World Atlas of Illicit Flows
CENTRAL AFRICAN REPUBLIC - A former Seleka soldier looks at a woman washing extracted soil and small rocks as she pans for gold near an open-pit at the Ndassima gold mine near Djoubissi, north of Bambani May 9, 2014.

© REUTERS / Siegfried Modola
Introduction: Environmental crime has become largest financial driver of conflict

Environmental crime: The largest conflict finance sector

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## Acronyms & abbreviations

<table>
<thead>
<tr>
<th>Acronym</th>
<th>Description</th>
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<tbody>
<tr>
<td>AQIM</td>
<td>al-Qaeda in the Islamic Maghreb</td>
</tr>
<tr>
<td>bpd</td>
<td>barrels per day</td>
</tr>
<tr>
<td>CAR</td>
<td>Central African Republic</td>
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<tr>
<td>CIA</td>
<td>Central Intelligence Agency</td>
</tr>
<tr>
<td>coltan</td>
<td>columbite–tantalites</td>
</tr>
<tr>
<td>DRC</td>
<td>Democratic Republic of the Congo</td>
</tr>
<tr>
<td>FARC</td>
<td>Revolutionary Armed Forces of Colombia–People’s Army</td>
</tr>
<tr>
<td>GDP</td>
<td>gross domestic product</td>
</tr>
<tr>
<td>HTS</td>
<td>Hay’at Tahrir al-Sham</td>
</tr>
<tr>
<td>INTERPOL</td>
<td>International Criminal Police Organization</td>
</tr>
<tr>
<td>IUU</td>
<td>illegal, unreported and unregulated</td>
</tr>
<tr>
<td>JNIM</td>
<td>Jama’at Nasr al-Islam wal Muslimin</td>
</tr>
<tr>
<td>KDF</td>
<td>Kenya Defence Forces</td>
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</table>
Preface

Peace, development and security are the most crucial concerns for any country. Yet national and international efforts are increasingly undermined by criminal networks. Indeed, transnational organized crime is infiltrating every corner of society, and continues to diversify its scope of operations.

Of particular concern has been the growth and convergence of criminal networks exploiting governance weaknesses during local conflicts and sustaining non-state armed groups and terrorists.

This atlas identifies more than 1,000 routes used for smuggling drugs and natural resources as well as human trafficking. The report provides the first consolidated global overview of these illicit flows and their significance in conflicts worldwide. It also forms a foundation for further development of actionable intelligence.

The findings reveal that the incomes of non-state armed groups and terrorist groups are diversifying and becoming increasingly based on organized crime activities, sustaining conflicts worldwide. Illegal exploitation and taxation of gold, oil and other natural resources are overtaking traditional threat finance sectors such as kidnapping for ransom and drug trafficking.

At the same time these non-state armed groups only take a fraction, around 4 per cent, of all illicit finance flows by organized crime in or near conflicts. The implication is that combating organized crime must be considered a significant factor in conflict prevention and resolution.

This report provides a new impetus for our continued efforts to stem these illicit flows and combat the threat posed by transnational organized crime in terms of peace, development and security.

Jürgen Stock
INTERPOL
Secretary General

Christian Nellemann
RHIPTO Norwegian Center for Global Analysis

Mark Shaw
Global Initiative against Transnational Organized Crime
KENYA, Nairobi - Volunteers carry elephant tusks to a burning site on April 22, 2016 for a historic destruction of illegal ivory and rhino-horn confiscated mostly from poachers in Nairobi’s national park. Kenya on April 30, 2016 burnt approximately 105 tonnes of confiscated ivory, almost all of the country’s total stockpile. Several African heads of state, conservation experts, high-profile philanthropists and celebrities were present at the event which sent a strong anti-poaching message. © AFP PHOTO / Tony Karumba
01 Introduction

Environmental crime has become the largest financial driver of conflict.
Introduction:
Environmental crime has become largest financial driver of conflict

This atlas of illicit flows presents over a thousand smuggling routes worldwide of goods and services associated with environmental crimes, drugs and people. Conflict and terrorism are today funded on an unprecedented scale by transnational organized crime and by illicit revenue from natural resources. While it is not possible to establish with certainty the exact value of revenues flowing to criminalized groups and non-state armed groups, it is possible to generate a rough snapshot based on the major non-state armed groups.

The proceeds of environmental crime – which encompasses not just wildlife crime, but also fuel smuggling and illicit mining of gold, diamonds and other minerals and resources – have become the largest source of income for non-state armed groups and terrorist organizations. Combined, environmental crimes, including those that involve the sale or taxation of natural resources, account for 38% of the financing of conflicts and of non-state armed groups, including terrorist groups; followed by drugs (at 28%); other forms of illegal taxation, extortion, confiscation and looting (26%); external donations (3%); and money extorted through kidnapping (3%). This evidence-based report aims to quantify how these illicit flows finance the major non-state armed groups.

Broadly speaking, environmental crimes generate the single-largest overall threat finance to conflicts today. The lack of criminal investigation, enforcement efforts or attention from the international community has enabled environmental crime to provide a ‘free ticket’ to armed criminalized groups and war profiteers, and it is gaining increasing interest as a source of financing among insurgents, terrorist groups and criminal cartels, in addition to their traditional financing sources from drug trafficking and kidnapping for ransom. The interest in natural resources is rising, especially gold and other minerals, and timber, among many armed and criminal groups, and this can be currently seen in the Great Lakes region of Africa, Colombia, Peru and Central America, and South East Asia.

The biggest source of revenue – that is, from one single illicit product category – for non-state armed groups in conflict is drugs, which, as mentioned, account for 28% of their funding. Most of this revenue comes from taxation of drugs by groups such as FARC and the Taliban. Illegally procured oil, gas, gasoline and diesel provides 20% of their income (this was the predominant source of financing for Islamic State in 2014 and 2015). Illegal income from oil is also crucial for organizations outside of the seven main global insurgent and terrorist groups discussed in detail here, including funding organized crime in conflict zones. Gasoline and diesel smuggling is a key source of criminal networks’ financing particularly in parts of Latin America, Libya and Nigeria.

After drugs and oil, taxation and extortion, and illegal mining, follow, with both representing 17% of revenue. Then, kidnapping for ransom, and external funding and donations each represent 3%. Charcoal and antiquities constitute 1% each, but these categories feature more predominantly as financial sources in particular regions, especially charcoal. Combined, these illicit flows directly fund an estimated 96 900 full-time fighters, and an unknown number of part-timers, associated with the seven most notable non-state insurgent and terrorist groups, plus the multitude of non-state armed groups active in north-eastern DRC.

Recent surveys by INTERPOL of member countries showed over 84% reported convergence of environmental crime with other forms of serious crime. Similarly, EUROPOL reported in 2017 that 45% of criminal groups in Europe were involved in several crime types – a sharp increase against the 2013 figure. Some 40 000 members of the Taliban totalled an estimated annual income of US$75–95 million from taxation – particularly of drugs, land and agricultural produce – and from donations from abroad. In mid-2017, Islamic State made an estimated US$10 million a month. Today, with dramatic losses of territory, Islamic State probably has at their disposal no more than a quarter of this. This comes largely from confiscations and illegal taxation. In all likelihood, they also have considerable reserves, of an unknown size. This figure is 98% down from their high of US$549–1 693 million in 2014. The merged al-Qaeda groups Hay’at Tahrir al-Sham (HTS) in Syria and Jama’at Nasr al-Islam wal Muslimin (JNIM) in the Sahel make an estimated US$18–35 million and US$5–35 million, respectively, from illegal taxation, donations, kidnapping for ransom, extortion, smuggling of counterfeit cigarettes, drugs and illegal taxation.

Al-Shabaab receives an estimated US$20 million, half from the illicit charcoal trade and the rest from other forms of taxation, while Boko Haram made an estimated US$5–10 million mainly from taxation, bank robberies, donations from other terrorist groups and kidnapping for ransom. Over 8 000 rebels inside the DRC make at least US$13 million a year from the exploitation and taxation of natural resources – and this sum is a small portion of the total estimated value attributed to illegally exploiting resources in the eastern DRC, which has been put at over US$770 million a year.
The smuggling and facilitation of migrants along the trans-Saharan routes have evolved into a highly lucrative industry for armed groups, with an estimated annual revenue of US$450–765 million (of which US$89–236 million is accounted for within Libya alone). Organized criminals use smuggling networks that also increasingly enable foreign fighters to move across borders to safe havens, and to stockpile or ship resources by means of formal and informal networks of financial flows. Over 2 600 unaccounted-for (predominantly Islamic State) foreign fighters have left Syria and Iraq, an unknown number of them via Libya, using these illicit smuggling networks, and they use them to get access to forged papers, as well as routes to safe havens.

Collectively, for the seven main extremist groups of insurgents and terrorists (referred to above) – al-Shabaab, Boko Haram, FARC, HTS, JNIM, Islamic State and the Taliban, plus the DRC fighters, the combined funding totals about US$1–1.39 billion a year. Taxation of natural resources and drugs is the most significant, readily available and accessible source of income, ranging from taxation of vehicles at checkpoints, agricultural produce, protection money targeting commercial activity to religious taxes.

The 96 900 fighters who make up the seven extremist groups (and the DRC combatants) earn an average of US$12 342 a year each. Although this is well above a typical combatant’s ‘salary’, which can be as low as US$100 a month, this amount also includes the funding for their campaigns, the cost of weapons, logistics, bribes and operations, and expenses for governance provision. In some cases, such as the Taliban and FARC, and most likely Islamic State too, a large amount is saved for future governance efforts.

Besides groups that are designated as terrorist organizations, and including regular organized-crime groups in and around conflict, the scale of criminal economies is in the US$24–39 billion range (with profits far lower). This indicates that threat finance revenue to terrorism and major insurgencies represents about 4% of the total illicit finance to organized crime in or near conflict.

This means that transnational organized-criminal groups targeting primarily natural resources and environmental crimes, in or near conflicts, get by far the largest slice of their revenue in conflict zones, often associated with corruption, and powerful political and military elites.

The costs to the natural and human environment, and to peace, sustainable development and security are severe, including development prospects for nearly two billion people, 535 million of whom are children, and causing forcible displacement of 65 million people, and with an estimated 127 000 people killed in conflicts (the figure is from 2017). Fragility, conflict and violence are critical development challenges that threaten efforts to end extreme poverty. The proportion of the extreme poor living in conflict-affected countries has been projected to rise to more than 60% by 2030. By comparison, the percentage of people living on only US$1.9 a day globally has dropped from 44% in 1980 to 9.6% in 2015. Conflicts also drive 80% of all humanitarian needs, while they reduce gross domestic product (GDP) growth by two percentage points per year, on average, according to the World Bank.

