Regional overview

This overview highlights some of the main characteristics and illicit drug market trends at the regional level.

a) North America

North America continues to be the world's largest drug market, even though it is -

according to all estimates -now smaller, in economic terms, than a decade or two ago.

Production

Production of illicit drugs in North America is primarily linked to cannabis (mainly cannabis herb), amphetamine- type stimulants (ATS) and opiates.

Substantial amounts of cannabis are grown in all North American countries and important exports are directed from Mexico to the United States, and, to a lesser extent, from Canada to the United States. Greenhouse cultivation of cannabis is still limited to the USA and Canada.

Manufacture of ATS takes place in all three countries and is mainly of methamphetamine and, to a lesser extent, ecstasy. Some 99% of all methamphetamine laboratories worldwide (though mostly 'kitchen labs') are dismantled in North America, notably in the United States. Significant amounts of methamphetamine continue to be shipped across the border from Mexico to the United States. Manufacture of ecstasy is mainly concentrated in Canada and the USA. A significant share of the Canadian ecstasy production is destined for the US market. Asian groups with links to China and South-East Asian countries are mainly involved in the ecstasy production.

Production of opiates in North America only takes place in Mexico. Mexico's opium production accounted for 5% of the world total in 2009.

Trafficking

Trafficking of drugs continues to be primarily directed towards North America. Trafficking of drugs out of the region to other destinations exists, but is limited. Trafficking of cannabis herb is mainly intra-regional, with cannabis herb from both Mexico and Canada being shipped into the United States, in addition to domestic shipments of locally produced cannabis herb across US states. Similarly, methamphetamine trafficking is primarily intra-regional, with flows from Mexico into the United States, as well as locally produced methamphetamine being trafficked domestically in the United States. Ecstasy trafficking used to be intra-regional (from western Europe to North America) but has now become mainly intra-regional, with deliveries from Canada into the United States. Cocaine trafficking, in contrast, remains inter-regional, with shipments of cocaine from the Andean region, notably Colombia, to Central America and Mexico for final destination markets in the United States and, to a lesser extent, Canada. The largest seizures in North America are reported for cannabis, followed by cocaine and the amphetamines. Expressed as a proportion of the global total, data show that 70% of global cannabis herb and 70% of global ecstasy seizures took place in North America in 2009, followed by amphetamines (21%) [methamphetamine only: 44%], cocaine (18%) and heroin (4% of the world total). Cannabis resin seizures accounted for less than 1% of the total, showing that hashish does not play a significant role in North America.

While cocaine seizures declined markedly between 2005 and 2009 (-43%), reflecting the overall decline of the cocaine market in North America, seizures increased over this period for amphetamines (87%), ecstasy (71%), cannabis herb (32%) and heroin (19%).

| | 2005 | 2006 | 2007 | 2008 | 2009 | In % of global total in 2009 |
|---------------|-----------|-----------|-----------|-----------|-------------|------------------------------------|
| Cannabis herb | 3,183,053 | 3,278,467 | 3,930,620 | 3,205,334 | 4,188,620 | 70% |
| Cocaine | 233,605 | 193,601 | 175,316 | 132,970 | 132,355 | 18% |
| Amphetamines | 7,422 | 9,226 | 7,047 | 8,551 | 13,876 | 21% |
| Ecstasy | 2,227 | 3,008 | 3,981 | 3,279 | 3,816 | 70% |
| Heroin | 2,391 | 2,432 | 1,760 | 2,283 | 2,853 | 4% |
| Memo: | | | | | | |
| Population | | | | | 458 million | 7% |

Seizures in North America, in kilogram equivalents, 2005-2009

Source: UNODC ARQ.

Illicit drug use

The highest levels of illicit drug use are related to the consumption of cannabis, mainly cannabis herb. With a prevalence rate of 10.7% among the population aged 15-64, cannabis use in North America is above the global average. The region accounts for about one fifth of global cannabis users, far above its share of the global population (around 7%). Following years of decline, cannabis use increased again in 2009 in the United States. The annual prevalence of cannabis use in the USA increased from 10.1% of the population aged 12 and above in 2007 to 11.3% in 2009.

The relative importance of North America is larger when it comes to cocaine. Almost 37% of all cocaine users worldwide are found in North America. With a prevalence rate of 1.9% among the population aged 15-64, North America – despite declines in recent years – still has the highest prevalence rate of any subregion, far above the global average (0.4%). The decline was most pronounced after 2006, with the annual prevalence of cocaine use in the USA falling from 3.0% of the population aged 15-64 to 2.4% in 2009. Significant declines in cocaine use were also reported from Canada in recent years, with the annual prevalence rate falling from 2.3% in 2004 to 1.4% in 2009.

About 1.1% of the population in North America uses amphetamines and a similar proportion uses ecstasy. These are – in both cases – above the global average. Use of amphetamine-type stimulants showed a downward trend over the 2006-2008 period and increased again slightly in 2009. The increase was mainly related to the 'recovery' of methamphetamine, rising from 0.3% of the population aged 12 and above in 2008 to 0.5% in 2009. The same applied to the use of ecstasy which rose in the USA from 0.9% of the population aged 12 and above in 2008 to 1.1% in 2009.

If opioids are considered, available estimates suggest that more than 40% of global opioid users are found in North America. These high levels are mainly due to widespread non-medical use of prescription opioids, which rose between 2002 and 2006, before falling until 2008 and rising again in 2009. The abuse of opiates is, at 0.4%, close to the global average. Opiate use levels have remained stable in recent years.

