

**Commission on Crime Prevention  
and Criminal Justice****Twenty-sixth session**

Vienna, 22-26 May 2017

Item 7 of the provisional agenda\*

**World crime trends and emerging  
issues and responses in the field of  
crime prevention and criminal justice****World crime trends and emerging issues and responses in  
the field of crime prevention and criminal justice****Note by the Secretariat***Summary*

The present document was prepared in accordance with the practice established pursuant to Economic and Social Council resolution 1990/18.

Crime prevention is often interpreted narrowly, focusing on techniques to resolve local crime problems. But what can be learned from broader crime trends, where national or international issues are at stake? The present report contains a brief overview of some of the most dramatic shifts in crime trends, and asks what these examples might imply about the role of the criminal justice system, and crime policy generally. Can targeted interventions really make a difference on a national or international scale?

The report contains an overview of some large-scale, dramatic reductions in different crimes and how they came about. It asks what can be learned from those crime prevention success stories. Taking advantage of the fact that the United Nations Survey of Crime Trends and Operations of Criminal Justice Systems captures both crime and criminal justice data for a large number of countries, the present report also contains an overview of striking regional reductions in homicide and of the issue of whether trends in the national criminal justice responses of the regions had any impact.

---

\* E/CN.15/2017/1.



## Contents

<i>Chapter</i>	<i>Page</i>
I. Introduction . . . . .	3
II. Learning from success: What can crime trends tell us about crime prevention? . . . . .	3
A. Criminal justice system as crime prevention . . . . .	3
B. Global levels and trends in intentional homicide . . . . .	4
C. Incarceration . . . . .	7
D. Crime prevention case studies . . . . .	12
E. What do crime trends tell us about international crime prevention? . . . . .	21
III. Improving the quality and availability of statistics on crime and criminal justice for policy development . . . . .	22

## I. Introduction

1. Crime is studied in order to prevent it. Crime data are gathered with the objective of understanding how and why crime occurs. This understanding is necessary to inform policy responses in order to reduce crime and its negative consequences in the future. Crime prevention is thus at the heart of criminological endeavour, although it is often treated as a specialized subject.

2. A large amount of literature has been devoted to the subject of crime prevention, but the topic has generally been interpreted quite narrowly. Most of that work has been focused on what the State can do to deter offenders or reduce criminal opportunities. Particularly prominent topics are techniques for reducing interpersonal violence, improving environmental design, and policing more proactively. Those approaches have usually been focused locally, at the neighbourhood or municipal level.

3. Much less has been said about the prevention of national or international crime problems. The present report contains an overview of some large-scale, dramatic reductions in crime and how they came about. What can be learned from these crime prevention success stories? To what extent were the changes the result of specific programmes and to what extent were they the result of broader social, political or economic dynamics?

4. The marginalization of crime prevention can also be seen in the way that the subject is treated by national Governments. Some countries maintain a national agency responsible for crime prevention, but the predominant response to crime is the criminal justice system.<sup>1</sup> While the criminal justice system deals with offences after they have occurred, its role in preventing crime is less clear.

5. Taking advantage of the fact that the United Nations Survey of Crime Trends and Operations of Criminal Justice Systems captures both crime and criminal justice data for a large number of countries, the report contains an overview of striking regional reductions in homicide and of the issue of whether trends in the national criminal justice responses of the regions had any impact. It concludes with a report on the road map on the improvement of crime and criminal justice statistics, pursuant to Economic and Social Council resolution 2015/24.

## II. Learning from success: what can crime trends reveal about crime prevention?

### A. Criminal justice system as crime prevention

6. Currently, the primary role of the criminal justice system is to address crime after it has occurred, by identifying and punishing offenders, ultimately through incarceration. But in responding to past crime, there are several ways that future crime may be prevented, in keeping with modern theories of punishment. Through incarceration, the criminal justice system incapacitates individual offenders by removing them from society until the completion of their sentences. Those who wish to avoid punishment may be deterred from engaging in criminal conduct. The experience of being incarcerated is, in many countries, intended to bring about changes in the individual offender, reducing the chance that he or she will offend in the future.

<sup>1</sup> For example, in 1999, the International Centre for the Prevention of Crime found that only nine countries had a national crime prevention strategy. In 2010, 24 countries had such a strategy, and 21 had a national agency responsible for implementing it (International Centre for the Prevention of Crime, *International Report: Crime Prevention and Community Safety — Trends and Perspectives* (Montreal, Canada, 2010), p. IX).

7. Determining whether any of those intended effects actually works is an extremely complex undertaking. Does removing offenders from the streets ultimately reduce the number of offences, or do deeper social dynamics ensure that others will commit those crimes? If incapacitation works, how many offenders must be removed before an appreciable impact on the crime rate is seen? Do offenders really consider the prospects of imprisonment before offending and, if so, what weight do those considerations have in their final decision to act? Does spending time in prison and rehabilitation change prisoners in ways that make it less likely they will offend when released? Do those intended effects sometimes work at cross purposes to one another?

8. Such questions continue to confound specialists, and no clear resolution is likely to be forthcoming. But the many different approaches taken by national Governments make the world a kind of global laboratory of criminal justice policy. Comparisons between countries are difficult, of course, but comparisons can also be made within countries across time. What works and what does not when it comes to using the criminal justice system to prevent crime?

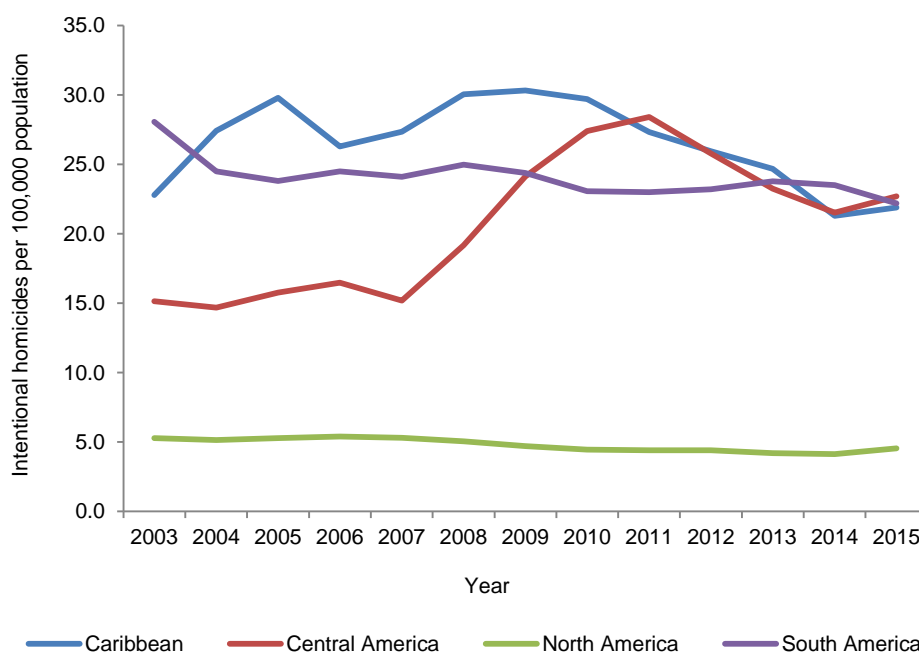
## B. Global levels and trends in intentional homicide

9. If crime is affected by criminal justice policy, it should be possible to explore that relationship empirically, and the United Nations Survey of Crime Trends and Operations of Criminal Justice Systems contains data on both crime and criminal justice systems. For crime, the single most reliable crime indicator covered by the Survey is the homicide rate, as, in many countries, most homicides are brought to the attention of the police.

10. The time series data for some regions, namely Africa and Oceania, are sparse, leaving the Americas, Asia and Europe for analysis. In the Americas, the most remarkable trend is the sudden escalation of homicides in Central America and the Caribbean after 2007, with a decline in both subregions after 2011 (see figure I). A sharp decline was seen in Central Asia after 2010 (see figure II). In Europe, a sustained decline was seen after 2004 (see figure III).

