

**Commission on Narcotic Drugs****Sixty-sixth session**

Vienna, 13–17 March 2023

Item 6 of the provisional agenda\*

**Follow-up to the implementation at the national,  
regional and international levels of all  
commitments, as reflected in the Ministerial  
Declaration of 2019, to address and counter the  
world drug problem****World situation with regard to drug trafficking****Report of the Secretariat***Summary*

The present report provides an overview of the latest trends in the illicit production of and trafficking in drugs worldwide. The statistics and analysis in the report are based on the latest information available to the United Nations Office on Drugs and Crime.

In 2021, global opium poppy cultivation declined by 16 per cent compared with the previous year, whereas opium production was up 7 per cent from the previous year, reaching an estimated 7,930 tons. Afghanistan remained by far the world's largest source of opium, accounting for an estimated 86 per cent of global illicit production in 2021. The amount of heroin seized globally continued the upward trend in 2020, increasing by 19 per cent and totalling 115 tons.

The area under coca bush cultivation remained stable in 2020 at 234,000 ha. Despite the stabilization in that area, global cocaine manufacture reached a record high of an estimated 1,982 tons of pure cocaine in 2020 and seizures of cocaine increased by 4.5 per cent compared with 2019, reaching a total of 1,424 tons.

Cannabis herb was produced and seized in almost all countries worldwide, while the production of cannabis resin remained confined to a few countries in South-West Asia and North Africa, of which the most prominent producer countries were Afghanistan and Morocco. In 2020, the total amount of cannabis herb seized globally increased by 15 per cent compared with the previous year, to 4,707 tons. The amount of cannabis resin seized globally increased by 29 per cent, reaching a record high of 2,190 tons in 2020.

The quantity of amphetamine-type stimulants seized globally has continued to increase and reached a record high of 525 tons in 2020, with an increase of 16 per cent

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\* E/CN.7/2023/1.



for methamphetamine and 23 per cent for “ecstasy”, and a decrease of 5 per cent for amphetamine.

Increased interconnectivity and the continuing evolution of online platforms have brought numerous advantages for both drug traffickers and people who use drugs. However, despite these advantages, the Internet has so far not dramatically changed drug supply chains, and online platforms overall account for only a small portion of the global drug market.

## I. Introduction

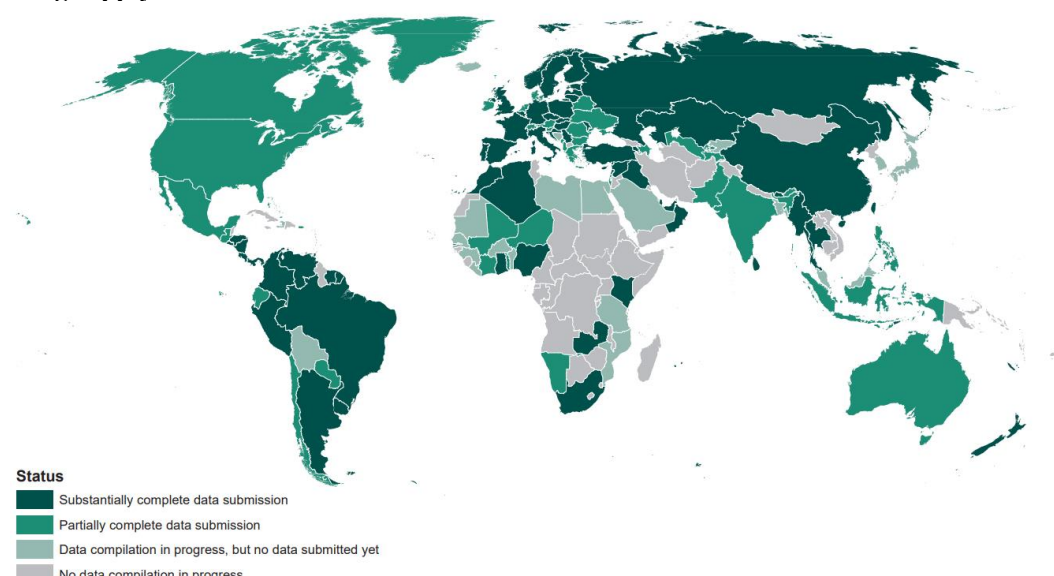
1. The present report provides an overview of developments in the illicit production of and trafficking in the main drugs at the global and regional levels. The statistics and analysis in the report are based on information available to the United Nations Office on Drugs and Crime (UNODC) up to 5 December 2022.

2. The principal sources of information on the illicit cultivation of drug crops and the production of plant-based drugs are the most recent UNODC illicit crop monitoring surveys, where available. In addition, replies by Governments to the annual report questionnaires provide the primary source of information on drug trafficking patterns and drug seizures.

3. As at 5 December 2022, 94 out of 202 States and territories that had been invited to complete the annual report questionnaire had submitted the modules related to drug supply reduction (A07, A08, A09, A10, A11 and A12) of the annual report questionnaire to UNODC. Supplementary sources of information include official reports published by Governments and international organizations, and the *World Drug Report*.

Figure I

**Member States that completed their submission of annual report questionnaire drug supply data for 2021<sup>a</sup>**



<sup>a</sup> Reflects the status of submission as at 5 December 2022.

## II. Global trends in illicit cultivation of drug crops and production of plant-based drugs

### A. Cannabis production

4. Cannabis cultivation has trended upward for a decade and most Member States reported increased cultivation in their territory in 2020.<sup>1</sup>

5. In 2019 and 2020, the number of countries reporting increased indoor cultivation was three times the number of countries reporting decreased outdoor cultivation. The number of countries reporting indoor cannabis cultivation rose from 48 in the period

<sup>1</sup> *World Drug Report 2022*, booklet 3, *Drug Market Trends: Cannabis, Opioids* (United Nations publication, 2022).

2011–2015 to 66 in the period 2016–2020. A total of 98 countries explicitly reported outdoor cannabis cultivation in the latter period.<sup>2</sup>

6. Historically, most countries reporting indoor cultivation have been in Europe and North America, but in recent years they have been joined by countries in numerous other regions and subregions.<sup>3</sup>

## B. Opium poppy cultivation

7. Of the 57 countries where illicit opium production was reported over the last decade, three alone collectively accounted for 97 per cent of estimated illicit opium production in the period 2017–2021. Afghanistan remained the world’s largest source of opium, accounting for an estimated 86 per cent of global illicit production in 2021, while Myanmar accounted for 6 per cent and Mexico for close to 6 per cent.<sup>4</sup>

8. The global area under opium poppy cultivation decreased by 16 per cent, to 246,800 ha, in 2021, primarily owing to a decrease in Afghanistan of 21 per cent, to 177,000 ha,<sup>5</sup> although the area under cultivation in that country was still higher than in 2019, and 35 per cent higher than in 2011.<sup>6</sup>

9. The area under opium cultivation in Myanmar increased slightly, by 2 per cent, to 30,200 ha, in 2021,<sup>7</sup> reversing a trend in which the area had decreased by almost 50 per cent between 2013 and 2020.<sup>8</sup>

10. Global opium production continued its long-term upward trend in 2021, growing 7 per cent year-on-year, to 7,930 tons, less than the peak of 10,240 tons reached in 2017. The increase in 2021 was largely attributable to an increase in opium production in Afghanistan (8 per cent) resulting from a marked increase in opium yields in the country, from 28 kg per ha in 2020 to 38 kg per ha in 2021.<sup>9</sup> The yield figure in Afghanistan thus continued to be considerably higher than in Mexico (about 21 kg per ha in 2018/19)<sup>10</sup> and Myanmar (about 14 kg per ha in 2021),<sup>11</sup> although still below reported opium yields from licit opium production.<sup>12</sup>

11. Opium yields also improved in Myanmar in 2021, such that overall opium production in that country rose by 4 per cent in 2021, to 30,200 ha,<sup>13</sup> thus reversing the downward trend observed in previous years (a decrease of 53 per cent between 2013 and 2020).<sup>14</sup>

<sup>2</sup> Ibid.

<sup>3</sup> Ibid.

<sup>4</sup> Ibid.

<sup>5</sup> United Nations Office on Drugs and Crime (UNODC), Research and Trend Analysis Branch, “Drug situation in Afghanistan 2021: latest findings and emerging threats” (November 2021).

<sup>6</sup> UNODC and Afghanistan, “Afghanistan opium survey 2020: cultivation and production – executive summary” (April 2021).

<sup>7</sup> UNODC, Regional Office for Southeast Asia and the Pacific, *Myanmar Opium Survey 2021: Cultivation, Production, and Implications* (Bangkok, 2022).

<sup>8</sup> UNODC, Regional Office for Southeast Asia and the Pacific, *Myanmar Opium Survey 2020: Cultivation, Production, and Implications* (Bangkok, January 2021).

<sup>9</sup> UNODC, “Drug situation in Afghanistan 2021”.

<sup>10</sup> UNODC and Mexico, *México: monitoreo de plantíos de amapola, 2018–2019* (June 2021).

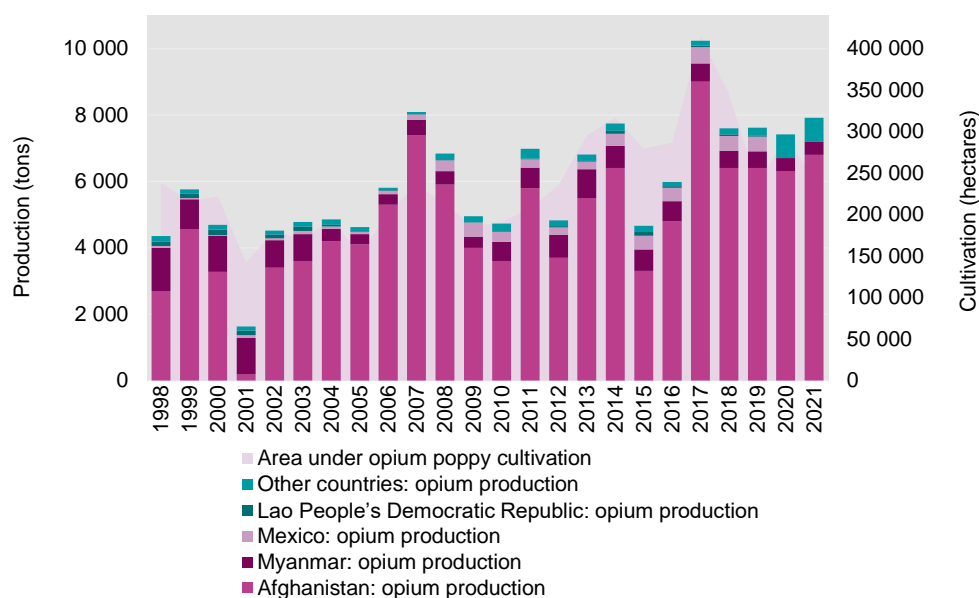
<sup>11</sup> UNODC, *Myanmar Opium Survey 2021*.