Environmental crimes and associated transnational organized crime, which are often deeply embedded in state and non-state armed forces and the political elite, are therefore directly stimulated by continued or renewed conflict in many of the world’s most deadly contexts. Conflicts, and the resultant severe impact of lost development on the lives of a rising number of people, are likely to continue to increase until the role of the profiteers of organized crime in conflicts is addressed as a primary threat to peace, development and stability.

Environmental crimes have grown to the point where they account for 64% of illicit and organized-crime finance, or between US$22.8 billion and US$34 billion of the criminalized economy in fragile states in or near conflict areas. This threat must be addressed in peacekeeping and in enforcement and prevention, otherwise it will continue to grow and undermine development and security in decades to come.

Powerful elites engaged in organized crime gain from sustaining conflicts and fund non-state armed groups, which undermines the rule of law and good governance. This, in turn, enables criminal elites to benefit from instability, violence and lack of enforcement and, hence, their subsequent exploitation of illicit flows during conflict.

Strengthening information and analysis is essential to be able to prevent, disrupt and defeat both violent armed groups and the organized-criminal actors that provide these armed groups (and themselves) with an environment of impunity and instability.

In order to ensure early prevention and intervention in conflict, it is therefore imperative to forcefully address the role of organized crime and illicit flows in benefiting non-state armed groups and the powerful elites engaged in criminal activity.
The rising transnational environmental crime smuggling networks


RHPTO 2016
The rising transnational environmental crime smuggling networks.

PERU - Aerial view of an illegal gold mining area in La Pampa, Madre de Dios, southern Peruvian jungle on July 14, 2015. In an unprecedented operation in mid-July, Peru managed to eliminate 55 camps for illegal gold mining in the area of La Pampa, in the region of Madre de Dios, where 60,000 hectares of forest have been destroyed by this activity.
© AFP PHOTO / Ernesto Benavides
02 Environmental crime
The largest conflict finance sector
BURKINA FASO, Poura - January 3, 2008: To the goldmine of Poura the gold diggers come from everywhere in the hope of finding a little gold. Women, children and men of all ages are here in a universe of dust under a blazing sun. In Burkina Faso, illicit gold mining is for some the only activity that keeps them out of desperate poverty.

© iStock / Gilles Paire
The term ‘environmental crime’ is often understood to collectively describe illegal activities harming the environment and aimed at benefiting certain individuals, groups or companies through the exploitation and theft of, or trade in natural resources. The term encompasses serious crimes and transnational organized crime, often linked to other forms of crime, tax fraud, corruption and threat finance. In all these manifestations, environmental crime comes with massive costs to countries worldwide.\footnote{16}

- Environmental crime is now estimated to be equivalent to US$110–281 billion annually (2018 figures), an approximately 14\% (9\%–20\%) increase from the previous official estimate in 2016 and 44\% higher (32\%–57\%) than the first estimate in 2014, disregarding inflation. This is mainly a result of improved estimates and criminal intelligence, alongside the addition of illicit oil (which contributes about 9\% of the total value).

- Environmental crime now slightly more lucrative than human trafficking, and is the third largest criminal sector worldwide, moving up from the 4th largest, after drugs, counterfeit goods and trafficking.

- The cost impact of environmental crime is rising by 5\% to 7\% annually, or two to three times the rate of the global economy.

- Forestry crimes including illegal logging, valued at US$51–152 billion annually.


- Illegal mining: estimated at US$12–48 billion.

- The illegal wildlife trade: estimated at US$7–23 billion.

- Forestry crimes, including corporate crimes and illegal logging, account for an estimated US$51–152 billion.

\begin{figure}
\centering
\includegraphics[width=\textwidth]{environmental-crime-diagram}
\caption{Major environmental crimes, drives and impacts}
\end{figure}

\begin{table}
\centering
\begin{tabular}{|c|c|c|}
\hline
Crime & Minimum & Maximum \tabularnewline
\hline
Illegal logging & US$51 & US$152 \tabularnewline
\hline
Illegal fisheries & US$11 & US$24 \tabularnewline
\hline
Illegal mining & US$12 & US$48 \tabularnewline
\hline
Illegal wildlife trade & US$7 & US$23 \tabularnewline
\hline
\end{tabular}
\caption{Annual revenue losses of environmental crimes}
\end{table}

At stake:

- Livelihoods
- Species extinction
- National economies
- Ecosystem depletion
- Climate change emissions
- Human health
- Local communities

RHIPTO 2018

Of incomes that finance the largest armed groups derive from environmental crimes 38\%
SUDAN - Men working in gold mine, north Sudan, 1 December 2007. © iStock / Maciek67
• Illegal trafficking and dumping of toxic and

• Illegal exploitation and theft of oil – previously
unaccounted for due to lack of information –
adds an additional minimum US$19–23 billion
to the total (or 9% of the total environmental
crime figure).

• Loss of government revenue through lost tax
income due to criminal exploitation is equiva-
 lent to at least US$11–28 billion annually.

• Environmental crime is increasingly converg-
ing with other forms of organized crime, such
as drugs, cybercrimes, corruption, tax fraud
and money laundering.

The wide range in the values given above reflects
the lack of statistics in this field, but these fig-
ures are based on best sources and criminal in-
telligence from INTERPOL and other sources.
The cost impact makes environmental crime
the third largest crime category in the world
after drug trafficking (US$344 billion), counterfeit
crimes (US$288 billion), with human trafficking
(US$157 billion) – fourth by some estimates.

Unlike any other known form of crime, environ-
mental crime is aggravated by its impact on the
environment and therefore its cost to future gener-
ations. Deforestation, dumping of chemicals and
illegal fisheries (and others) damage the environ-
ment, causing loss of clean air and water, exacer-
bating extreme weather conditions, reducing food
security and thereby threatening overall health
and societal wellbeing. These crimes also deprive
governments of much-needed revenue and under-
mine legal businesses.
Turkish drivers with hundreds of tanker trucks lining up on their way to get oil from Iraq at Turkey's Habur border point in this Aug. 16, 2002 file photo. Although U.N sanctions limit Iraq's oil exports, more than 80,000 barrels of Iraqi crude are smuggled into Turkey each day.

© AP Photo / Burhan Ozbilici
03 Illegal trade & exploitation of fuel
Oil and charcoal
IRAQ – October 2015: Smoke rises as Iraqi security forces and allied Popular Mobilization Forces shell Islamic State group positions at an oil field outside Beiji, some 250 kilometers (155 miles) north of Baghdad, Iraq. Ramadi and the city of Beiji, home to Iraq’s largest oil refinery.
© AP Photo
Illegal trade and exploitation of fuel: Oil and charcoal

Illegally procured oil, gas, gasoline and diesel sales account for 20% of the income of non-state armed groups in conflict, and this segment was the predominant source of income for Islamic State in 2014 and 2015. Oil also features as a source of income for rebel groups and organized crime — derived from gasoline and diesel smuggling in parts of Latin America, Libya and Nigeria. Al-Shabaab makes an estimated US$20 million, where half is from the illicit charcoal trade and the rest on other taxation.

Niger Delta

UNODC estimated in 2009 that 55 million barrels of oil (145 000 barrels per day) are smuggled (or ‘bunkered’) out of the Niger Delta each year. At an estimated price of US$20 per barrel, this comes to about US$1.1 billion. In a more recent Chatham House report, government loss from illicit trade in hydrocarbons in Nigeria amounted to between US$3 billion and 8 billion. That study estimates a loss of 100 000 bpd in the first quarter of 2013.

Nigeria’s 7 000 kilometres of oil pipeline (at least) are difficult to secure. Sabotage was responsible on average for 44% of losses that occurred between 2004 and 2011. When it comes to oil theft, the typical methods are hot tapping (creating a branch connection, for example under water) and cold tapping (where bombing a pipeline is used to install a spur pipeline). Barges then transport the stolen oil downriver to tankers in the Gulf of Guinea; some of it is transported by trucks in barrels. Another way in which oil is stolen is through corruption. Meanwhile, non-state armed groups, like the Movement for the Emancipation of the Niger Delta, and the Niger Delta Avengers, benefit from the proceeds of oil thefts.

Mexico

Some 23 500 bpd of crude and refined oil are stolen through tapping of the state-owned Petroleos Mexicanos (Pemex) pipelines. The cost has been put by the Mexican government at US$1.17 billion (March 2016 figure). Much of this is caused by criminal collusion conducted by Pemex personnel, for example identifying tapping valves, and helping to install sophisticated equipment for tapping. In addition, there is theft, through coercion or stealth and ‘kidnappings’ trucks where the oil is ransomed. Among the perpetrators, the Zetas cartel (which has captured 38.9% or US$372 million of the illegal market) is the dominant player, followed by the Jalisco New Generation Cartel (21.4% market share, or US$212 million) and the Gulf Cartel, with 16.3%, or US$158 million.

Ghana experiences a wide variety of illicit hydrocarbon activities. These include transshipments via the offshore Saltpond Oil Field (which sells 100 000 barrels per year, but 470 000 barrels were shipped in 2014); oil tanker hijackings; tapping and siphoning of pipelines; and fuel smuggling caused by a 50% subsidy on oil price at a rate of US$13 million per year, according to official numbers.

In Morocco illicit hydrocarbon activity is centred on illegal supply chains and smuggling. Stolen crude oil from Nigeria is laundered through Ghana’s Saltpond Field, and sold on to the SAMIR field in Morocco, which exports it. Oil price subsidies in Algeria also cause smuggling overland — according to one report by official sources, smuggling accounted for 1.5 billion litres (9.4 million barrels) in 2013, with losses of US$2 billion per year. The estimated amount equates to an oil price of over US$200 per barrel, which is halved here to reach an estimated total value of US$1 billion.
In the border area between Iran and Pakistan, diesel smuggling has taken over from drug smuggling for some locals. The low Iranian oil price (approximately 15 US cents per litre, compared with US$1.06 in America) leads to smuggling volumes of 100 to 130 tankers a day, each carrying 25,000 to 40,000 litres. Smuggling activity has a revenue potential of between US$0.83 billion and 1.73 billion a year.26

Angola’s state-owned oil company, Sonangol, has a production rate of about 1.63 million bpd in 2018, making Angola as the second largest producer of crude oil in Africa. The company’s official net profit in 2017 was US$224 million,27 and yet its profit margin was just 0.7%.28 Human Rights Watch and The International Monetary Fund have said this is because tens of billions of dollars are missing from official accounting figures.29 A conservative estimate of 5% to 15% of total production is lost to corruption, which equates to between US$4.8 billion and US$14.5 billion a year.30

About US$750 million to US$1 billion worth of Libyan oil is smuggled to Malta each year, according to the Daphne Project and the Libyan National Oil Corporation.31 The oil is transferred from ship to ship about 12 miles off the Malta coast.32

