine abuse is highest in the Americas but the strongest increase is recorded in Europe**

For South America, cocaine continues to account for most of the drug abuse related treatment demand (54 per cent) though the proportion has declined since the late 1990s (down from 65 per cent). High proportions of cocaine related treatment demand are also encountered in North America (41 per cent). The strongest increase in cocaine related treatment demand was observed in Europe (rising from 3 per cent to 7 per cent). Cocaine is still mainly a problem of Western Europe, where it accounts for more than 10 per cent of treatment demand; in Eastern Europe the proportion is at less than 2 per cent.

#### **Cannabis-related treatment demand remains highest in Africa**

For Africa, most of the demand for drug use treatment is linked to cannabis (63 per cent 2004), but demand for opiates related treatment (12 per cent) has increased in recent years, notably in Eastern Africa. Spill-overs from trafficking of opiates via these countries to Southern Africa, Western Africa and Europe seem to have been responsible for higher heroin abuse levels. Paradoxically as heroin production in Latin America (Colombia and Mexico) is declining, heroin transit trafficking from South-West Asia via Africa to markets in North America might lead to further increases of heroin abuse in Africa in the future.

Treatment demand for cannabis has increased in most parts of the world since the late 1990s. It increased in North America (from 23 per cent to 43 per cent) and is now at levels similar to cocaine-related treatment demand. Increases in cannabis-related treatment demand were also reported from South America (from 15 per cent to 24 per cent), Europe (from 10 per cent to 16 per cent), Oceania (from 13 per cent to 36 per cent) and Asia (from 9 per cent to 12 per cent).

#### **Treatment demand for ATS is highest in East & South-East Asia, Oceania, North America and Europe**

The proportions of ATS abuse-related treatment

demand are highest in Oceania (19 per cent) and in Asia (17 per cent), followed by North America (12 per cent) and Europe (10 per cent). In most regions, ATS-related treatment demand is now higher than in the late 1990s. Treatment demand for ATS rose in Oceania from 12 per cent to 19 per cent; in Asia from 12 per cent to 17 per cent; in North America from 5 per cent to 12 per cent, in Europe from 8 per cent to 10 per cent and in Africa from 3 per cent to 6 per cent of all drug related treatment demand between the late 1990s and 2004.

The highest proportion of ATS related treatment demand are found in East & South-East Asia (unweighted average 32 per cent in 2004). In a number of countries, including the Philippines, Japan, Republic of Korea and Thailand, more than half of all drug-related treatment is related to methamphetamine abuse.

In North America, methamphetamine treatment demand is highest in the United States and in some areas of Mexico and Canada bordering the United States. In 2004, about 18 per cent of overall treatment demand was linked to the abuse of amphetamine-type stimulants in the United States. Traditionally a phenomenon of the western and south-western states of the United States, methamphetamine abuse and related treatment demand, have spread eastwards over the last decade and already affect many of the Midwestern states. Treatment demand for methamphetamine abuse is still low in the Northeast but it seems to be only a question of time until those states will also suffer the consequences of large-scale methamphetamine abuse and will require related treatment.

In Africa, rising levels of methamphetamine abuse have been felt most acutely in South Africa where ATS-related treatment accounted for 14 per cent of overall treatment demand in that country. Most other ATS-related treatment demand in Africa is linked to licit pharmaceutical products diverted to illicit drug markets.

In Europe, only the Czech Republic reports methamphetamine to be a major problem (54 per cent of all treatment demand in 2004). This substance is also being used in a few other European countries such as Slovakia (24 per cent of treatment demand), Estonia, Latvia and, albeit at very low levels, United Kingdom. Demand for treatment for other ATS, notably amphetamine, is, relatively high in several of the Nordic countries (Iceland, Finland and Sweden).

**Treatment demand for cannabis and ATS abuse on the rise**

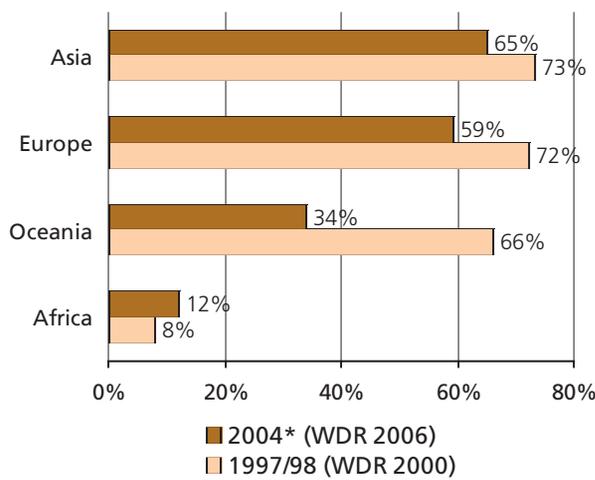
By drug, the picture for treatment demand can be summarized as follows:

- *Cannabis* is increasingly requiring treatment in North America, Oceania, Europe, Africa, South America and Asia;

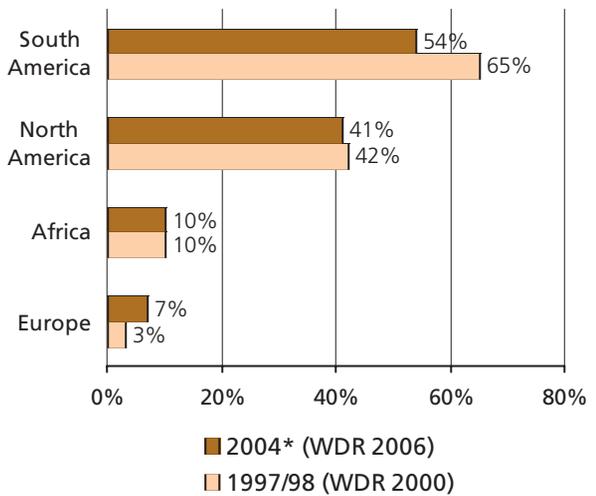
- *Cocaine* has declined in overall drug treatment in the Americas, but continues rising in Europe;
- *Opiates* have declined in overall treatment in several regions;
- *ATS* in treatment has increased in Asia, North America, Europe and Africa.