<sup>12</sup> E/INCB/2020/2.

<sup>13</sup> UNODC, *Myanmar Opium Survey 2021*.

<sup>14</sup> UNODC, *Myanmar Opium Survey 2020*.

Figure II  
Global opium production and opium poppy cultivation, 1998–2021



Source: *World Drug Report 2022* (data based on UNODC illicit crop monitoring surveys and on responses to the annual report questionnaire).

Note: Data for 2021 are preliminary.

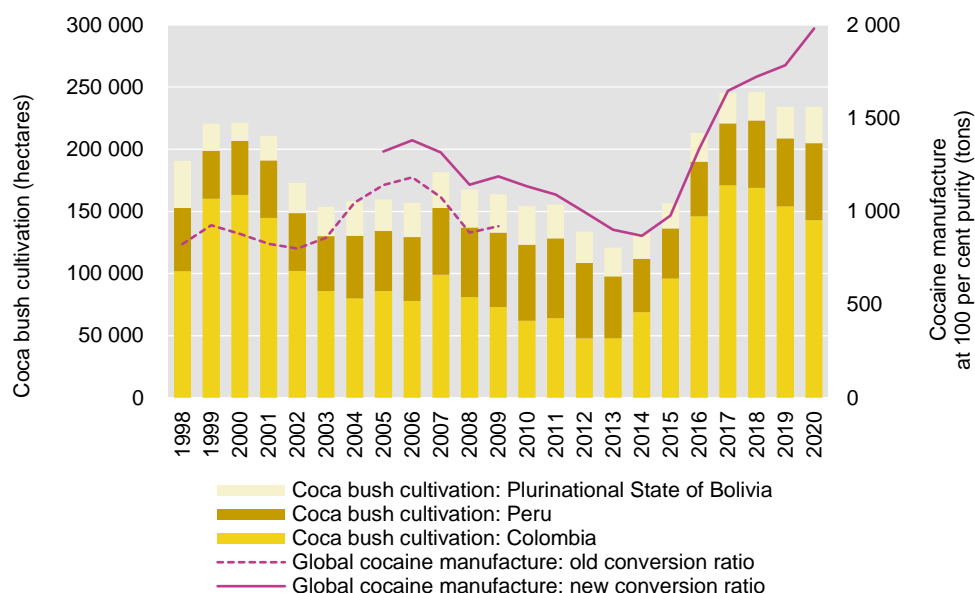
### C. Coca bush cultivation

12. The global area under coca bush cultivation remained basically unchanged in 2020, at 234,200 ha,<sup>15</sup> 5 per cent below the peak in 2018. The decrease in the area under coca bush cultivation in Colombia of 7.1 per cent in 2020 was offset by increases in Peru (13 per cent) and the Plurinational State of Bolivia (15.3 per cent).<sup>16</sup>

<sup>15</sup> This figure includes areas under coca bush cultivation considered for traditional use of coca leaf.

<sup>16</sup> *World Drug Report 2022*, booklet 4, *Drug Market Trends: Cocaine, Amphetamine-type Stimulants, New Psychoactive Substances* (United Nations publication, 2022).

Figure III  
Global coca bush cultivation and cocaine manufacture, 1998–2020



Sources: *World Drug Report 2022* (data based on UNODC coca bush cultivation surveys in Bolivia (Plurinational State of), Colombia and Peru in 2020 and previous years); and United States of America, Department of State, Bureau of International Narcotics and Law Enforcement Affairs, *International Narcotics Control Strategy Report*, various years.

13. In 2020, despite productive areas under coca bush cultivation decreasing by 9 per cent compared with the previous year,<sup>17</sup> potential cocaine manufacture in Colombia rose by 8 per cent,<sup>18</sup> to 1,228 tons, owing to increased yields and higher laboratory efficiency rates. The average yield of fresh coca leaf harvested per hectare under coca bush cultivation rose by 10 per cent, from 5.8 tons in 2019 to 6.4 tons in 2020, while the overall quantity of cocaine hydrochloride obtained from one hectare under productive coca bush cultivation rose by 18 per cent, from 6.7 kg in 2019 to 7.9 kg in 2020.<sup>19</sup>

14. The area under coca bush cultivation in Peru has shown an increasing trend since 2015, and this was even more pronounced in 2020, when the area under cultivation increased by 13 per cent compared with the previous year, to 61,800 ha, representing over 50 per cent of the increase of more than 21,000 ha between 2015 and 2020.<sup>20</sup>

15. The area under coca bush cultivation in the Plurinational State of Bolivia continued to increase in 2020, growing by 15 per cent, to 29,400 ha, an increase accounting for almost half of all growth registered in the country in the period 2015–2020.<sup>21</sup>

<sup>17</sup> UNODC and Colombia, *Colombia: Monitoreo de territorios afectados por cultivos ilícitos 2015* (July 2016).

<sup>18</sup> Ibid.

<sup>19</sup> Ibid.

<sup>20</sup> Peru, Sistema de información de Lucha contra las Drogas and Observatorio Peruano de Drogas, “Producción estimada de hoja de coca en el Perú, 2020”, Reporte No. 03 (October 2021).

<sup>21</sup> UNODC and Plurinational State of Bolivia, *Estado Plurinacional de Bolivia: monitoreo de cultivos de coca 2020* (August 2021).

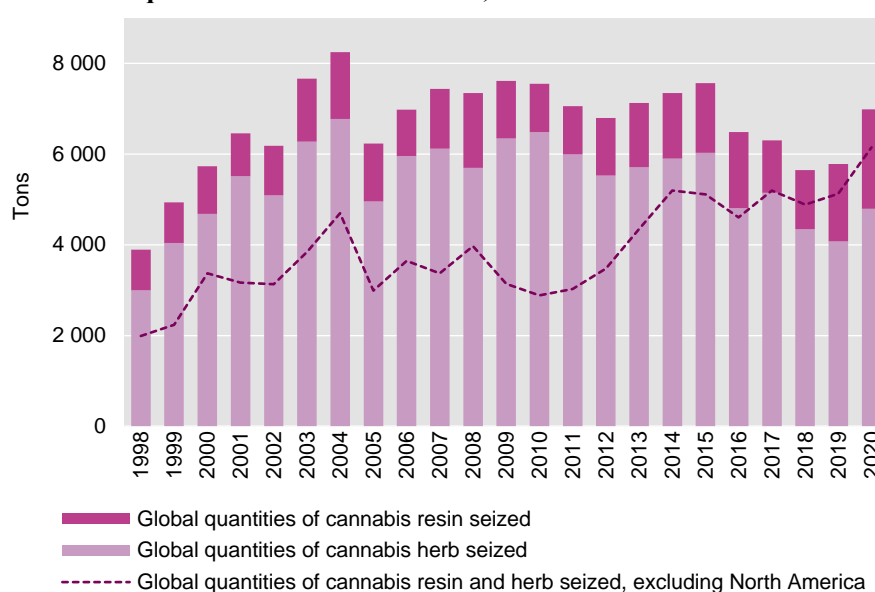
### III. Global trends in drug seizures and drug trafficking

#### A. Cannabis

16. The quantities of cannabis herb and resin seized clearly increased in 2020. The increase reversed a decade-long trend of declining seizures of cannabis herb, a trend that had accelerated in the period 2015–2019, when a number of jurisdictions in North America legalized non-medical cannabis. The increase in global seizures in 2020 is in line with reports that cannabis use increased during the coronavirus disease (COVID-19) pandemic in many countries. The overall year-on-year increase in quantities of cannabis seized amounted to nearly 20 per cent in 2020, the biggest upward jump since 2015. The amount of cannabis seized outside North America reached an all-time high in 2020.<sup>22</sup>

Figure IV

**Global quantities of cannabis seized, 1998–2020**



Source: *World Drug Report 2022* (data based on responses to the annual report questionnaire).

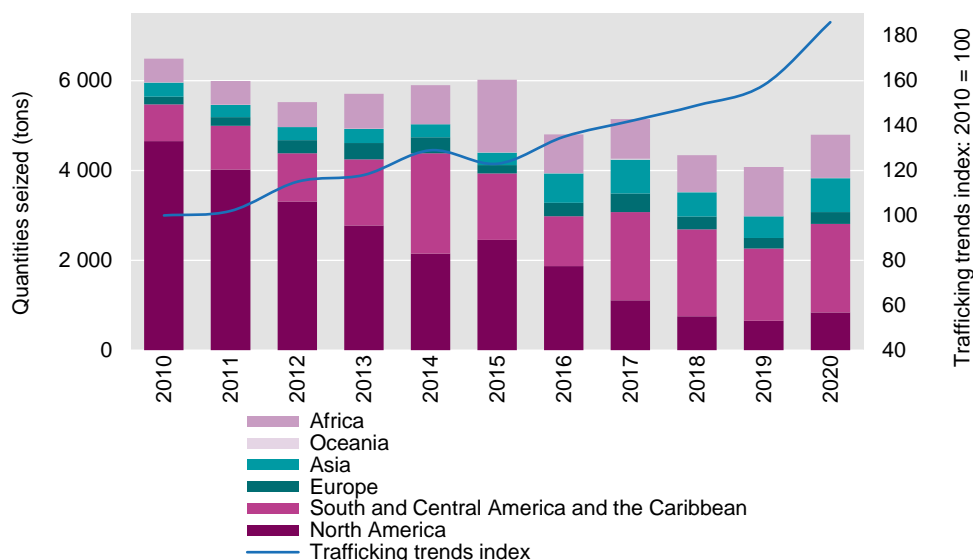
#### Cannabis herb

17. In contrast to the overall decline in quantities of cannabis herb seized between 2010 and 2019, the trends in cannabis trafficking rose over the last decade, according to qualitative reporting from Member States. In 2020, reported qualitative trends in cannabis herb trafficking and quantities of cannabis herb seized moved upwards, with increases reported in most regions.<sup>23</sup>

<sup>22</sup> *World Drug Report 2022*, booklet 3.

<sup>23</sup> *Ibid.*

Figure V  
**Global quantities of cannabis herb seized and reported trends in cannabis herb trafficking, 2010–2020**



Source: *World Drug Report 2022* (data based on responses to the annual report questionnaire).

Note: Because of the uneven coverage of reporting, some regions, notably Africa, may be underrepresented in the data on quantities seized.

18. Countries in the Americas together accounted for almost 60 per cent of the amount of cannabis herb seized globally in the period 2016–2020. However, the region’s share of the amount of cannabis herb seized globally has declined significantly, falling from 84 per cent of the global total in 2010 to 58 per cent in 2020.<sup>24</sup>

19. Quantities seized in the United States of America alone decreased by 76 per cent over the period 2010–2020.<sup>25</sup>

20. Mexico also reported a strong decline in quantities seized as higher potency cannabis became widely available in the United States and organized criminal groups shifted their focus to other drugs.<sup>26</sup>

### Cannabis resin

21. Quantities of cannabis resin seized increased to a record high in 2020. Trends reported by Member States in 2020 on the basis of qualitative assessments suggest that this reflected an increase in cannabis resin trafficking activities worldwide.