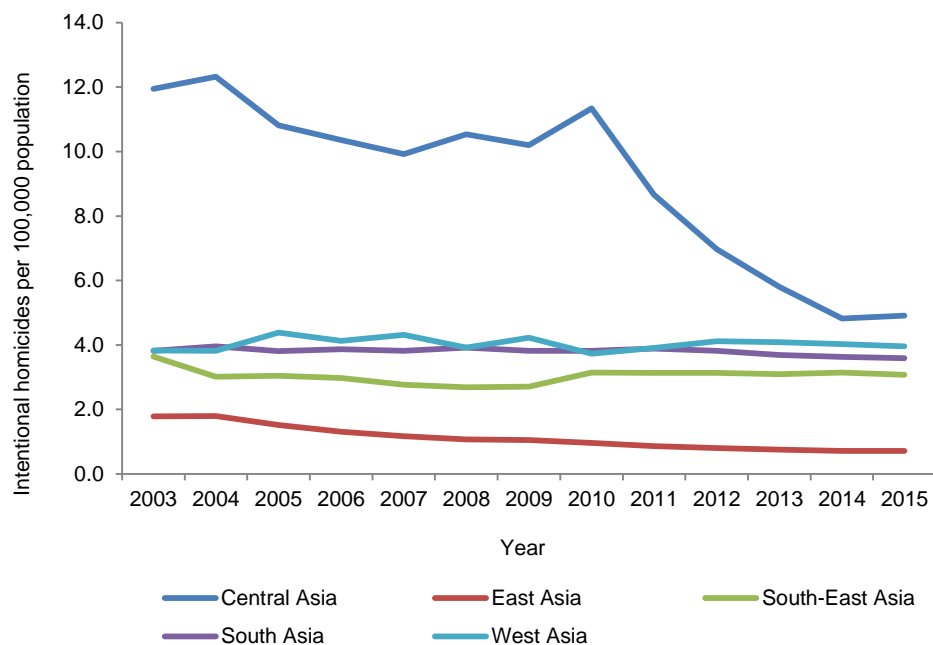
Figure I

### Intentional homicide rates in the Americas, 2003-2015



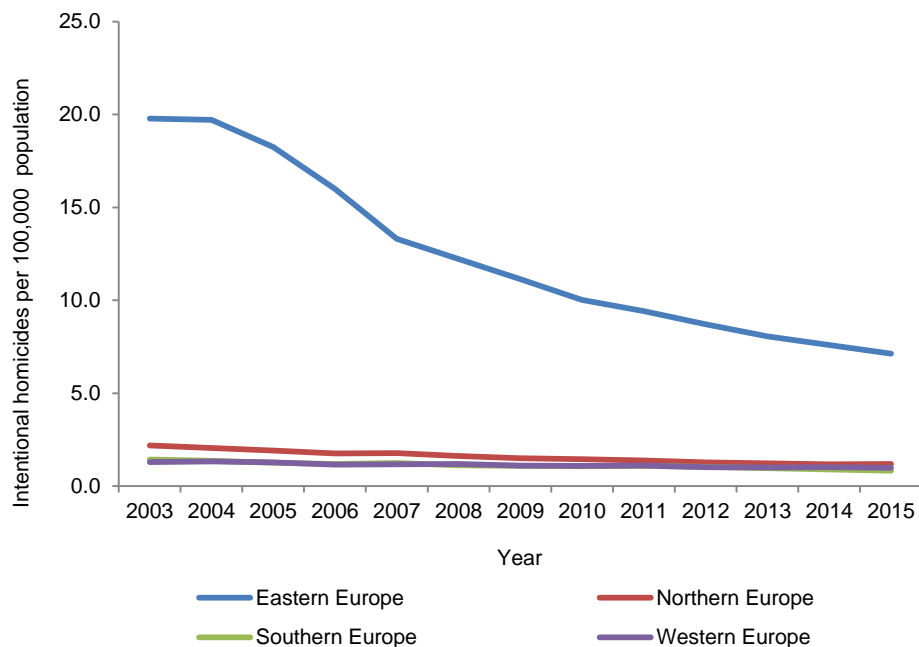
Source: United Nations Office on Drugs and Crime (UNODC) homicide database.

Figure II  
Intentional homicide rates in Asia, 2003-2015



Source: UNODC homicide database.

Figure III  
Intentional homicide rates in Europe, 2003-2015

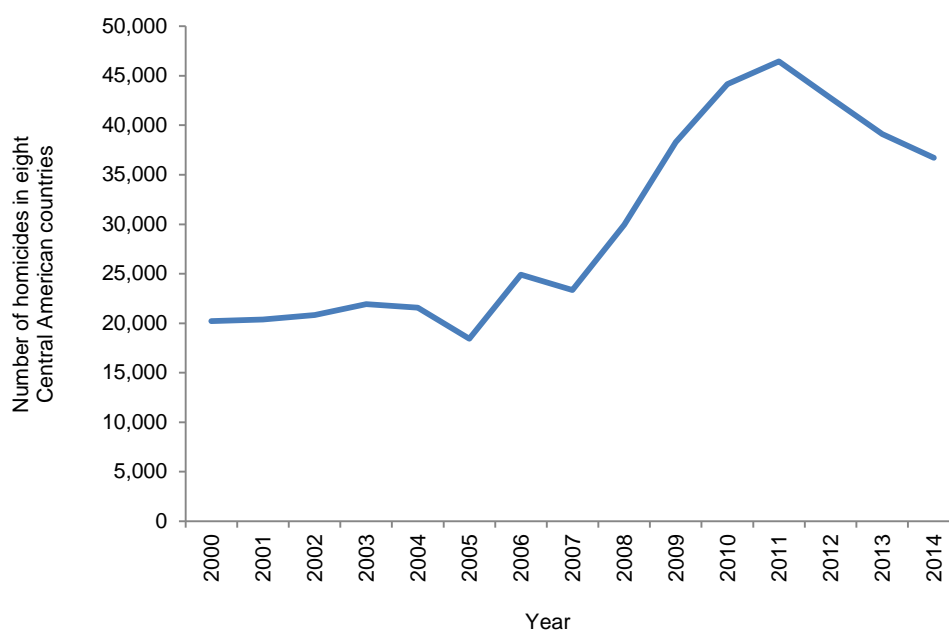


Source: UNODC homicide database.

11. These trends are not subtle. In Central America, the homicide rate virtually doubled between 2007 and 2011 (see figure IV). In Central Asia, it declined by more than half between 2010 and 2014. In Eastern Europe, murder rates in 2015 were about one third what they had been in 2003. Violence is often blamed on deep social causes, but such causes do not change overnight. What can explain these sudden shifts?

12. For a variety of reasons, violence levels in Central America have long been relatively high. Between the 1960s and the mid-1990s, the subregion experienced three brutal civil wars. Since then, it has been prone to dramatic spikes in homicide rates. Although often considered as a unit, the causes of those spikes are diverse. In some countries, the violence is clearly tied to competition between rival trafficking groups due to shifts in the volumes and routes of cocaine moving north. Other countries experience far less cocaine traffic, but are nonetheless afflicted with street gangs in conflict with each other and the State. National homicide rates decline dramatically when the core issue — drug flows or gang conflict — is resolved in some way.<sup>2</sup>

Figure IV

**Number of homicides in Central America, 2000-2014 (eight selected countries)**

Source: UNODC homicide database.

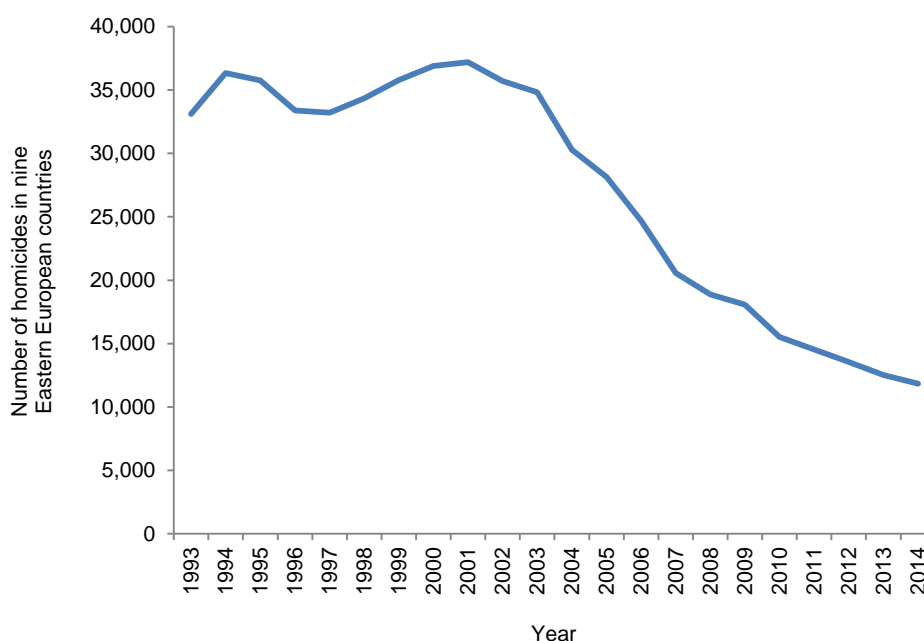
13. The situation in Eastern Europe is different. Historically, most of Eastern Europe experienced homicide rates not so different from those of Western European countries, but the fall of the Berlin Wall, in 1989, ushered in a period of intensive change. There were dramatic political realignments and also an economic transformation, featuring the fierce competition associated with early capitalism. During that period of flux, homicide rates shot up rapidly, and remained high for a decade.<sup>3</sup>

14. Over time, however, the situation stabilized, and the unpredictability of the transition years faded away. By the early 2000s, economic growth rates had become strongly positive, coinciding with rapidly decreasing homicide rates. In most countries, the number of murders in Eastern Europe in 2014 was between one half and one fifth of those in the early 2000s (see figure V), one of the most dramatic subregional crime trends on record. The situation in Central Asia appears to involve a similar, but slightly delayed, normalization effect.

<sup>2</sup> See Laura Jaitman, ed., *The Costs of Crime and Violence: New Evidence and Insights in Latin America and the Caribbean* (Washington, D.C., Inter-American Development Bank, 2017).

<sup>3</sup> For a description of the relationship between economic transition and crime, see UNODC, *Crime and Its Impact on the Balkans and Affected Countries* (Vienna, 2008).