**Fig. 7: Proportion of people in drug treatment for specific substances - 1997/98 and 2004**

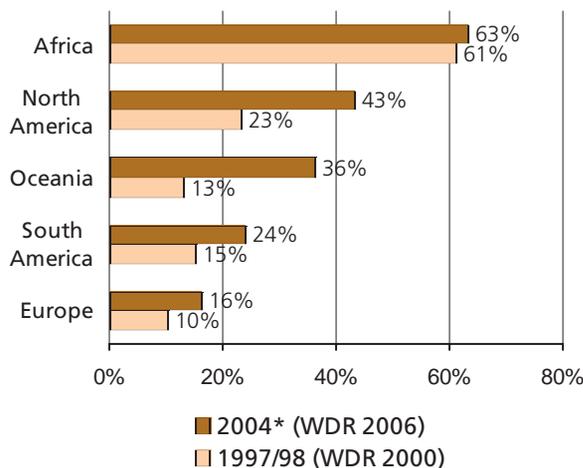
**Opiates**



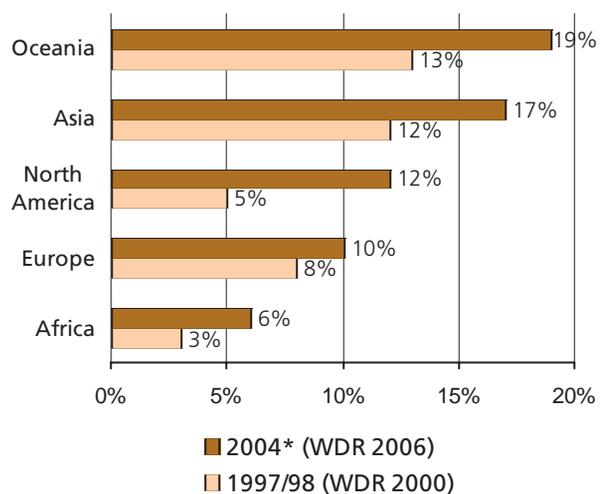
**Cocaine**



**Cannabis**



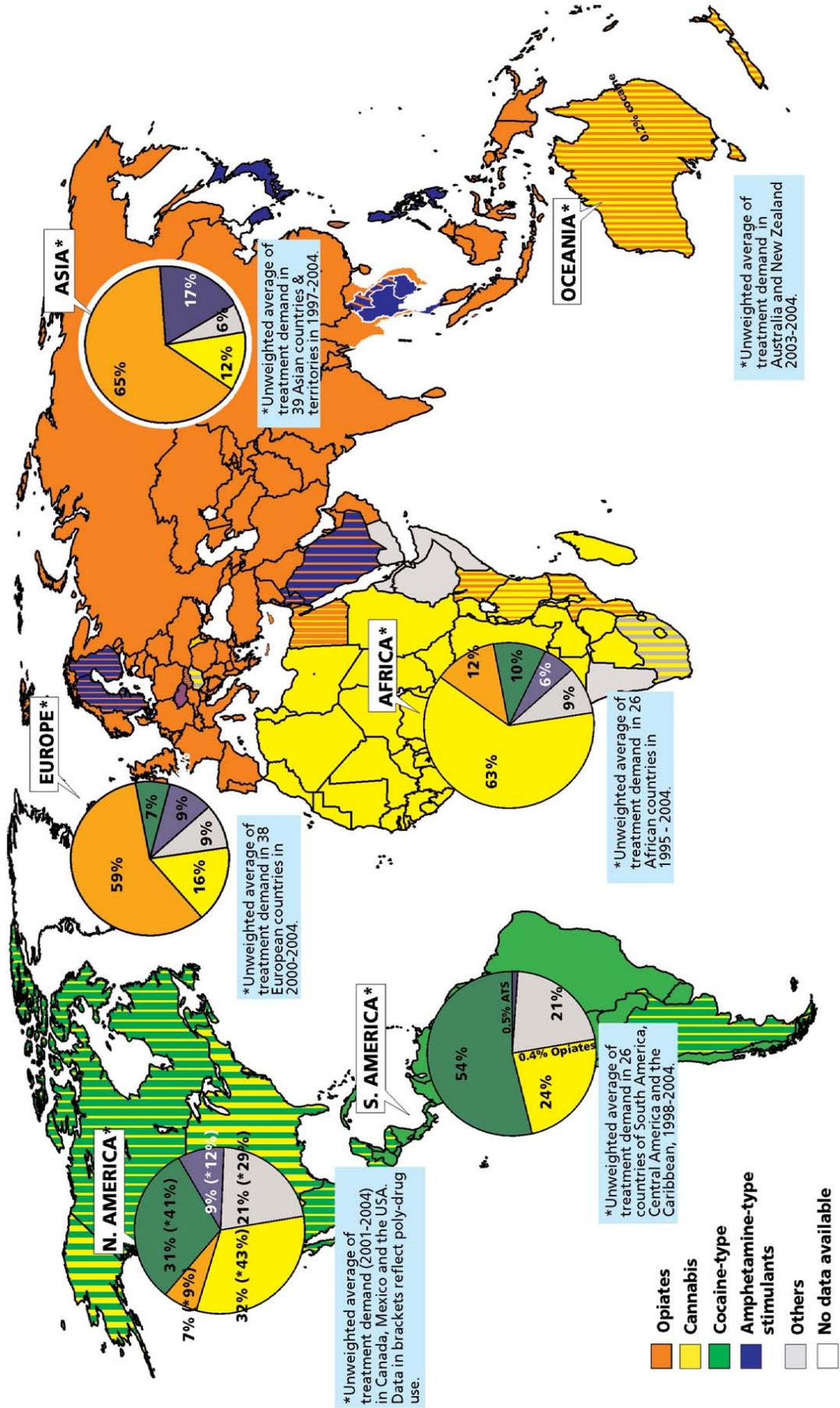
**Amphetamine-type stimulants**



\* 2004 or latest year available.

Sources: UNODC, Annual Reports Questionnaire Data; National Govt. report; reports by regional bodies.

Map 1. Main problem drugs (as reflected in treatment demand) in 2004 (or latest year available)



Source: UNODC, Annual Reports Questionnaire Data/DELTA and National Governments Reports.

## Seizures remain an important indicator of the world drug problem

Seizure statistics are a further source of information on the evolution of the world drug situation. Their main advantage is that they are systematically and comprehensively recorded and reported by most Member States. As they have been reported since the times of the League of Nations, seizure statistics are in fact the largest time-series drug data, thus allowing for long-term analysis of the evolution of drug markets.