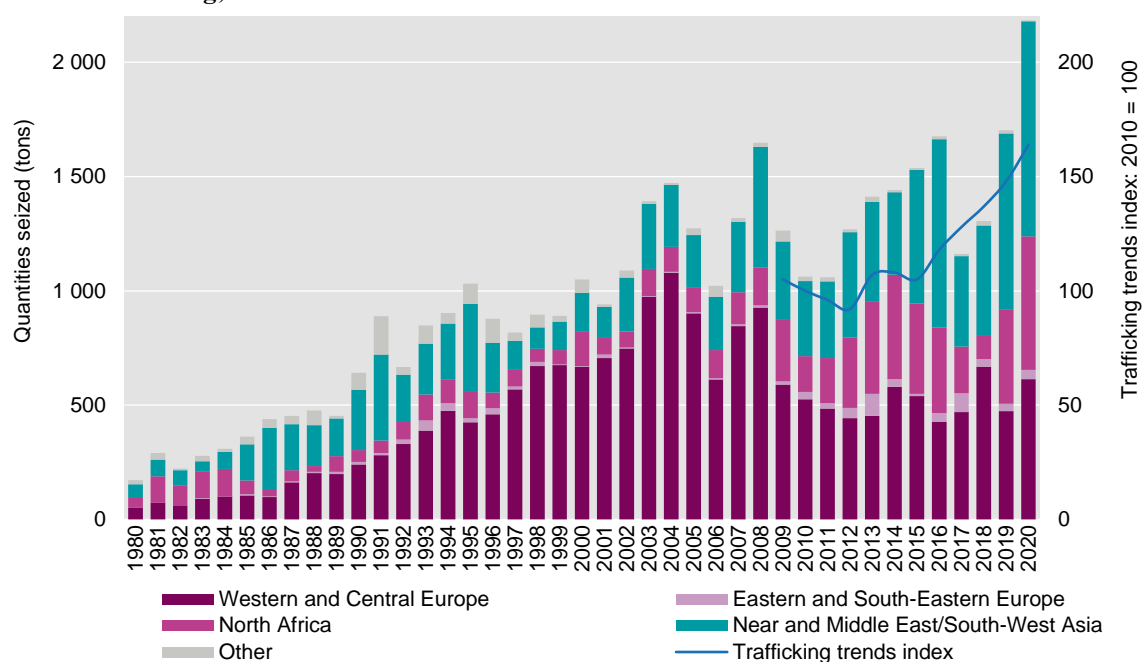
<sup>24</sup> Ibid.

<sup>25</sup> Ibid.

<sup>26</sup> Ibid.



Figure VI  
**Global quantities of cannabis resin seized and reported trends in cannabis resin trafficking, 1980–2020**



Source: *World Drug Report 2022* (data based on responses to the annual report questionnaire).

Note: The trafficking trends index is based on qualitative information on trends in cannabis resin trafficking reported by Member States.

22. Seizures of cannabis resin continued to be concentrated in North Africa and Western Europe, which together formed a single de facto production, trafficking and consumption area for cannabis resin, accounting for almost 60 per cent of the amounts seized globally in the period 2016–2020, as well as in South-West Asia, another major production, trafficking, and consumption area, accounting for about one third of the global total. In terms of the global share of cannabis resin seized, those two areas were followed by the Near and Middle East.<sup>27</sup>

23. In 2020, the largest quantities of cannabis resin seized were reported by Spain, followed by Morocco, Afghanistan, Pakistan and the Islamic Republic of Iran.<sup>28</sup>

24. Cannabis resin from Morocco is mostly trafficked to Spain, which serves as the primary gateway for markets in Western and Central Europe.<sup>29</sup> Cannabis resin from Morocco is also destined for other North African countries<sup>30</sup> and is transported by sea via the southern Mediterranean coastal route.<sup>31</sup>

25. Cannabis resin produced in Afghanistan is mostly trafficked to neighbouring countries.<sup>32</sup> Other significant trafficking flows include routes through Central Asia, mainly to destinations within the subregion and the Russian Federation, as well as routes from production areas in Lebanon to other countries in the Near and Middle East and Europe.

<sup>27</sup> UNODC, responses to the annual report questionnaire.

<sup>28</sup> *World Drug Report 2022*, booklet 3.

<sup>29</sup> UNODC, responses to the annual report questionnaire.

<sup>30</sup> Ibid.

<sup>31</sup> Matt Herbert and Max Gallien, *A Rising Tide Trends in Production, Trafficking and Consumption of Drugs in North Africa* (Geneva, Global Initiative against Transnational Organized Crime, 2020).

<sup>32</sup> UNODC, responses to the annual report questionnaire.

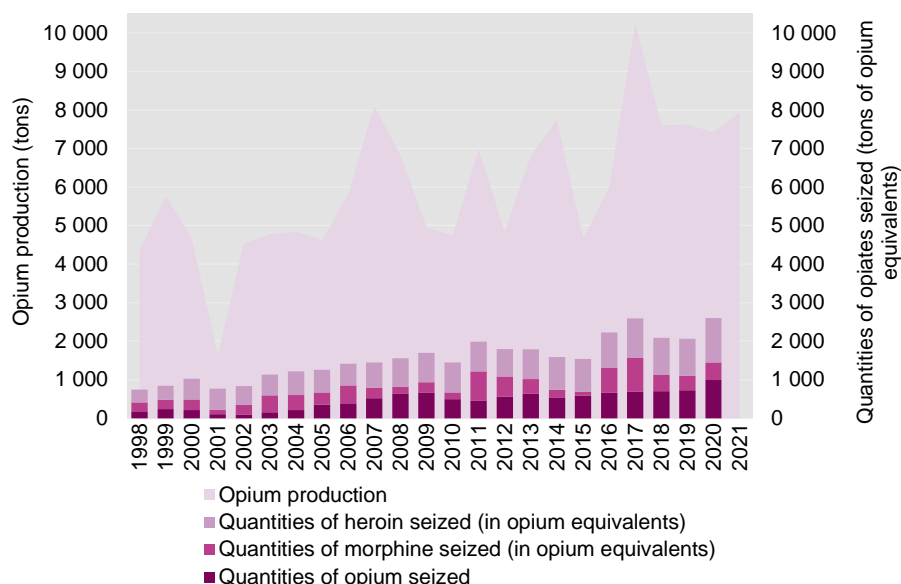
## B. Opiates

### Opium, illicit morphine and heroin

26. Quantities of opiates seized soared almost 40 per cent in 2020, reaching a new record high. Quantities of opium seized increased by 37 per cent, quantities of morphine seized by 116 per cent and quantities of heroin seized by 20 per cent.<sup>33,34</sup>

Figure VII

### Global opium production, 1998–2021, and quantities of opiates seized, 1998–2020



Source: *World Drug Report 2022* (data based on UNODC surveys in selected countries and responses to the annual report questionnaire, and other government sources).

Note: A ratio of 1:10 was used to convert quantities of heroin and morphine to opium equivalents.

27. The increase in the amounts seized was most pronounced for opium, which was primarily seized close to the main production centres. Interception rates for opium – the percentage of estimated opium produced that was reported seized in the form of opium – rose from 5 per cent in 2000 to 13 per cent in 2020.<sup>35</sup>

28. In 2020, most of the heroin and morphine seized globally was once again seized in Asia, with the total amount seized increasing by about 46 per cent compared with the previous year; in South-West Asia, the total amount seized increased by more than 60 per cent. That subregion, together with the broader subregion also comprising the Near and Middle East, saw its proportion of the global amount of opiates seized increase from 50 per cent in 2019 to 67 per cent in 2020 and its proportion of the amount of opiates seized in Asia increase from 77 per cent to 85 per cent, with the increase driven by seizures reported by the Islamic Republic of Iran and Pakistan.<sup>36</sup>

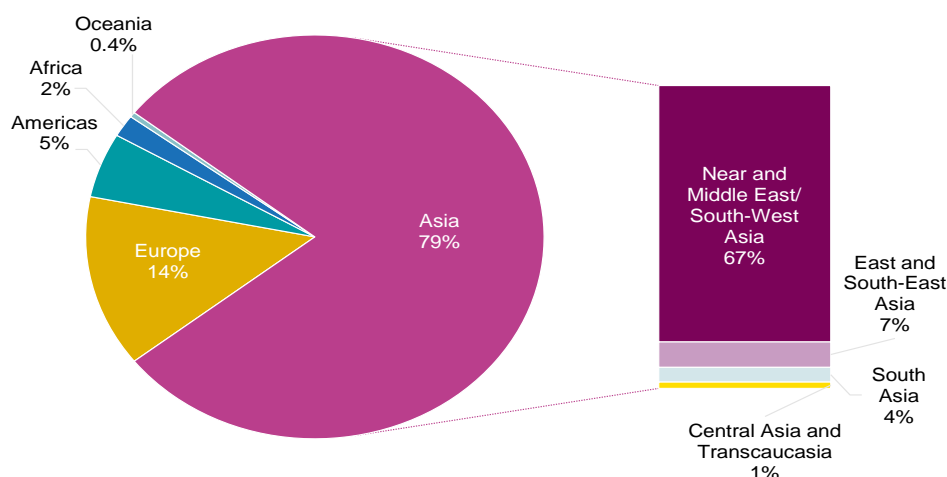
<sup>33</sup> These calculations are based on an assumed conversion ratio of 10 kg of opium per 1 kg of morphine or heroin.

<sup>34</sup> *World Drug Report 2022*, booklet 3.

<sup>35</sup> *Ibid.*

<sup>36</sup> *Ibid.*

Figure VIII  
Geographical distribution of global quantities of heroin and morphine seized, 2020



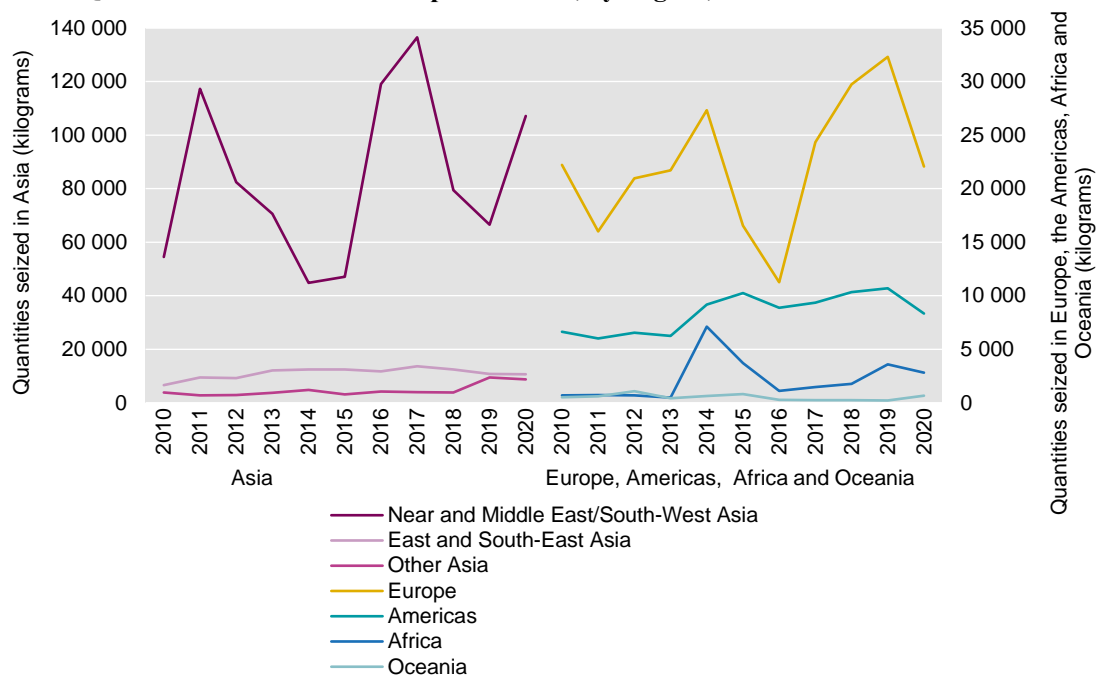
Source: *World Drug Report 2022* (data based on responses to the annual report questionnaire).

