Chapter I of this year’s World Drug Report provides an overview of recent trends and the drug situation in terms of production, trafficking and consumption and the consequences of illicit drug use in terms of treatment, drug-related diseases and drug-related deaths.

Chapter II presents a long-term perspective on the characteristics and evolution of the drug problem and the main factors that shaped it. It starts with a discussion of the main characteristics of the contemporary drug problem, followed by an overview of the shifts observed over the last few decades, before concluding with an analysis of the driving factors that shaped the evolution of the drug problem, including a brief outlook for its likely future direction.

CHAPTER I. RECENT STATISTICS AND TREND ANALYSIS OF ILICIT DRUG MARKETS

Latest available data indicate that there has been no significant change in the global status quo regarding the use, production and health consequences of illicit drugs, other than the return to high levels of opium production in Afghanistan after a disease of the opium poppy and subsequent crop failure in 2010. But while the troubled waters of the world’s illicit drug markets may appear to be stagnant, shifts and changes in their flows and currents can be observed below the surface. These are significant and also worrying, not because of how they currently impact on the data but because they are proof of the resilience and adaptability of illicit drug suppliers and users and because of the potential future repercussions of those shifts and changes in the world’s major drug markets.

The global picture

The extent of global illicit drug use remained stable in the five years up to and including 2010, at between 3.4 and 6.6 per cent of the adult population (persons aged 15-64). However, some 10-13 per cent of drug users continue to be problem users with drug dependence and/or drug-use disorders, the prevalence of HIV (estimated at approximately 20 per cent), hepatitis C (46.7 per cent) and hepatitis B (14.6 per cent) among injecting drug users continues to add to the global burden of disease, and, last but not least, approximately 1 in every 100 deaths among adults is attributed to illicit drug use.

Opioids continue to be the dominant drug type accounting for treatment demand in Asia and Europe and also contribute considerably to treatment demand in Africa, North America and Oceania. Treatment for cocaine use is mainly associated with the Americas, while cannabis is the main drug causing treatment demand in Africa. Demand for treatment relating to the use of amphetamine-type stimulants (ATS) is most common in Asia.

Globally, the two most widely used illicit drugs remain cannabis (global annual prevalence ranging from 2.6 to 5.0 per cent) and ATS, excluding “ecstasy”, (0.3-1.2 per cent) but data relating to their production are scarce. Total production and cultivation of coca is known to be stable, while the production of opium has returned to levels comparable to 2009. Global annual prevalence of both cocaine and opiates (opium and heroin) has remained stable, with ranges from 0.3-0.4 per cent and 0.3-0.5 per cent, respectively, of the adult population aged 15-64:

<table>
<thead>
<tr>
<th>Annual prevalence and number of illicit drug users at the global level, 2010</th>
<th>Prevalence (percentage)</th>
<th>Number (thousands)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Low</td>
<td>High</td>
</tr>
<tr>
<td>Cannabis</td>
<td>2.6</td>
<td>5.0</td>
</tr>
<tr>
<td>Opioids</td>
<td>0.6</td>
<td>0.8</td>
</tr>
<tr>
<td>Opiates</td>
<td>0.3</td>
<td>0.5</td>
</tr>
<tr>
<td>Cocaine</td>
<td>0.3</td>
<td>0.4</td>
</tr>
<tr>
<td>Amphetamine-type stimulants</td>
<td>0.3</td>
<td>1.2</td>
</tr>
<tr>
<td>“Ecstasy”</td>
<td>0.2</td>
<td>0.6</td>
</tr>
<tr>
<td>Any illicit drug</td>
<td>3.4</td>
<td>6.6</td>
</tr>
</tbody>
</table>

Opioids

With estimated annual prevalence ranging from 0.6 to 0.8 per cent of the population aged 15-64, the use of opioids (mainly heroin, morphine and non-medical use of prescription opioids) is stable in all of the main markets. After a blip in global production in 2010, caused by a disease of the opium poppy in Afghanistan, production has now more or less returned to its 2009 level. Average wholesale and retail prices in the most regularly monitored markets for opiates, in Western and Central Europe and the Americas, have also shown little change since 2009, but this does not reflect the situation seen in such major opium-producing countries as Afghanistan and Myanmar where, despite an increase in opium production, farm-gate prices continued to rise in 2010 and 2011.