It is, however, clear that the capacity to make seizures varies considerably among nations. This has to be taken into account in making comparisons among countries. There are also some basic problems related to the recording of seizures. One such problem is non-reporting which, although it has declined over the years, can still be a problem for some regions.

Secondly, if more than one law enforcement body is involved in making drug seizures - and this seems to be increasingly the case - there is a potential danger of double counting. This can be the case both within countries as well as between countries<sup>12</sup>.

Another problem is that it may take a long time to dismantle major drug trafficking networks. Once a drug ring is dismantled and seizures are made in a specific year, it would be wrong to interpret such seizures as proof of rising drug trafficking activities in that specific year. Finally, seizures and the related dismantling of drug trafficking networks could lead to a reduction of drug trafficking operations in the subsequent period; but it is equally possible that seizures made are just the tip of the iceberg, and more seizures are an indication of intensified drug trafficking operations.

All of these shortcomings have cast doubt as to the validity and usefulness of collecting seizure data. Nonetheless, experience has shown that seizure data, in combination with other indicators (such as purity data,

price data and, if available, drug production estimates, treatment data, arrest data, drug use survey data etc.) are a very powerful tool for investigating major trafficking flows and their trends. In particular, when larger geographical units are investigated (subregions or regions) and seizures are looked at over longer periods of time, they have proven to be rather good reflections of underlying trafficking trends. Drug seizures have, in general, been in line with drug production trends (though gradually showing higher interception rates) and, in the main consumer markets, with drug consumption trends.

Seizure data can be examined from three different angles:

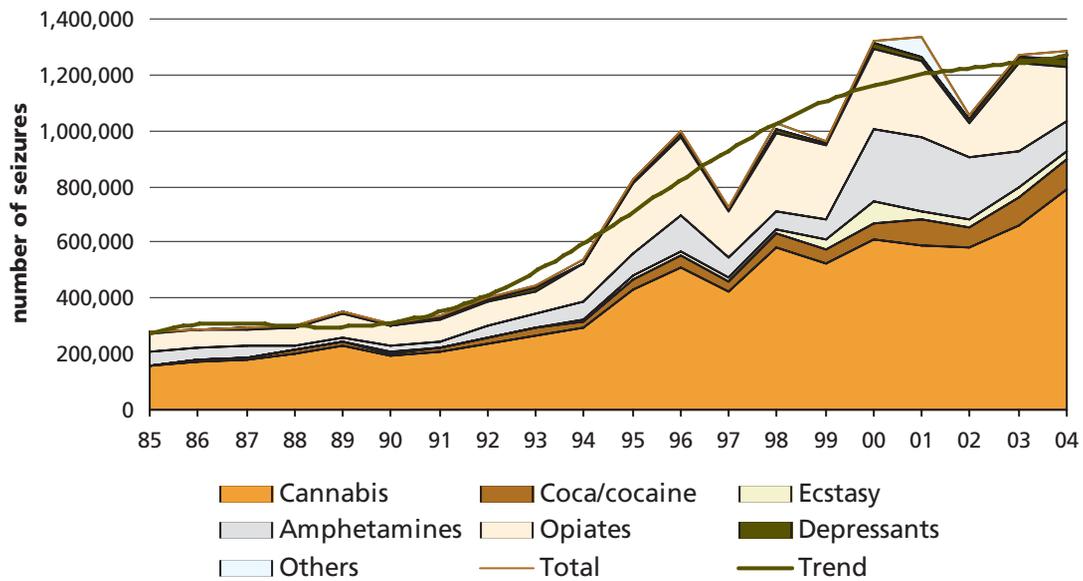
- the number of seizure cases
- the quantities of drugs seized and
- the number of drug units seized.

### Number of seizure cases increases slightly in 2004

A total of 1.3 million seizure cases were reported to UNODC from 93 countries in 2004 (+1 per cent). However, a number of countries (19 in total) had reported seizure cases to UNODC in 2003, but not in 2004 (Instead, another 19 countries had reported seizure cases to UNODC in 2004, but not in 2003). Assuming that the overall number of seizure cases of the non-reporting countries was not zero but the same as in 2003, the total number of seizure cases would have increased to 1.36 million (+8 per cent on a year earlier), i.e. marginally higher than the seizure cases reported in 2000 and 2001. Comparing the seizure cases of the countries reporting in both 2003 and 2004, the increase would have amounted to 6 per cent - which is still less than the long-term rate of increase. As compared to 1985, seizure cases increased by 8 per cent on average per year, or 4 ½ fold in total. Most of the increase took place in the 1990s (+16 per cent per year over the 1990-2000 period).

<sup>12</sup> A seizure case made by customs and then handed over to the police, may, in some countries, enter the police registry as well. This could result in double counting once the police seizure statistics and the customs seizure statistics are aggregated at the national level. There could be also potential problems of double counting once seizures are done in cooperation between local police and the national (federal) authorities. Similarly, it cannot be excluded that a seizure made, for instance, on a ship, in close cooperation between drug law enforcement agencies from two countries, are recorded in both countries as a seizure, thus leading to double counting once the consolidated country reports, sent to international bodies, are aggregated. The likelihood of double counting may also have increased in recent years following the introduction of seizures as one of the performance indicators of police forces. A possible solution to this problem would be to extension of the existing performance indicators to a category of 'seizures made in cooperation with other law enforcement bodies', which could still allow enforcement bodies to take credit for their work while avoiding double counting.