Note: A total of 160 tons of heroin and morphine were seized in 2020.

29. South Asia and Oceania reported increases in seizures of heroin and morphine. Most other regions saw a decline in seizures of heroin and morphine in 2020, including all of the subregions of Europe, the Americas and Africa.<sup>37</sup>

30. South-West Asia accounted for most of the opium produced in the 1990s and has continued to do so since 2002, leading to extremely high levels of trafficking in and seizures of opiates. More than three quarters of all opiates seized worldwide (expressed in heroin equivalents) in 2020 were seized in South-West Asia.<sup>38</sup>

Figure IX  
Quantities of heroin and morphine seized, by region, 2010–2020



Source: *World Drug Report 2021* (data based on responses to the annual report questionnaire).

<sup>37</sup> Ibid.

<sup>38</sup> Ibid.

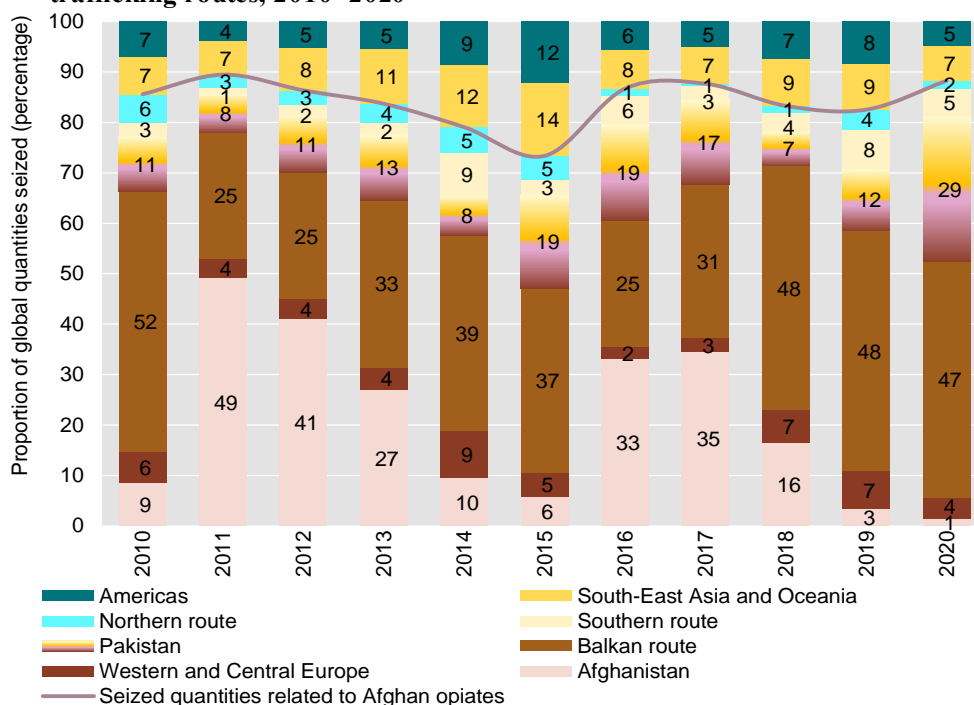
31. In 2020, seizures of heroin and morphine increased significantly in countries neighbouring Afghanistan, notably in the Islamic Republic of Iran and Pakistan, but declined in the Balkan countries and in destination countries in Western and Central Europe.<sup>39</sup>

32. The principal immediate outlet for opiates produced in Afghanistan seems to be Pakistan, with seizures reported there accounting for close to 29 per cent of all heroin and morphine seized globally in 2020. Some of the amounts seized were destined for domestic consumption, some for trafficking to the Islamic Republic of Iran and beyond, and some for trafficking along the southern route<sup>40</sup> to either South Asia (4 per cent of the global amount seized), notably India, or to eastern Africa (1 per cent).

33. Another important route, accounting for about 2 per cent of global seizures of heroin and morphine in 2020, runs from South-West Asia to Central Asia and Trans-caucasia and onward to the Russian Federation or Western and Central Europe.

34. For opiates originating in South-East Asia, mainly Myanmar, the main routes run to East Asia, elsewhere in South-East Asia, and Oceania, which together accounted for 7 per cent of global seizures of heroin and morphine. Routes in the Americas flow from south to north, mainly to the United States, either from Mexico or, to a lesser extent, from South America, notably Colombia, with these two routes accounting for a combined 5 per cent of global seizures in 2020.

Figure X  
**Distribution of global quantities of heroin and morphine seized, by main trafficking routes, 2010–2020**



Source: World Drug Report 2022 (data based on responses to the annual report questionnaire).

Note: The Balkan route includes the Islamic Republic of Iran, half of Transcaucasia, and South-Eastern Europe; the southern route includes South Asia, Gulf countries and other countries in the Near and Middle East and Africa; and the northern route includes Central Asia, Eastern Europe and half of Transcaucasia. Heroin seized in Transcaucasia was attributed partly to the Balkan route and partly to the northern route, as it may be trafficked along both routes.

<sup>39</sup> Ibid.

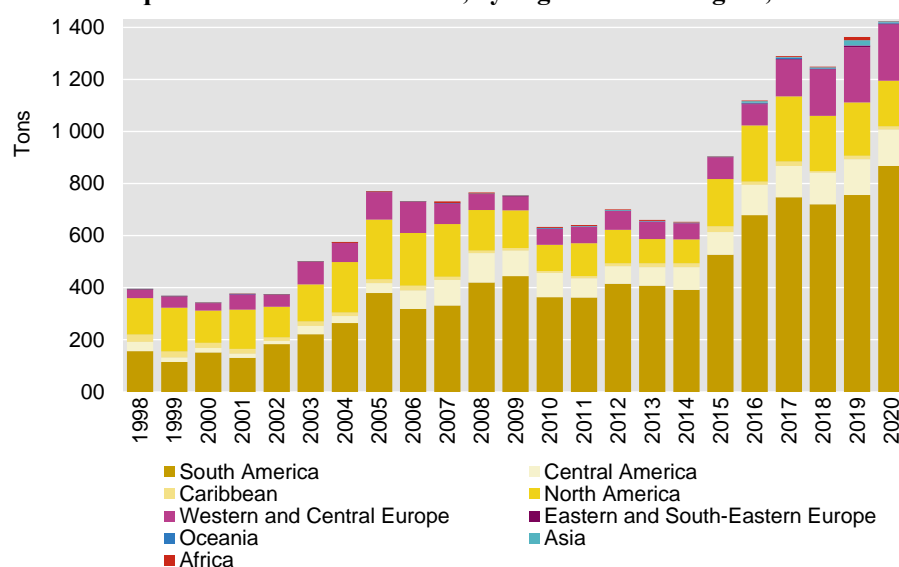
<sup>40</sup> The southern route includes trafficking from South-West Asia, notably Pakistan, to South Asia, the Gulf countries and other countries in the Near and Middle East and Africa.

## C. Cocaine

35. Trafficking in cocaine continued to increase in 2020 despite the COVID-19 pandemic, and global quantities of cocaine seized (not adjusted for purity) increased by 4.5 per cent, to a new record high of 1,424 tons, with quantities of cocaine paste and cocaine base seized rising by 16 per cent, to 108 tons, and quantities of cocaine hydrochloride seized rising by 4 per cent, to 1,105 tons (and only seizures of “crack” cocaine and non-specified types of cocaine showing smaller growth rates).<sup>41</sup>

Figure XI

### Global quantities of cocaine seized, by region and subregion, 1998–2020



Source: *World Drug Report 2022* (data based on responses to the annual report questionnaire).

Note: Includes quantities seized of cocaine hydrochloride, coca paste and base and “crack” cocaine.

36. The total quantity of cocaine seized in South America is now five times as high as in North America, in contrast to the period 1999–2001, when the total quantity seized in North America was higher than that in South America.<sup>42</sup>

37. Data also show a shift from the Caribbean towards Central America in terms of the quantity of cocaine seized over the last two decades, reflecting a general shift towards trafficking cocaine from Colombia along the Pacific route to Central America and North America instead of via the Atlantic Ocean and the Caribbean.<sup>43</sup>

38. North America, the world’s largest consumer market for cocaine, reported strong increases in seizures of the substance in the period 2015–2020, as did Europe, the second largest consumer region, up to and including 2019, before stabilizing in 2020.<sup>44</sup>

39. Total quantities of cocaine seized in Asia and Africa peaked in 2019, while quantities seized in Oceania continued to trend upwards in 2020.<sup>45</sup>

40. The main destination country in Europe for cocaine seized in Africa in the period 2015–2021 was Belgium (mostly relating to seizures made in Benin and Morocco in the period 2020–2021), followed by the Netherlands, the United Kingdom of Great Britain and Northern Ireland, and France.<sup>46</sup>

<sup>41</sup> *World Drug Report 2022*, booklet 4.

<sup>42</sup> *Ibid.*

<sup>43</sup> *Ibid.*

<sup>44</sup> *Ibid.*

<sup>45</sup> *Ibid.*

<sup>46</sup> UNODC, Drugs Monitoring Platform.