The latter may imply that illicit demand for opium and its derivatives is continuing to increase in spite of the recent recovery of opium production. While it is difficult to identify one specific reason for this, it could be an underestimation of global heroin consumption, especially in countries in Asia that are major markets and countries in Africa that are possible emerging markets, or to an expansion in the market for raw opium (not processed into heroin), which could feed increased opium consumption and, perhaps, a parallel illicit market for opiates such as morphine. High prices at source could also be explained by speculation in the local market.
It is too early to know exactly the impact of the 2010 opium crop failure in Afghanistan on the major illicit markets for opiates, but a general decrease in seizures in 2010 occurred in most of the countries supplied by Afghan opiates and a heroin shortage was observed in some European countries in 2010-11. There are indications that this shortage has encouraged users in some countries to replace heroin with other substances such as desomorphine (also known as “krokodil”), acetylated opium (known as “kompot”) and synthetic opioids such as fentanyl and buprenorphine.

Although large quantities of heroin continue to be trafficked along the main Balkan route, leading from Afghanistan to Western and Central Europe via South-Eastern Europe, declining seizures were reported in most of the countries in those regions in 2010. However, the coastal markets of Africa are reporting increasing seizures, as are countries in South-East Asia. Whether this implies that traffickers are seeking alternative routes or that heroin use is on the increase in those places, the lack of available data makes it impossible to draw definitive conclusions. But one thing is clear: the opiate market continues to be extremely flexible and adaptable.

**Cocaine**

The general stability of global cocaine use and manufacture masks different trends in different regions and countries. Available data on cultivation, yield and trafficking indicate that there has been an overall decline in global manufacture of cocaine, prompted by a major decline in cocaine manufacture in Colombia in the five-year period 2006-2010. A sizeable shift has taken place as coca bush cultivation and coca production increased in the same period in the other two coca-producing countries, Bolivia (Plurinational State of) and Peru, which are becoming increasingly important producers. The major markets for cocaine continue to be in North America, Europe and Oceania (mainly Australia and New Zealand). North America has seen a marked decline in cocaine use, mainly due to a decline in the United States, from 3.0 per cent (2006) to 2.2 per cent (2010) among adults aged 15-64; however, there has not been such a decline in Europe, where cocaine use stabilized over the same period. Latest data from Australia show an increase in cocaine use. There is evidence that, while the United States market continued to be almost exclusively supplied by cocaine produced in Colombia, from 2006 there was a shift in the European markets, which compensated, at least partially, for the shortage of cocaine produced in Colombia with cocaine produced in Bolivia (Plurinational State of) and Peru. The decline in seizures in Europe, despite the apparent stability of the region’s cocaine supply, implies that a change in trafficking modes is occurring as traffickers may be making increasing use of containers. In the United States of America, the decrease in availability of cocaine has been reflected by rising prices since 2007. In Europe, however, no dramatic changes in prices have been observed since 2007. Overall, they remained at the same level in dollar terms between 2007 and 2010 and even decreased in some countries.

An additional factor influencing the availability of, and overall demand for, cocaine in different regions is the emergence of new, albeit small, cocaine markets in, for example, Eastern Europe and South-East Asia. There is also some evidence that cocaine trafficking through West Africa may have had a spillover effect on countries in that subregion, with cocaine emerging as a drug of major concern, along with heroin. Some data indicate an expansion of the cocaine market, particularly of “crack” cocaine, in some countries of South America.

**Amphetamine-type stimulants**

The illicit manufacture of ATS (mainly methamphetamine, amphetamine and “ecstasy”), the second most widely used class of drugs worldwide, is difficult to measure because it is widespread and often on a small scale. While the use and global seizures of ATS remained largely stable, 2010 was marked by an increase in methamphetamine seizures to more than double the amount in 2008, partly due to seizures increasing in Central America and East and South-East Asia. For the first time since 2006, global methamphetamine seizures surpassed global amphetamine seizures, which fell by 42 per cent (to 19.4 tons) mainly as a result of a decrease in seizures in the Near and Middle East and South-West Asia.

Despite a significant rise in the dismantling of clandestine amphetamine laboratories, amphetamine seizures in Europe continued their downward trend, reaching their lowest level since 2002 (5.4 tons). There are signs, however, of a recovery in the European “ecstasy” market, with seizures of “ecstasy”-group substances more than doubling (from 595 kg in 2009 to 1.3 tons in 2010). The drug’s availability and use also appear to be on the increase in the United States, while there has also been an increase in “ecstasy” seizures in Oceania and South-East Asia.

There is also growing evidence to suggest that criminal organizations involved in smuggling ATS, particularly methamphetamine, exploit West Africa in a similar way to cocaine traffickers. Seizures of methamphetamine from West Africa started to increase in 2008; the substance was being smuggled into East Asian countries, predominantly Japan and the Republic of Korea.