Fig. 8: Number of seizure cases, 1985-2004



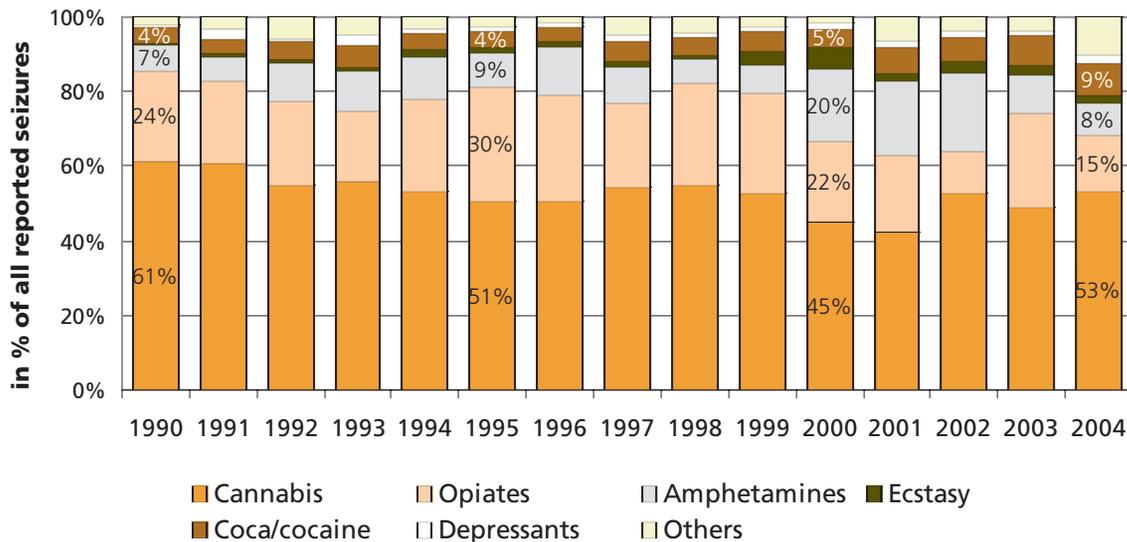
Sources: UNODC, Annual Reports Questionnaire Data/DELTA.

Cannabis accounted for 53 per cent, opiates for 15 per cent, amphetamine-type stimulants (including ecstasy) for 10 per cent and cocaine for 9 per cent of total drug seizure cases reported in 2004. These four drug groups thus accounted for 88 per cent of all drug seizures made in 2004.

in relative terms between 1990 and 2000, the proportion of cannabis in overall drug seizure cases increased from 45 per cent in 2000 to 53 per cent in 2004. The proportions of most other drugs declined accordingly. The only exception was cocaine. Its share in global seizure cases rose from 5 per cent in 2000 to 9 per cent in 2004.

The most striking trend over the last few years has been the increase in cannabis seizures. After having declined

Fig. 9: Proportion of seizure cases according to drug category, 1990-2004



Source UNODC, Annual Reports Questionnaire Data / DELTA.

**Table 2: Number of countries reporting drug seizures in 2004**

Drug	No. of countries
Cannabis herb	135
Cocaine	119
Heroin	114
Cannabis resin	83
Ecstasy	69
Opium	60
Amphetamine	47
Methamphetamine	42
LSD	40
Depressants	40
Morphine	34
Crack-cocaine	32
Khat*	19
Cannabis oil	19
Methadone	11
GHB	9
Methaqualone	8
Ketamine*	6
* Not under international control	

### Largest quantities of seized drugs are cannabis, cocaine and opiates

Turning from the number of seizure cases to the quantities seized, a total of 119 countries reported such information to UNODC in 2004. Including information obtained from other sources<sup>13</sup>, seizure information from 152 countries and territories is included in UNODC's database (DELTA) which forms the basis for the subsequent analysis. Quantities of drugs seized are thus the most comprehensive drug data set available.

**Table 3: The largest quantities of drugs seized in 2004 (rounded) concerned**

Drug	Quantity in tons
Cannabis herb	6,200
Cannabis resin	1,500
Coca leaf	1,200
Cocaine	590
Opium	210
Heroin & morphine	100
Khat	97
Amphetamines	20
Ecstasy	8
Methaqualone	5
Other depressants	2

*... with significant increases observed for ecstasy, opium, cannabis herb, and cocaine*

For the various drug groups changes in 2004 as compared to a year earlier were as follows:

Cocaine:	+18 per cent
Opiates (in heroin equivalents):	+9 per cent
Cannabis:	+6 per cent
ATS:	-11 per cent

The strongest increases in seizures for individual drugs in 2004 as compared to a year earlier were for:

Ecstasy:	+87 per cent
Opium:	+57 per cent
Khat:	+40 per cent
Coca leaf:	+29 per cent
Cocaine:	+18 per cent
Heroin:	+13 per cent
Cannabis herb:	+6 per cent
Cannabis resin:	+6 per cent
Amphetamine:	+5 per cent

<sup>13</sup> Government reports, UNODC Field Offices, Drug Abuse Information Network for Asia and the Pacific (DAINAP), Interpol, World Customs Organization (WCO), International Narcotics Control Board (INCB), EUROPOL, Comisión Interamericana para el Control del Abuso de Drogas (CICAD), United States State Department International Narcotics Control Strategy Report etc.

The increase in ecstasy seizures was particularly high as the base year for comparison (2003) was rather low. Nonetheless, as compared to the year 2002 ecstasy seizures were still 20 per cent higher, and they were the highest ever reported.

The increase in opium seizures reflected the re-emergence of large-scale opium production in Afghanistan. As compared to 2001 (the year of the Afghan opium ban) and 2002, global opium seizures doubled. Global opium seizures were, however, still slightly lower than in 1999/2000 (Afghanistan's peak harvest of 1999) and 1994 (reflecting the previous peak in Afghanistan's opium production). While heroin seizures increased, morphine seizures declined in 2004. Heroin and morphine seizures, taken together, remained roughly stable.

Seizures of khat – which is under control in a number of countries though not under international control – increased strongly in 2004 but were still 80 per cent lower than in 2002.

Both seizures of coca leaf and of cocaine turned out to be the highest ever reported. At first sight, this may seem surprising since the area under coca cultivation has declined since the year 2000 and remained largely stable in 2004. However, reductions in the area under cultivation seem to have been largely offset by higher yields and improved cocaine processing capabilities. Still more important, greater enforcement effort and improved cooperation among enforcement agencies helped to increase seizures.

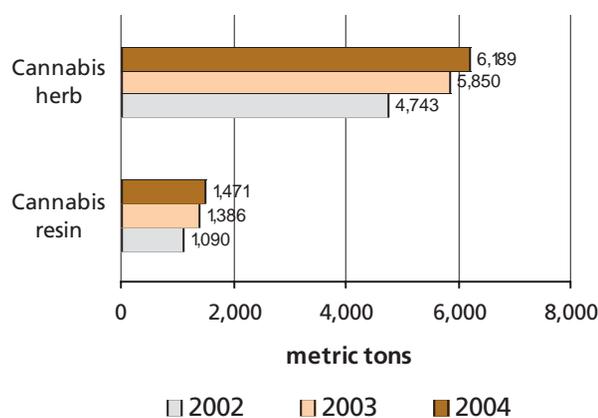
**Strongest declines reported for GHB, LSD, methamphetamine and morphine**

The strongest declines in global drug seizures in 2004 were observed for GHB (-85 per cent), LSD (-51 per cent), methamphetamine (-50 per cent) and morphine (-10 per cent).