41. The most important departure country in South America for cocaine shipments seized in Africa was Brazil, accounting for 70 per cent of quantities reported in individual seizures in the period 2015–2021. The next most important departure country in that regard was Ecuador (14 per cent), followed by Colombia (11 per cent).<sup>47</sup>

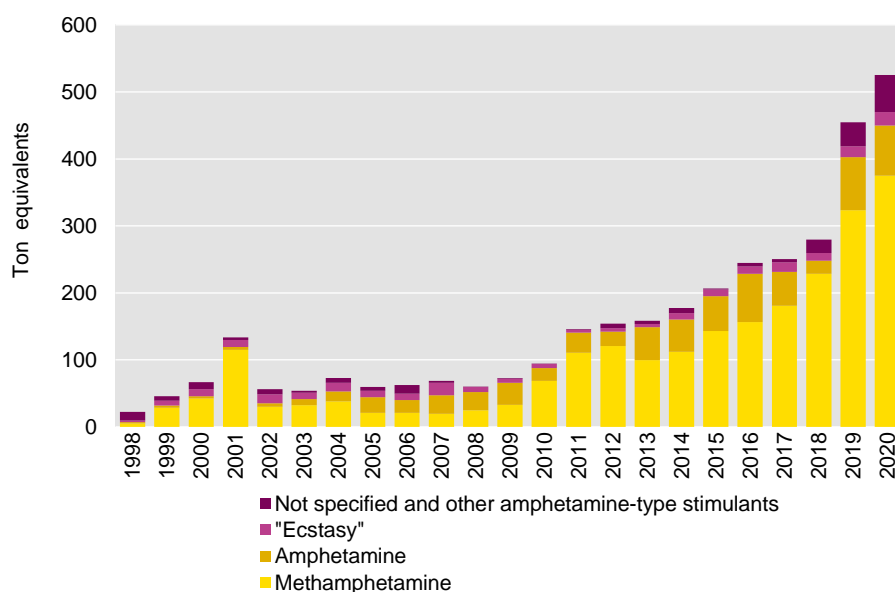
42. Brazil was the most important South American departure country for shipments of cocaine to Asia, accounting for 46 per cent of cocaine seized in individual drug seizures in Asia in the period 2015–2021, followed by Peru (24 per cent) and Ecuador (14 per cent). In the period 2020–2021, Brazil (72 per cent) and Panama (16 per cent) were the main countries of origin for such seizures.<sup>48</sup>

#### D. Amphetamine-type stimulants

43. A record quantity of over 525 tons of amphetamine-type stimulants was seized in 2020, which represents a 15 per cent increase year on year<sup>49</sup> and continued the upward trend observed over the period 2010–2020, during which the total quantity of methamphetamine seized grew fivefold, the total quantity of amphetamine seized almost quadrupled and the total quantity of “ecstasy” seized more than tripled.

Figure XII

#### Global quantities of amphetamine-type stimulants seized, 1998–2020



Source: *World Drug Report 2022* (data based on responses to the annual report questionnaire).

44. Data on seizures of amphetamine-type stimulants suggest that, at the global level, global trafficking in amphetamine-type stimulants continues to be dominated by methamphetamine. Seventy-two per cent of the amphetamine-type stimulants seized in the period 2016–2020 were related to methamphetamine, followed by amphetamine (17 per cent) and “ecstasy” (4 per cent), with the remainder being other amphetamine-type stimulants.<sup>50</sup>

45. Although the total number of countries reporting seizures of amphetamine-type stimulants has risen, the quantities seized remain somewhat concentrated in certain countries. Three countries accounted for 65 per cent of the total amount of methamphetamine seized globally in the period 2016–2020, three accounted for

<sup>47</sup> Ibid.

<sup>48</sup> Ibid.

<sup>49</sup> UNODC, responses to the annual report questionnaire.

<sup>50</sup> *World Drug Report 2022*, booklet 4.

54 per cent of the “ecstasy” seized and three accounted for 43 per cent of the amphetamine and “captagon” seized.<sup>51</sup>

46. In the period 2016–2020, the largest numbers of seizures of amphetamine-type stimulants were reported by countries in East and South-East Asia and North America, followed by countries in the Near and Middle East and South-West Asia, and Europe.

47. During the period 2016–2020, nearly 16,000 sites and facilities associated with the manufacture of amphetamine-type stimulants were dismantled across 45 countries worldwide.<sup>52</sup>

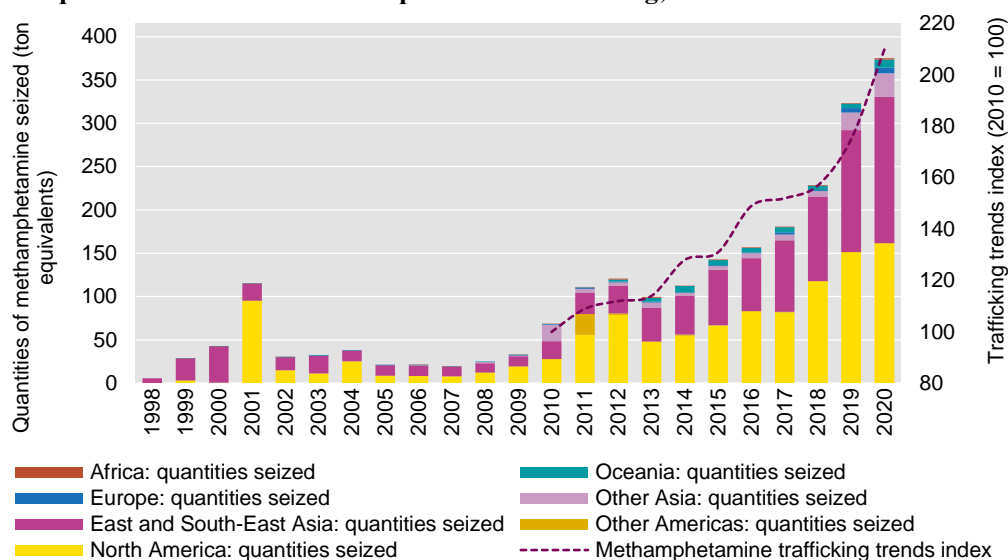
### Methamphetamine

48. Seizures of methamphetamine and qualitative assessments of methamphetamine trafficking reported by Member States have shown a clear upward trend over the past two decades. That trend continued in 2020, as 55 per cent of the 65 countries reporting qualitative methamphetamine trafficking trends to UNODC reported increases and 14 per cent reported stable levels.<sup>53</sup>

49. The number of countries reporting seizures of methamphetamine rose from 84 in the period 2006–2010 to 117 in the period 2016–2020, suggesting a significant increase in the geographical spread of methamphetamine trafficking.<sup>54</sup>

Figure XIII

#### Quantities of methamphetamine seized, by region and subregion, and reported qualitative trends in methamphetamine trafficking, 1998–2020



Source: *World Drug Report 2022* (data based on responses to the annual report questionnaire).

Note: The trafficking trends index is based on qualitative information on trends in methamphetamine trafficking reported by Member States. The trend line is calculated on the basis of the number of countries reporting increases minus the number of countries reporting decreases (2 points for “large increase”, 1 point for “some increase”, 0 points for “stable”, -1 point for “some decrease”, -2 points for “large decrease”).

50. Methamphetamine seizures in South-East Asia continued to rise rapidly in 2020, increasing by 30 per cent compared with 2019, with the greatest increases in absolute numbers reported by Myanmar, followed by Malaysia.

51. Seizures in East Asia fell in 2020, down 18 per cent from a year earlier and down 36 per cent since their peak in 2015. This was mainly due to decreases reported in China, where the manufacture, trafficking and use of methamphetamine appear to

<sup>51</sup> Ibid.

<sup>52</sup> Ibid.

<sup>53</sup> Ibid.

<sup>54</sup> Ibid.

have declined in recent years. Japan and the Republic of Korea also reported declines in 2020.

52. Trafficking in methamphetamine manufactured in Afghanistan continued to expand across the region and beyond, and in the period 2019–2021 more than 10 countries, including countries in Asia, Europe and Africa, reported seizures of methamphetamine originating in Afghanistan. Seizure data also suggest that trafficking in methamphetamine is taking place alongside trafficking in opiates, with the seizures of methamphetamine, seized together with heroin, indicating that trafficking in methamphetamine benefits from the existence of well-established heroin trafficking networks operating both inside and outside Afghanistan.<sup>55</sup>

53. The quantities of methamphetamine seized in North America reached a record high in 2020. Data on individual drug seizures do not indicate any reduction in drug trafficking activities or shifts in trafficking patterns in North America during the period 2020–2021 compared with the period 2018–2019, and data on annual seizures for 2020 do not indicate any disruptions in the supply of methamphetamine to the United States, where methamphetamine seizures have increasingly spread nationwide, outward from the traditional concentration in the south-west of the country.<sup>56</sup>

54. Recent years have seen an increase in the use and trafficking of methamphetamine in the Near and Middle East. The largest quantities of methamphetamine seized in the Near and Middle East in the period 2016–2020 were reported by the United Arab Emirates (50 per cent of all methamphetamine seized in the Near and Middle East), followed by Bahrain (28 per cent), Saudi Arabia (9 per cent), Iraq (9 per cent), Israel (2 per cent) and Kuwait (2 per cent).

55. Although quantities of methamphetamine seized represented the vast majority of the amphetamine-type stimulants seized in Oceania in 2020, they were at their lowest level since 2012.<sup>57</sup> The new record high in the amount of methamphetamine seized at borders that was reached in Australia in the fiscal year 2019/20, together with the decline in the number of dismantled methamphetamine laboratories on Australian territory, suggests a trend towards decreased domestic manufacture in the subregion and increased imports.<sup>58</sup>

56. In the period 2016–2020, quantities of methamphetamine seized accounted for 14 per cent of all amphetamines seized in Europe.

57. Of the 16,000 sites and facilities associated with the manufacture of amphetamine-type stimulants during the period 2016–2020, 94 per cent were linked to methamphetamine. The majority (69 per cent) of the dismantled sites were involved in the actual manufacture of methamphetamine; the others were waste-dumping sites (19 per cent), warehouses used to store chemicals (11 per cent) or facilities involved exclusively in the packaging of methamphetamine (less than 1 per cent).<sup>59</sup>

58. In Asia, Oceania, Africa and most parts of Europe, the manufacture of methamphetamine has traditionally been based primarily on ephedrine and pseudoephedrine, while in North America it has been based primarily on the use of various chemicals required to manufacture P-2-P, also known as BMK (benzyl methyl ketone), and then methamphetamine.<sup>60</sup>

59. In Oceania, seizure data suggest that the clandestine manufacture of methamphetamine continued to be primarily based on ephedrine, followed by

<sup>55</sup> UNODC, “Drug situation in Afghanistan 2021”.

<sup>56</sup> *World Drug Report 2022*, booklet 4.

<sup>57</sup> UNODC, responses to the annual report questionnaire.

<sup>58</sup> Australian Criminal Intelligence Commission, *Illicit Drug Data Report 2019–20* (Canberra, 2021).

<sup>59</sup> *World Drug Report 2022*, booklet 4.

<sup>60</sup> *Ibid.*



pseudoephedrine,<sup>61</sup> in the period 2016–2019.<sup>62</sup> The data on seizures in 2020 suggest that, in the manufacture of methamphetamine, the use of pseudoephedrine preparations, mainly originating in India, has now overtaken the use of ephedrine preparations, mainly originating in China.<sup>63</sup>

60. Seizures of methamphetamine smuggled into Australia indicate a notable rise in methamphetamine manufactured from P-2-P, with its share rising from 14 per cent in 2011 to 70 per cent over the first two quarters of 2020,<sup>64</sup> which may indicate an increase in the importance of imports of the substance from North America, partly replacing imports from East and South-East Asia, which had been the predominant sources of methamphetamine shipments to Oceania in the past.