**Cannabis**

Cannabis is the world’s most widely used illicit substance: there are between 119 million and 224 million cannabis users worldwide, and consumption is stable. Cannabis seizure and eradication data suggest that the production of cannabis herb (marijuana) is increasingly widespread, but the often localized, small-scale nature of cannabis cultivation and production make it very difficult to assess. New
data on larger-scale global production of cannabis resin (hashish) are only available for Afghanistan.

The relative importance of cannabis resin and herb varies by region, with cannabis resin being dominant in the Near and Middle East and South-West Asia, cannabis resin and herb markets being comparable in size in North Africa and Europe. The rest of the world, including the United States, where production continues to be high, is dominated by cannabis herb. Data for Africa is hard to come by but seizure data suggest that herb is also the dominant form of cannabis in that region, except in North Africa where resin is predominant.

The production of cannabis resin is assumed to be very small in Europe yet the region is the world’s biggest market for cannabis resin and North Africa has long been Europe’s predominant supplier. Most of the North African cannabis resin consumed in Europe traditionally comes from Morocco, but recent data show that that country’s relative importance as a supplier could be on the wane. Indeed, Afghanistan now appears to be one of the most important countries worldwide in terms of cannabis resin production.

The proliferation of indoor cannabis cultivation sites and differing trends in prices and seizures of cannabis herb and resin indicate that there may be a shift in the European cannabis market away from the dominance of resin towards herb, with most European Union member States reporting the cultivation of cannabis herb to be a phenomenon that appears to be on the increase.1 Though usually small-scale, indoor cultivation sites may also include major operations run by organized criminal groups who often choose to supply local markets in order to reduce the risks involved in cannabis trafficking.

Furthermore, the rise in indoor cultivation of cannabis is often related to an increase in cannabis potency, which is reflected in the data only to a limited extent. Such increases in potency may explain, in part at least, the increase in treatment demand among cannabis users, though this may also be related to the cumulative effects of prolonged use of cannabis.

**Beyond the traditional “highs”: new substances and the non-medical use of prescription pharmaceuticals**

Global figures for the non-medical use of prescription drugs other than opioids and amphetamines are not available. Nevertheless, this is reportedly a growing health problem, with prevalence rates higher than for numerous controlled substances in many countries. In the United States, for example, lifetime, annual and monthly prevalence of non-medical use of psychotherapeutics (mostly pain relievers) among persons aged 12 and over was reported as 20.4, 6.3 and 2.7 per cent, respectively, for 2010,2 higher rates than for any drug other than cannabis. And while illicit drug use among males in general greatly exceeds that among females, the non-medical use of tranquillisers and sedatives among females, in those countries where data are available (in South America, Central America and Europe), is a notable exception to the rule (and exceeds the use of cannabis).3 There is also evidence that these substances are increasingly being used in combination with more traditional illicit substances, in polydrug use designed to either enhance or counterbalance their effects.

New chemically engineered psychotropic substances designed to remain outside international control are also increasingly being used and identified. Numerous countries in all regions, particularly Europe, North America and Oceania, reported the use of such substances as an emerging trend in 2010. The most notable of these substances included the methcathinone analogue 4-methylmethcathinone (also known as mephedrone), and methylenedioxypyrovalerone (MDPV), which are often sold as “bath salts” or “plant food” and used as substitutes for controlled stimulants such as cocaine or “ecstasy”. Similarly, piperazine derivatives4 are also being sold as substitutes for “ecstasy”, while several synthetic cannabinoids that emulate the effect of cannabis but contain uncontrolled products have been detected since 2008 in herbal smoking blends.

Drug trafficking organizations continue to adapt their manufacturing strategies in order to avoid detection, and such changes in the illicit manufacturing process of synthetic substances present new challenges to drug control authorities worldwide.

**Data challenges**

Considerable challenges also remain in the reporting of trend data on illicit drug use, production and trafficking. The main challenges continue to be the availability and reporting of data on different aspects of illicit drug demand and supply in Member States. The lack of data is particularly acute in Africa and parts of Asia, where data on the prevalence of illicit drug use and trends remain vague at best. Other aspects such as prices and purity of drugs, seizures and trafficking patterns and methodological difficulties in estimating in some regions the illicit production of substances — particularly cannabis and ATS — make it

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2 United States of America, Department of Health and Human Services, Substance Abuse and Mental Health Services Administration, Results from the 2010 National Survey on Drug Use and Health: Summary of National Findings, NSDUH Series H-41, HHS Publication No. SMA 11-4658 (Rockville, Maryland, 2011).