Because of its strategic location, Turkey is a major node in many illicit trafficking flows, not least oil. Smuggling is the major issue in Turkey, much it the result of price disparities. At their height, Islamic State earned up to US$1.4 billion a year from sales of oil and gas – a large proportion of it to Turkey. While oil smuggling across the border from Syria has existed for some time, it increased by 300% when the Syrian civil war started.33 According to official numbers from the energy ministry, smuggling accounts for up to 2.7 million tonnes a year, at a tax loss of US$2.5 billion a year.34

Hydrocarbon crime is also widespread in a number of other countries, although reliable estimates of its scale are missing from the data. These include Uganda (principally the result of smuggling, by former DRC rebels called the Opec Boys); Mozambique (corruption); Thailand (smuggling from Malaysia caused by subsidized prices there); Azerbaijan (smuggling from neighbouring countries).35
IRAQ – A Sunni gunman stands at a checkpoint on the road near Biji city, northern Iraq, June 2014.
© EAP / STR
Taxation and extortion

Islamic State made most of their income at the group’s peak in 2013 and 2014 from oil, but were forced into using more coercive fundraising methods when they came under pressure two years later. They are one of the terrorist groups with the largest financial reserves, likely to be well over a hundred million US dollars. And the group has the ability and intent to recruit low-level individual terrorists while exercising increasing ability to undertake highly dangerous and more sophisticated attacks, like the one in November 2017 in Egypt that killed 305, including in Western countries. The group’s finances have plummeted since a high in 2014:

- **September 2014**: US$1.1 billion with US$436 million in expenses
- **February 2015**: US$670 million with US$435 million in expenses
- **February 2016**: US$285 million with US$222 million in expenses
- **June 2017**: US$130 million with US$117 million in expenses
- **January 2018**: US$6–24 million in expenses, half locally raised, half from reserves

In 2017 and 2018, Islamic State incurred very heavy financial and military losses, with a 95% drop in income. However, they are likely to retain in excess of US$100 to US$200 million in reserves and are still independent of expat finance. The group have become so weakened that they are not in a position to conduct their earlier robust and systematic funding campaign. However, a lot of their wealth is likely laundered, for example through investment in real estate. And their ‘brand name’ is still strong, not least because of their credible threats of resurgence as well as their reputation for use of extreme violence, so these investments remain relatively secure. In the meantime, they will resort to local taxation and extortion, as well as confiscation, as forms of income, which is what most insurgent groups turn to when under pressure, and which Islamic State has already shown a strong tendency for.

Of incomes funding the largest armed groups derive from illicit taxation and extortion, excluding taxation of drugs.

**Smuggling of diesel and gasoline to mafia-run militant groups**

Various criminalized militia groups export diesel out of Libya. In October 2017, Italian police disrupted a group smuggling diesel through an Italian mafia network. The mafia were engaged in a Libyan fuel-smuggling ring in which at least €30 million (US$35 million) of diesel was sold in gas stations in Italy and Europe. A Libyan group used small boats to steal fuel from Libya’s National Oil Corporation refinery in Zawiya, a port city west of Tripoli. The fuel was then transferred to a larger ship off the coast of Malta and shipped to Italy.

There is a huge amount of fuel-smuggling activity between Colombia and Venezuela; Tunisia and Libya; Iran and Afghanistan; and Nigeria, Cameroon and Chad. Very often, militant groups engage in the smuggling of fuel themselves, or tax impoverished people engaged in it. The smuggling occurs at all levels, from highly organized rings using road tankers, to buried funnels cross border between Syria and Turkey, to small refineries. In some cases, small quantities are smuggled in canisters by road to individual low-level dealers or sellers.

In terms of funding, at a fairly basic subsistence minimum and with some transportation and bribe costs of US$100–200 a month for 5 000 fighters, and additional costs of maintaining the organization, hiding high-value targets, and sustaining intelligence and counter-intelligence costs of another US$200 per fighter, Islamic State would have estimated current expenses of between US$6 million and US$24 million. They are likely to be able to raise half of this, funding the balance from their reserves. In their current situation, therefore, the organization is likely to think less in terms of salaries, and more in terms of emergency burden sharing and long-term survival as a group.

<table>
<thead>
<tr>
<th>Source of Income</th>
<th>2014</th>
<th>2015</th>
<th>2016</th>
<th>2017</th>
</tr>
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<tbody>
<tr>
<td>Oil and gas</td>
<td>150-450 / <strong>400-1,400</strong></td>
<td>435-550 / <strong>84-244</strong></td>
<td>200-250 / <strong>48-95</strong></td>
<td>Lacking / <strong>10-17</strong></td>
</tr>
<tr>
<td>Taxes and fees</td>
<td>300-400 / <strong>26-170</strong></td>
<td>400-800 / <strong>77-258</strong></td>
<td>200-400 / <strong>70</strong></td>
<td>Lacking / <strong>107</strong></td>
</tr>
<tr>
<td>Kidnap/ransom</td>
<td>20-40 / <strong>87</strong></td>
<td>Lacking / <strong>20</strong></td>
<td>10-30 / <strong>20</strong></td>
<td>Lacking / <strong>10</strong></td>
</tr>
<tr>
<td>Antiquities</td>
<td>Lacking / <strong>36</strong></td>
<td>Lacking / <strong>22-55</strong></td>
<td>Lacking</td>
<td>Lacking</td>
</tr>
<tr>
<td>Foreign donations</td>
<td>Unknown</td>
<td>Insignificant / <strong>40</strong></td>
<td>Insignificant</td>
<td>Insignificant</td>
</tr>
<tr>
<td>Looting / confiscations</td>
<td>500-1,000 / <strong>Included above</strong></td>
<td>200-350 / <strong>240</strong></td>
<td>110-190 / <strong>138-216</strong></td>
<td>Lacking / <strong>Included above</strong></td>
</tr>
<tr>
<td>Sum income all sources</td>
<td>970-1,890 / <strong>549-1,693</strong></td>
<td>1,035-1,650 / <strong>523-815</strong></td>
<td>520-870 / <strong>262-309</strong></td>
<td>Lacking / <strong>127-134</strong></td>
</tr>
<tr>
<td>Expenses (salaries, arms, transport, social services)</td>
<td>285-586</td>
<td>285-586</td>
<td>221</td>
<td>117</td>
</tr>
<tr>
<td>Net income</td>
<td>259-1,107</td>
<td>229-238</td>
<td>40-87</td>
<td>10-17</td>
</tr>
</tbody>
</table>

Sources: International Centre for the Study of Radicalisation and Political Violence, King’s College, 2017 and RHIPTO Norwegian Center for Global Analysis 2014-2017 (in bold) 38, 39, 40, 41. The numbers are generally roughly compatible with estimates from captured Islamic State accounts from Deir-ez-Zor Governorate from January 2015. 42, 43

SYRIA – Islamic State in Palmyra, Syria. © Unknown photographer.
Syrian and Iraqi smuggling routes from and into Turkey

ISIS territory control (As of April 2017)
- Actually controlled
- Gained in 2017
- Lost in 2017
- Lost in 2016
- Lost in 2015

Old smuggling scheme
- Route active in 2016 and now reduced or closed
- Border crossing point active in 2016 and now closed

Actual smuggling routes
- IS fighters
- Antiquities
- Oil
- Border crossing point active in 2017

Oil facilities
- Oil/gas field
- Mobile refinery
- Concentration of oil tanker trucks

Sources: Institute for the Study of War, Financial Times, Norwegian Center for Global Analysis, Ministry of Defence of the Russian Federation

RHFPT - 2017
SOMALIA – New recruits belonging to Somalia’s al-Qaeda-linked al-Shabab rebel group march during a passing out parade at a military training base in Afgoye, west of the capital, Mogadishu February 17, 2011.

© REUTERS / Feisal Omar
HAITI – Charcoal sellers wait for customers at the Titanyen Market outside of Port-au-Prince, Haiti, on March 20, 2018. This market is filled with sellers and buyers on Tuesday and Friday. © AFP PHOTO / Hector Retamal
Charcoal – Africa’s black gold

In Africa, 90% of wood consumed is used for fuel and in the form of charcoal (the regional range is 49–96%). The charcoal production was 32.4 million tonnes in 2016, with a market value of approximately US$9.7–25.9 billion. Illicit taxing of charcoal, commonly up to 30% of the product’s value, is carried out on a regular basis by organized-criminal groups, militias and terrorist groups across Africa. Given an official tax rate of 5% to 10%, the annual revenue lost to the fiscus from not taxing the charcoal trade is between US$0.5 and US$2.6 billion to African countries.

Militias in the DRC are estimated to make between US$14 million and US$50 million annually on illicit taxes. Al-Shabaab’s primary income is from informal taxation at roadblock checkpoints and ports. In one case, in Somalia’s Badhaadhe District, from 2012, they were able to make up to US$50 000 a day from one particularly lucrative checkpoint by taxing trucks transporting charcoal. Trading in charcoal and taxing ports generated at their highest point an estimated annual total of US$38–56 million for al-Shabaab in 2012/13. The overall value of the illicit charcoal export trade from Somalia has been estimated at US$360–384 million a year in 2012, dropping to US$120 million by 2017.

Increasingly, transnational criminal networks are taking control of the Somali charcoal trade. The supply side in Kismayo, Somalia, and the receiving side in Dubai are connected through the so-called All Star Group of companies, comprising suppliers, traffickers and investors in both locations. According to an informant to the Group of Experts (who subsequently received death threats from al-Shabaab’s Amniyat unit), the All Star Group is alleged to cooperate with both the president of Somalia’s Jubba interim administration and al-Shabaab over profit sharing in the charcoal trade and export terms.

Al-Shabaab: The rise and fall and rise of charcoal income

As of 2018, al-Shabaab had a fighting force of approximately 5 000. By comparison, there are about 200 Islamic State fighters in Somalia. Al-Shabaab have been linked to over 4 500 fatalities in 2017. The largest attack to date happened in October 2017, when more than 300 were killed by a truck bomb in Mogadishu. Their support zones, as well as striking ranges, are spread throughout the southern and central part of the country, in both inland and coastal areas.

Al-Shabaab’s primary income is from charcoal. In 2011 and 2012, the group were taxing the charcoal trade out of six ports, the biggest being Kismayo and Barawe. They took money from all those involved in the trade: producers, workers, transporters, buyers, operators of small boats and port workers. These were all taxed at 2.5%, which is equivalent to the religious tax zakat. In addition, dhows were charged docking fees and exporters an export tax. By November 2012, the illegal charcoal export trade was generating for al-Shabaab an income from illicit taxes of between US$38 million and US$56 million, from 9 to 10 million sacks of exported charcoal weighing 25 to 30 kg. The charcoal was shipped to the United Arab Emirates at a rate of 500 000 to 600 000 sacks a month, and 200 000 to 300 000 sacks a month to Saudi Arabia.