Figure V  
**Number of homicides in Eastern Europe, 1993-2014 (nine selected countries)**



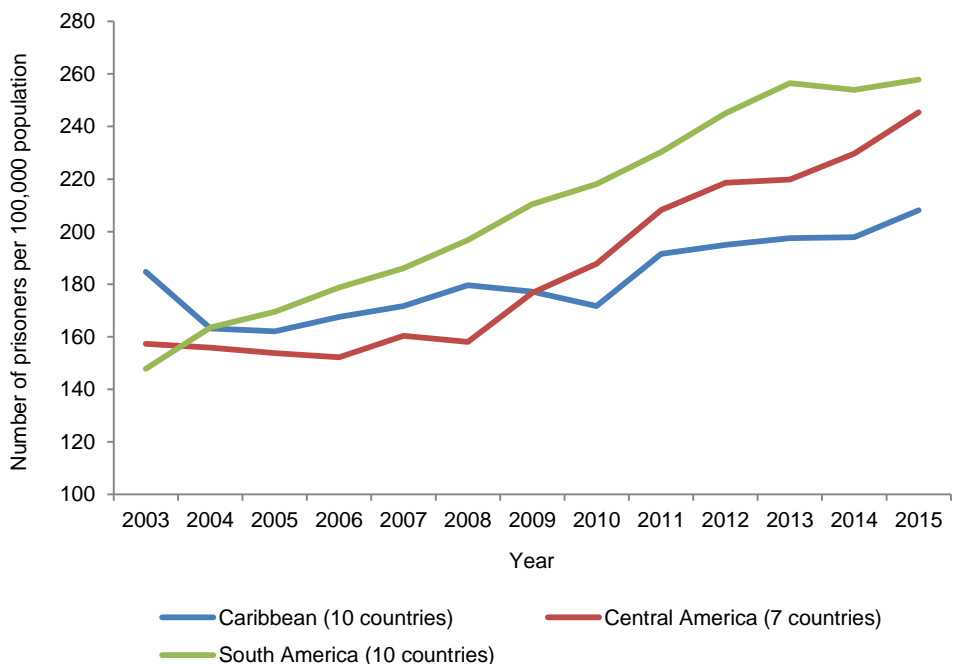
Source: UNODC homicide database.

15. Thus, there are some broad social trends that could explain the shifts in homicide rates in those regions, but the preventive role of the criminal justice system cannot be discounted. It is possible that homicide was prevented by the threat of swift and strong justice, or that a large number of potential murderers were removed from the streets through incarceration and that murderers who served their time emerged from prison as changed people.

### C. Incarceration

16. Distinct regional and subregional trends can be seen in the rate of incarceration. North America remains the subregion with the highest incarceration rates, although they have been declining since 2007. Elsewhere in the Americas, incarceration rates have increased dramatically throughout Latin America and the Caribbean (see figure VI). Although the data are limited, it appears that the number of prisoners has declined in Central Asia and risen in West Asia (see figure VII). In Europe, Eastern Europe has shown a marked reduction in the number of people imprisoned (see figure VIII).

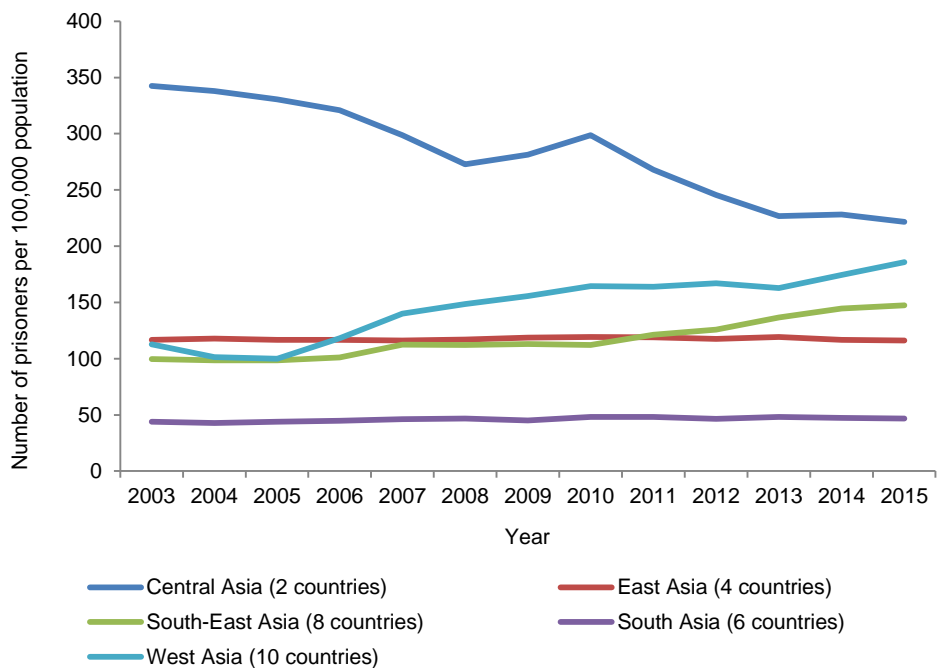
**Figure VI**  
**Number of prisoners per 100,000 population in Latin America and the Caribbean, 2003-2015**



Source: United Nations Survey of Crime Trends and Operations of Criminal Justice Systems.

Note: North America is not displayed in the present figure because its high incarceration rates make trends in the other subregions difficult to discern.

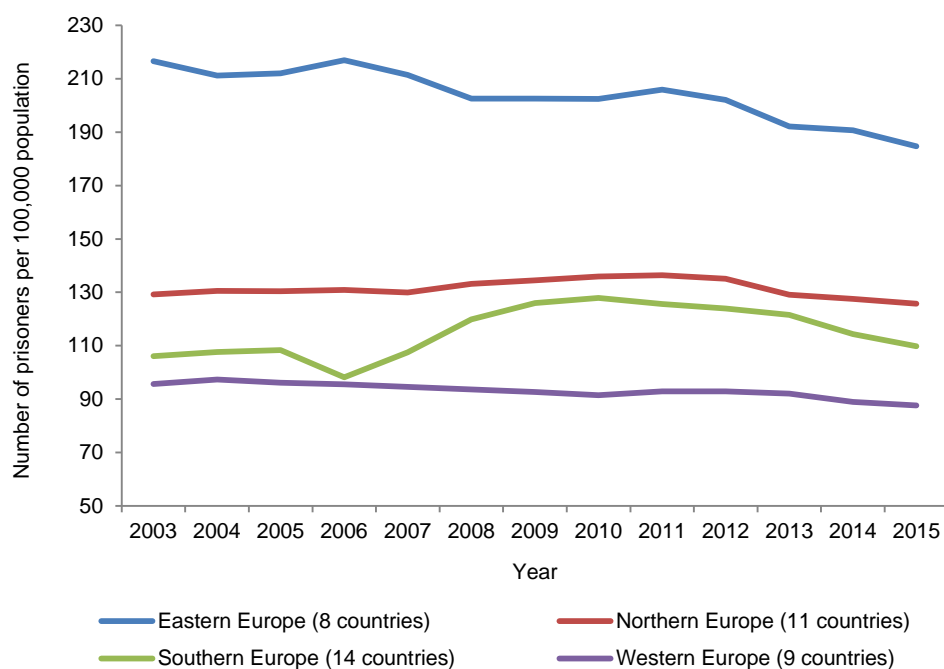
**Figure VII**  
**Number of prisoners held per 100,000 population in Asia, 2003-2015**



Source: United Nations Survey of Crime Trends and Operations of Criminal Justice Systems.



Figure VIII  
Number of prisoners held per 100,000 population in Europe, 2003-2015



Source: United Nations Survey of Crime Trends and Operations of Criminal Justice Systems.

17. Remarkably, the subregional incarceration trends mirror the homicide trends: the regions with the greatest increases in imprisonment have also experienced the greatest increases in homicide, and the same is true for declines. On one level, that is not surprising, as declining crime rates would require fewer people to be imprisoned. On another level, it brings into question the impact that the criminal justice system has on crime. More people in prison does not necessarily result in lower homicide rates, and declining imprisonment does not automatically produce a crime wave. Those issues can be explored in more depth by looking at the two subregions discussed above: Central America and Eastern Europe.

18. In Central America as a whole, the prison population has grown rapidly, increasing 28 per cent between 2003-2005 and 2012-2014, according to data from seven countries (see figure VI). While regional homicide rates have declined since 2011, this shift is not seen in all countries. It remains unclear whether incapacitating a growing number of offenders can stem the violence that has afflicted the region.

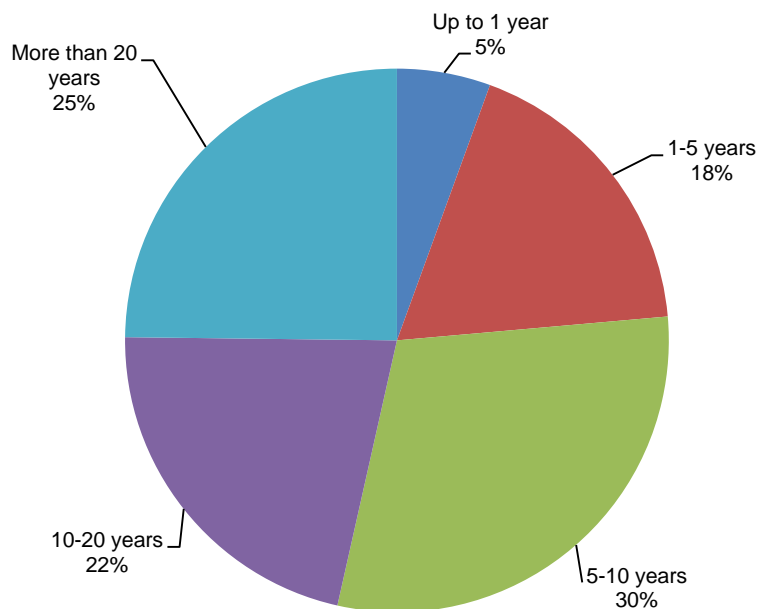
19. With regard to deterrence, data from 19 countries in Latin America and the Caribbean show that about 28 people were convicted of homicide for every 100 incidents of homicide between 2003 and 2014. Data from the United Nations Survey of Crime Trends and Operations of Criminal Justice Systems indicate that some countries have far fewer homicide convicts than homicides. This suggests that the risk of being incarcerated, even for the most serious crimes, may be relatively low in some countries, reducing both the deterrent and incapacitation effects.

20. It is difficult to assess rehabilitation rates, as only a limited number of countries have been able to report the share of their present prison populations that had previously served time for another offence. Although the data are sparse, they suggest that only about 17 per cent of the prison population between 2010 and 2012 had served a prison sentence previously. In some individual countries, the share was so low as to suggest a data anomaly, or the possibility that there is some difficulty in identifying repeat offenders.