### **Amphetamine**

61. Seizure data and qualitative trends regarding amphetamine trafficking reported by Member States suggest that the substantial upward trend in amphetamine trafficking observed between 2010 and 2019 may have reached a plateau, albeit at a high level, in 2020.<sup>65</sup>

62. Most of the amphetamine seized in the period 2016–2020 was seized in the Near and Middle East (where it mostly took the form of counterfeit “captagon” tablets), followed by Europe, with those two regions together accounting for 80 per cent of all amphetamine seized worldwide during that period.<sup>66</sup>

63. In the period 2016–2020, seizures of amphetamine accounted for 68 per cent of all seizures of amphetamines in Europe, with the largest quantities of amphetamine seized in Europe in that period reported in Western and Central Europe (70 per cent), followed by South-Eastern Europe (27 per cent) and Eastern Europe (2 per cent).<sup>67</sup>

64. The largest quantities of “captagon” reported seized in 2020 were those reported by Saudi Arabia, followed by the United Arab Emirates and other countries along the main “captagon” trafficking route, which runs from the Syrian Arab Republic and Lebanon (which continue to be the two countries reported by other countries as the source of seized amphetamine) to Saudi Arabia, the United Arab Emirates and other Gulf countries, either directly via Jordan or by sea, or via destinations in Europe (mainly Greece and Italy), as well as to destinations in North Africa.

65. Seizures were not confined to the main trafficking routes, as a large seizure of 16 tons of “captagon” was reported in Malaysia in April 2021 and another of 74 kg was reported in Nigeria in September 2021.<sup>68</sup>

<sup>61</sup> Australian Criminal Intelligence Commission, *Illicit Drug Data Report 2019–20*.

<sup>62</sup> E/INCB/2021/4.

<sup>63</sup> *Ibid.*

<sup>64</sup> *Ibid.*

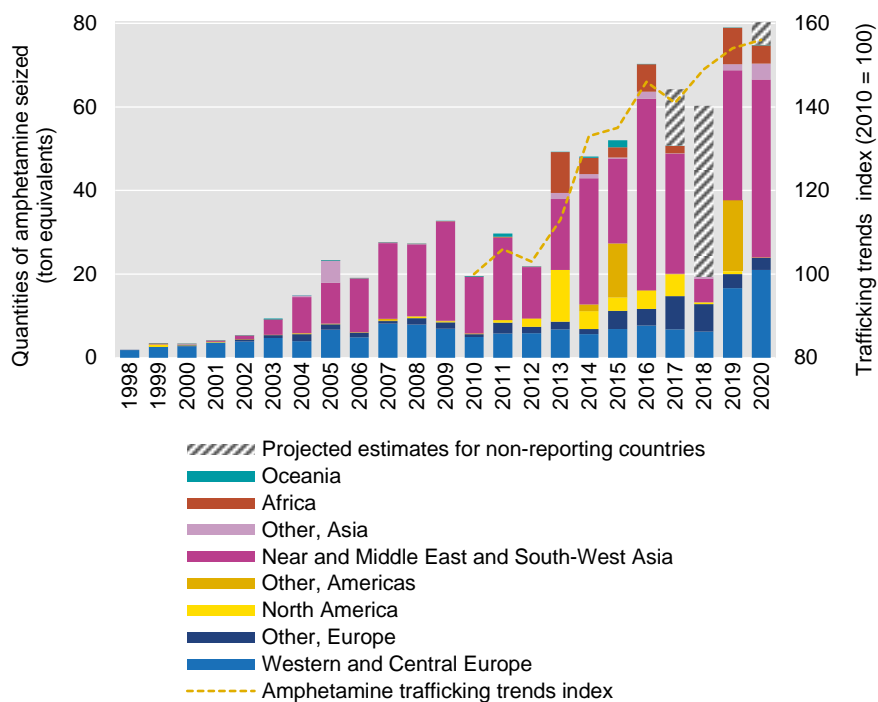
<sup>65</sup> *World Drug Report 2022*, booklet 4.

<sup>66</sup> *Ibid.*

<sup>67</sup> *Ibid.*

<sup>68</sup> UNODC, Drugs Monitoring Platform.

Figure XIV  
**Quantities of amphetamine seized and reported qualitative trends in amphetamine trafficking, 1998–2020**



Source: *World Drug Report 2022* (data based on responses to the annual report questionnaire).

Note: The trafficking trends index is based on qualitative information on trends in amphetamine trafficking reported by Member States. The trend line is calculated on the basis of the number of countries reporting increases minus the number of countries reporting decreases (2 points for “large increase”, 1 point for “some increase”, 0 points for “stable”, -1 point for “some decrease”, -2 points for “large decrease”).

### “Ecstasy”-type substances

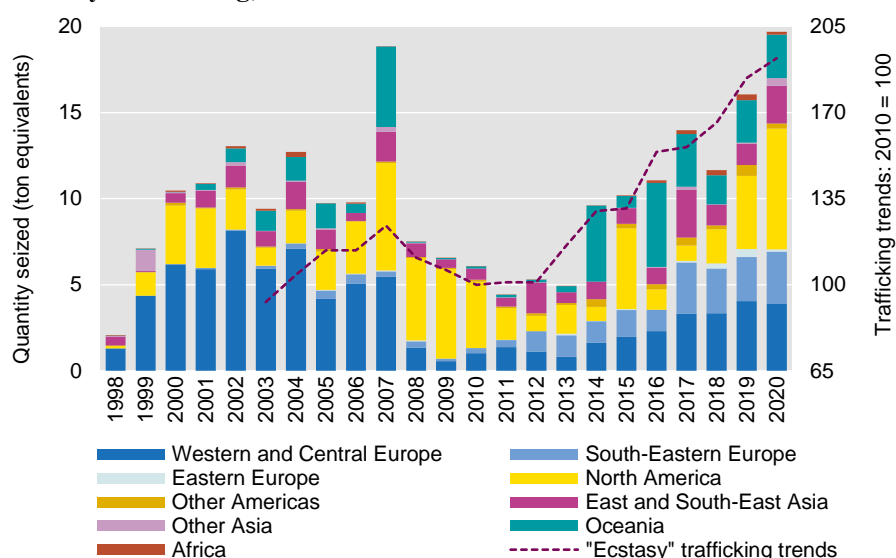
66. In 2020, the quantity of “ecstasy” seized continued to increase at the global level, surpassing the previous record level reached in 2007. The overall global increase was driven by increases in the Americas and Asia, whereas there was a small decline in the quantities reported seized in Western and Central Europe. The main countries of origin and/or departure of “ecstasy” in the period 2016–2020 were in Europe, which accounted for 81 per cent of all mentions worldwide.<sup>69</sup>

67. Despite the overall increase in the quantity of “ecstasy” seized, compared with the previous year, more countries reported declines in quantities of “ecstasy” seized (53 countries) than those reporting increases in 2020 (44 countries).<sup>70</sup>

<sup>69</sup> *World Drug Report 2022*, booklet 4.

<sup>70</sup> *Ibid.*

Figure XV  
Quantities of “ecstasy” seized, by region, and reported qualitative trends in “ecstasy” trafficking, 1998–2020



Source: *World Drug Report 2022* (data based on responses to the annual report questionnaire).

68. Over the past decade, the number of “ecstasy” laboratories reported to have been dismantled fluctuated greatly, but with an overall upward trend, rising from an average of 41 dismantled laboratories per year over the period 2010–2015 to an average of 58 per year in the period 2016–2020. Most laboratories dismantled in the period 2016–2020 were in Europe (54 per cent), followed by Oceania (23 per cent), Asia (13 per cent) and the Americas (9 per cent).<sup>71</sup>

69. Although the amounts seized of 3,4-MDP-2-P methyl glycidate and 3,4-MDP-2-P methyl glycidic acid continue to decline, the substances nevertheless accounted for about 45 per cent of all “ecstasy” precursors seized (expressed in MDMA equivalents) in 2020, greater than the amounts seized of 3,4-MDP-2-P (37 per cent) and safrole (18 per cent).<sup>72</sup>

## E. New psychoactive substances

70. The number of new psychoactive substances identified by national authorities and forensic laboratories in the last 15 years totalled 1,127 by December 2021.<sup>73</sup> That was more than triple the 302 psychoactive substances under international control at the end of 2021.<sup>74</sup> However, many new psychoactive substances emerge for only a short period of time before disappearing again, thus, a total of 193 new psychoactive substances previously found on the drug markets were not reported in the period 2017–2020.<sup>75</sup>

71. After rapid expansion between 2009 and 2018, the number of distinct new psychoactive substances found on global drug markets has now stabilized at about 550. In 2020, Member States reported the appearance of 548 new psychoactive

<sup>71</sup> Ibid.

<sup>72</sup> E/INCB/2021/4.

<sup>73</sup> This number includes all new psychoactive substances identified, including those already placed under international control in recent years (data based on the UNODC early warning advisory on new psychoactive substances).

<sup>74</sup> For the latest scheduling decisions, see *Official Records of the Economic and Social Council, 2021, Supplement No. 8* (E/2021/28), and previous years.

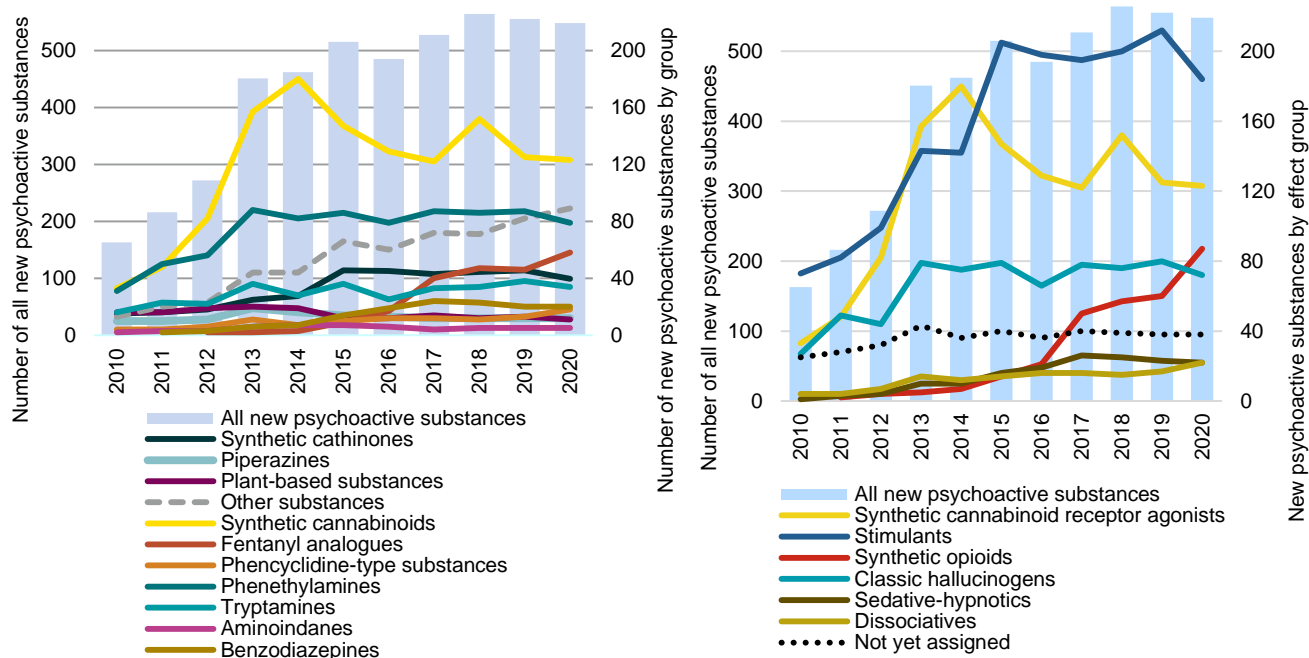
<sup>75</sup> World Drug Report 2022, booklet 4.