Although they were the major player in this illicit market, not all of the income from the trade benefited al-Shabaab. Later they were squeezed out in large measure by the Kenya Defence Forces (KDF). Al-Shabaab were also making money from a series of other taxation activities, including taxing sugar imports into Kismayo, although this generated only a modest US$400 000 to US$800 000 a year. At that time, one exceptionally profitable checkpoint, at Buulo Xaaji, generated the group a daily income of US$35 000 (US$12.8 million a year) from taxing 90 to 100 trucks a day at a rate of US$250 to US$500 per vehicle, depending on its size.

By 2014, the charcoal price had increased, and al-Shabaab had honed their taxation systems, generating about US$7.5–15 million from checkpoints alone. In addition, it took a 30% to 40% share of all charcoal exports out of Kismayo, where the export tax had risen to US$3.75 per bag – with at least 6.57 million bags exported from Kismayo and Barawe, al-Shabaab generated at least US$8.2 million to US$9.8 million – this from illicit export taxes alone. Meanwhile, that year, it also accrued income from numerous other inland forms of taxation – taxes on production, work, transport, buying and loading. With vehicle checkpoints and export tax from charcoal generating US$20 million, al-Shabaab was probably earning in 2014 close to the same as during its financially most rewarding year, 2012. But that would soon change.

From late 2015, al-Shabaab shifted almost entirely away from the charcoal trade, even to the point of enforcing their own ban, and attacking those involved in the trade within their own territory. This happened in conjunction with their losing control over Kismayo Port in September 2012 (although they retained a share of the trade for another couple of years) and Barawe Port in October 2014; a breakdown in revenue sharing with Interim Jubba Administration President Ahmed Mohamed Islam; and the KDF increasing their share of the trade by charging export tax of US$2 per bag at Kismayo and establishing an AMISOM base at the Buur Gaabo charcoal stockpile. At the same time, the international enforcement of the export ban has become more effective.

Following their losses in charcoal revenue, al-Shabaab have diversified their income streams by doubling down on taxation across all aspects of private and commercial life in an effort to compensate. They tax everything: drinking water at wells, intensified zakat collection, extortion of businesses in person or by text messages, agriculture and
The illegal charcoal trade controlled by al-Shabaab
SOMALIA – Kenya Defence Forces and Somali Transitional Federal Government (TFG) soldiers take part in a joint patrol at a charcoal depository formerly under the control of al-Shabaab militants in Burgabo, south of Kismayu in Somalia in this in December 2011. Kenyan forces fighting militants in Somalia are taking cuts from charcoal and sugar smuggling, earning themselves about $50 million a year and boosting an illegal trade that helps fund the Islamists, a rights group said on November 12, 2015.

© REUTERS / Noor Khamisli
livestock taxation, and they train young cadres as tax collectors, identifiable by their uniforms. The group has also intensified the taxation of distribution of development aid as well as commerce, using checkpoints, which has driven up local prices.

In late 2016 to early 2017, however, al-Shabaab resurrected their taxation of the charcoal trade, using checkpoints on the road to Buur Gaabo and Kismayo, as well as still controlling the main production areas in Lower and Middle Juba. The charcoal trade in general, and therefore al-Shabaab’s tax revenue, is smaller however, as is reflected in the lower tax of US$2.5 per bag, down from US$3 in 2016. The group’s estimated revenue from charcoal is currently about US$10 million a year. The shift back to illicit charcoal taxation was possibly due to their having found that alternative income sources proved both more resource intensive to collect and less fruitful.

In addition to their charcoal income, the group probably makes another US$10 million from other forms of taxation. For example, from a single checkpoint at Leego (which generates US$1.8 million), livestock markets at Safarnooley and Wajid (US$1.6 million and US$0.9 million, respectively), and protection money from three companies, al-Shabaab make US$4.3 million. This would seem to correlate well with about 4,500 fighters earning about US$100 a month, and perhaps 500 Amniyat and senior leaders earning US$500 a month, giving a total of US$8.4 million in salary expenses, and about US$11.6 million in other costs, including transportation, ammunition, food, training camps, religious education and bribes.

Widely cited rumours that al-Shabaab had major sources of income from ivory have been refuted. Similar rumours about their involvement in the East African heroin route trade have not been refuted, but the Group of Experts had, as of 2015, not found any evidence for it. Al-Shabaab remain a threat to stability, albeit mainly in Somalia and neighbouring Kenya, including their retaliatory responses to temporary territorial losses and disputes over their share of the charcoal trade, which impedes their political influence over clan leaders in Somalia.

For African countries experiencing ongoing conflicts, including Mali, Central African Republic, DRC, Sudan and Somalia, a conservative estimate is that, in total, the militia and terrorist groups in those countries may gain US$111–289 million annually, depending upon prices, from their involvement in, and taxing of, the illegal or unregulated charcoal trade.

With current trends in urbanization and a projected population increase of another 1.1 billion people in sub-Saharan Africa by 2050, the demand for charcoal is expected to at least triple over the next three decades. This will have severe impacts, including large-scale deforestation, pollution and subsequent health problems in slum areas, especially for women. The increased demand for charcoal will also rapidly accelerate emissions from both forest loss and emissions of short-lived climate pollutants in the form of black carbon. It is estimated that there are over 1,900 charcoal dealers in Africa alone, at least 300 of which export minimum orders of 10 to 20 tonnes of charcoal per shipment. Their minimum daily orders exceed the official total annual exports for some countries. For East, Central and West Africa, the net profits, combined, from trading and taxing unregulated, illicit or illegal charcoal are estimated at between US$2.9 and US$7.8 billion. When one compares this figure with the street value heroin and cocaine in the region, which is US$2.65 billion, the scale of the illicit charcoal market becomes starkly apparent.
SOMALIA – The Somali National Army patrol the area for extremist group Al-Shabaab on 22 March 2014 © United Nations Photo / Flickr
The impacts of unsustainable charcoal production

Estimated annual deforestation rates caused by charcoal production
Square kilometres, 2009

Charcoal production
Million tonnes, 2009

Greenhouse gas emissions caused by charcoal production
Million tonnes, 2009


Bags of charcoal line a road in Africa. © SHUTTERSTOCK / Peter Wollinga
Wood charcoal production in Africa

Charcoal officially produced by country
Tonnes, 2012

Total charcoal production trend in Africa
Million tonnes

Source: FAOSTAT, accessed May 2014
The charcoal supply chain

Price of a bag of charcoal at retail market
Percentage of the total selling price, Malawi

Sources: Kambewa, P., et al., Charcoal: the reality, 2007
SOMALIA – Naasa Hablood mountain in Somaliland.
© iStock / Muendo
SOMALIA – Boys pan for gold at a riverside at Iga Barriere, 25 km (15 miles) from Bunia, in the resource-rich Ituri region of eastern Congo February 16, 2009. © Reuters / Finbarr O'Reilly
04 Illegal mining in contexts of conflict
Illegal mining in contexts of conflict

The Great Lakes: Gold and minerals in the world’s most violent organized-crime conflict

The illicit exploitation of natural resources in eastern DRC is valued at over US$1.25 billion a year; this falls to between US$722 and US$862 million if diamonds are excluded from the picture (which may also be sourced outside eastern DRC). Of this figure, an estimated 10% to 30% (i.e. US$72 million–426 million per annum) goes into the coffers of transnational organized-criminal groups.

The annual net profits to organized crime in the eastern DRC – and these are conservative estimates – derive from:

1. Gold (US$40–120 million)
2. Timber (US$16–48 million)
3. Charcoal (US$12–35 million)
4. 3T minerals (US$7.5–22.6 million)
5. Diamonds sourced mainly from outside the conflict zone (US$16–48 million)
6. Other, including wildlife (ivory and fisheries), local taxation schemes, cannabis and other resources (US$14.3–28 million).

Around 98% of the net profits from illegal exploitation of natural resources, particularly gold, charcoal and timber, go to transnational organized-criminal networks operating in and outside of the DRC. The significance of charcoal as a conflict resource is likely to increase given increasing demand and a growing regional energy deficit (see Chapter 3 for more on charcoal).

Armed groups in eastern DRC retain around 2% (equivalent to US$13.2 million per annum) of the net profits from illegal smuggling. This income represents the basic subsistence cost for maintaining at least 8,000 armed fighters a year, and enables defeated or disarmed groups to continually resurface and destabilize the region. Revenue from illegal natural resources exploitation finances a high number of well over 25 armed groups (up to 49, according to some estimates) continuing to destabilize eastern DRC. While the armed groups have their own proven survival strategies, transnational organized-criminal networks might try to ‘divide and rule’ armed groups in eastern DRC to prevent any single armed group from achieving a dominant role and potentially interfering with illegal exploitation rackets run by transnational criminal networks.
Natural resources and armed groups in the Kivu provinces, DR Congo

Selected armed groups count

<table>
<thead>
<tr>
<th>Armed groups</th>
<th>Count</th>
</tr>
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<tr>
<td>FDLR</td>
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<td>CNDP</td>
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<td>40</td>
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</tbody>
</table>

Source: Norwegian Center For Global Analysis, 2015; UNODC, 2011; based on a map from Christoph Vogel, 2014.
Resource smuggling and armed group control in eastern DRC

Artisanal mines
- Gold
- Diamonds
- Cassiterite
- Coltan
- Others

Armed group control
- Congolese Army (FARDC)
- Rebel groups

Smuggling
- Charcoal, wood and minerals
- Gold smuggling hub
- Main border crossing point

DRC – Chai, North Kivu, March 29, 2014:
FDLR rebel soldiers reloading ammo before patrols start in Chai, North Kivu, DR Congo.
© iStock / Jon Brown
CENTRAL AFRICAN REPUBLIC – Prospectors work at an open-pit at the Ndassima gold mine, near Djoubissi north of Bambani May 9, 2014.

© Reuters / Siegfried Modola
Armed groups, border-corridor movement and clashes in CAR
October 2017

Livestock movement
Entry point
Con/flict, 2016

Transhumance
Livestock movement
Entry point
Conflict, 2016

Density of livestock
High
Medium
Low

MINUSCA army presence
Republic of Congo
Cameroon
Morocco
Bangladesh
Pakistan
Mauritania
Zambia
Burundi

Sources: Norwegian Center for Global Analyses, 2017; IPIS, 2017
DRC – U.N. peacekeepers drive their tank as they patrol past the deserted Kibati village near Goma in the eastern Democratic Republic of Congo, August 7, 2013.

© Reuters / Thomas Mukoya
Illegal mining of gold and coltan in Latin America by FARC and drug cartels

Illegal mining, especially of gold but also other minerals, is gaining increasing interest in Latin America among non-state armed groups, as well as traditional drug cartels, which are finding safer, alternative income streams through taxation or illegal logging and mining in the Peruvian, Brazilian and Colombian parts of the Amazon, and in the mountainous areas of Colombia. Similar trends are observed in parts of Central America. Like in Africa, natural resources, such as gold and timber, are easy to launder and sell in Latin America, with virtually no interventions from law-enforcement agencies, except for in Brazil. Hence, the risk, compared to that of the drug trade, is minimal.