North America has, in general, a significant problem when it comes to the non-medical use of prescription drugs. In the United States, such use of prescription drugs ('psychotherapeutics') has ranked for some years second after cannabis, with an annual prevalence of 6.4% among the population aged 12 and above.¹ The non-medical use of pain relievers (4.9%) which are prescription opioids and of tranquillizers (2.2%) now show higher annual prevalence rates than cocaine (1.9%). The non-medical use of easily available prescription opioids - oxycodone in particular - appears to have increased since 2005. Among the new initiators of drug use in 2009, around 2.2 million people in the USA initiated their drug use with pain relievers, approaching the number of those who initiated their drug use with cannabis.

The main pharmaceutical prescription drug categories used in Canada are 'opioid pain relievers', 'stimulants' and 'tranquillizers and sedatives'. In 2009, prescription opioid misuse in Canada was reported at 0.5%, the same level as 2008, while heroin use was estimated at 0.36%.²

In Mexico, the annual prevalence of non-medical use of prescription drugs seems to be much lower. The national household survey found prescription opioid prevalence to amount to 0.06% of the adult population in 2008, compared to 0.04% for heroin.³

Drug-related deaths

North America seems to experience a large proportion of drug-related deaths (45,100 deaths) and the highest drug-related mortality rate (148 deaths per million population aged 15-64). The United States saw an estimated 38,400 deaths from illicit drug use in

 ¹ Substance Abuse and Mental Health Services Administration, *Results from the 2009 National Survey on Drug Use and Health: Volume I.* Summary of National Findings, 2010, Rockville, Maryland, USA.
² Estimated by UNODC based on 1% prevalence of injecting drug use (estimated 220,690 IDU in 2004)

reported by the Reference Group to the United Nations on HIV and injecting drug use, 2008.

³ SALUD, Encuesta Nacional de Adicciones 2008, Instituto Nacional de Salud Publica, Mexico.

2006, corresponding to a drug-related mortality rate of 182 deaths per one million inhabitants aged 15-64.

In the United States, overdoses from prescription opioids have been steadily increasing from 4,000 in 2001 to 11,000 in 2006 (the most recent year available), an increase of 175%, primarily as a result of the non-medical use of diverted prescription opioids.⁴ Similar trends in the non-medical use of prescription medicines are also emerging in other countries.⁵

b) South America, Central America and the Caribbean

South America continues to be primarily a subregion known for large-scale cocaine production and trafficking, though drug use, notably in the Southern Cone countries, has also become significant.

Production

Notable illicit drug production continues to take place in the three Andean countries. Colombia, Peru and the Plurinational State of Bolivia are responsible for close to 100% of global coca leaf production, the raw material for the manufacture of cocaine. In 2010, coca was cultivated on $149,100^6$ ha in the Andean countries, down from 221,300 ha in 2000. Cocaine manufacture in clandestine laboratories also takes place, to a large extent, in the Andean countries. Since 2007, cocaine production has shown a clear downward trend, mainly due to declines of production in Colombia, which also continued in 2010. Cocaine production fell by some one sixth over the 2007-2010 period.

Most of the countries in South America, Central America and the Caribbean have significant levels of cannabis production, notably of cannabis herb. In 2009, 70% of global cannabis plant seizures, an indirect indicator of cannabis eradication, occurred in this subregion. Three quarters of these seizures took place in South America. Cannabis production seems to be - in most countries - primarily for domestic use. Opium production in South America is almost negligible at the global level.

Manufacture of amphetamine-type stimulants is still limited in the region as most of the ATS consumed are still diverted prescription stimulants. However, in recent years, illicit manufacture of ATS has emerged in several countries with little or no previous history of reported manufacture.

⁴ U.S. Department of Justice, Drug Enforcement Administration, National Drug Intelligence Centre, National Prescription Drug Threat Assessment 2009 and National Drug Threat Assessment 2010.

⁵ Nicholas R., Lee N., and A. Roche, *Responding to pharmaceutical drug misuse in Australia: A Matter of Balance*, NCETA Literature Review to support the development of the National Pharmaceutical Drug Misuse Strategy, March 2011.

⁶ The figure for the Plurinational State of Bolivia was not available at the time of printing of this report. The total area under cultivation in 2010 is based on old figures for Bolivia and will be revised once the 2010 figure becomes available.

Trafficking

Trafficking flows are primarily directed out of the cocaine-producing countries in the Andean region towards North America, either directly to Mexico and then the United States, or via Central America to Mexico or via the Caribbean to the United States. Trafficking flows to Europe are either directly from the Andean region or via neighbouring countries to Europe, via countries in the Caribbean region as well as via countries in Africa (notably West Africa) to Europe.

Cannabis trafficking flows are mainly intra-regional. In addition, there are limited trafficking flows of heroin from Colombia to the United States.

In contrast, trafficking flows of amphetamines and 2010 figure becomes available. ecstasy are still mainly from Europe towards South America, though these appear to be declining as they start to be substituted by local production.