**Long-term trends show increases primarily for synthetic drugs and cannabis**

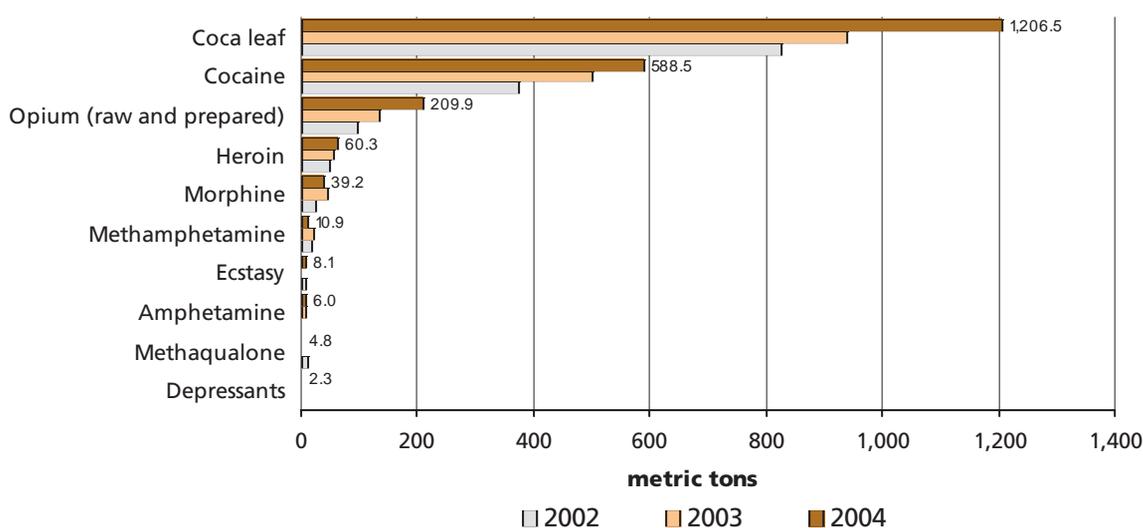
The analysis of seizure data over longer periods is more relevant for the identification of underlying trafficking

**Fig. 10: Global cannabis seizures (in weight equivalents), 2002-2004**



Source: UNODC, Annual Reports Questionnaire Data / DELTA.

**Fig. 11: Global drug seizures, excluding cannabis (in weight equivalents), 2002-2004**



Source: UNODC, Annual Reports Questionnaire Data / DELTA.

trends. The strongest increases in seizures over the 1994-2004 period were reported for:

- depressants (mainly diverted pharmaceuticals such as benzodiazepines and barbiturates) which have, on average, increased by 21 per cent every year, and
- ecstasy (21 per cent per year)

The second largest increases over the ten-year period were observed for the amphetamines (amphetamine and methamphetamine). Seizures of amphetamines increased, on average, by 12 per cent per year. Even the strong decline of amphetamines seizures in 2004 (-26 per cent) has not changed this trend.

Seizures of cannabis herb have shown larger increases (10 per cent per year) than seizures of cannabis resin, which grew only at a rate of 5 per cent per year. This reflects the stronger expansion of the market for cannabis herb in many countries.

Growth in heroin and morphine seizures together amounted to 9 per cent per year, reflecting the trend towards further processing of opium into morphine and

heroin in the producer countries. As a consequence, the proportion of morphine and heroin in the trafficking of all opiates has risen over the last decade.

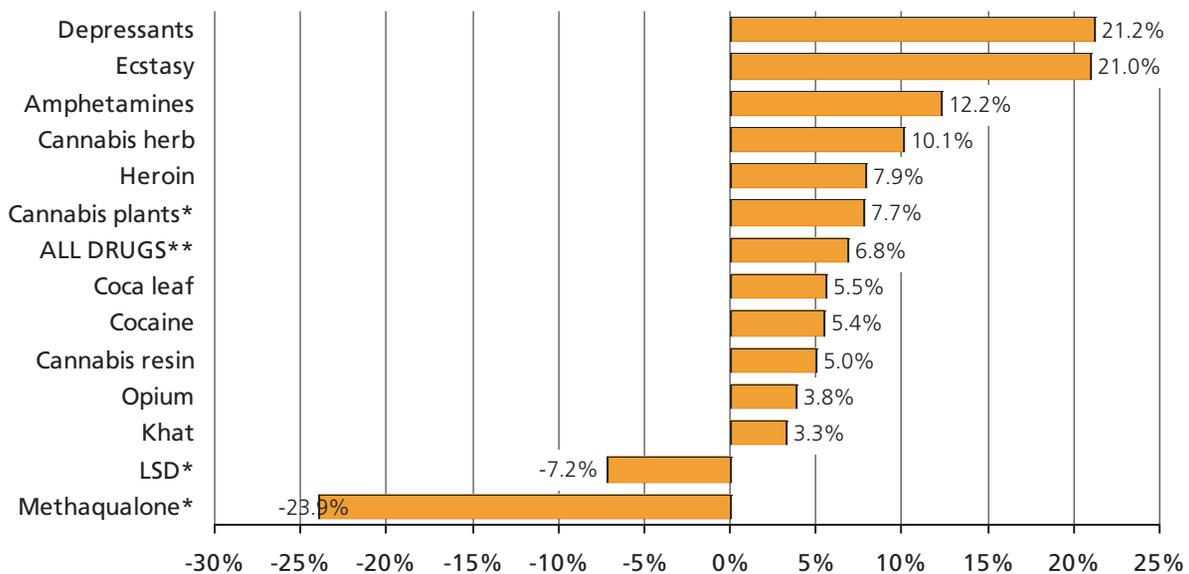
Seizures of coca leaf and of cocaine (5½ per cent per year) were below the average for all drugs (7 per cent per year).<sup>14</sup> This is probably due to the fact that cocaine production has remained largely stable over the last decade. Increases in seizures were mainly the consequence of improved enforcement activities.

The strongest declines in seizures over a long term period were observed for methaqualone, which is primarily seized in countries of southern Africa, and for LSD. This is in line with other indicators showing a decline in production and abuse of these substances over the last decade.