21. One possible reason for the low share of repeat offenders is the extremely long sentences that many are serving. Nearly half of the prisoners in the two Central American countries for which data are available are serving sentences of more than

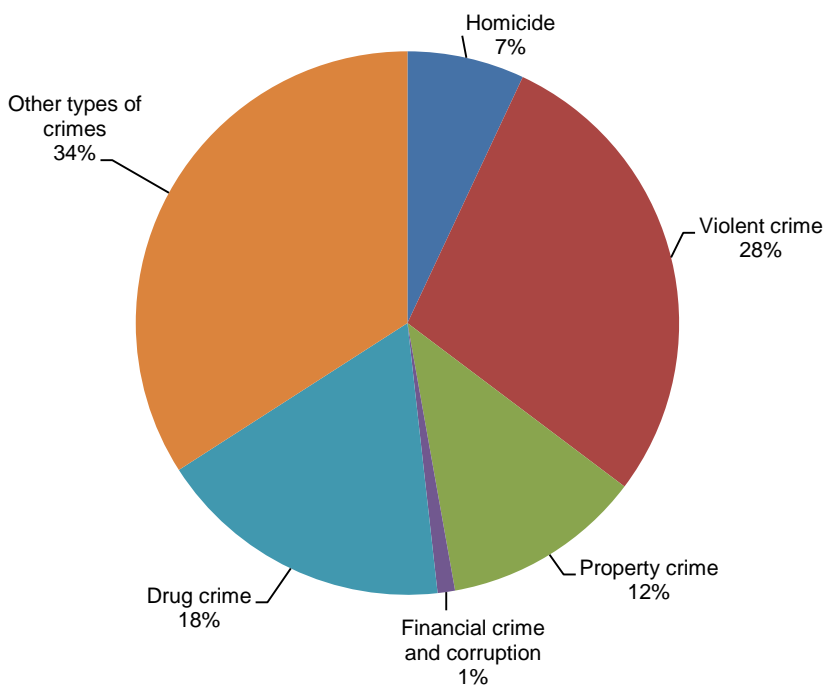
10 years, which is remarkably high (see figure IX). In Eastern Europe, according to data from 12 countries, the share is only 14 per cent (see figure XII) and in Western Europe it is 15 per cent (based on data from 14 countries). At the same time, in Central America, the majority (65 per cent) of the prisoners are imprisoned for non-violent offences (see figure X).

Figure IX  
**Central American prison population by length of sentence, 2010 (two countries)**



Source: United Nations Survey of Crime Trends and Operations of Criminal Justice Systems.

Figure X  
**Share of prisoners by crime type for which they were convicted in Central America, 2012 (five countries)**



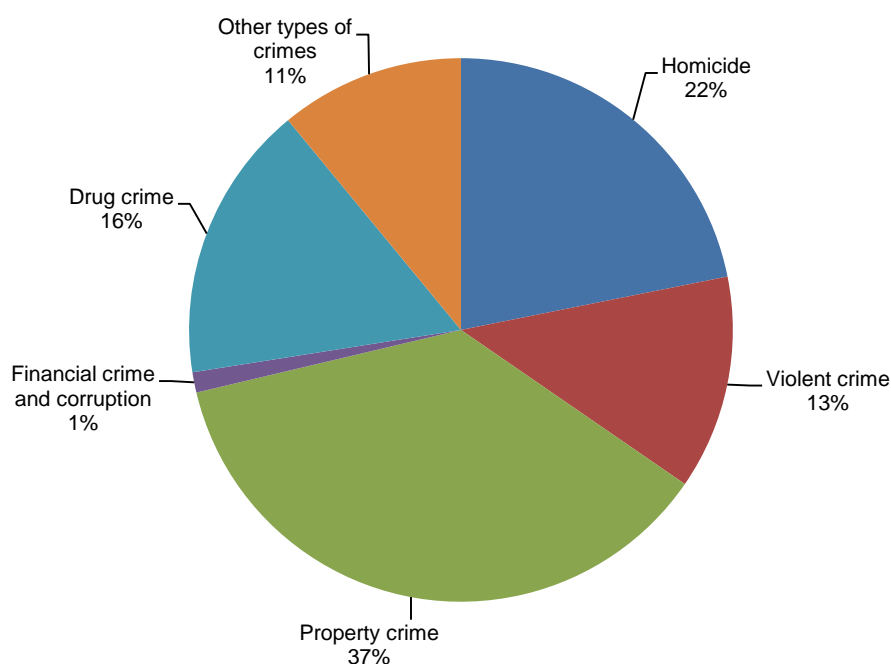
Source: United Nations Survey of Crime Trends and Operations of Criminal Justice Systems.

22. Incarceration rates in Eastern Europe were relatively high in the early 2000s but, according to data from nine countries, they declined 27 per cent between the periods 2003-2005 and 2012-2014 (see figure VIII). That trend went in parallel with a uniform reduction in homicide rates. Eastern Europe shows remarkably high conviction rates for homicide, a characteristic that the subregion shares with Central Asia. Based on data from 20 countries in Eastern Europe and Central Asia between 2003 and 2014, for every 100 homicides, there were 82 convictions. The reasons for those high conviction rates could be many, including the procedural point at which a homicide is formally recorded as such. Setting such possibilities aside, the criminal justice statistics indicate that the chances of being convicted for a homicide are much greater in Eastern Europe than in most of the rest of the world, so deterrence could be having some effect.

23. In contrast, the data do not suggest that much rehabilitation is taking place. According to data from six countries in Eastern Europe, during the period 2010-2012, about 42 per cent of the prison population had previously served a prison sentence. There could be several reasons for this apparently high rate of recidivism. If non-custodial options are available, the sanction of prison could be reserved for only serious and repeat offenders. This possibility is borne out by the fact that, in 2012, more than one fifth (22 per cent) of prisoners in the region had been convicted of homicide (see figure XI). As shown in figure XII, however, about half of the prisoners in Eastern Europe are serving sentences of five years or less.

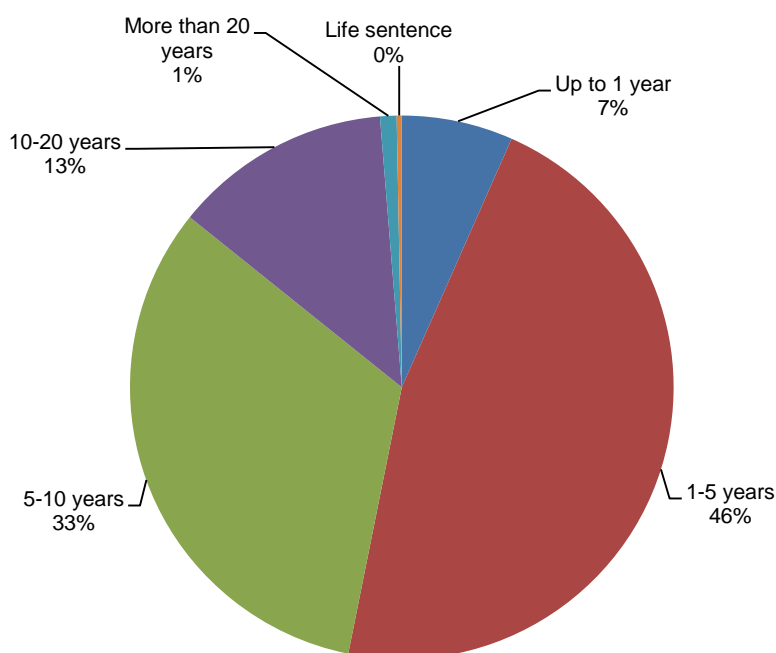
Figure XI

**Share of prisoners by crime type for which they were convicted in Eastern Europe, 2012 (five countries)**



Source: United Nations Survey of Crime Trends and Operations of Criminal Justice Systems.

Figure XII  
**Eastern European prison population by length of sentence, 2010 (12 countries)**



Source: United Nations Survey of Crime Trends and Operations of Criminal Justice Systems.

24. In addition to these relatively short sentences, only about 14 per cent of prisoners in Eastern Europe remain unsentenced, and only 84 per cent of available prison space is occupied.

25. Central America and Eastern Europe are very different in many respects in terms of crime trends. Central America has a much younger population, with a larger share of the demographic most prone to crime. Countries in the region have, on average, a lower ranking on the Human Development Index than countries in Eastern Europe,<sup>4</sup> and the region has a much higher overall homicide rate. This limited analysis cannot produce any definite conclusions. There are many reasons why crime trends may diverge that have nothing to do with criminal justice policy. But it does raise questions about the preventive effect of criminal justice systems, in particular the notion that more punitive approaches are successful in reducing crime.

26. Aside from national homicide rates and the criminal justice system, what can the international experience tell us about the prevention of crime?

## D. Crime prevention case studies

### 1. Maritime piracy off the coast of Somalia

27. Starting around 2005, the world witnessed a series of hijackings for ransom of large marine vessels in the Gulf of Aden and off the coast of Somalia. On the basis of information contained in the United Nations Office on Drugs and Crime (UNODC)-World Bank database,<sup>5</sup> it was estimated that that piracy brought

<sup>4</sup> See United Nations Development Programme, *Human Development Report 2015: Work for Human Development* (New York, 2015), pp. 208-211.

<sup>5</sup> The UNODC-World Bank database is a joint dataset on the ransom amounts, using sources from the International Maritime Bureau at the International Chamber of Commerce, the International Maritime Organization, the European Union Naval Force ATALANTA, several Member States' law enforcement agencies, several law firms and private security companies, and open sources. The dataset gathers most of the ransom amounts available, as well as details including the dates of hijacking and dates of release, the type of vessel, the ship owner and managers and the crew.