The largest seizures, in volume terms, are those of coca leaf in South America, which accounts for all global coca leaf seizures. Such seizures declined, however, over the 2007-2009 period by some 25%, partly reflecting a decline in coca leaf production. In contrast, cocaine seizures, for which the countries of South America, Central America and the Caribbean accounted for 74% of the world total, showed an increase by 27% over the 2007-2009 period. Increasing interdiction efforts by the Andean countries (notably

Colombia) as well as improvements in international cooperation - and thus more

'upstream' interdictions – have been responsible for this.

Seizures of opium and heroin declined markedly between 2005 and 2009. The decline is in line with reports of strong reductions of opium production in South America over the last decade.

| | 2005 | 2006 | 2007 | 2008 | 2009 | In % of global total in 2009 |
|---------------|-----------|-----------|-----------|-----------|-------------|------------------------------------|
| Cannabis herb | 509,265 | 1,065,673 | 1,009,470 | 857,534 | 619,786 | 10% |
| Coca leaf | 3,195,757 | 3,318,645 | 4,698,820 | 4,883,732 | 3,517,918 | 100% |
| Cocaine | 432,968 | 400,266 | 427,693 | 523,040 | 561,975 | 75% |
| Amphetamines | 140 | 87 | 519 | 41 | 189 | 0.3% |
| Ecstasy | 141 | 53 | 103 | 46 | 54 | 1% |
| Heroin | 1,863 | 1,689 | 1,205 | 1,335 | 1,159 | 2% |
| Opium | 2,129 | 263 | 259 | 300 | 74 | 0.01% |
| Memo: | | | | | | |
| Population | | | | | 473 million | 7% |

Seizures in South America, Central America and the Caribbean, in kilogram equivalents, 2005-2009

Source: UNODC ARQ.

Illicit drug use

Surveys suggest that about 5% of all cannabis users worldwide are found in South America, the Caribbean and Central America, slightly less than the region's share of the global population. Nonetheless, cannabis is the most widely consumed illicit substance in the region. The prevalence rate for cannabis use in South America ranged between 2.9%-3.0% of the population aged 15-64 in 2009, between 1.6%-7.6% in the Caribbean and between 2.2%-2.5% in Central America.

The prevalence of cocaine use in South America, Central America and the Caribbean is clearly above the global average. About 0.9%-1.0% of the population aged 15-64 consumes cocaine, equivalent to some 2.6-3.0 million people or 17% of the world's cocaine-using population. Following years of increases, the latest data indicate a stabilization at the higher levels. Cocaine continues to be the main problem drug in South America, Central America and the Caribbean, accounting for some 50% of all drug-related treatment demand in the region.

Use of other drugs is below average. This is true for ATS as well as the opioids. Overall opioid use is far more prevalent (some 0.4%) than the use of opiates (0.1%).

The most prevalent prescriptions drugs in the region seem to be prescription opioids. High prevalence of the non-medical use of prescription opioids has been reported by Costa Rica, Brazil and Chile. Most of the ATS use in the region is linked to diverted prescription stimulants (legally prescribed mainly as anorectics or for the treatment of attention deficit disorders). High levels of consumption have been reported for 2009, in particular from Argentina, Brazil and, to a lesser extent, Chile.⁷

⁷ INCB, Report for 2010 – Psychotropic Substances.

Drug-related deaths

Countries in South America, including the Caribbean and Central America, report relatively few drug-related deaths (between 2,200 and 6,300) with a mortality rate (between seven and 20 deaths per million aged 15-64) well below the global average. Countries consistently rank cocaine first as the primary cause of death, which is in accordance with high prevalence of cocaine use and the dominance of cocaine in treatment demand.

c) Europe

Production

Illicit drug production in Europe is mainly linked to cannabis, amphetamines and ecstasy.Cannabis production in Europe is believed to be increasing, mostly in indoor settings. Twenty-nine European countries reported domestic cultivation of cannabis herb in 2008.

In the past, ecstasy-group substances used to be manufactured predominantly in West Europe. The Netherlands and Belgium are still the main sources for ecstasy in Europe. However, manufacture has shifted away from the region and only a few laboratories were reported from Europe in 2008 and 2009.

• Most amphetamine seized in Europe is manufactured, in order of importance, in the Netherlands, Poland and Belgium.

• The clandestine manufacture of methamphetamine is concentrated in the Czech Republic, though some production is also taking place in the Baltic countries. Methamphetamine production and consumption are, however, still the exception in Europe.

• In Spain, there is some evidence of the reconversion of cocaine mixed with other substances back into cocaine.

• In East Europe, notably in the Russian Federation and Ukraine, there is domestic production of opium or poppy straw for local consumption purposes ('kompot').

Trafficking

Most cannabis seizures are related to cannabis resin in Europe, accounting for 49% of the global total in 2009. Cannabis resin found on the European market originates primarily in Morocco. While cannabis resin seizures declined over the 2005-2009 period, those of cannabis herb increased by 88%, confirming reports of increasing levels of (often hydroponic) cannabis herb production within Europe for local consumption. Despite the increasing importance of cannabis herb, overall cannabis seizures declined by 19% between 2005 and 2009.