#### Seizures in unit terms continue to climb in 2004

The analysis of quantities of drugs seized allows for the identification of growth rates of the seizures of various drugs. However, as the quantities of drugs seized are not directly comparable, it is difficult to draw conclusions on overall drug trafficking patterns. Since the ratio of

**Fig. 12: Average annual change in seizures, 1994-2004**

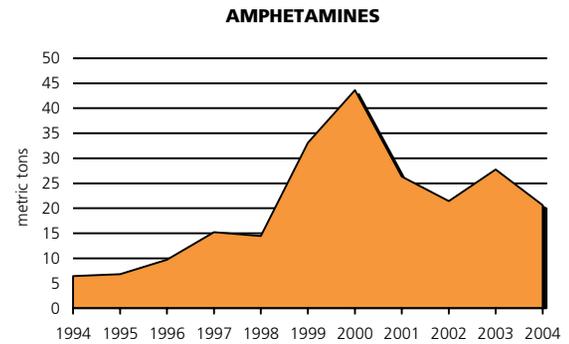
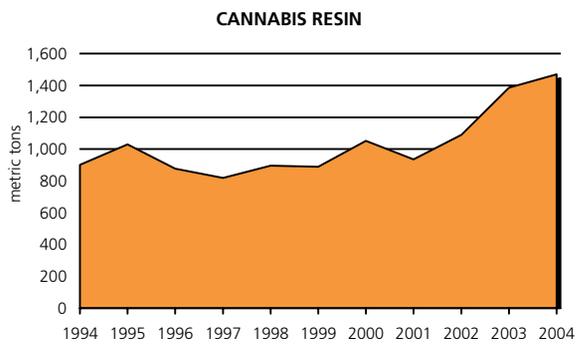
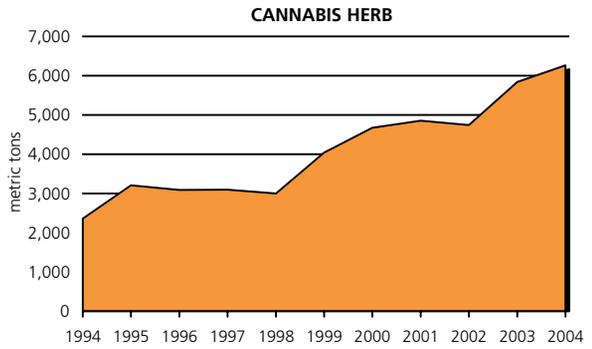
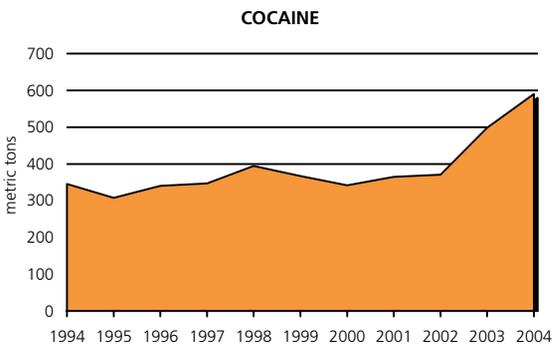
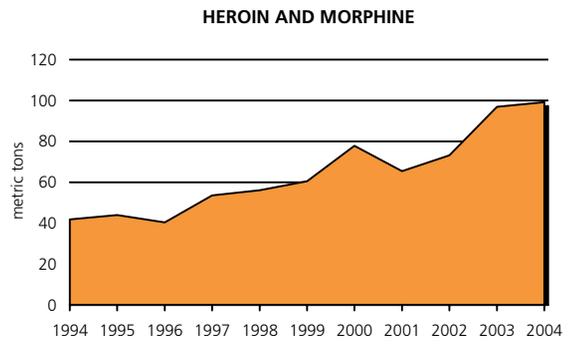
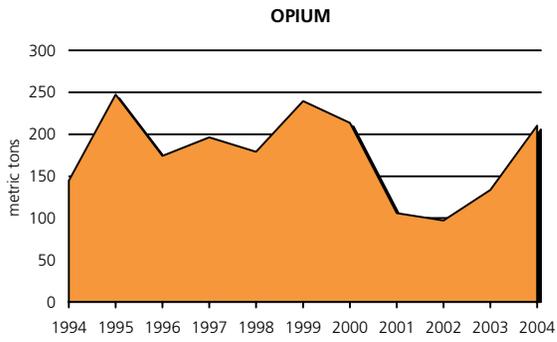


\* seizures in units; \*\* seizures transformed into unit equivalents

Source: UNODC, Annual Reports Questionnaire Data / DELTA.

14 This average for all drugs was calculated on the basis of unit equivalents.

**Fig. 13: Trends in world seizures, 1994-2004 (in metric tons)**



weight-to-psychoactive effects varies greatly from one drug to another, the indicator weight of seizures assumes more utility if it is converted into a typical unit of consumption, or the dose taken by drug users to experience a high.<sup>15</sup> Expressing drug seizures in such typical units/doses enables a more meaningful comparison of the quantities of different drugs seized.

Typical doses tend to vary across countries (and sometimes across regions within a country), across the various substances aggregated under one drug category (e.g. commercial cannabis herb and high-grade cannabis herb), across user groups and across time. Unfortunately, such detailed conversion ratios are not available. Comparisons made here are based on global conversion rates of grams/milligrams per dose. The results should be thus interpreted as indications of overall patterns rather than precise estimates.

Based on such calculations, global seizures reported in 2004 were equivalent to some 34 billion drug units (doses). This is equivalent to an increase of 7.6 per cent as compared to a year earlier. The increase in 2004 was thus stronger than the average annual growth rate over the 1994-2004 period (6.8 per cent). Global drug seizures almost doubled over this period.