\$150 million into Somalia in 2011. Those attacks threatened a major shipping corridor, and vessels of strategic importance were taken, including those bearing arms and oil. In addition, hundreds of hostages were kidnapped and detained for periods often exceeding one year.<sup>6</sup>

28. The phenomenon peaked around 2010, when 50 vessels were hijacked. But by 2012, the number had dropped to 15, and this proved to be the last year a merchant vessel was successfully attacked (see figure XIII). In 2016, there were only two, unsuccessful, attempts.<sup>7</sup> What could account for the near disappearance of a phenomenon that, at its peak, appeared unstoppable?

Figure XIII

**Number of successful hijackings attributed to Somali pirates, 2005-2013**



Source: UNODC-World Bank database.

29. The decline was the result of several factors:

(a) In accordance with the recommendations of international organizations, high-value ships began to steer a route further from the coast.<sup>8</sup> In 2005, the average successful pirate attack was 109 km from the Somali coast; in 2012, it was 746 km.<sup>9</sup> Combined with the increased defensive capacities of vessels and the rise of private armed security on board, the extended range meant that an increasing number of pirates were lost at sea. Interviews with former pirates have indicated that that risk provided a strong deterrent;

(b) Ransom negotiations also became more protracted, requiring investors or financial backers to support the pirates and their hostages for many months before seeing a return, if indeed they were to see any at all;

(c) That growing cost was formerly offset by the continual growth in ransom payments but, by 2012, the average ransom had declined by 20 per cent. As the

<sup>6</sup> For a comprehensive analysis of the hostage-taking and ransom payments, see World Bank *Pirate Trails: Tracking the Illicit Financial Flows from Pirate Activities off the Horn of Africa* (Washington, D.C., World Bank, 2013).

<sup>7</sup> International Maritime Organization, Piracy and Armed Robbery, Global Integrated Shipping Information System. Available at: <http://gisis.imo.org> (accessed on 1 March 2017).

<sup>8</sup> Maritime Security Centre — Horn of Africa, *Best Management Practices for Protection against Somalia-based Piracy*, 4th ed. (Edinburgh, United Kingdom, Witherby Publishing, 2011).

<sup>9</sup> Calculations using data from the UNODC-World Bank database.

proceeds of piracy had driven up the cost of everything in the communities where the pirates resided, extended negotiations seriously undercut the return on investment<sup>10</sup> and, since the investors were paid first, the expenses of the pirates during the negotiations were deducted from their share, with the result that some pirates made barely any profit;<sup>11</sup>

(d) International naval forces that had been deployed to guard the shipping lane had their mandate extended to Somali coastal territory in March 2012, allowing them to act directly against the pirates in Somali territory;

(e) The Government of Somalia took steps to enhance the legal and policy frameworks on maritime safety, including by revising its Maritime Code and taking steps to establish a maritime administration department. The Government has also continued to build the country's maritime security capacity in cooperation with international partners.<sup>12</sup>

30. In the case of Somali piracy, therefore, an important organized crime trend was sharply reversed, chiefly by international policy intervention, not as a result of changes in the political or economic climate. In this case, as a result of what can be described as “target hardening” (making targets more resistant or difficult to attack), the criminal act became more difficult to successfully execute, and more hazardous to the perpetrator. Crime was effectively prevented.

## 2. Cocaine trafficking through West Africa

31. Few transnational contraband flows have generated more alarm than the flow of cocaine through West Africa in the 2000s. In around 2005, it became clear that massive amounts of drugs, worth billions of dollars, were being shipped through one of the least stable regions in the world. The signs were unmistakable:

(a) Between 2005 and 2007, a series of more than 20 major seizures were made in the West African region, involving thousands of kilograms of cocaine.<sup>13</sup> Most of the seizures were made at sea, but some involved private aircraft or caches detected on land. Those amounts appeared to have been the tip of the iceberg: most of the seizures were made with the assistance of European navies or foreign tip-offs, and some were stumbled upon by accident;

(b) At the same time, hundreds of commercial air couriers were detected carrying cocaine on flights from West Africa to Europe.

32. The risks were equally clear:

(a) If the drugs seized had made it to Europe, their retail value would have exceeded the gross domestic product of some of the nations they transited, suggesting the involvement of criminal organizations with greater resources at their disposal than the affected States, which posed a threat to the rule of law in those States;

(b) Since in some countries no legitimate commercial activity had the potential to generate income comparable to that generated by the drug trade, it had the potential to “crowd out” other forms of economic activity. A similar risk prevailed in the political sphere — pursuit of drug graft threatened governance and stability;

(c) There was fear that insurgents and extremists throughout the region would be in a position to facilitate trafficking, thus drawing resources to their cause and increasing the potential for violence.

<sup>10</sup> *Pirate Trails*.

<sup>11</sup> UNODC, *Transnational Organized Crime in Eastern Africa: A Threat Assessment* (Vienna, 2013), pp. 36 and 37.

<sup>12</sup> Report of the Secretary-General on the situation with respect to piracy and armed robbery at sea off the coast of Somalia (S/2016/843), paras. 11-22.

<sup>13</sup> UNODC Individual Drug Seizures Database.

33. Unfortunately, it appears that some of those risks were realized. At the end of 2000, there was serious political unrest in some West African countries. While some of the conflicts appeared to have occurred along well-established political fault lines, competition for cocaine profits raised the stakes and augmented tensions between rival groups.

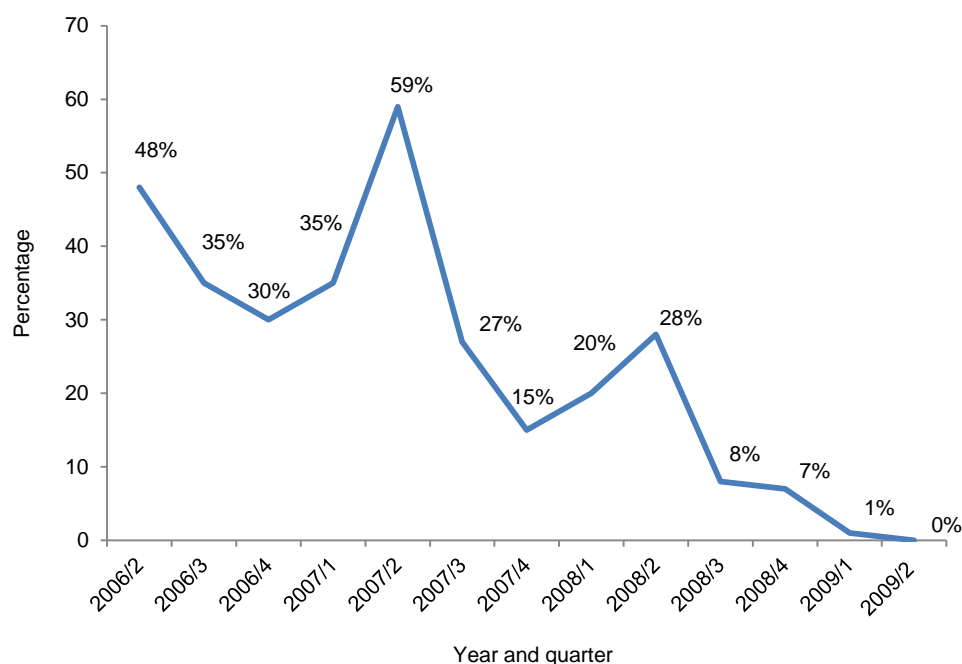
34. However, in around 2008, there were a number of indications that the flow of drugs had begun to abate:

(a) Large seizures declined drastically. In 2007, there were at least 11 seizures of more than 100 kg of cocaine around West Africa, totalling over 11 tons; in 2009, a single seizure of 160 kg was made;<sup>14</sup>

(b) The number of couriers emanating from the region also decreased sharply. According to one database of air courier detections, 59 per cent of the cocaine couriers detected in the second quarter of 2007 originated in West Africa; in the third quarter of 2009, no couriers from the region were detected (see figure XIV).

Figure XIV

**Share of cocaine couriers detected in European airports that originated in West Africa, 2006-2009**



Source: UNODC Individual Drug Seizures Database.

35. Since the 2009 downturn, there have been one or two large seizures of cocaine per year in West Africa. In 2015 and 2016, a number of large seizures were made in South America of drugs destined for West Africa, indicating that the route may be experiencing a revivification.<sup>15</sup> There is little doubt that what had been a major threat to stability between 2004 and 2008 receded to a lesser flow in the course of a year or so.

36. There are a number of possible reasons for the decline. There was a formal response from the regional and international authorities, but that took some time to organize. In 2009, the Economic Community of West African States developed the Regional Action Plan to Address the Growing Problem of Illicit Drug Trafficking, Organized Crime and Drug Abuse in West Africa. To support the Action Plan, the

<sup>14</sup> UNODC Individual Drug Seizures Database.

<sup>15</sup> UNODC, *World Drug Report 2016* (United Nations publication, Sales No. E.16.XI.7), p. 39.

international community established the West African Coast Initiative. The main output of that Initiative was to help West African countries to create interdepartmental transnational crime units, designed to improve national and international coordination and enable intelligence-based investigations. As at 1 March 2017, three such units had been established, although none of them are based in the countries where the most cocaine has been seized. In addition, the Initiative and the transnational crime units were implemented only after the decline in seizures had occurred at the end of 2008.