Most of the world’s tantalum comes from Brazil and Australia (it is also mined in China, the DRC, Ethiopia, Mozambique, Nigeria, Russia and Rwanda). Tantalum is also produced in Thailand and Malaysia as a by-product of tin mining and smelting. Tantalum raw materials occur in many other countries, such as Canada, Colombia, Egypt, Namibia, South Africa, Tanzania, Venezuela and Zimbabwe. The level of production in these countries varies from exploration deposits to active artisanal mining and inactive major mines. Tantalum is a notable and well-documented threat finance source to rebel groups and organized crime networks.

Coltan, a contraction used for columbo-tantalites, is refined to produce tantalum. Members of FARC, who have been observed in the Colombian Amazon, are involved in taxing coltan ore being transported through the area. This illicit tax has been valued at about US$7 per kilogram of coltan ore. Paramilitaries, it has been alleged, were running the business in collusion with the army and police. Sometimes taxes have paid with crack cocaine, which is possible given the area’s proximity to drug-producing areas.

Coltan ore has been priced at an average of US$180 to US$200 per kilogram (in the period 2011–2015). Its commercial value is calculated on the tantalum oxide content: a concentrate may contain between 10% and 30% tantalum oxide. This corresponds with a front-line ore price of US$27 to US$60 per kilogram (possibly much lower) depending on purity and distance from the mine, suggesting a vehicle checkpoint or river tax of between 11% and 27%.

Illegal coltan mining, alongside gold mining, has been allegedly tied to some cartels, possibly drug cartels such as the Sinaloa cartel and the Cifuentes Villa family, but this anecdotal information has not been verified. Much of the coltan is transported through Brazil and exported, and can be bought online, such as on the internet platform Ali Baba.
DRC – The forest in the Itombwe Reserve, South Kivu.
© Riccardo Pravettoni
Illegal logging
The largest, least risky and most profitable illicit environmental industry
MADAGASCAR – Toamasina, April 12, 2014: Loading of rosewood on trucks at the port of Toamasina (Tamatave).
© iStock / Pierre-Yves Babelon
Illegal logging: The largest, least risky and most profitable illicit environmental industry

The UN Environment Programme and INTERPOL estimate that 62% of all suspected illegal tropical wood entering the US and 86% entering the EU arrives in the form of paper, pulp or wood chips, and not as roundwood, sawnwood or furniture products, which have tended to receive the most attention in the past. The more than 30% lower market prices fetched by illegal tropical wood in recent years – of which INTERPOL has estimated that 50% to 90% of the wood felled in tropical countries is traded illegally – has probably contributed to the downfall of many European forestry and paper industries, and the loss of over 270 000 jobs in the industry from 2000 to 2010. Overall, the European forestry sector (which employed over 3.3 million people in 2016) has shed about 560 000 jobs since 2000, equivalent to 17% of the workforce.

Across the EU-28, manufacturing employment levels fell by 16.8% during the 2000–2015 period, while the largest losses were recorded in furniture manufacturing (which saw 29% lower employment). Pulp, paper and paper products lost 22.2%, while employment in the manufacturing of wood products dropped by 26.5%. Asian paper and pulp companies now account for nearly half of the global market share.
BRAZIL – Forest on Awá land is being illegally cleared by settlers.
© Survival / Fiona Watson
Illegal logging and log laundering

- Cutting:
  - Illegal cutting
  - Protection area
  - Concession
  - Cutting beyond concessions
  - Cutting wider along road corridors
- Transport:
  - Hacking to obtain false road transport or logging permits
  - Cutting down in and around palm oil plantations
  - Getting "permits" through bribes
- Milling:
  - Mixing illegal timber with legal local timber
  - Underreporting actual capacity and production in mills with a modest legal production
- Exporting:
  - Processing roundwood into chips or paper before exporting, making traceability very difficult or impossible
  - Getting "cross border permits" through bribes
  - Re-importing
  - Smuggling

Illegal operation
Laundering operation
Legal operation
Rhinos grazing.
© iStock / 2630ben
06 Wildlife crime & waste
Wildlife crime and waste

Insignificant as conflict finance except for marginalized groups

Elephants and rhinos

The number of elephants killed in Africa is in the range of 20,000 to 25,000 a year (2016 numbers) out of a population of 415,428 (+/- 20,111) plus a possible additional 117,000 to 135,000 elephants. The latter number is based on less certain estimates. In total, this gives a broad range of 395,000 to 570,000 elephants. For the forest elephant, the population is estimated to have declined by about 62% between 2002 and 2011.

Poached African ivory may fetch an end-user street value in Asia of an estimated US$165–188 million of raw ivory per year, and this figure does not include ivory from Asian sources.

In the case of rhinos, about 94% of the animals are poached in Zimbabwe and South Africa, which have the largest remaining rhino populations. In those countries, poaching has increased dramatically – from 13 (the number recorded in 2007) to 1,215 in 2014, declining slightly to 1,028 by 2017. Poaching of rhino horn involves organized syndicates. Rhinos have disappeared entirely from several Asian and African countries in recent years. The value of rhino horn poached in 2013 was valued in downstream markets at between US$63.8 million and US$192 million, but the value is much less at the supply end of the chain.

Wildlife and forest crime play a relatively small role in threat finance to organized crime and non-state armed groups, including terrorist groups. It is estimated that less than 1% of the overall income to non-state armed groups comes from ivory. Ivory provides a portion of the income raised by militia groups in the DRC and CAR, and is most likely a primary source of income for the Lord’s Resistance Army, which currently operates in the border triangle of South Sudan, CAR and DRC. Ivory also provides a source of income to the Sudanese Janjaweed and other horseback gangs operating across Sudan, Chad and Niger.

Given the estimated elephant populations and the number of projected elephants that are killed within the striking range of these militia groups, the annual income from ivory to militias in the whole sub-Saharan region is likely to be in the range of US$4.0 million–12.2 million.

Poaching is also a threat to Asian rhinos. Over 70% of Indian Greater One-horned rhinos were in Kaziranga National Park by 2008, with an estimated population of 2,401 in 2015. Poaching is currently a threat in Kaziranga, with 123 rhinos killed between 2006 and 2015. The poaching trend has increased dramatically: 58% of these rhinos were killed between just 2013 and 2015.

In Nepal, rhino populations diminished by 88%, to 100 animals in 1960 in just one decade as a result of poaching. A Rhinoceros Action Plan for Nepal was developed in 2017. Earlier, an intense protection scheme, including deployment of the army, the Department of National Parks and Wildlife Conservation, and the translocation of 87 rhinoceros took place between 1986 and 2003 (at an average cost of US$4,000 each).

When the war broke out in Nepal in 1996, tourism dropped by 41% in two years and rhino numbers decreased by a third in five years to a population of just 408 by 2005, as they were poached by armed groups for cash. Dedicated rangers and anti-poaching units in the Bardia and Chitwan national parks fought hard to rescue remaining rhinos at the height of the conflict. After the war, the campaign continued, this time against organized-criminal networks smuggling rhino horn to China via Pokhara and Kathmandu. As populations reached their lowest, protecting the remaining rhinos became vital. Due to intense efforts, the year 2015 passed without the loss of a single rhino to poaching in Nepal (likewise 2011 and 2013).
**African rhino smuggling**

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**Black rhinoceros, a dramatic loss**
Number of black rhinos in Africa, thousands

100
80
60
40
20
0


**Southern African rhino poaching**
Rhinos reported illegally killed


0 200 400 600 800 1000 1200 1400

---

Number of rhino horn seizures by country

- **Main trafficking hubs**
- **Main routes**
- **Main country of origin**
- **Main transit country**
- **Secondary transit country**
- **Main destination**
- **Secondary destination**

---

Elephants and rhinos threatened by conflict

Conflicts and security incidents
- Major battle (more than 50 fatalities)
- Battle and other security incident with more than 1 casualty
- Riot or protest
- Violence against civilians

Protected areas and animal range
- Protected area
- Elephant known range
- Rhino known range

Note: A battle is defined as a violent interaction between two politically organized armed groups at a particular time and location.
A riot is defined as a violent disturbance of the public peace by three or more persons assembled for a common purpose.
A protest is defined as a spontaneous, non-violent gathering of civilians for a political purpose

Source: Armed Conflict Location and Events Dataset (ACLED), African Elephant Database (AED)/IUCN/SSC African Elephant Specialist Group (AfESG)
Annual mortality of the greater one-horned rhinoceros in Nepal

NEPAL – A relocated rhino charges a Nepalese forestry and technical team after being released as part of a relocation project in Shuklaphanta National Park, some 510 km from Kathmandu, on April 4, 2017. Conservationists on April 3 captured a rare one-horned rhinoceros in Nepal as part of an attempt to increase the number of the vulnerable animals, which are prized by wildlife poachers.

© AFP PHOTO / Prakash Mathema
Pangolin, the world’s most trafficked mammal

Myanmar, a new hub for pangolin trafficking to China

Main smuggling routes
- Main country of origin
- Transit country
- Main destination

Pangolin trafficking
- Main smuggling routes

Pangolin seizures, 2010-2015
- Individuals or kilograms of scales

Sources: Environmental investigation Agency, 2015; Nijman, V., et al., Pangolin trade in the Mong La wildlife market and the role of Myanmar in the smuggling of pangolins into China, 2016
Pangolins

Every year, between 400 000 and 2.7 million pangolins are hunted in the forests of central Africa. Hunting pangolins has increased by over 150% since 2000, making the pangolin one of the world’s most trafficked animals in the illegal wildlife trade. It is estimated that at least a million pangolins were traded in Asia in 10 years. In 2015, Vietnamese customs officers trained by the UNODC-WCO Container Control Programme seized around 4 000 kg of pangolin scales (along with 1 023 kg of ivory). In January 2017, Tanzanian authorities seized 6 000 kg of scales destined for Asian markets.
85% of the global trade in tigers takes place within the EU

Tiger habitat
- Resident
- Possibly extinct

Import and export of tigers
- Top 20 importers of live tigers, 1975-2017
- Top 20 exporters of tigers

Source: CITES database 2018, UNODC and RHPTO 2018
INDONESIA – Navy ship blowing up a foreign fishing vessel caught fishing illegally in the waters near Bitung, North Sulawesi, 20 May 2015. According to media reports, Indonesia has sunk 41 foreign boats across the country, as part of an ongoing push to stop illegal fishing in its waters. © EPA
Trafficking in waste: The rise of global dumping grounds

Some 41.8 million metric tonnes of electronic waste (e-waste) were generated in 2014, and this number is set to increase to 50 million metric tonnes by 2018. According to various estimates, the amount of e-waste properly recycled and disposed of is between just 10% and 40% of the total. The presence of the informal economy makes precise estimates of the value of this sector difficult to ascertain. However, using an estimate formulated by INTERPOL that attributes an average value of US$500 to each tonne of e-waste, the volume of e-waste handled informally, or which is unregistered, including illegally, amounts to US$12.5–18.8 billion annually. It is unknown how much of this e-waste falls within the illegal trade or is simply dumped. Its role in threat finance to conflicts is peripheral or insignificant. However, organized-criminal groups, including the Italian mafia, have been engaged in it for decades.