substances on the market, of which 77 were identified for the first time. A year later, the number of new psychoactive substances identified for the first time fell to 50.<sup>76</sup>

72. The number of opioid new psychoactive substances found on markets worldwide grew from just one substance in 2009 to 14 in 2015, then to 56 in 2019 and further, to 87, in 2020,<sup>77</sup> by which time synthetic opioids had become the third most numerous group of new psychoactive substances in terms of the number of different substances reported by Member States. Synthetic opioids accounted for the highest number of new psychoactive substances identified for the first time at the global level in 2020, comprising 22 new substances (29 per cent of those identified).

Figure XVI

**New psychoactive substances found on markets globally, 2010–2020**



Source: *World Drug Report 2022* (data based on UNODC early warning advisory on new psychoactive substances).

73. The number of countries reporting seizures of synthetic new psychoactive substances increased from 30 in the period 2009–2010 to 57 in the period 2019–2020, equivalent to an increase from 18 per cent to 41 per cent between the two periods.<sup>78</sup> No country in Africa reported seizures of synthetic new psychoactive substances in the period 2009–2010, but one did so in the period 2019–2020 (Egypt). In Oceania, the number of countries reporting such seizures rose from 1 to 2, in the Americas from 2 to 7, in Asia from 14 to 22 and in Europe from 13 to 25.<sup>79</sup>

74. Reported quantities of plant-based new psychoactive substances and synthetic new psychoactive substances declined year-on-year in 2020.<sup>80</sup>

75. Even if estimates for non-reporting countries were included, the volume of seizures of plant-based new psychoactive substances in 2020 would remain below the

<sup>76</sup> UNODC early warning advisory on new psychoactive substances.

<sup>77</sup> Ibid.

<sup>78</sup> This number includes all new psychoactive substances identified, including those already placed under international control in recent years (data based on the UNODC early warning advisory on new psychoactive substances).

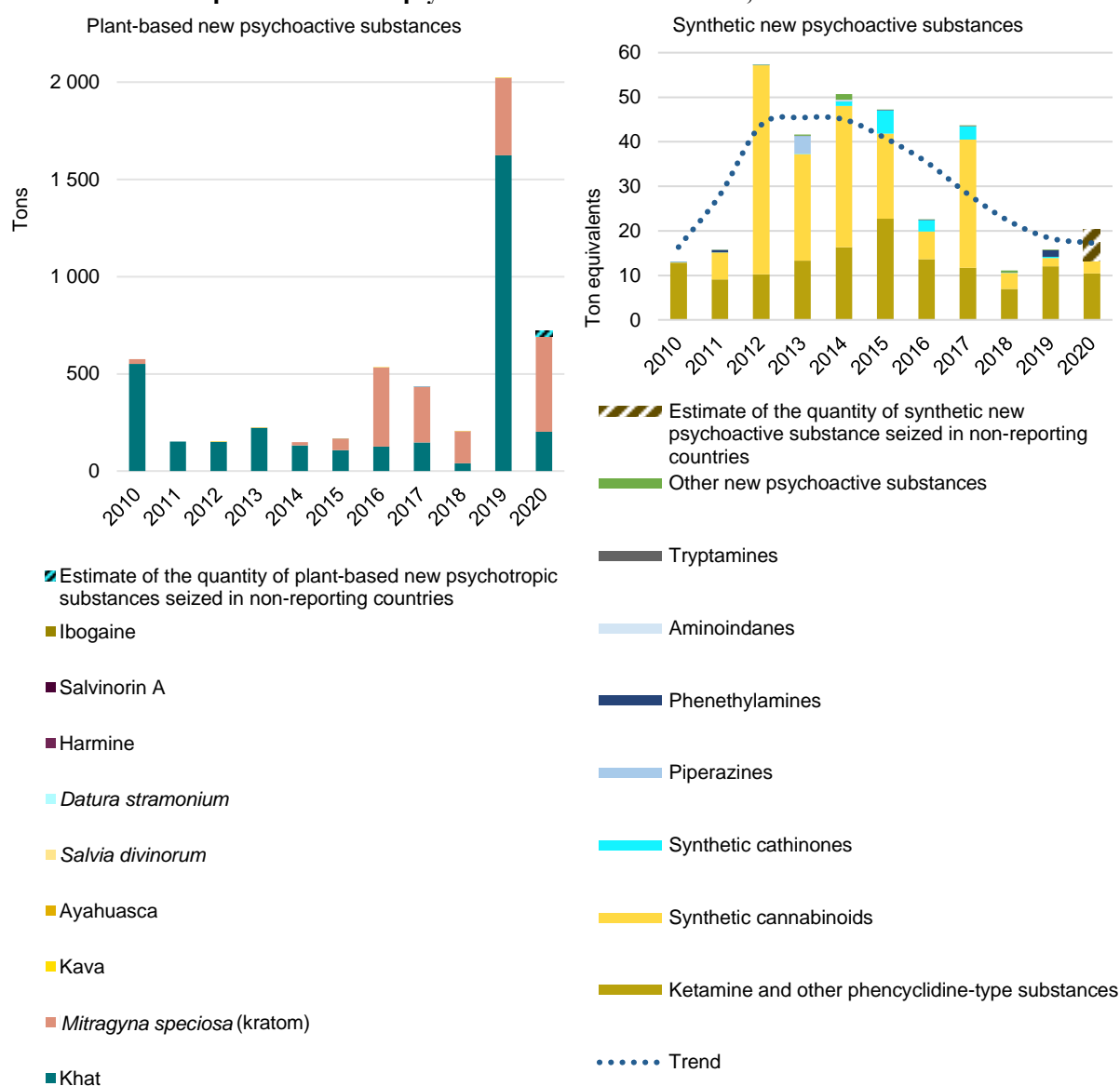
<sup>79</sup> *World Drug Report 2022*, booklet 4.

<sup>80</sup> Ibid. It should be noted that, with regard to all of the figures in the present report relating to new psychoactive substances, 1 kilogram of a particular new psychoactive substance can translate into many more daily doses than would 1 kilogram of another, and such differences are often more pronounced than differences arising in the analysis of individual drugs that may nevertheless have diverging purity levels.

record levels reported for 2019, although they would nevertheless be higher than in any year in the period 2008–2018. Between 2016 and 2020, khat accounted for 55 per cent of all plant-based new psychoactive substances seized, in terms of weight, with kratom accounting for almost all of the remainder.<sup>81</sup>

76. Seizures of most synthetic new psychoactive substances showed significant declines between 2012, when they peaked, and 2020. The largest quantities of synthetic new psychoactive substances seized between 2016 and 2020 were of ketamine and other phencyclidine-type substances (51 per cent), followed by synthetic cannabinoids (41 per cent), synthetic cathinones (6 per cent) and phenethylamines (1.5 per cent). However, the reported declines may well have been statistical artefacts, as, for the most part, different countries reported seizures of new psychoactive substances to UNODC in 2015 and 2020.<sup>82</sup>

Figure XVII

**Global quantities of new psychoactive substances seized, 2010–2020**

Source: *World Drug Report 2022* (data based on responses to the annual report questionnaire).

<sup>81</sup> Ibid.

<sup>82</sup> Ibid.

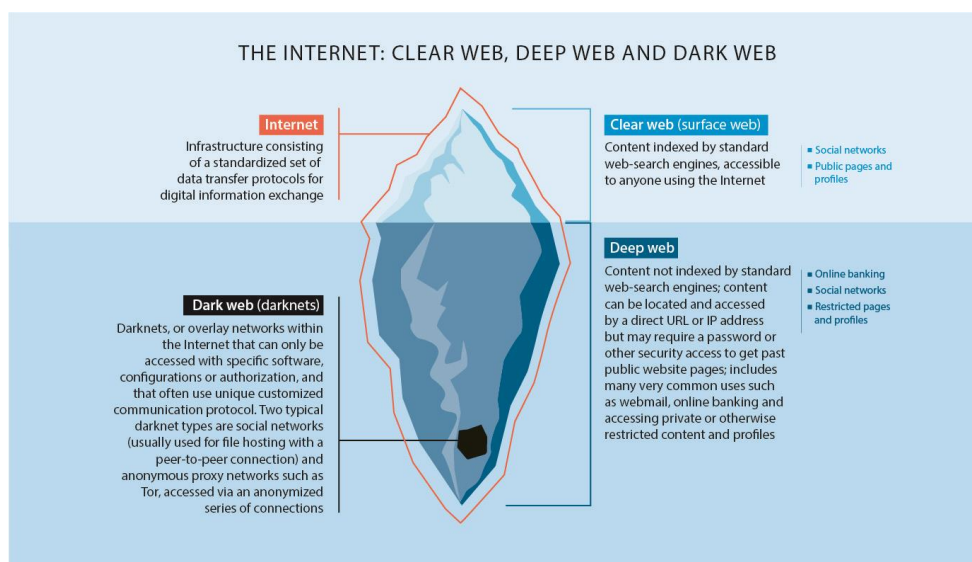
## F. Drug trafficking over the Internet

77. The marketing and sale of controlled drugs and new psychoactive substances on the Internet can take place at different levels: on the open Internet, also known as the “clear web”, often using encrypted communications tools; on social media applications; and on the “dark web”, which forms part of the so-called “deep web” (the part of the Internet that is not accessible to search engines).

78. There has been a general increase in the use of social media, instant messaging apps, dating apps and other secure communication channels such as encrypted messaging apps to supply and trade drugs.<sup>83</sup> Current dark web trends show a shift towards smaller marketplaces.

Figure XVIII

### Internet: clear web, deep web and dark web



Source: *World Drug Report 2022*, booklet 2, *Global Overview: Drug Demand, Drug Supply* (United Nations Publication, 2022).