37. There is no clear evidence on what may have triggered the reduction. The following elements may have contributed:

(a) For the South American traffickers, one of the benefits of using the West African route was its novelty — law enforcement authorities were not expecting cocaine to come from that region.<sup>16</sup> By mid-2008, owing to the international attention that the flow had received, that was no longer the case;

(b) The political turmoil around 2008 and 2009 may have disrupted the channels of corruption that facilitated trafficking through the region;

(c) Prior to 2009, it appears that most of the cocaine seized was the property of South American traffickers and that the West Africans were paid for logistical services only.<sup>17</sup> When large cocaine seizures disappeared from police custody,<sup>18</sup> South American partners may have concluded that they had been betrayed by the corrupt officials they were sponsoring and severed relations. In addition, there were multi-ton cocaine losses in West Africa that may have led some South American traffickers to return to more traditional routes or to change techniques for reaching West Africa.

38. Thus, the reduction may have stemmed from a mix of intentional responses and broader geopolitical changes. Greater vigilance and awareness in European destination countries made it hazardous to courier drugs by air. Interdiction seems to have played a role, perhaps most acutely in the way it sowed distrust between the West African facilitators and their South American partners. Tensions over drug wealth may have helped precipitate the regime changes that made trafficking more difficult. But it would be a mistake to characterize the decline as a product of merely crime prevention interventions.

### 3. Caviar trafficking

39. Caviar is made from the unfertilized eggs of the *Acipenseridae* family (sturgeon and paddlefish). The traditional source of the world's finest caviars is the Caspian Sea, an area dominated during the bulk of the twentieth century by the Union of Soviet Socialist Republics. During those days, the extraction of caviar was tightly controlled, but the disorder surrounding the collapse of the Union at the end of the 1980s ushered in an era of overharvesting and smuggling. In a drive to protect the wild sturgeon, all species of the *Acipenseridae* family were placed under the protection of the Convention on International Trade in Endangered Species of Wild Fauna and Flora.<sup>19</sup>

40. That chaos at source coincided with increased luxury consumption during the 1990s, and huge volumes of caviar were smuggled from the Caspian Sea region to

<sup>16</sup> Based on UNODC drug seizure data, between 1994 and 2004, about 1.5 metric tons of cocaine were seized in the 15 countries of West Africa. Between 2004 and 2014, over 24 metric tons were seized.

<sup>17</sup> Based on testimony associated with the criminal trials of several high-level traffickers, the West Africans were generally paid a set rate per ton for their assistance, in cash or in kind. For example, see the 2013 indictment in the case of *United States vs Jose Americo Bubo Na Tchuto et al.*, United States Attorney's Office for the Southern District of New York.

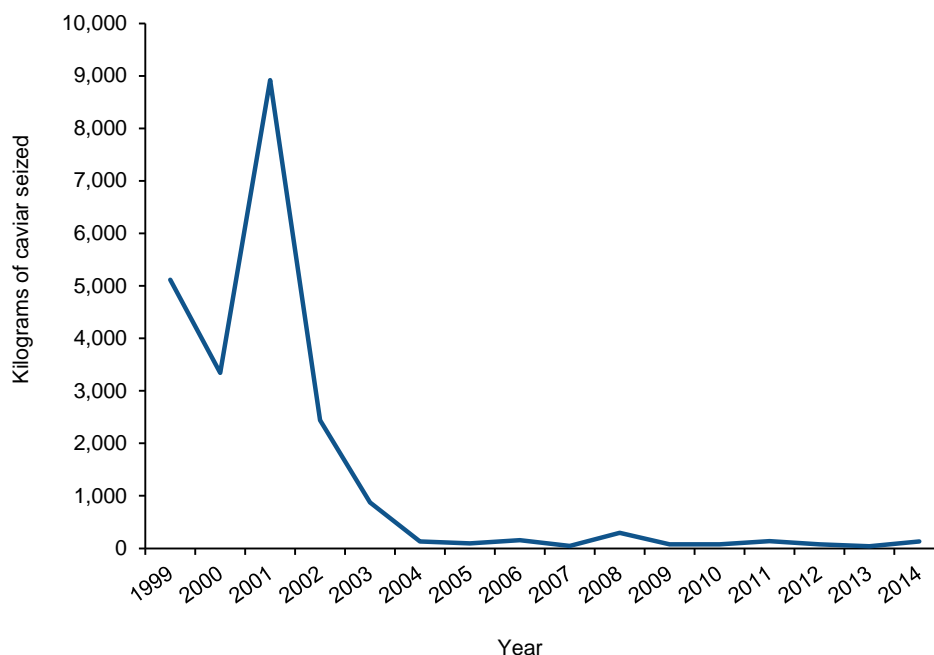
<sup>18</sup> See UNODC, "Cocaine Trafficking in West Africa: the threat to stability and development (with special reference to Guinea-Bissau)" (Vienna, 2007).

<sup>19</sup> *World Wildlife Crime Report: Trafficking in Protected Species* (United Nations publication, Sales No. E.16.XI.9), pp. 83-94.



the West, coinciding with large seizures. Major caviar importers were charged with importing illegal caviar, and scandals rocked the industry.<sup>20</sup> Then, around 2004, the flow seemed to disappear. According to UNODC data on wildlife seizures, for example, seizures in the United States of America went from about 9 tons in 2001 to 134 kilograms in 2004, and they have remained at low levels since then (see figure XV).

Figure XV

**Kilograms of caviar seized in the United States, 1999-2014**

Source: UNODC World WISE database.

41. What can account for that trend? After a few notable prosecutions of major importers in the early 2000s,<sup>21</sup> it appears that few major labels are packing or selling illegally sourced caviar today. Packaging standards under the Convention on International Trade in Endangered Species of Wild Fauna and Flora have also proved effective. Forensic testing of caviar samples in the United States showed a decline in mislabelled caviar from 19 per cent in the period 1995-1996 (before the listing in the Convention) to 10 per cent in the period 2006-2008 (after international controls were in place). In the latter period, all of the fraudulent caviar was found online — none of the samples from retail outlets were mislabelled.<sup>22</sup> The level of compliance for caviar compares very favourably with that for other seafood products.

42. Aside from those measures, there appear to have been three main reasons for the decline in the international illicit trade:

- (a) Wild Caspian sturgeon has become very scarce;
- (b) The caviar from such sturgeon that it is possible to find is distributed locally;

<sup>20</sup> See, for example, United States, Department of Justice, “Caviar convictions (since 1/1/2000)”. Available from [www.justice.gov/sites/default/files/enrd/legacy/2013/08/30/CaviarConvictionsSince2001\\_new.pdf](http://www.justice.gov/sites/default/files/enrd/legacy/2013/08/30/CaviarConvictionsSince2001_new.pdf).

<sup>21</sup> Ibid.

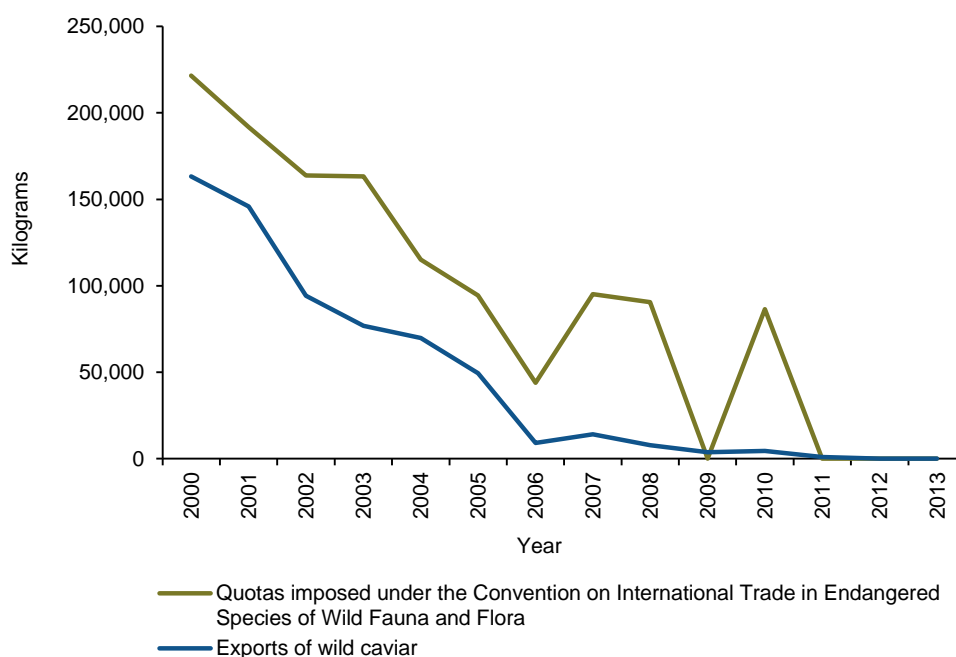
<sup>22</sup> Phaedra Doukakis and others, “Testing the effectiveness of an international conservation agreement: marketplace forensics and CITES caviar trade regulation”, *PLoS ONE*, vol. 7, No. 7 (July 2012).

(c) The international illicit market has been displaced by the growth in farmed sturgeon.

43. Official estimates of the remaining sturgeon population are viewed as overly optimistic by some scientists, but even they show a dramatic reduction in the size of stocks.<sup>23</sup> During the years when a quota on caviar exports was imposed, suppliers were not able to meet even those quotas (see figure XVI). While black market caviar is still available in regional markets, the figures suggest that stocks may have dwindled to the point that it has become difficult for poachers to find sturgeon.