Fisheries crime: Fraud and impunity on the world's seas

Close to 10% of the world’s catches are dumped at sea if they fail to meet the regulatory standards required. Great concern has been expressed over illegal fishing off the coast of West Africa and its impact on the livelihoods of local fishermen. Illegal, unreported and unregulated (IUU) fishing off West Africa, which makes up between one third and half the total catch, is worth US$2.3 billion in 2015. In Somalia, illegal fishing has been posited as a cause of the rise in piracy through lost livelihoods. Losses incurred by foreign illegal vessels off Somalia have been estimated to be in the region of US$100–300 million. IUU fishing off Senegal, with a catch of about 261,000 tonnes a year, incurred a loss of about US$300 million in 2012, or 2% of GDP. Many vessels offload illegal catches to other ships at sea.

The role of IUU fishing for threat finance is peripheral, although some fisheries are used to pay illegal taxes. The role of fishing vessels and recreational vessels in transporting drugs – whether from Colombia, or along the west and east African coasts – is significant, however. Furthermore, fishing vessels are key to transporting foreign fighters, including across the Caspian Sea, the Mediterranean, and off the Horn of Africa and Yemen.
Illegal, unreported, unregulated /fishing

Fishing that violates national laws or international obligations.

Fishing within a country’s Exclusive Economic Zone without permission

Fishing that has not been reported, or has been misreported, to the relevant national authority

Fishing by vessels under the flag of a country they are not part of, or not part of a fishery organisation

Fishing outside of regulated zones, breaking international law to conserve living marine resources

Global losses from IUU fishing are estimated to be between US$10 billion and US$23.5 billion annually, between 10 and 22% of total fishery production

Sources: NOAA; IEEP, an independent review of the eu illegal, unreported and unregulated regulations, 2011.
CHAD – This photo was taken in the Chadian desert. A group of migrants were travelling in a truck that broke down Mondou, Chad, December 8, 2012. © iStock / yoh4nn
07 The Trans-Saharan
Migrants, drugs and arms
Trans-Saharan trafficking and threat finance
October 2017

Main transit point
Small-arms supply routes
Small-arms supply routes by air
Goods, counterfeit, human trafficking and drugs route
Human trafficking
Charcoal and other natural resources

Major trafficking and trade axis taxed by militants or run by organized crime
Bottleneck on trafficking routes of strategic importance
Militia groups fighting over the control of bottlenecks
Main regional conflicts and areas of reported operations by militia groups

Area* with severe resource gap for livestock feed for the period 2011-2030. Cattle need to move south in the fattening period
*Information available for Mauritania, Mali, Niger and Chad only

Source: RHIPTO - Norwegian Centre for Global Analyses, 2016
The Trans-Sahara: Migrants, drugs and arms

Armed groups in the Trans-Sahara engage in numerous forms of trafficking, including smuggling cigarettes, drugs and arms. However, their main source of income is from extorting taxes, and through their involvement in supplying the human-trafficking industry, including supply of 4x4 vehicles.\textsuperscript{92} Taxes are extorted of between 10\% and 30\% of the price depending on the commodity and its place in the supply chain. In addition, armed groups invest incomes from cigarette and arms trafficking, ransom and ex-pat finance in improving the logistical base of smugglers, and subsequently tax them 30–50\% of their incomes from traditional trafficking.

Drugs are trafficked by ship and air from Brazil and Venezuela, landing in West Africa, especially Guinea-Bissau. Drugs transported in mother ships are consolidated into smaller units in fast boats or sailing vessels at sea, which head north to Cape Verde or the Canary Islands and then onwards to mainland Europe. Those that arrive on the African mainland are trafficked onwards using all manner of transport, but commonly 4x4s that driven by highly organized groups. Much of these flows pass through Morocco and Algeria, as well as Libya. Cocaine also arrives in containers in West Africa, and in East Africa by air via Addis Ababa, Ethiopia.

Al-Qaeda in the Islamic Maghreb (AQIM), as well as its splinter groups Al-Mourabitoun (now reformed after a two-year split) and Ansar Dine, are now increasingly changing how they finance themselves, shifting their attention away from kidnapping for ransom and cigarette smuggling to protection-taxing the trafficking of drugs, predominantly cocaine originating in Latin America, an activity that pays much higher dividends. For AQIM, these illicit protection taxes are charged at a rate of between 10\% and 30\%. The group has been significantly bolstered by having had access to a steady supply of arms from Libya since 2011, which has strengthened their position to offer ‘protection’. AQIM has also invested cigarette smuggling profits in traffickers’ infrastructure since the mid-2000s, in return for a cut of trafficking profits. This affords a discreet and hands-off approach to how they make money, earning a possible rate of 5\% of the value of drugs trafficked through key hotspots.

The estimated trafficked volume of cocaine in the region is around 18 tonnes per year, and its price rises from US$1\,600–2\,500/kg in Colombia to around US$20\,000–30\,000/kg as it passes through checkpoints. If, hypothetically, AQIM and Al-Mourabitoun could tax only one in three route segments and only two out of the four major drug routes in the region, one could put an estimate of their likely annual income from these flows at around US$7.5 million to US$22.5 million a year, or US$2.5 million to US$7.5 million.

Armed groups are also involved in the smuggling and trafficking of migrants. For example, Islamic State in the Sirte region of Libya allegedly operated a vehicle checkpoint near Al Nuwfayah, where receipts were issued for migrants to pass through. With an estimated 150\,000 to 170\,000 migrants and fees for transit and onward travel at around US$3\,000 to US$4\,500 per migrant, the overall migrant business in the Trans-Sahara, including Libya, is now estimated to be worth between US$450 million and US$765 million.

If armed groups tax criminal entrepreneurs or take the commonly used illegal tax rate of 10\% to 30\%, and less than 5\% goes to terrorist organizations, armed groups in the region may make as much as US$45 million to US$229 million a year.\textsuperscript{93} Meanwhile, terrorist groups, like JNIM, Ansar al-Sharia and, for a time, Islamic State, are likely to make around US$22 million to US$38 million.\textsuperscript{94}

It is believed that smuggling of drugs and cigarettes continues to be a relatively important income mainstay for regional terrorist groups, but it is also evident that migrant trafficking and investing in entrepreneurs and traffickers – irrespective of what they transport – are becoming safer and more common sources of income for terrorist organizations, such as JNIM. This may also explain the aggressive attacks made by JNIM during 2017 on UN forces north and east of Bamako in Mali – seen as an attempt to enable them to exert taxes on the routes from the west to the Gao–Kidal–Menaka–Tessalit ‘smuggling highway’ to Algeria and Libya.\textsuperscript{95}
LIBYA – Tuareg in Acacus Mountains © iStock / Cinoby
LIBYA – In this March 5, 2011 photo, an anti-government rebel sits with an anti-aircraft weapon in front an oil refinery in Ras Lanouf, eastern Libya. The fight for the Ras Lanuf refinery and nearby Sidr depot threatens to spiral into open conflict between rival factions vying for power from east and west.

© AP Photo / Hussein Malla
Migrant routes to Libya

Refugees, migrants and territorial control in Sabha

Migrant detention zones and departing points in Libya

Libya territory control and conflict
January 2018

Control of territory
- GNA (Government of National Accord)
- LNA (Libyan National Army)
- Amazigh
- Touareg
- Tebu
- Criminal gangs
- Safe haven for smugglers
- LNA expanded control between July 2017 and January 2018

Armed conflicts and violence, 2017
Actor involved
- ISIS
- Misrata militias
- Other actor

Fatilities
- 141
- 50
- 25
- 5

Sources: United Nations; ACLED database, accessed in October 2017
RHIPTO - 2018
Attacks in Mali linked to violent-extremist groups

Attacks from extremist groups
- 2017
- 2016
- 2015
- 2014

Include rebels, political militias and ethnic militias

Attack against UN Division or International Army Force
- 2017
- 2014-2016

Fatalities
- 55
- 10
- 1

Source: ACLED, 2017

Attacks against local defense and security forces in Mali

Source: ACLED, 2017
MALI – Malian soldiers patrol the roads during the visit of the Malian Prime Minister in Menaka Mali on May 9 2018.
© AFP PHOTO / Sebastien Rieussec
Political threat from bordering country
Terrorist attacks, Jan 2017 - Jan 2018
Sahara Desert
Sahel
Erg and other desert
Presence of Touareg
Presence of Toubou
Migrant routes
Border police post
French military base or facility
Using ATW to avoid official roads
Stopover point
American military base

Sources: RHIPTO; Reuters press review 2018
RHIPTO - February 2018

Migrant routes and political threats in Niger

Islamic State’s Adnane Abou Walid al-Sahrahoui, killing UN and France soldiers amongst others
Attacks from Boko-Haram in and nearby Niger

0 200 400 Km
Migrant routes and political threats in Niger

- Risk of spillover of Libya's instability into the south
- Marginalized tribes and local issues spilling over the border
- Boko Haram incursions in Niger
- Route to avoid moving within Chad territory
- Political threat from bordering country

**Legend**
- Sahara Desert
- Sahel
- Erg and other desert
- Presence of Touareg
- Presence of Toubou
- Migrant routes
- Using ATW to avoid official roads
- Stopover point
- Border police post
- French military base or facility
- American military base
- Political threat from bordering country
- Terrorist attacks, Jan 2017 - Jan 2018
- Islamic State’s Abou Walid al-Sahrahoui, killing UN and France soldiers amongst others
- Attacks from Boko-Haram in and nearby Niger

**Sources:** RHIPTO, Reuters press review 2018
© Shutterstock / Anjo Kan
08 Migrant smuggling & human trafficking
Migrant smuggling and human trafficking

Human smuggling and trafficking are now probably, economically speaking, the fourth largest global crime sector – estimated at an annual market value of at least US$157 billion. Globalization and increasing access to transport from any corner of the planet have made it possible for criminal networks to organize the movement of enslaved victims, and of refugees and migrants at unprecedented levels, even for mass movements.