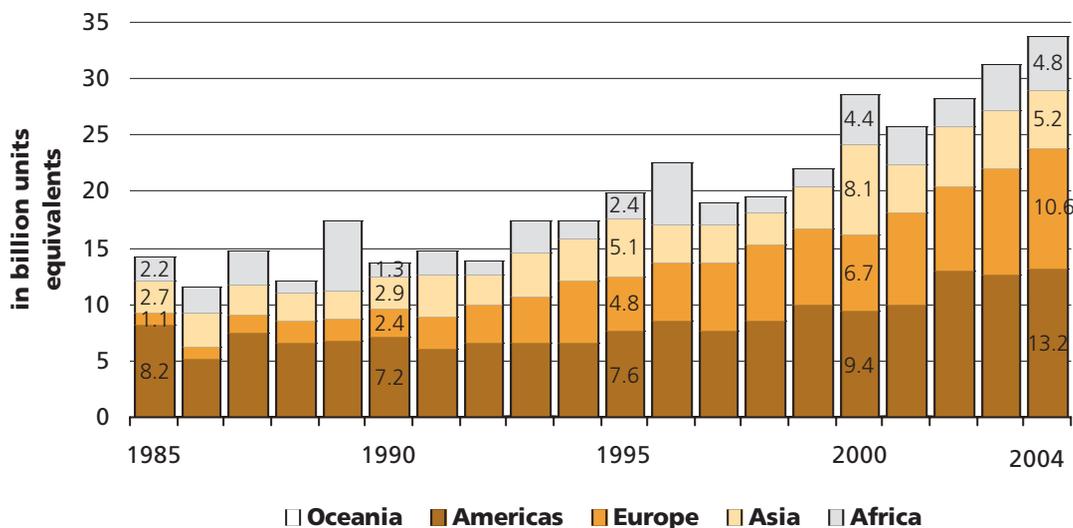
The increase in seizures took place across all regions. In

2004, most seizures were made in the Americas (39 per cent), followed by Europe (31 per cent), Asia (15 per cent), Africa (14 per cent) and Oceania (0.2 per cent).

While most seizures continue to be made in the Americas, the strongest increases have been reported from Europe. The proportion of Europe in total seizures rose from 17 per cent in 1990 to 26 per cent in 2000 and 31 per cent in 2004, suggesting that drug trafficking has also increased in this part of the world. The proportions of seizures made in North America, in contrast, remained largely stable (25 per cent in 1990, 25 per cent in 2000 and 26 per cent in 2004). The proportion of seizures made in other parts of the world fluctuated strongly year on year, so that it is difficult to identify any clear trends. The proportion of seizures made in South America ranged from 11 per cent to 27 per cent over the 1990-2004 period, in Asia from 15 per cent to 26 per cent, in Africa from 7 per cent to 24 per cent and in the Oceania region from 0.2 per cent to 0.7 per cent.

On a per capita basis, data suggest that drug trafficking is most widespread in North America, followed by Europe. Most drugs in 2004 were seized in North America (21 doses per inhabitant per year), followed by Europe (15 doses) and South America (10 doses per inhabitant). The global average was 5 doses per inhabitant. Per capita seizures in Africa were close to the

**Fig. 14: Regional breakdown of drug seizures in unit equivalents, 1985-2004**

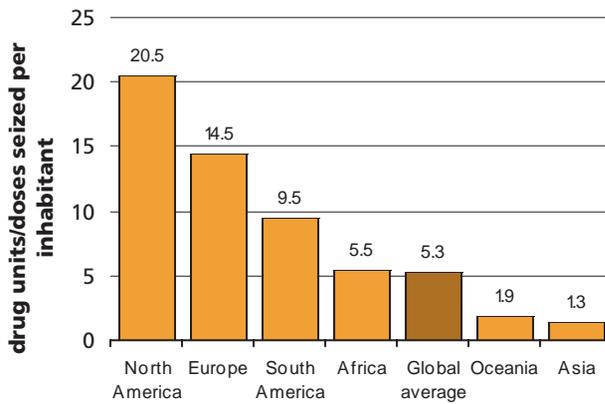


Source: UNODC, Annual Reports Questionnaire Data / DELTA.

<sup>15</sup> For the purpose of this calculation, the following typical consumption units/doses (at street purity) were assumed: cannabis herb 0.5 grams; cannabis resin 0.135 grams; cocaine and ecstasy 0.1 grams; heroin and amphetamines, 0.03 grams; LSD 0.00005 grams (50 micrograms).

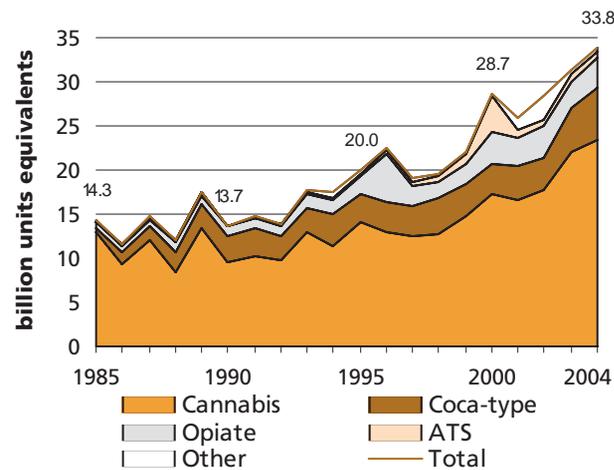
global average, mainly reflecting high levels of cannabis seizures. The lowest per capita levels were reported from Asia (1 dose per inhabitant). However, the Near & Middle East /South-West Asia region had a rate that was twice the global average (10 doses per inhabitant), reflecting large-scale trafficking of drugs originating in Afghanistan.

**Fig. 15: Drug doses seized per inhabitant in 2004**



Source: UNODC, Annual Reports Questionnaire Data / DELTA.

**Fig. 16: Global drug seizures in unit equivalents, 1985-2004**



Source: UNODC, Annual Reports Questionnaire Data / DELTA.

Seizure in unit terms can also shed some light as to the relative importance of various drugs in trafficking. The most important drugs in terms of seizures, expressed in unit equivalents, at the global level are cannabis (69 per

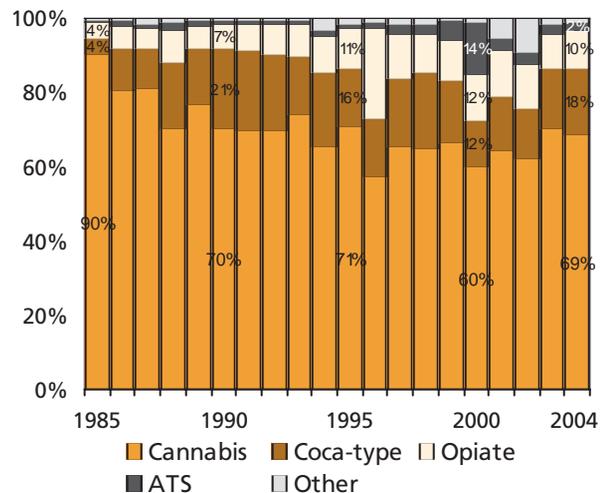
cent), followed by cocaine (18 per cent), opiates (10 per cent) and ATS (2 per cent).