Figure XVI

**Convention on International Trade in Endangered Species of Wild Fauna and Flora quotas for Caspian caviar export and exports of wild caviar (kilograms), 2000-2013**

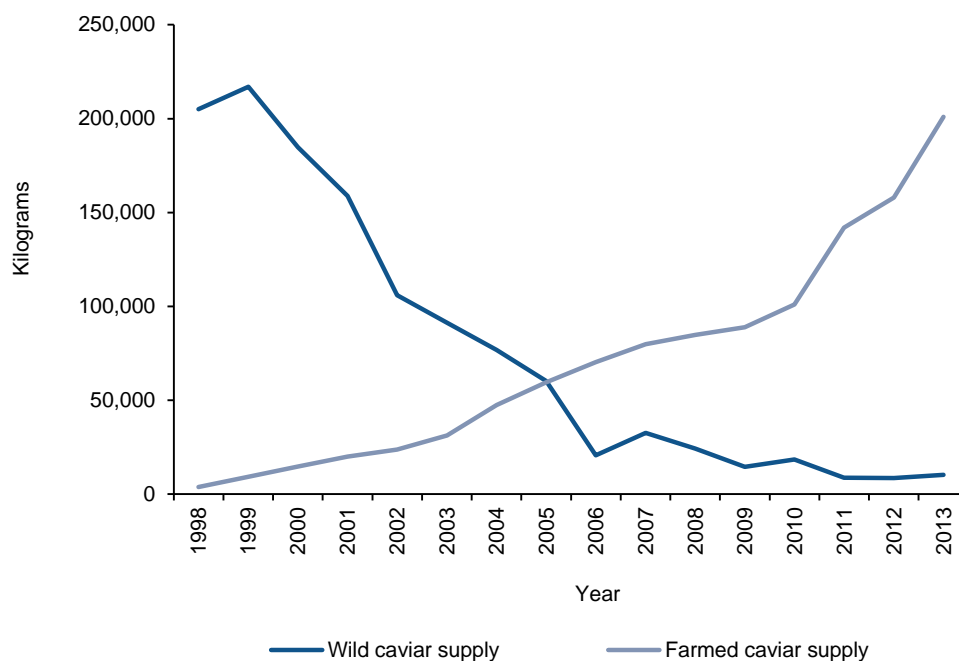


Source: Convention on International Trade in Endangered Species of Wild Fauna and Flora Trade Database.

44. In addition, since 2005, caviar demand has been largely satisfied by legal, farmed production. The growing shortage of sturgeon did not pass unnoticed by aquaculturists and, from the late 1990s, a number of projects to raise commercial volumes of sturgeon in captivity began to bear fruit. In effect, that legal supply effectively displaced the need for illegally supplied sturgeon (see figure XVII).

<sup>23</sup> R. P. Khodorevskaya, G. I. Ruban and D. S. Pavlov, *Behaviour, Migrations, Distribution, and Stocks of Sturgeons in the Volga-Caspian Basin* (Neu Wulmstorf, Germany, World Sturgeon Conservation Society, 2009).

Figure XVII  
Exports of caviar from wild sturgeon and from farmed sturgeon (kilograms),  
1998-2013



Source: World Wildlife Crime Report: Trafficking in Protected Species.

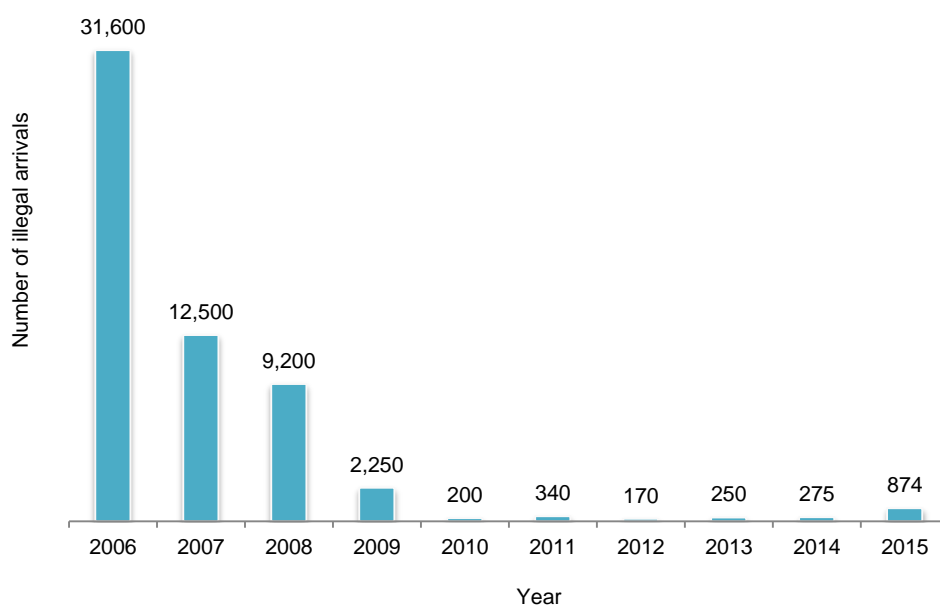
#### 4. Smuggling of migrants from West and North Africa to the Canary Islands, Spain

45. In 2006, the sea route connecting Senegal, Mauritania and Morocco to the Canary Islands, Spain, became the main entry gate to Europe for irregular migrants and refugees. During that year, almost 32,000 arrivals and 6,000 people who died or went missing on the sea journey. Almost half of the arrivals came from Senegal; other countries of origin included Côte d'Ivoire, the Gambia, Guinea-Bissau, Mauritania and Morocco. As the sea crossing could not be undertaken without the assistance of smugglers, such an increase in arrivals went hand in hand with a dramatic increase in the smuggling of migrants.<sup>24</sup>

46. The following year, the number of irregular arrivals in the Canary Islands dropped by 60 per cent. While the push and pull factors of the migration flow — including poverty, political instability and the standard of living in Europe — have not significantly changed since 2006, irregular arrivals continued to decrease until 2012 and have remained at low levels since then (see figure XVIII).

<sup>24</sup> UNODC, "Organized crime and irregular migration from Africa to Europe" (Vienna, July 2006), p. 10; Walter Kemp, "Learning from the Canaries: Lessons from the 'Cayucos Crisis'", Desperate Migration Series, No. 1 (New York, International Peace Institute, May 2016).

Figure XVIII  
**Illegal maritime arrivals in the Canary Islands, 2006-2015**



Source: FRONTEX, *Risk Analysis for 2016* (Warsaw, 2016).

47. There is no doubt that the decline of irregular migration and smuggling of migrants to the Canary Islands resulted from a combination of law enforcement and crime prevention measures put in place by Spain. The country strengthened its border management capacities by reinforcing the coast guard and civil guard (*Guardia Civil*) and by introducing an integrated system of external vigilance (SIVE) to detect and apprehend unauthorized vessels heading to the Canary Islands.<sup>25</sup> The Government of Spain also appealed to the other European Union countries for help. Support was provided through Frontex Operations Hera I, Hera II and Hera III, consisting in the deployment of experts and the provision of technical equipment to patrol the maritime zone between the coast of West Africa and the Canary Islands.<sup>26</sup> Other crime prevention measures adopted by Spain included bilateral agreements with Mauritania and Senegal and information campaigns targeting local communities in countries of origin on the risks of irregular migration and the smuggling of migrants.<sup>27</sup>

48. The smuggling of migrants to the Canary Islands appears to have stopped. However, considering the case in the wider context of irregular migration and the smuggling of migrants from West and North Africa to Europe and from a long-term perspective, the effectiveness of the crime prevention measures may appear more controversial. Following the decline of the Canary Islands route, other smuggling routes from West to North Africa opened up or gained popularity. As shown by the data on irregular entries to the European Union along the central Mediterranean route between 2008 and 2016 (see figure XIX), the drastic reduction in irregular arrivals in the Canary Islands corresponded with a rise in migrants and refugees

<sup>25</sup> Kemp, “Learning from the Canaries”; Jørgen Carling, “The Merits and Limitations of Spain’s High-Tech Border Control”, 7 June 2007. Available from [www.migrationpolicy.org/article/merits-and-limitations-spains-high-tech-border-control](http://www.migrationpolicy.org/article/merits-and-limitations-spains-high-tech-border-control).

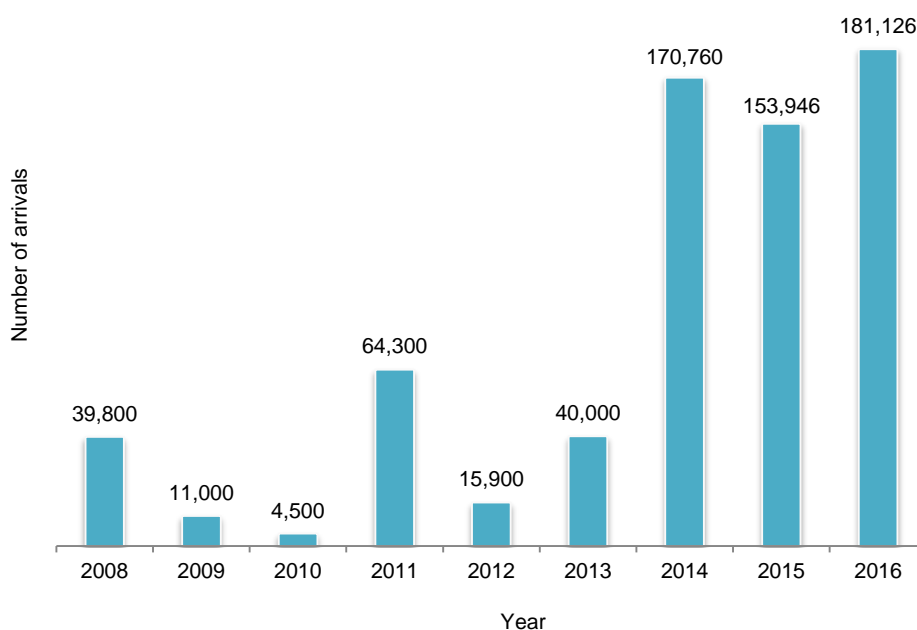
<sup>26</sup> Frontex, *Frontex Annual Report 2006* (Warsaw, 2006), p. 12.