EUROPOL and INTERPOL estimated the value of migrant traffic from outside Europe to Europe in 2015 to be in the order of US$5 billion to 6 billion each year. According to various other estimates, human smugglers made revenues of about US$4.2 billion smuggling people into Europe; US$672 million from the onward journey inside Europe; total revenues in 2015 of US$4.9 billion. The profit margins for human smugglers (in the range of 10% to 50%) are US$42 million to US$2.1 billion for entry into Europe; US$67 to US$301 million for the onward journey; total profits in 2015: US$489 million to US$2.3 billion.

Nepal: Trafficking networks grew during the civil war and continued post-war

During the civil war in Nepal, many trafficking networks expanded, as is often the case during conflicts. However, unlike with the poaching of rhino horn, the incidence of which was reduced or even stopped as a result of targeted efforts after the war, trafficking of women and children for forced labour and prostitution in Nepal continued, and these activities now fuel organized crime.

Libya: Migrant trafficking in conflict

Based on numbers of migrants arriving in Italy in 2016, combined with detailed price levels for the different legs of the journey, it is possible to calculate revenues and profits to armed groups on the various legs. Along the eastern route, there were about 43,000, whereas on the western route the number was between 143,000 and 300,000, with the two flows merging in Sabha. The average prices charged within Libya to the north-west coast is US$300 to US$500, with an additional US$200 to US$250 for the departure by boat. The traffickers and smugglers may gain a profit of 15% to 30% of the income. With an estimated 186,000 to 343,000 passing through Libya in 2016, and with no indication of a significant decrease in flow, the annual revenue to all armed groups combined is US$93 million to US$244 million, with a net profit of US$13 million to US$71 million.

Mali and Niger: Migrants, cigarettes and conflict

JNIM conducted an eastward offensive in 2017, including attacks on forces of the UN mission in Mali, MINUSMA. JNIM also operates from the south-east corner of Mauritania. From there, they advance out, using caches of arms, as far as south of Bamako. Formerly parts of AQIM’s Sahara branch, Ansar Dine, Katibat Macina and Al-Mourabitoun merged with JNIM in early 2017. The group is based in the Sahel, its core area being northern Mali. They have been responsible for a large number of attacks on UN peacekeeping forces in Mali, operating out of Mauritania and Mali, and in south-west Libya and Algeria. It is likely that they will increasingly move into Niger to gain control of smuggling networks as income opportunities. Their precise sources of finance are unknown, but it is derived mainly from ransom money, cigarette and drug smuggling, illicit taxation, protection money and return from investments in migrant smugglers (e.g. trucks and finance).

JNIM’s income is probably in the range of US$7 million to US$20 million for drugs and ransom, and US$11 million to US$15 million from return of investments in the migrant trafficking trade, which is largely outside JNIM-controlled areas, apart from some traffic from the south-west. JNIM is the big potential future winner among the Salafist/jihadist groups. Some expat finance is believed to be involved. The group probably has about 3,500 to 4,500 fighters.
Migrant trafficking into and within European Union and approximate costs in 2015

Migration routes
- Eastern Mediterranean and Western Balkan route
- Apulia and Calabria route
- Central Mediterranean route
- Western Mediterranean route
- Western Africa route

Number of trafficked migrants
- EU and Schengen country
- EU non-Schengen country
- Non-EU and Schengen country

Cost of the voyage
- Approximate price paid to organized crime groups

Sources: Frontex; International Organization For Migration (IOM); International Centre for Migration Policy Development (ICMPD); Norwegian Center for Global Analyses (RHIPTO)
© Nature Picture Library / Steve O. Taylor
Migrants in the EU: main countries of origin and destination

First-time asylum applicant, 2015
Thousands

Main destinations
- Primary destination
- Second and third destination by number of asylum seeker

Note: only the first 10 countries by origin and destination, and only the first three destinations by country are represented.

Source: Eurostat 2016
RHPTO 2016
Human trafficking in Nepal - Patterns

PUSH FACTORS
- Conflicts
- Open border
- Impoverishment
- Natural hazards
- Impunity
- Patriarchy
- Illiteracy
- Domestic violence
- Family disruption

SOCIAL STATUS
- HIGH
- LOW

VULNERABILITY
- LOW
- HIGH

RECRUITMENT AND TRANSPORTATION
- Fraudulent marriage
- Deception: offering jobs and education
- Provoking unconsciousness with drugs

ENSLAVEMENT PROCESS
- Coercion
- Systematic violence
- Abduction

DESTINATIONS
- Nepal
- India
- China
- Gulf Countries

REASON FOR TRAFFICKING
- Forced labour
- Sex industry
- Brothels

Trafficking of women and girls in Nepal

Estimates of trafficked girls and women for brothel based prostitution

Thousands

- 12
- 8
- 1.5
- 0.3
- Estimates not available

Main destinations

- To other Indian cities
- To South-East Asia

Sources: Maiti Nepal; NHRC, Trafficking in Person Especially on Women and Children in Nepal, 2008, Interpol; Press Review.
Migrants to the US bypass the Mexican border using multiple entry points

In the Americas, the UNODC estimated that in 2010 there are 3 million illegal entries to the US each year, with 60% to 75% entering secretly, and over 90% paying a smuggler. Of these, between 14 500 and 17 500 are victims of human trafficking. Facilitating smuggling across the Mexico–US border has been estimated to generate an income of US$6.6 billion a year, and links to drug trafficking cartels are often insinuated. Meanwhile, US efforts to counter this threat have resulted in the creation of a border patrol of paramilitary proportions, with over 60 000 border-patrol officers. However, smuggling hubs that move migrants into the US are far from confined to the Mexican border alone. Addressing the smuggling networks requires more sophisticated approaches.
Trafficker gang arrests and Latin-American migrant smuggling hubs in the US

Gang member arrests, by gang

- MS-13
- 18thStreet
- Latin Kings
- Ramos
- Mexican Mafia
- Linda Vista
- M18
- Trinitarios
- Tiny Radical
- Santiago Apostol
- Texas Syndicate

Main commercial hubs

- Minneapolis
- Chicago
- Atlanta
- Miami
- Boston
- New York
- Philadelphia
- San Francisco
- San Jose
- Los Angeles

Anti-immigration filters

- Militarized barrier
- "Frontera olvidada": jointly controlled by USA and Mexico

Gang member arrests, 2013

Immigration as workforce

Percentage of irregular migrants integrated in the workforce

SYRIA – An explosion after an apparent US-led coalition airstrike on Kobane, Syria, as seen from the Turkish side of the border, near Suruc district, 24 October 2014, Sanliurfa, Turkey. © Shutterstock / Orlok
09 Foreign fighters
Travelling along smuggling networks
Foreign fighters: Travelling along smuggling networks

There are at least 5,600 foreign fighters associated with Islamic State. These combatants move along several routes: from Libya to Egypt, Mali and Mauritania onwards to Senegal and out of the African continent; from Turkey to the Caucasus, especially Azerbaijan, then across the Caspian Sea and via Iran or Turkmenistan to central Asia (Uzbekistan, Pakistan, Afghanistan, Kyrgyzstan and Tajikistan); via Turkey to the Balkans, especially Bosnia and Herzegovina. Many have also returned to Western Europe, and to Tunisia and Morocco. Claims of large numbers of Islamic State foreign fighters from Africa’s Great Lakes region are false.

Some 14,900 foreign fighters leaving conflict zones have at least in part used these routes for travel back to their home countries; of these, some 5,395 are imprisoned; 6,837 have returned home but without having been apprehended by the criminal-justice system. This leaves over 2,600 unaccounted for, in addition to some 7,000 killed, mainly in Syria and Iraq.

Organized-crime groups use smuggling networks that increasingly enable foreign fighters to move across borders to safe havens, as well as build up or migrate resources through formal and informal networks of financial flows. The over 2,600 unaccounted-for foreign fighters have left Syria and Iraq, and an unknown number travelled via Libya, using these illicit smuggling networks for access to resources such as forged papers, as well as routes to safe havens.
Foreign fighters joining the fights in both Syria, Iraq and Libya originate from a wide range of countries - of which Tunisia and Saudi Arabia are the most significant in terms of absolute numbers, but also including former soviet republics, Jordan and France as the top five countries of origin, reaching as far as Central and Southeast Asia and covering over a hundred countries.

Foreign fighters often return to their countries following periods of fighting in Syria/Iraq. Terrorist suspects subsequently cannot be identified through means of race, nationality or religion. Strengthening information, analysis and investigative capacity, along with accelerated sharing mechanisms of intelligence, are vital for prevention and early intervention. Nonetheless, the mass migrations and refugee streams to Europe, including expansions of networks of traffickers, smugglers and forged document suppliers along these streams, also facilitate movements of individual criminals - including terrorist suspects.
Foreign fighters going back home from Syria and Iraq

Estimated fighters returned from Iraq or Syria

Country of origin
Country where they fight
Transit for return
Main country of return

Return routes and fluxes
- Major route
- Other important route

Sources: RHIPTO; Norwegian Centre for Global Analyses; The Soufan Group, BEYOND THE CALIPHATE: Foreign Fighters and the Threat of Returnees, October 2017.

RHIPTO 2017
COLOMBIA – A counter-narcotics police officer takes cover as a helicopter lands on a coca field in Tumaco, southern Colombia, Wednesday, April 18, 2018.

© AP Photo / Fernando Vergara
10 Drugs & threat finance
AFGHANISTAN – May 27, 2016: members of a breakaway faction of the Taliban fighters during a gathering, in Shindand district of Herat province, Afghanistan. Mullah Abdul Manan Niazi said Sunday.
© AP Photo / Allauddin Khan
Drugs and threat finance

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The Taliban – opium and heroin

According to the US military and the Afghan government, in late 2017 insurgents were in 'control' of 2.2% of the population and 'influenced' another 9.2%, which, combined, means some 3.7 million Afghans. A further 24.9%, or 8.1 million people, live in contested areas. As of August 2017, 13% of Afghanistan's municipal districts were either controlled or influenced by insurgents, the highest rate in at least two years.

In late 2017, the Taliban claimed to control 34 out of 400 districts, and to contest a further 167 districts (claiming a 40–97% presence in the latter). In practice, the Taliban contest half the country. The group claims to control most of the provinces of Helmand, Nimruz, Urozgan, Ghazni and Zabul, and half of Kandahar.

The Taliban's size has been estimated to be more than 200 000, with a fighting strength of 150 000, of whom about 60 000 constitute a full-time force. Accounting for rotation for leave, and other reasons for absence, the fighting force present in Afghanistan would not exceed, at any one time, 40 000. The full-timers are highly mobile and rely on safe havens, particularly in Pakistan, but also in Iran, when they are not operating in Afghanistan (accounting for a third of the time spent outside the country on rest and recreation). This compares to about 11 000 US troops in present in the country, and well over 300 000 Afghan government security forces (numbers recently classified).