### Drug trafficking over the dark web

79. Increased interconnectivity and the continuing evolution of online platforms have brought numerous advantages for both drug traffickers and people who use drugs. Higher levels of anonymity and reduced risks of detection have made the use of the Internet an attractive alternative to the street and a potentially more convenient and secure method of distribution of substances for illicit drug markets. But despite these advantages, the Internet has so far not dramatically changed drug supply chains, and online platforms overall account for only a small portion of the global drug market.<sup>84</sup>

80. Despite strong annual fluctuations, online drug sales on the dark web quadrupled in the period mid-2017–2020 compared with the period 2011–mid-2017 and even stronger growth rates may have been encountered in overall online drug-related transactions in recent years. Drug-related transactions on 19 major darknet markets monitored over the period 2011–2020 were estimated to amount to a total of only \$315 million per year from 2017 to 2020,<sup>85</sup> representing about 0.2 per

<sup>83</sup> Leah Moyle and others, “#Drugsforsale: an exploration of the use of social media and encrypted messaging apps to supply and access drugs”, *International Journal of Drug Policy*, vol. 63 (2019), pp. 101–110.

<sup>84</sup> *World Drug Report 2022*, booklet 2, *Global Overview: Drug Demand, Drug Supply* (United Nations publication, 2022).

<sup>85</sup> *World Drug Report 2021*, booklet 2, *Global Overview: Drug Demand, Drug Supply* (United Nations publication, 2021).

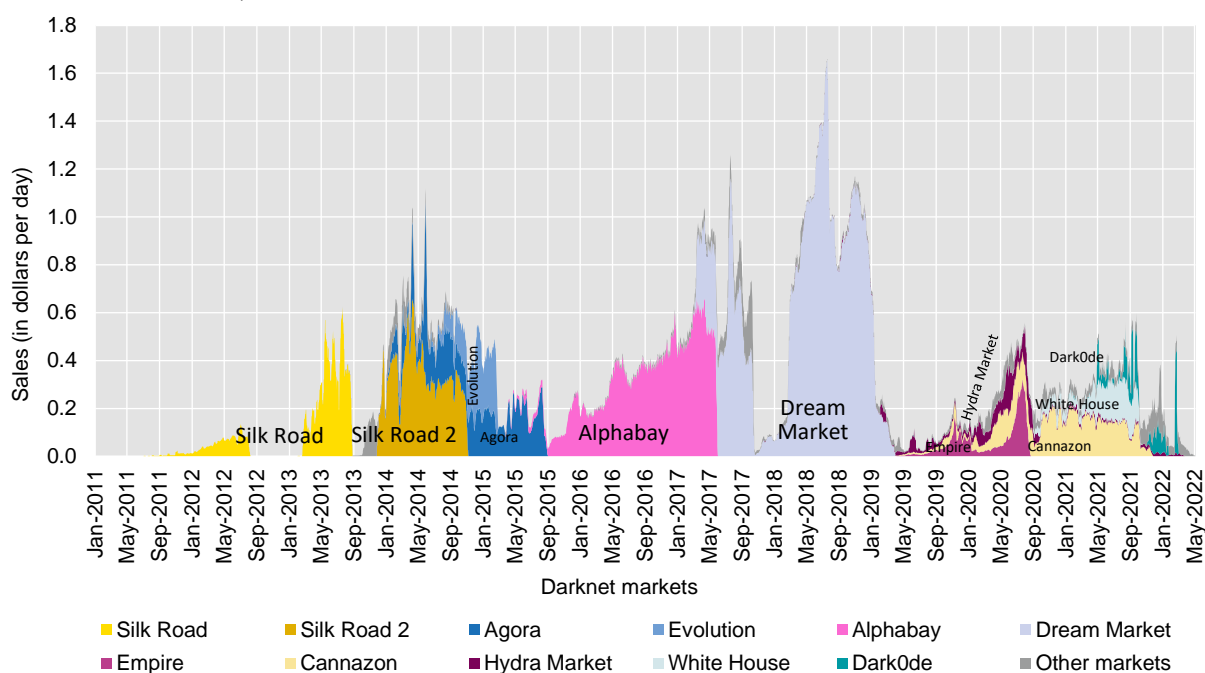
cent of combined estimated annual illicit retail drug sales in the United States and the European Union in that period. This proportion appears to have been similar in 2021.<sup>86</sup>

81. Overall sales on the 28 major darknet markets monitored over the period 2019–2021 rose by almost 130 per cent in 2020 as compared with 2019 (a year which saw low sales figures as a consequence of the demise of the darknet market Dream Market) and by a further 13 per cent in 2021.<sup>87</sup> Nonetheless, preliminary data for the fourth quarter of 2021 indicate a strong decline in dark web sales, with minimum sales falling by more than 50 per cent quarter-on-quarter, somewhat reflecting the demise of the darknet market White House.

82. In 2021, drugs accounted for 91 per cent of all sales on the 28 darknet marketplaces monitored over the period 2019–2021, up from 85 per cent in 2019.<sup>88</sup>

Figure XIX

**Daily sales (minimum sales, mostly of drugs) on 38 major global darknet markets, 2011–2021**



Source: *World Drug Report 2022* (data based on UNODC analysis of dark web data).

Note: Data refer to minimum stacked market sales of different products and services, of which drugs accounted for 92 per cent, and are presented as seven-day averages. All data shown reflect minimum sales, as the current web-crawler techniques do not cover all sites on a specific market and because not all customers leave feedback, information which is used to arrive at total sales figures.

83. Cannabis remained by far the most widely traded drug, accounting for 48 per cent of all drugs sold (in terms of value) on the monitored marketplaces in 2021, up from 37 per cent in 2019, although down from 58 per cent in 2020. The proportion of sales of most other drugs declined in 2020, with stimulants, new psychoactive substances, cocaine and opioids all seeing a fall in market share in 2020 before partly recovering in 2021. After cannabis, the next largest shares of drug sales on the dark web in 2021 were reported for amphetamine-type stimulants (16 per cent), cocaine (12 per cent) and benzodiazepines (6 per cent), followed by opioids and pharmaceutical drugs (5 per cent each).<sup>89</sup>

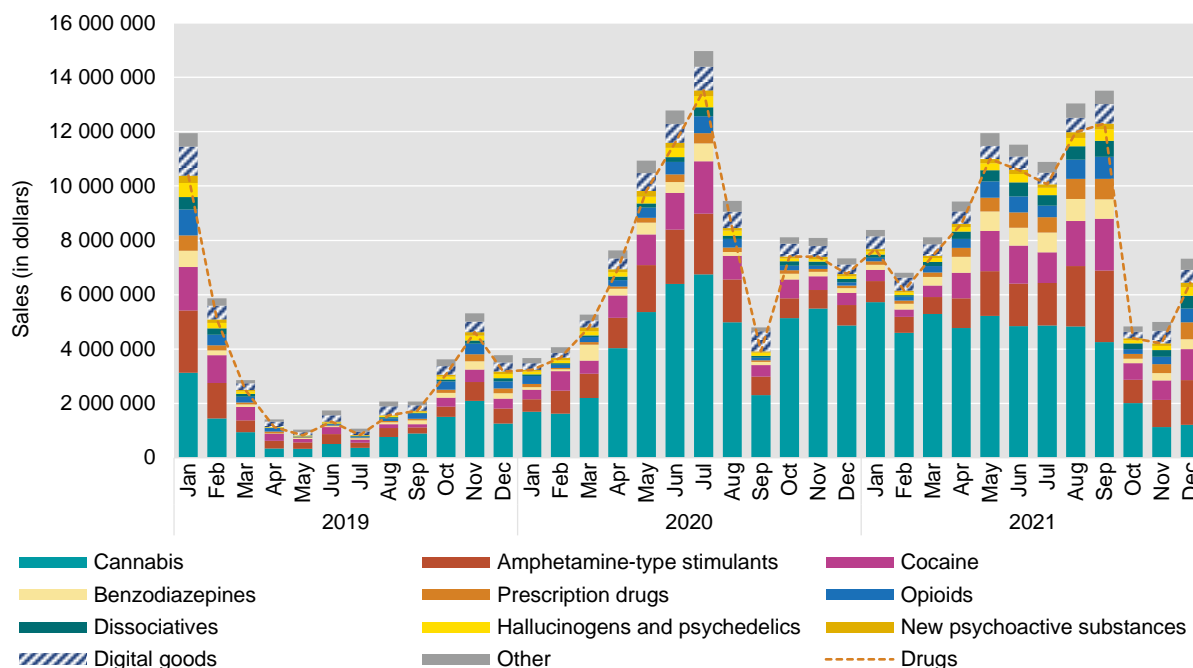
<sup>86</sup> *World Drug Report 2022*, booklet 2.

<sup>87</sup> UNODC analysis based on dark web data (see online, *World Drug Report 2022: Methodological Annex*).

<sup>88</sup> *Ibid.*

<sup>89</sup> *Ibid.*

Figure XX  
**Minimum monthly sales on 28 major darknet markets,  
 January 2019–December 2021**



Source: *World Drug Report 2022* (data based on UNODC analysis of dark web data).

Note: Aggregate minimum sales on 28 major darknet markets operating, at least partially, between January 2019 and December 2021, ranked in terms of minimum sales over that period; the markets included are Cannazon, White House, Empire, Hydra Market, Dream Market, Dark0de, Versus, Monopoly, Torrez, Deep Web Chinese, BitBazaar, Wall Street, Dark Market, Yellow Brick, Tor Market, Asean, Berlusconi, Apollon, Tochka, Cryptonia, Vice City, Mega Darknet Market, Square Market, DarkFox, Agartha, MGM Grand, Invictus and Avaris. All data shown reflect a lower-bound estimate of sales, as the current web-crawler techniques do not cover all sites on a specific market and because not all customers leave feedback, information which is used to arrive at total sales figures.

## IV. Conclusions

84. Cannabis cultivation remains a global phenomenon, and much cannabis is produced in the country where it is consumed. The largest quantities of drugs seized globally in 2020 again consisted of cannabis herb, which, as in previous years, accounted for more than double the amount of cannabis resin seized. In 2020, the total quantity of cannabis herb seized at the global level increased by 15 per cent and the total quantity of cannabis resin seized increased by 29 per cent.

85. The area under opium poppy cultivation decreased in 2021 to approximately 246,800 ha, about 40 per cent less than the peak in 2017 and 16 per cent less than in 2020. The amount of heroin seized globally increased by 19 per cent, to 115 tons, while the amount of opium seized globally increased by 37 per cent, to a total of 992 tons.

86. The area under coca bush cultivation remained relatively stable in 2020, at 234,000 ha, 5 per cent less than the peaks seen in 2017 and 2018. The amount of cocaine seized globally continued to increase, reaching 1,424 tons in 2020, an increase of 4.5 per cent compared with the previous year.

87. A record quantity of over 525 tons of amphetamine-type stimulants was seized in 2020, which represents a 15 per cent increase from the previous year. Methamphetamine continued to dominate seizures of amphetamine-type stimulants at the global level, totalling 375 tons and representing an increase of 16 per cent.