<sup>27</sup> Kemp, “Learning from the Canaries”; Sergio Carrera, “The EU border management strategy: Frontex and the challenges of irregular migration in the Canary Islands”, CEPS Working Document No. 261 (Brussels, Centre for European Policy Studies, March 2007), pp. 20-24.

arriving in Italy and Malta, a growing number of whom come from the same countries of origin as those previously directed to the Canary Islands.<sup>28</sup>

Figure XIX

**Illegal maritime arrivals into the European Union along the central Mediterranean route, 2008-2016**



Source: FRONTEX, *Risk Analysis for 2017*.

49. The situation of the smuggling of migrants to the Canary Islands seems to indicate that, in the long term, efforts that are primarily focused on border control may lead to the diversion of smuggling routes, rather than to the eradication of the crime. Effective prevention strategies require strong international cooperation and an integrated approach, where border control measures are put in place alongside legislative and policy reforms, technical assistance and development projects addressing the root causes of migration.

## E. What do crime trends reveal about international crime prevention?

50. As the examples above show, there are many reasons why national and international crime problems are resolved. Sometimes, crime problems create the circumstances for their own resolution, like cocaine trafficking in West Africa, where the corrosive effects of corruption precipitated the fall of the corrupt officials themselves. Some crime problems are resolved when a legal substitute for contraband emerges, as is the case with farmed sturgeon. Some national solutions only result in displacement of the problem to other countries, as was seen with the closure of the Canary Islands route for the smuggling of migrants.

51. Sometimes, crime problems are resolved through targeted crime prevention measures. Somali piracy has been prevented largely by target hardening. Such measures have to do with making the crime more difficult to execute, although they do not resolve the social issues that produced the crime problem in the first place. These examples show that intelligent interventions can produce enduring results that are not dependent on broad geopolitical and market forces.

<sup>28</sup> Frontex, *Risk Analysis for 2017* (Warsaw, 2017).

### III. Improving the quality and availability of statistics on crime and criminal justice for policy development

52. The following section contains the most recent information on the implementation of Economic and Social Council resolution 2015/24, on improving the quality and availability of statistics on crime and criminal justice for policy development.

53. Activities in this area over the past two years are part of a broader plan to improve statistics on crime and criminal justice, described in the report of the National Institute of Statistics and Geography of Mexico and UNODC on a road map to improve the quality and availability of crime statistics at the national and international levels (E/CN.3/2013/11), of which the Economic and Social Council took note in its resolution 2013/37.

54. The road map outlined the major challenges for improving the quality and availability of statistics on crime and criminal justice and identified a number of activities to address them. Those activities fall into three broad areas: developing new standards and methodology to improve crime statistics, improving the capacity to produce and disseminate crime data, and improving international data collections and analyses.

55. A major challenge identified under the road map was the lack of a common set of definitions and concepts to describe criminal offences. The development of a common standard for crime statistics was thus given priority, and a major milestone was achieved with the endorsement in 2015 of the International Classification of Crime for Statistical Purposes by the Statistical Commission.<sup>29</sup> Following that endorsement, UNODC, as the custodian of the classification, undertook a number of activities to support Member States in the implementation of the Standard. To facilitate the adoption of the Standard by Member States, the classification was first translated into the six official languages of the United Nations.

56. As part of the implementation plan of the Standard, a technical advisory group was formed to provide substantive advice to and support the maintenance of the Standard. Around 60 substantive experts familiar with the production of national statistics on crime and criminal justice have been nominated by Member States as members of the group thus far, together with observer members from international organizations and academia. The first meeting of the group, in May 2016, was attended by more than 60 participants from 40 countries around the world. The meeting discussed the challenges of implementing the Standard at the national level and a number of critical tools for supporting its implementation were identified.

57. At the request of the technical advisory group and in cooperation with a number of States, work on the first volume of a manual on the implementation of the Standard was started. It is expected to be finalized by the end of 2017. In parallel with the methodological work, technical assistance and training workshops, presentations at international and national conferences and ad hoc advice on crime classification have been provided on request. Moreover, to exchange information and experiences, UNODC established an online forum for members of the technical advisory group and other experts in Member States. The moderated forum currently has active participants from 19 Member States and the number of contributions and membership requests is increasing.

58. Another area where further methodological work is needed is in the monitoring of the Sustainable Development Goals through the related framework of indicators. After the adoption of the Goals in September 2015 by the General Assembly, the Statistical Commission oversaw the drafting of a framework of indicators for monitoring the 17 goals and 169 targets, which was presented in

<sup>29</sup> E/2015/24-E/CN.3/2015/40.

March 2016.<sup>30</sup> UNODC actively contributed to the development of the metrics, particularly in the areas of crime and violence, access to justice, rule of law, trafficking and corruption. As the primary source of data on crime, drugs and criminal justice at the international level, UNODC has been indicated as custodian agency for the monitoring of a number of indicators related to targets 3, 5, 8, 11, 15 and 16. In 2016, based on its global data collections, UNODC provided the first sets of data and metadata on selected indicators for global monitoring (intentional homicide, trafficking in persons and unsentenced detainees).

59. For other indicators where an established international methodology does not yet exist (such as corruption, trafficking in firearms, illicit financial flows and wildlife crime), further work to improve data collection and the development of indicators is needed. To enable countries to produce relevant and reliable data in those areas, UNODC has initiated a number of activities. In 2016, a study on the use of national crime victim surveys for indicators on the prevalence of physical, sexual and psychological violence, as well as indicators on access to justice, was started with a global mapping exercise of national crime victim surveys. That work will be finalized through the production of guidelines on the production of Sustainable Development Goal indicators based on crime victim surveys.

60. With regard to indicators on corruption, UNODC, together with the Centre of Excellence for Statistical Information on Governance, Victims of Crime, Public Security and Justice and the United Nations Development Programme (UNDP), initiated the development of a manual to conduct corruption surveys, which are a vital tool for the production of experience-based data for Sustainable Development Goal indicators on corruption. An advisory task force of over 20 national experts from countries and institutions all over the world is overseeing that work.

61. With regard to indicators derived from crime victim surveys, UNODC, together with the Centre of Excellence for Statistical Information on Governance, Victims of Crime, Public Security and Justice, has taken the lead in developing common methodological standards for crime victim surveys in Latin America and the Caribbean through extensive consultations with government officials, statistical offices and experts from eight countries of the region. In collaboration with the Organization of American States, the Inter-American Development Bank and UNDP, three technical meetings were held during the period 2015-2016 to finalize a harmonized survey instrument. It is now available in four languages (English, French, Portuguese and Spanish). In 2016, Panama conducted its first national crime victim survey, with technical support from the Centre of Excellence, and on-site training on crime victim surveys was delivered to over 100 public officials in five other countries in the region. In addition, the Centre of Excellence has conducted two online training courses on crime victim surveys, which have reached over 140 public officials in 15 countries in the region. UNODC also coordinated the implementation of a large-scale household survey on corruption in Nigeria in 2016 and will publish a report in 2017.

62. As in previous years, during the period 2015-2016, the Office carried out a number of activities that were aimed at improving the capacity of countries to collect, analyse, report and disseminate accurate and comparable administrative statistics on crime and criminal justice, including through workshops, training sessions, conferences and ad-hoc technical assistance in several countries in Latin America, West and North Africa and West Asia. In 2015, UNODC, in cooperation with the Centre of Excellence, partnered with the UNDP InfoSegura project for improving crime statistics in Costa Rica, the Dominican Republic, El Salvador, Guatemala and Honduras. In 2015 and 2016, UNODC, in collaboration with the Economic and Social Commission for Asia and the Pacific, the Korean Institute of Criminology and the Thailand Institute of Justice, organized two regional workshops on crime statistics and monitoring of Sustainable Development Goal indicators for countries in the Asia and the Pacific region.

<sup>30</sup> E/CN.3/2016/2/Rev.1.

63. UNODC has continued to collect data on selected crimes and on the operation of justice systems through the United Nations Survey of Crime Trends and Operations of Criminal Justice Systems and has disseminated updated data series on its website. To support global data collection and to facilitate the coordination of national responses to the Survey, UNODC has built a network of over 130 national focal points, nominated by Member States. In May 2016, UNODC organized the first global meeting of focal points for the Survey. It was held in Vienna and was attended by representatives of 43 countries and 11 international organizations. The meeting provided the opportunity to consult with Member States on the forthcoming revision of the data collection for the survey — to make it compliant with the International Classification of Crime for Statistical Purposes — and to support new data requirements for the monitoring of the Sustainable Development Goals.

64. Relevant data on several Sustainable Development Goal indicators are also collected by UNODC. The global data collection on trafficking in persons patterns and flows, conducted annually by UNODC pursuant to a mandate from the General Assembly, currently includes data from 136 countries. The third edition of the *Global Report on Trafficking in Persons*, prepared pursuant to General Assembly resolution 64/293, was published in December 2016 and includes a thematic chapter on the links between trafficking in persons, migration and conflict. Data collected on the illicit trade in protected species of flora and fauna include data from 120 countries across the world and form the basis of the *World Wildlife Crime Report: Trafficking in Protected Species*, which was prepared pursuant to General Assembly resolution 69/314 and was published in May 2016. In 2015, as part of its activities to monitor the implementation of the Protocol against the Illicit Manufacturing of and Trafficking in Firearms, Their Parts and Components and Ammunition, supplementing the United Nations Convention against Transnational Organized Crime, UNODC has collected data on firearm seizures. Those data, on firearms trafficking from 45 countries, formed the basis of the first *UNODC Study on Firearms*.

---