3 In fact, monthly prevalence of tranquilizer use among females in South America (1.3 per cent) and Europe (4.2 per cent) is greater than annual prevalence of the use of cannabis among females in South America (1.0 per cent) or Europe (3.5 per cent).

4 These include N-benzylpiperazine (BZP) and 3-trifluoromethylphenylpiperazine.
difficult to analyse and present a complete picture of the ever-evolving illicit drug market. Most of the challenges can be overcome by sustained efforts in priority regions and countries to support and improve the collection of quality data on these different aspects of illicit drug use. It is only then that the ebb and flow of the world’s illicit drug market can be properly measured.

CHAPTER II. THE CONTEMPORARY DRUG PROBLEM: CHARACTERISTICS, PATTERNS AND DRIVING FACTORS

What are the fundamental characteristics of the contemporary illicit drug problem

While psychoactive substances have been consumed for thousands of years, the drug problem has developed some key characteristics over the last few decades, against a backdrop of rapid socioeconomic transitions in a number of countries. Illicit drug use is now characterized by a concentration among youth — notably young males living in urban environments — and an expanding range of psychoactive substances. Although established illicit drug markets in many developed countries have shown signs of stabilization, the growth of drug use seems to continue in many developing countries.

While illicit drug production, trafficking and use remain issues of concern, the international drug control system appears to have kept the consumption of illegal drugs well below the levels reported for legal psychoactive substances. Global estimates suggest that past-month prevalence of tobacco use (25 per cent of the population aged 15 and above) is 10 times higher than past-month prevalence of illicit drug use (2.5 per cent). Annual prevalence of the use of alcohol is 42 per cent (the use of alcohol being legal in most countries), which is eight times higher than annual prevalence of illicit drug use (5.0 per cent). Heavy episodic weekly drinking is eight times more prevalent than problem drug use. Drug use accounts for 0.9 per cent of all disability-adjusted life years lost at the global level, or 10 per cent of all life years lost as a result of the consumption of psychoactive substances (drugs, alcohol and tobacco).

Drug consumption levels would likely be higher without an age-containment effect at work. The international drug control system seems to be acting as a brake on drug use, particularly among adults who are less willing to transgress laws by consuming drugs. While the initiation of psychoactive substance use typically occurs during the teens or early years of adulthood, the (legal) use of tobacco and alcohol continues in much larger proportions with age in the same population groups. The use of khat — which is legal in a number of countries — shows the same patterns. While the prevalence of khat use in Yemen among persons aged 61 and above is just 13 per cent lower than among those in the age group 21-30, the use of cannabis in the United States is some 93 per cent lower among those aged 61 and above than among those aged 21-30. In other words, the use of legal psychoactive substances tends to be far more homogeneously distributed across age groups than the use of illegal drugs.

There is also a pronounced gender gap in relation to illicit drug consumption, with use levels among females significantly lower than among males in nearly all countries for which solid gender-disaggregated data are available. In the United States, characterized by a small gender gap, female drug use is about two thirds that of males, whereas in some other countries, including India and Indonesia, female drug use is as low as one tenth that of males, though there is a risk that female drug use may be underreported. There are some signs, however, that the gender gap may be diminishing in some highly mature illicit drug markets, particularly among young people. Nonetheless, the overrepresentation of males among drug users, which is confirmed by household surveys, workforce drug tests, treatment data, arrest statistics and other relevant information, is still a salient feature of drug use patterns.

What is the impact on society

One of the key impacts of illicit drug use on society is the negative health consequences experienced by its members. Drug use also puts a heavy financial burden on society. Expressed in monetary terms, some US$ 200 billion-250 billion (0.3-0.4 per cent of global GDP) would be needed to cover all costs related to drug treatment worldwide. In reality, the actual amounts spent on treatment for drug abuse are far lower — and less than one in five persons who needs such treatment actually receives it.

The impact of illicit drug use on a society’s productivity — in monetary terms — seems to be even larger. A study in the United States suggested that productivity losses were equivalent to 0.9 per cent of GDP, and studies in several other countries showed losses equivalent to 0.3-0.4 per cent of GDP.

The costs associated with drug-related crime are also substantial. In the United Kingdom of Great Britain and Northern Ireland, a study suggested that the costs associated with drug-related crime (fraud, burglary, robbery and shoplifting) in England and Wales were equivalent to 1.6 per cent of GDP, or 90 per cent of all the economic and social costs related to drug abuse.

How have the patterns of the drug problem shifted over time

While several of the overall characteristics have remained relatively constant over the last few decades, the patterns of illicit drug production, trafficking and use have, nonetheless, shifted significantly.