Cocaine is trafficked to Europe mainly by sea, though in terms of reported seizure cases, deliveries by air are higher. The trafficking of cocaine into the EU by maritime containers seems to have increased in recent years. While the European cocaine market appears to have been fairly stable between 2006 and 2009 – following strong increases in trafficking

over the 1998-2006 period – cocaine seizures declined massively over this period (-53%). This partially reflects improved cooperation with law enforcement counterparts in Latin

America and thus improved sharing of information, leading to seizures in South America rather than waiting for the cocaine to arrive in Europe. Cocaine seizures are still concentrated in western Europe. The countries of West and Central Europe accounted for 97% of all European cocaine seizures in 2009. In addition to direct shipments from South America, shipments via Africa, notably West Africa, gained strongly in importance over the 2004- 2007 period, before decreasing over the 2007-2009 period. Though the Iberian peninsula, followed by the Netherlands and Belgium, continue to be main entry points for cocaine shipments into Europe, there have also been reports of shipping cocaine to the Balkan region (by container or air freight) for final destinations in the European Union.

Heroin seizures made in Europe accounted for 38% of the world total in 2009. Heroin seizures are mostly concentrated in South-East Europe (63% of all heroin seizures in Europe), mainly reflecting the strong seizure efforts of Turkey as heroin is shipped via the Islamic Republic of Iran to Turkey and then along the various branches of the 'Balkan route' to western Europe. While heroin seizures in West and Central Europe remained largely stable over the 2005-2009 period, they doubled in South-East Europe.

Europe is primarily a region of final consumption - except for ecstasy, which is still produced locally and shipped to other destinations as well. Ecstasy exports out of Europe, however, have declined markedly in recent years, which has been linked to improvements in precursor control and thus shortages of the traditional ecstasy precursor. Europe's share in global ecstasy seizures declined from 90% in 1996 to 18% in 2009.

Europe accounted for 24% of global amphetamine seizures in 2009. Amphetamine seizures remained largely stable over the 2005-2009 period. More than 80% of all European amphetamine seizures in 2009 took place in the countries of West and Central Europe.

Seizures of benzodiazepines and barbiturates increased by more than 50% between 2005 and 2009. Close to 90% of all benzodiazepines and barbiturate seizures worldwide in 2009 were reported from countries in Europe.

Seizures of GHB (gamma-hydroxybutyric acid), frequently known in the illicit drug markets as 'liquid ecstasy' and as a 'date rape drug,' increased four-fold in Europe over the 2005-2009 period. European seizures accounted for almost 80% of the world total.

Seizures of LSD, which in volume terms are hardly noticeable, have shown a downward trend over the 2005-2009 period. Europe accounts for 80% all LSD seizures made worldwide.

| | 2005 | 2006 | 2007 | 2008 | 2009 | In % of global total in 2009 |
|-------------------------------------|----------|---------|----------------|---------|-------------|------------------------------------|
| Cannabis resin | 907,423 | 618,448 | 853,654 | 937,027 | 623,369 | 49% |
| Cannabis herb | 105,577 | 132,558 | 144,310 | 178,345 | 198,841 | 3% |
| Cocaine | 106,587 | 121,065 | 79,864 | 62,737 | 56,738 | 8% |
| Amphetamines- group | 9,906 | 11,434 | 11,216 | 9,771 | 9,077 | 14% |
| of which amphetamine | 8,039 | 6,019 | 8,791 | 9,438 | 8,117 | 24% |
| Ecstasy | 4,709 | 5,649 | 5,839 | 1,763 | 995 | 18% |
| Heroin | 22,165 | 22,171 | 26,394 | 29,206 | 28,762 | 38% |
| Opium | 2,059 | 1,292 | 1,445 | 1,324 | 1,379 | 0.2% |
| Benzodiazepines and barbiturates | 1,344.25 | 126.13 | 452.38 | 580.54 | 2,103.22 | 89% |
| GHB | 156 | 38 | 318 | 383 | 675 | 79% |
| LSD | 6.1 | 0.5 | 0.4 | 0.1 | 0.1 | 80% |
| Memo: | | | | | | |
| Population | | ~ | urce: UNODC AR | | 808 million | 12% |

Seizures in Europe in kilogram equivalents, 2005-2009

Source: UNODC ARQ.

Illicit drug use

The most prevalent drug in Europe is cannabis, showing an annual prevalence rate of 5.2%-5.3% among the population aged 15-64. Around 18% of the total cannabis- using population lives in Europe. Following years of significant increases, cannabis use appears to have stabilized in Europe.

Cocaine is the second most prevalent drug (0.8% - 0.9%). With 4.3 - 4.75 million cocaine users, Europe accounts for almost 30% of all cocaine users worldwide. Cocaine use is still concentrated in West and Central Europe, accounting for some 90% of all cocaine users in Europe. Cocaine prevalence rates in West and Central Europe doubled between 1998 and 2006 but remained basically stable over the 2006-2009 period.

The next most prevalent substance is ecstasy (0.7%) of the population aged 15-64). With 3.7-4 million ecstasy users, Europe accounts for about one fifth of the global ecstasyusing population. Most European countries report stable trends of ecstasy use.

Use of amphetamines affects some 2.5-3.2 million people in Europe, or 0.5-0.6% of the population aged 15-64. Most countries report stable trends in amphetamine use. Amphetamine remains the main amphetamines-group substance used in Europe.

Methamphetamine use is mainly limited to the Czech Republic, though some consumption also occurs in neighbouring Slovakia, some of the provinces of Germany and Austria bordering the Czech Republic, as well as in the Baltic countries and some of the Nordic countries. If ecstasy and amphetamines- group use are combined, use of ATS constitutes the second most prominent drug group after cannabis.