Though cannabis seizures increased in absolute terms, their proportion in all seizures declined over the 1985-2000 period, from 90 per cent to 60 per cent. However, since 2000, the proportion of cannabis in all seizures has been rising again and reached 69 per cent in 2004, reflecting rising levels of cannabis production and cannabis use and also rising levels of cannabis trafficking. The only other drug which showed rising proportions in recent years was cocaine (from 12 per cent in 2000 to 18 per cent in 2004, though the proportion of cocaine in total seizures is lower than in 1998 (20 per cent) or in 1994 (20 per cent)).

Comparing seizures expressed in doses and the reported drug seizure cases, it becomes apparent that – except for cannabis – the ranking of the most trafficked drugs differs. While opiates and ATS are the second and third most widely seized substance in terms of seizure cases, followed by cocaine; in terms of drug dosages seized, cocaine ranks second, ahead of opiates and ATS. This reflects the fact that at the global level far larger drug quantities are seized, on average, per cocaine seizure (4.3 kg in 2004) – often found on ships or containers - than per heroin (0.3 kg) or ATS (0.2 kg) seizure.<sup>16</sup>

**Containment of opium and cocaine production: in**

**Fig. 17: Proportion of drug categories in seizures, in unit equivalents**



Source: UNODC, Annual Reports Questionnaire Data / DELTA.

<sup>16</sup> This calculation was based on information from countries providing both seizures in weight terms and the number of seizure cases for various drugs for the year 2004.

### 2005, opium declined and cocaine remained stable

For coca and opium, the two substances for which UNODC, in collaboration with the Governments concerned, has been undertaking detailed surveys, the situation looked quite positive for 2005. While for 2004 opium/heroin production and cocaine production had still increased, global opium production declined in 2005 by 5 per cent and cocaine production decreased by 3 per cent. The global area under opium cultivation was 151,500 hectares and the global area under coca cultivation was 159,600 hectares in 2005. It is thus comparable to the size of some of the smaller countries<sup>17</sup>.

Global heroin production was estimated at 462 tons in 2005, and global cocaine production at 932 tons.

The decline in global opium production of 5 per cent in 2005 was due to lower levels of opium production in Afghanistan (-2 per cent), lower levels of opium production in Myanmar (-16 per cent), in Laos (-67 per cent) as well as in Latin America (-25 per cent). The declines in the area under poppy cultivation were even more impressive: twenty-three per cent in total, reflecting a decline of 21 per cent in the area under cultivation in Afghanistan, -26 per cent in Myanmar, -73 per cent in Laos and -30 per cent in Latin America. Seen in perspective, the 2005 area under global poppy cultivation (151,500 hectares) was - with the exception of 2001 - the lowest since 1987.

The overall decline in global opium production could have been far more pronounced, if yields in Afghanistan had not recovered in 2005 from their low levels a year earlier. Opium production in Afghanistan (4,100 tons) accounted for 89 per cent of global opium production in 2005. The next largest producers were Myanmar with 312 tons (6.8 per cent). Mexico and Colombia accounted for 2 per cent, Pakistan for 1.3 per cent and Laos for 0.3 per cent of global opium production.

The global area under coca cultivation amounted to 159,600 hectares by the end of 2005 and was thus largely stable as compared to a year earlier (+1 per cent). Though higher than in 2003 and 2004, the area under coca cultivation was still lower than in all years of the

1990s and lower than in the late 1980s. The area increased in Colombia in 2005 by 7.5 per cent to 86,000 hectares, but declined in Peru to 48,200 hectares (-4.2 per cent) and Bolivia to 25,400 hectares (-8.3 per cent), reversing the trends in 2004 when coca declined in Colombia and increased in Peru and Bolivia. As compared to the year 2000, the area under coca cultivation is still 47 per cent lower in Colombia, though 11 per cent higher in Peru and 74 per cent higher in Bolivia. The net result is an area under cultivation in 2005 that is still 28 per cent lower than in 2000.

Improved yields and laboratory efficiency have, however, prevented these gains from being translated into any significant decline in cocaine production. Cocaine production in 2005 was 3 per cent lower than a year earlier but was still slightly higher than in 2000 (6 per cent), though marginally lower than in 1996 (-2 per cent) and about the same as a decade earlier.

### Cannabis herb production continues to increase...

There are strong indications that cannabis herb production continued increasing in 2004/05. UNODC's cannabis herb production estimates show a value of 45,000 tons in 2004/05, up from the estimate of 42,100 tons published in the 2005 *World Drug Report*. As compared to the early 1990s, cannabis herb production appears to have doubled. In contrast, to the estimates on heroin and cocaine, the estimates collected from Member States are – in most cases – not based on strict scientific criteria and must thus be treated with caution.

### ...while cannabis resin production appears to have declined in 2005

UNDOC's cannabis resin estimates for 2004 were 7,500 metric tons, slightly higher than those for 2002/03 (6,300 metric tons). However, there are indications that global production fell in 2005, following the massive reduction of cannabis resin production in Morocco, the world's largest cannabis resin producer. Cannabis resin production, derived from remote sensing studies and ground surveys in Morocco, declined from 3,070 metric tons in 2003 and 2,760 metric tons in 2004 to 1,070 metric tons in 2005, a decline of more

<sup>17</sup> The global area under opium or coca cultivation is larger than the size of countries or areas such as Saint Kitts and Nevis (26,900 ha), Maldives (29,800 ha), Malta (31,560 ha), Grenada (34,450 ha), Saint Vincent and the Grenadines (38,930 ha), Barbados (43,000 ha).

than 60 per cent in 2005. There are not, as yet, sufficient data available for UNODC to provide an overall production estimate for 2005, but the strong decline in Morocco should have been sufficient to reduce global cannabis resin production in 2005.

**ATS production has been contained in recent years, but is still higher than in the late 1990s**

UNODC has estimated volumes of ATS production for the years 1997-99, 2000-2001 and 2003 and 2004. The estimates, showed a rapidly rising production for the late 1990s (from 246 to 410 metric tons for the amphetamines and 49 to 113 tons for ecstasy). In subsequent years, however, production declined to 332 metric tons of amphetamines and 90 metric tons of ecstasy. For 2004 amphetamines production was estimated at 354 metric tons and ecstasy production at 126 metric tons. Given large margins of error in these estimates, the conclusion is likely to be that overall ATS production remained more or less stable in 2004, though production was higher than in the late 1990s.