The illicit market for opiates — the most problematic type of drugs — clearly declined over the last century. Licit and illicit production of opium (including in the form of poppy
straw) fell by some three quarters between 1906/07 and 2010. The decline mainly took place in the first half of the twentieth century. Global opium production levels increased again until 2000, and remained basically stable thereafter. While consumption of opiates has stabilized or declined over the past decade in Western Europe (for a long time, the key market for heroin consumption), developments in other markets have been mixed.

The global cocaine market, in contrast, has expanded since the late nineteenth century and has only recently been showing some signs of decline. Global production of cocaine increased sharply in the 1980s and the 1990s and has only stabilized over the past decade. In recent years, however, the amounts of cocaine available for consumption — after deducting seizures made along the trafficking routes — appear to have declined. Cocaine consumption in North America, the region with the largest cocaine market, has declined significantly over the past decade, though that decrease has been partially offset by rising consumption in Europe and South America.

Cannabis was and continues to be the world’s most widespread illicit drug. While cannabis use is stable or declining in several developed countries, it is still increasing in many developing ones. Hydroponic cannabis cultivation, often indoors, is now common in many developed countries. The result has been a more potent drug as well as shorter supply lines and a reduced need for interregional trafficking.

Illicit manufacture and consumption of ATS continue to rise, in contrast with current overall trends for plant-based drugs. Global seizures of ATS increased some threefold over the period 1998-2010, far more than the increases for plant-based drugs. The strongest increases in demand over the past decade have been reported in countries in Asia.

The consumption of drugs is a dynamic phenomenon, with users trying different combinations of drugs, sometimes mixing of legal and illegal drugs, as well as various modes of consumption. Polydrug use, or the use of various substances either simultaneously or sequentially, is reportedly increasing in many countries. While the most frequent substance combination is that of alcohol and various illegal drugs, combinations such as “speedball”, a mix of cocaine and heroin, are also common in many places. High levels of non-medical use of prescription drugs are reported in many countries. The non-medical use of opioids is especially problematic, with overdose deaths involving prescription opioids having quadrupled since 1999 in the United States.

**Which factors shape the evolution of the problem**

The evolution of the complex global illicit drug problem is clearly driven by a range of factors. Socioeconomic trends, such as the population’s gender and age balance and the rate of urbanization, are influential. If the demographic profile of a given society changes, drug use behavior may also change accordingly. Socioeconomic factors, such as levels of disposable income, inequality and unemployment, also play a role. Increased levels of disposable income may enable a larger number of people to buy illicit drugs, whereas high levels of inequality or unemployment may increase the propensity to use illicit drugs among those affected. A broad sociocultural category of drivers — including changes to traditional value systems and the emergence of a relatively uniform “youth culture” in many countries — also influences the evolution of the problem, though in ways that are often challenging to quantify. Analysis also shows that the availability of and perceptions of the inherent dangers of drugs are key variables in shaping drug use.

The international drug control system and its implementation have had a decisive influence on the evolution of the drug problem. A broad range of social and political events, generally unforeseeable and seemingly not connected to drug-related issues, have also fundamentally altered the drug problem that the world is faced with today. Events such as the war in Viet Nam, as well as broader and more profound transformations, such as those taking place at the end of the cold war, all impacted indirectly but significantly on the situation with regard to illicit drug use.

**How is the drug problem likely to evolve in the future**

One key development to monitor will be the ongoing shift away from developed to developing countries, which would mean a heavier burden for countries relatively less equipped to tackle it. Demographic trends suggest that the total number of drug users in developing countries would increase significantly, owing not only to those areas’ higher projected population growth, but also their younger populations and rapid rates of urbanization. Moreover, the gender gap may start closing as developing countries are likely to experience higher levels of female drug use in the wake of disappearing sociocultural barriers and increasing gender equality.

In terms of specific substances, the prominence of heroin and cocaine in illicit drug markets may continue to decline. In contrast, there are no signs that the popularity of cannabis is going to decrease significantly. Cannabis is likely to remain the most widely used illegal substance, and the use of a broad range of licit and illicit synthetic drugs is likely to continue to increase. These forecasts hinge on the assumption that key factors will remain unchanged. This assumption may not necessarily hold, as a number of unforeseen and largely unforeseeable events and circumstances may still occur and influence the problem, as has repeatedly happened in the past. The further one looks into the future, the more unpredictable the evolution becomes.

What can be said for sure is that Governments and societies will continue to face different policy choices when tackling drug-related and crime-related problems while securing international peace and development and upholding human rights.