In contrast to other regions, non-medical use of prescription drugs has not been regarded as a major problem in Europe so far.⁸ Denmark, Estonia and Finland are countries with substantial or higher proportions of non-medical use of prescription opioids than heroin. The highest levels of non-medical use of prescription opioids so far have been reported from Northern Ireland (UK). Other countries in Europe reporting a substantial proportion of treatment demand for sedatives and tranquillizers are found among the Nordic countries, notably Sweden (11.6%), Norway (10.2%) and Finland (8.5%). The use of benzodiazepines is common among drug users all across Europe, including substitution treatment clients. Studies show that between 11% and 70% of clients report current use of benzodiazepines.⁹

Drug-related deaths

For Europe, the best estimates suggest that there are between 25,000 and 27,000 drugrelated deaths annually, with a rate between 46 and 48 deaths per one million people aged 15-64, though some estimates give substantially higher figures (about twice these numbers). Drug-related deaths due to overdose amounted to some 7,000 in the countries of the European Union in recent years, down from around 8,000 in 2000.¹⁰ Opioids,

mainly heroin, are predominantly ranked as the primary cause of death, followed - at

much lower levels – by cocaine. Most drug-related deaths seem to occur in Ukraine, the Russian Federation, the United Kingdom, Spain and Germany. Combined, these five countries account for some 80% of all reported drug-related deaths in Europe. In terms of mortality rates, Ukraine, Iceland, Ireland and Luxembourg seem to experience some of the highest levels in Europe, with over 100 drug-related deaths per one million inhabitants aged 15-64.

d) Africa

Production

Illicit drug production in Africa is mainly focused on cannabis. While cannabis resin is mainly produced in Morocco, cannabis herb is produced all over Africa.

Small-scale opium production is limited to countries in North Africa, notably Egypt, which regularly reports the largest eradication of opium poppy among all countries in Africa.

⁸ EMCDDA, The State of Drugs Problem in Europe, Annual Report 2010.

⁹ EMCDDA, *Polydrug Use: Patterns and responses*, Selected issues 2009.

¹⁰ EMCDDA, *Statistical Bulletin*, Number of drug-induced death recorded in EU Member States according to national definition, Dutal drug-induced deaths, 1995-2008.

ATS manufacture appears to be emerging in some African countries. For some time, methamphetamine and methcathinone production has been taking place in South Africa, basically for domestic use. Similarly, Egypt has reported clandestine manufacture of ATS for some years. This production only takes place at low levels and is intended for the domestic market.

In contrast, recent reports of shipments of methamphetamine from countries in West Africa (notably Nigeria) to various destinations in East and South-East Asia is an international concern, and suggest that a more professional ATS production has been emerging in West Africa. Some equipment and chemicals seized in Guinea in 2010 might indicate possible ATS manufacture there.

Finally, khat is cultivated in several East African countries. Khat is not under

international control, though a number of countries – including countries in Africa – have introduced national legislation to prohibit its cultivation and trafficking.

Trafficking

Most of the cannabis trafficking is for shipments across African countries. Only smaller amounts are destined for overseas markets, mainly in Europe. Most of the cannabis resin production in North Africa is for final consumption in Europe. The largest seizures were reported for cannabis herb, followed by cannabis resin. Africa's share of global cannabis

herb seizures amounts to 11% – and is thus below its share of the global population

(15%), while its share in global cannabis resin seizures - mostly carried out by countries

in North Africa – is equivalent to 25% of the world total.

Africa has been affected by significant shipments of cocaine from South America to Europe in recent years. The amounts trafficked via Africa to Europe, however, seem to have decreased in 2008 and 2009, and only partly resumed in 2010. Estimates for 2009 suggest that some 35 mt of cocaine may have left South America for Africa of which some 21 mt actually arrived in Europe. Most of the rest appears to have been consumed locally. In addition, there are some indications that West African countries are being used to stockpile cocaine which is later trafficked in small quantities to Europe.

In addition, African countries are increasingly being used by traffickers to ship Afghan heroin to final destinations in Europe and other regions. Though East Africa is reportedly the main intermediate target for these trafficking activities, African heroin seizures were highest in Southern Africa and North Africa. Estimates suggest that 40-45 mt of Afghan heroin was trafficked to Africa in 2009.

Methamphetamine seizures have been reported from Nigeria and South Africa. For 2009, however, only South Africa reported such seizures, out of a total of four African countries reporting any ATS seizures in the ARQ. Approximately one half of the ATS

seized in Africa was amphetamine. The paucity of the data does not allow for a reliable characterization for the continent as a whole. Several African countries appear to be affected by trafficking in, and consumption of, diverted or counterfeit prescription drugs containing controlled substances whose nature is not always clear, though they appear to include ATS as well as sedatives and tranquillizers.

| | 2005 | 2006 | 2007 | 2008 | 2009 | In % of global total in 2009 |
|------------------------|---------|-----------|---------|---------|---------|------------------------------------|
| Cannabis herb | 865,974 | 1,220,578 | 694,177 | 936,084 | 639,769 | 11% |
| Cannabis resin | 121,576 | 132,784 | 140,544 | 165,455 | 320,600 | 25% |
| Khat* | 1,522 | 5,691 | 2,490 | 6,219 | 23,442 | 12% |
| Cocaine | 2,575 | 851 | 5,535 | 2,551 | 956 | 0.1% |
| Methaqualone | 159 | 773 | 93 | 1,586 | 828 | 99% |
| Heroin | 325 | 335 | 328 | 311 | 515 | 0.7% |
| Opium | 45 | 33 | 49 | 67 | 57 | 0.01% |
| Amphetamines- group | 2,085 | 851 | 721 | 3,492 | 98 | 0.2% |
| Ecstasy | 3.7 | 74.5 | 9.2 | 0.06 | 0.02 | 0.0% |
| Memo: | | | | | 1,009 | |
| Population | | | | | million | 15% |

Seizures in Africa, kilogram equivalents, 2005-2009

Source: UNODC ARQ.

Illicit drug use

Information on drug use in Africa is extremely limited, given the lack of scientific surveys in the region. The high level of uncertainty is reflected in the broad ranges around the best estimates. The available information suggests that cannabis use is widespread, and that other drugs are used as well, notably in urban areas.

The limited information on drug-related treatment in Africa identified cannabis as the main problem drug, accounting for 64% of all treatment demand in the region. This is a far higher proportion for cannabis than in any other region. Cannabis was followed by opioids (19%), cocaine (5%) ATS (5%), methaqualone (4%), khat (3%), solvents and inhalants (3%) and sedatives and tranquillizers (2%).

Given the absence of information on overall drug use patterns, it is also difficult to estimate the extent of nonmedical prescription drug use in the region. However, parallel markets exist in many African countries, where prescription drugs are sold outside the control of the health authorities. ARQ data suggest frequent nonmedical use of prescription drugs such as buprenorphine, pentazocine and benzodiazepines in several

African countries. In Mauritius, the use of buprenorphine was reported to be higher than heroin. In Madagascar, around 38% of the total treatment demand was for tranquillizers, second to cannabis (>60%). Similarly in South Africa, on average 6.9% of people in treatment reported prescription opioids and tranquillizers as either their primary or secondary drug of abuse.¹¹

Drug-related deaths

Information on drug related deaths in Africa is also limited. The best available estimates suggest that there could be between 13,000 and 41,700 drug-related deaths, equivalent to between 23 and 74 per one million inhabitants aged 15-64. These figures would suggest that drug-related death in Africa is close to the global average. Estimates could of course change substantially were better data to become available.

e) Asia

Production

The main illicit drug produced in Asia is opium. The two largest opium-producing countries are Afghanistan and Myanmar. Though the proportion of Asian opium production in the global total declined from 98% in 2007 to 87% in 2010, Asian opium continues to dominate the world opium and thus also the world heroin market. While Afghan opium production declined over the 2007-2010 period, production in Myanmar increased.

Cannabis production is widespread across Asia, including cannabis resin production in Afghanistan and its neighbours in South-West Asia and Central Asia, and cannabis herb production in East and South-East Asia, and South Asia. The preliminary UNODC/Government of Afghanistan cannabis survey found cannabis resin production of 1,200-3,700 mt in Afghanistan in 2010, and Afghanistan was worldwide the second most frequently mentioned source country for cannabis resin shipments after Morocco.

Seizures of cannabis plants – an indirect indicator of cannabis eradication – were higher in Asia 2009 than in North America, Europe or Oceania. Only South America showed higher figures.

Asia also plays a major role in the clandestine manufacture of ATS, notably of methamphetamine. Methamphetamine manufacture is mainly concentrated in East and South-East Asia, including the Philippines, China, Malaysia and Myanmar. In addition, since 2009, the Islamic Republic of Iran appears to have emerged as a significant location for the clandestine manufacture of methamphetamine. Limited production of ecstasy also takes place in Asia, notably East and South-East Asia, including Malaysia, China and Indonesia. ATS production is mainly for consumption within the region. Exports to other regions (with the exception of a few exports to Oceania) hardly take place.

¹¹ South African Community Epidemiology Network on Drug Use (SACENDU), *Monitoring Alcohol and drug abuse trends in South Africa*, SACENDU Research Brief Vol 13 (01), 2010.

Trafficking

Trafficking in Asia is dominated by opium and heroin, which are smuggled to final destinations within the region as well as to Europe (from Afghanistan) and China (from Myanmar), though some Afghan opiates also find their way to China (up to 30% of Chinese demand). Overall, Asian opium exports accounted for more than 99% of the world total. Similarly, morphine seizures made in Asia accounted for more than 99% of the world total. More than half of all heroin seizures (56% in 2009) were made by Asian countries. In line with the much larger opium production of Afghanistan compared to Myanmar, opiate seizures have been far larger for the countries surrounding Afghanistan (notably the Islamic Republic of Iran and Pakistan) than for the countries surrounding Myanmar.

Cannabis herb seizures in Asia amounted to just 6% of the world total. In contrast, cannabis resin seizures accounted for 24% of the world total in 2009. Cannabis herb and resin seizures in Asia both showed upward trends over the 2005-2009 period (60% and 30%, respectively). A breakdown shows that 98% of Asian cannabis resin seizures in 2009 took place in the Near and Middle East/South-West Asia. Cannabis herb seizures, in contrast, occurred primarily in South Asia (53% of all Asian seizures) and in East and South-East Asia (36%).

In addition, Asia has developed into a major production and trafficking hub for ATS, accounting for 64% of all such seizures worldwide in 2009. Amphetamine seizures (mainly Captagon) happen primarily in the Near and Middle East, notably the Arabian peninsula, accounting for almost all Asian amphetamine seizures. Methamphetamine seizures, in contrast, affect primarily East and South-East Asia (95% of all Asian methamphetamine seizures). Both amphetamine and methamphetamine seizures increased in Asia over the 2005-2009 period (by 59% and 36%, respectively).

Ecstasy seizures, in contrast, declined over the 2005- 2009 period (-58%), which is also in line with reports of improved ecstasy precursor controls. The importance of Asian ecstasy seizures in the global total (9%) is much lower than for the amphetamines.

A problem, for countries in East and South-East Asia as well as South Asia, is the increasing popularity of ketamine, a drug used mainly in veterinary medicine for its analgesic properties. It is not under international control. Ketamine is sometimes sold as 'ecstasy' or mixed with MDMA. Seizures of ketamine tripled over the 2005-2009 period and were in 2009 – in volume terms – some 20 times larger than ecstasy seizures in Asia. Asia accounted for 99% of global ketamine seizures in 2009. Most of the ketamine is produced in the region.

Cocaine seizures reported in Asia accounted for just 0.1% of the global total. Nonetheless, except for countries in Central Asia, all other subregions reported seizures of cocaine in recent years. Relative concentrations of cocaine trafficking seem to exist in East and South- East Asia as well as in the Near and Middle East.

| | 2005 | 2006 | 2007 | 2008 | 2009 | In % of global total in 2009 |
|------------------------|---------|---------|---------|---------|------------------|------------------------------------|
| Opium | 337,071 | 381,741 | 517,119 | 643,873 | 649,449 | > 99% |
| Morphine | 31,342 | 45,787 | 27,039 | 17,060 | 23,655 | > 99% |
| Heroin | 31,852 | 30,442 | 34,699 | 40,490 | 42,512 | 56% |
| Cannabis herb | 233,808 | 231,786 | 201,030 | 331,322 | 373,522 | 6% |
| Cannabis resin | 236,284 | 227,822 | 308,410 | 543,177 | 306,556 | 24% |
| Amphetamines- group | 29,968 | 32,460 | 31,031 | 32,854 | 41,592 | 64% |
| of which | | | | | | |
| - amphetamine | 15,572 | 15,690 | 19,296 | 19,711 | 24,772 | 74% |
| - methamphetamine | 12,175 | 12,360 | 11,026 | 13,052 | 16,577 | 53% |
| Ecstasy | 1,202 | 451 | 1,998 | 843 | 506 | 9% |
| Ketamine | 3,256 | 4,455 | 12,098 | 7,913 | 10,693 | 99% |
| Cocaine | 525 | 711 | 568 | 1,136 | 676 | 0.1% |
| Memo: Population | | | | | 4,068 million | 59% |

Seizures in Asia, kilogram equivalents, 2005-2009

Source: UNODC ARQ.

Illicit drug use

Information on illicit drug use is only slightly better in Asia than in Africa, which also results in broad ranges around the best estimates.

Cannabis is the most widely consumed drug in Asia. Despite national differences, overall cannabis use is, however, rather low in Asia, clearly below the global average. While cannabis resin is mostly used in Afghanistan and Lebanon and their respective neighbouring countries, cannabis herb is mainly used in South and South-East Asia.

The second most widely consumed drug type in Asia is the amphetamines, that is, methamphetamine in East and South-East Asia and amphetamine on the Arabian peninsula. Available information suggests that the use of amphetamines increased in recent years.

Asian countries reported mixed trends of ecstasy use. Estimates regarding ecstasy, however, must be treated with caution. Substances other than MDMA are often sold as 'ecstasy' in Asia.

By far the most problematic group of substances for most Asian countries are the opiates. It is estimated that more than half of the world's opiate-using population lives in Asia.

Opiate prevalence rates are particularly high in the main opium-producing regions as well as in some of their neighbouring countries. The highest estimates of opiate consumption are found in the countries of South-West Asia.

Cocaine use in Asia is still limited, though there are regular reports that organized crime groups are trying to develop the market, notably in some of the richer parts of Asia, where sufficient purchasing power exists.

Due to the absence of regular prevalence studies for the majority of countries in Asia, information on non-medical use of prescription drugs is scattered and limited. Available reports nonetheless indicate substantial nonmedical use of prescription opioids, tranquillizers and amphetamines in many Asian countries.

In Bangladesh, Nepal and India, buprenorphine is commonly injected. In South-West and Central Asia, among the regular heroin users, the non-medical use of prescription opioids, barbiturates and sedatives has been a commonly observed phenomenon. In Afghanistan, an annual prevalence rate of 0.5% for prescription opioids and 0.4% for tranquillizers was reported among the adult population. The annual prevalence of tranquillizer use was about the same among the male and female populations, while other drug use is far more male dominated.¹²

In South-East Asia, along with the use of ATS, the non-medical use of tranquillizers -

especially benzodiazepines– is widely reported from various countries in the region, including Brunei Darussalam, Malaysia, Myanmar, the Philippines and Singapore. In the Republic of Korea and the Philippines, prescription opiates are the predominantly used opioids. Increased use of synthetic and prescription drugs has also been reported in a number of countries, including Jordan, Qatar and the United Arab Emirates. In Kuwait, for instance, around 16% of treatment demand was related to the use of sedatives and tranquillizers.

Drug-related deaths

Asia has the largest uncertainty in the estimated range of drug-related deaths: between 6 and 51 deaths per one million persons aged 15-64. This needs to be interpreted with caution, considering the lower coverage and reporting of mortality data. Nevertheless, due to the considerable population in Asia, this translates to between 15,000 and 140,000 deaths. In Asia, opioids are almost exclusively reported as the primary substance in drug-related deaths.

f) Oceania

Production

Drug production in Oceania is limited to the cultivation of the cannabis plant, mainly for the production of cannabis herb. Cannabis production takes place in Australia, New

¹² UNODC, Drug Use in Afghanistan: 2009 Survey.

Zealand and most of the small island countries. Cannabis production is for local consumption and there is no information on exports to other regions.

In addition, ATS production has started to gain prominence over the last decade. This is mainly methamphetamine and, to a lesser extent, ecstasy. In addition, some amphetamine is also produced. ATS production is concentrated in Australia and, to a lesser extent, New Zealand.

Trafficking

The amounts of drugs seized in Oceania tend to be very small by international standards. Seizures of cannabis herb continued to decline over the 2005-2009 period and account for

just 0.02% of the world total – far less than the share of the population of the Oceania region in the global total (0.5%). This is surprising as Oceania has one of the world's highest cannabis use prevalence rates.

The second largest seizures in volume terms were of cocaine, accounting for 0.04% of global seizures. Cocaine seizures increased over the 2005-2008 period, but declined again in 2009. Cocaine is trafficked from South America to Australia, though some recent arrests suggest that Mexican drug cartels may have started to show an interest in the potentially lucrative Australian cocaine market (due to high cocaine prices).

The proportion of Oceania in the global total is higher when it comes to ATS. Seizures of amphetamines-group substances accounted for 0.4% of the world total. Amphetamines-group seizures declined by some 85% between 2006 and 2009.

The decline was even more pronounced for ecstasy seizures, falling by 96% between 2005 and 2009, or by 99% between 2007 and 2009. Nonetheless, with a share in global seizures of 1.2%, ecstasy continues to play an above-average role in this region.

Significant amounts of ecstasy – by local standards – are still being smuggled into Oceania (notably Australia) from Europe and South-East Asia, in addition to domestic supply.

The importance of heroin seizures in Oceania is also modest (0.3% of global seizures). Heroin seizures, however, showed a clear increase over the 2006-2009 period but were nonetheless some 80% lower than in 2000.

LSD seizures declined by some 95% between 2005 and 2009, but LSD was the only substance where Oceania accounted for a substantial share of global drug seizures (16%).

| | 2005 | 2006 | 2007 | 2008 | 2009 | In % of global total in 2009 |
|--------------------------|-------|-------|-------|-------|------------|------------------------------------|
| Cannabis herb | 3,514 | 2,845 | 2,730 | 1,445 | 1,389 | 0.02% |
| Cocaine | 95 | 285 | 626 | 931 | 290 | 0.04% |
| Amphetamines- group | 338 | 1,753 | 198 | 312 | 253 | 0.4% |
| of which methamphetamine | 132 | 216 | 174 | 48 | 171 | 0.6% |
| Ecstasy | 1,447 | 541 | 4,666 | 58 | 63 | 1.2% |
| Heroin | 152 | 67 | 65 | 80 | 195 | 0.3% |
| LSD | 0.67 | 0.13 | 0.13 | 0.00 | 0.03 | 16% |
| Memo: | | | | | | 0.5% |
| Population | | | | | 36 million | |

Seizures in Oceania, kilogram equivalents, 2005-2009

Source: UNODC ARQ

Illicit drug use

Illicit drug use in Oceania is generally characterized by high prevalence rates, notably for cannabis (9.3%-14.8%) of the population aged 15-64), but also for ATS, both ecstasy (3.6%-4%) and amphetamines (2%-2.8%), as well as for cocaine (1.4%-1.7%). Only the

prevalence rate for opiates (0.2%) is below the global average – a lasting result of the 'heroin drought' in 2001.

At the same time, much progress has been made over the last decade in reducing the prevalence rates. This was particularly true for the opiates, but also for cannabis. Use of ecstasy and cocaine increased. More recently, all indicators show a stabilization of drug use.

Though annual drug use prevalence rates are high, per capita consumption of drugs among drug users tends to be low in Oceania, notably for cocaine. Very high drug prices may explain this.

Non-medical use of prescription drugs also appears to be widespread in Oceania, and it seems to be mainly linked to some prescription amphetamines and prescription opioids.

In Australia, there is substantial non-medical use of both amphetamines (2.7%) and prescription opioids (0.2%) among the general population. Use of tranquillizers is also common. Among students aged 12-17, 16.2% had used tranquillizers without a doctor's prescription in their lifetime. This compares with a lifetime prevalence of 3.8% for

amphetamines among students, and 2.3% who had used opiates in their lifetime.¹³ Widespread non-medical use of prescription drugs was also reported by New Zealand.

Drug-related deaths

For Oceania, although the total number of drug-related deaths is small (approximately 2,800 deaths), the mortality rate seems to be rather high, at 119 deaths per one million inhabitants aged 15-64. Since Australia is the only reporting country, this rate probably does not reflect the situation across Oceania. Moreover, Australia has a better drug-death registration system than many other countries.

¹³ White V. and Smith G., *Australian secondary school students' use of tobacco, alcohol, and over-thecounter and illicit substance in 2008*, Drug Strategy Branch, Australian Government Department of Health and Ageing, September 2009.