There has been recent fighting between the Taliban and Islamic State in the north-western provinces of Jawzjan and Faryab, and at least one case of collaboration between the two in the attacks and killing of over 50 Shias in the Sayyad District of Sar-e-Pol Province in August 2017, probably attributable to family or tribal affiliation rather than strategic cooperation.

The Taliban carried out eight large attacks in 2017, killing Afghan security forces and civilians, with between 15 and 150 fatalities per attack. Both the magnitude of such attacks and the increase in insurgent control over the population undermine the credibility of the Afghan security forces and the government.

Opium production in 2017 in Afghanistan was 9 000 metric tonnes (up by 87% from 2016) from an area of 328 000 hectares (up 63% from 2016) – equivalent to a total farm-gate value of US$1.4 billion, according to UNODC. The largest increase was in Helmand Province, followed by Kandahar, Badghis and Faryab.

UNODC estimates that non-state armed groups in Afghanistan raised about US$150 million in 2016 from taxing opium production. The UN Security Council Committee in 2011/12 cited an Afghan government estimate that reckoned that a quarter of the Taliban's income was derived from opium-related activity, in other words US$100 million out of a total income of US$400 million. In 2010 the CIA estimated that the group was predominantly funded by non-drug-related taxation, and donations from Pakistan and Persian Gulf countries. As these examples show, agencies with different perspectives and priorities have debated this issue throughout the Afghanistan war.
The entire 2017 poppy crop was 9,000 metric tonnes. The price varies between regions, and has been cited as between US$5,210 and US$15,510 per kilogram for fresh opium, and US$182 for cooked opium. The fresh farm-gate price then gives a price range for the crop value of about US$468 million to US$1.4 billion. If the Taliban tax three-quarters of the area they control – and there is some evidence they are effectively taxing the rural parts of districts that are supposedly in government control, so about a quarter of those – then this balances out the equivalent of 100% taxation of 60% of the land.

Prices vary by season, year and even by district, not to mention by region. Empirical data is not available to cover these variations (and will probably never be available). In the meantime, by extrapolating from their Helmand tax rate of 1.125 kg per hectare, with a 60% tax coverage, the Taliban earn an estimated 221.4 tonnes of opium from the entire crop, worth a total of US$11.5 million to US$34.3 million. In addition to this there is taxation of transportation at checkpoints, but this is very hard to quantify without specific intelligence, since the transported goods do not pass through just a few ports, as is the case in Somalia with charcoal, for example (see Chapter 3).

In the two districts Nad-e-Ali and Marjah, closely studied by David Mansfield in 2016, 66% of the Taliban’s income came from tax on opium (US$2.46 million); 8.2% (US$305,000) was land tax, and 25% (US$935,000) was wheat tax. In the case of the Bakwa District, in Farah Province, also in 2016, taxation was based on an altogether different method: the number of tube wells, and totalled US$287,000–US$766,000.

In the two districts in Helmand cited above, two-thirds of the Taliban’s funding came from opium, whereas in the district cited above in Farah, none of it did. Their funding from Pakistan is also very well documented, although precise figures are difficult to come by. Given the expenses incurred by maintaining a permanent force of 40,000, with another 20,000 out of the country, and ambitions to make savings towards future governance expenditure, it is likely that the group’s annual funding would need to be in the US$50 million to US$100 million range (and probably closer to US$100 million), where one-third comes from opium, giving an annual funding of US$75–95 million from all sources.
AFGHANISTAN – farmers harvest raw opium at a poppy field in the Zhari district of Kandahar province, Afghanistan. © AP Photo / Allauddin Khan
AFGHANISTAN – Helicopters in Afghanistan. © iStock / Mie Ahmt
AFGHANISTAN – Special Forces vehicles on mission. © iStock / Analisa Hegyesi
Drug routes and threat finance to Eastern European organized crime

Organized crime

- Organized crime hub
- Main criminal organization

1. Chechen mafia
2. Dagestan criminal groups

Heroin

- Trafficking route
- Country of origin
- Main flow

Weapons

- Trafficking route
- Country of origin
- Country or region of destination

Source: UNODC, 2010; Norwegian Center for Global Analyses, 2015
COLOMBIA – Military forces of Colombia supervise territories where guerrillas of FARC still act. Soldiers patrol the mountain river in November 6, 2012 in La Macarenia, Colombia.
COLOMBIA – Soldiers keep guard over workers uprooting coca plantations as part of a government counter-narcotics program in San Francisco Antioquia province May 11, 2009.

© Reuters / Fredy Amariles
FARC – cocaine and illicit mining

The Colombian revolutionary insurgent movement, FARC, who had been at war with the Colombian government since 1964, disarmed itself and transitioned into a political party in June 2017. In the 1980s, FARC were funded by primary commodities, like cattle and other agricultural products, and by oil and gold. They also engaged in smuggling in border areas. Until 1981 they had considered cocaine and marijuana counter-revolutionary, but for fear of alienating local farmers, and seeing obvious financial advantages, FARC changed their policy on drugs. Initially their taxation came from gramaje, which is a farm tax. Later this was upscaled to both systematic taxation of coca cultivation, as well as any infrastructure or transportation routes associated with the logistics of moving the product.

The Colombian government assessed in 1998 that illegal paramilitaries, including guerrilla movements like FARC, made US$551 million a year in drug trafficking, US$311 million from extortion and US$236 million from kidnapping for ransom.

During the last few years of their insurgency, FARC guerrillas moved out of the mountainous areas and established a number of camps in the Colombian Amazon, including areas north of the Brazilian border to the far east of the country, outside drug-producing areas. In recent years, they gained about 20% of their income from illegal mining of gold. The organization’s 34th Front allegedly made over US$1 million a month from extorting miners.

When the peace process took place, FARC declared their wealth in an inventory as US$332 million, including assets such as US$147 million worth of property, US$10.5 million in cattle, US$70 million in weaponry and US$10.7 million in gold. However, InSight Crime calculated in 2015/2016 that FARC at that time had assets worth US$580 million, mostly income from drugs and illegal mining.

The peace process was honoured by about 10 000 FARC members, but several thousand rejected it or did not participate in it, led by the dissident 1st Front. About 2 500 of these dissidents are thought to have formed an ex-FARC mafia, some of whom call themselves the Eastern Bloc, who have become big players in the cocaine trade. They operate a relatively flat business-oriented structure, and have taken control of key choke points bordering Venezuela and Brazil.

A significant degree of corruption in the chain of command, as well as thousands of FARC members or their part-time support cadre leaving or ignoring the peace process, or simply going rogue and joining criminal groups, could explain some of the discrepancy. In addition, assets kept abroad are not included in the inventory. FARC controlled about 60% to 70% of the coca-producing areas, and were the biggest single player. Their income largely came from taxing – varying between US$35 and US$150 per kilogram of coca base. They were also to some extent involved in production, and widely taxing of labs and transportation. In 2016 the coca crop – over 188 000 hectares, with an average production 7 kg of cocaine per hectare – could have produced a max crop of 1 200 tonnes, according to InSight Crime. The actual cocaine production for 2015 was about 646 000 kg, according to UNODC. The price of coca base was US$621 per kilogram in 2016, and US$1 633 for cocaine. The total cocaine value for the entire crop would be US$1.05 billion, given UNODC production numbers. InSight Crime has calculated FARC’s earnings from the cocaine trade alone to be in the region of US$267 million, where US$67.9 million was from cocaine base taxation, US$169.5 million from cocaine production and US$30 million from other taxes. Other earnings came from heroin (US$5 million), marijuana (US$30 million), cattle taxation (US$4.5 million), extortion of businesses (US$76.8 million a year) and illegal mining (US$200 million), giving a total of US$580 million in 2015, of which about US$200 million was taken by corrupt commanders.
COLOMBIA – Armed Forces of Colombia (FARC) guerrillas listen during a "class" on the peace process between the Colombian government and their force, at a camp in the Colombian mountains on February 18, 2016. © AP Photo / Luis Acosta
COLOMBIA – A soldier stands next to packages containing marijuana at an army base in Cali, Colombia, Friday, Aug. 22, 2008. According to the Colombian army, 6.7 tons of marijuana were seized from rebels of the Revolutionary Armed Forces of Colombia, FARC, near Cali.

© AP Photo / Christian Escobar Mora
LIBYA – Libyan rebels travel to a battle line where they will fight Colonel Muammar Gaddafi's army. Ajdabiya, Libya, April 7, 2011. © Shutterstock / Rosen Ivanov Iliev
The new ‘jihadist drugs’

Since 2015 there has been an increasing number of intelligence reports regarding extensive smuggling and use by jihadist fighters, especially Islamic State, of tramadol, an opioid pain reliever, as well as Captagon, a psychostimulant for increased alertness. Both often called ‘jihadist pills’ or ‘courage pills’. Captagon is a brand name for the drug fenethylline, a combination of amphetamine and theophylline, which increases alertness. Tramadol provides pain relief and can also allegedly reduce fear and stress during battle by in some cases releasing serotonin, creating a feeling of wellbeing or happiness. Captagon stimulates alertness and reduces exhaustion, and the need for sleep.

This kind of drug use is predominantly seen in the Middle East, is very prevalent in Syria and Iraq, including by Chechen fighters, but is also becoming increasingly common in the Trans-Sahara, including Mali, Niger, Nigeria, Chad and Libya. Islamic State has been directly involved in the smuggling and sale of jihadist drugs, and not only to their own fighters. Pills are entering the region from Greece and Tobruk, Libya, as well as via Lomé (Togo), Cotonou (Benin) and Nigeria. Most originates from India. The rising use of this drug by jihadist fighters in the Trans-Sahara, Libya and Nigeria most likely points to increased smuggling activity by Islamic State and related jihadist groups.
Tramadol smuggling into jihadist combat areas

Country of origin
Country of transit
Country of destination
Smuggling route
Main smuggling port

Sources: RHIPTO, Norwegian Centre for Global Analyses, 2018
DRC – New recruits in the FDLR rebel group begin training in the mountainous region of DR Congo, North Kivu Province. Chai, North Kivu, DRC. March 29, 2014. © iStock / Jon Brown
11 Terrorist & rebel finance
Taxation, drugs, counterfeits, natural resources and migrants
DRC – Artisanal gold mine in a river in Mwenga, in South Kivu, Democratic Republic of the Congo.
© Riccardo Pravettoni
Terrorist and rebel finance: Taxation, drugs, counterfeits, natural resources and migrants

For the seven main terrorist/rebel groups that comprise a mix of insurgents and terrorists – al-Shabaab, Boko Haram, FARC, HTS, JNIM, Islamic State and the Taliban – as well as a number of groups operating in the eastern DRC, the combined funding is about US$1 billion–US$1.39 billion a year. Taxation of natural resources and drugs is the most important, commonly available and accessible source of income. This ranges from taxation of transport at vehicle checkpoints, to agricultural produce, protection money targeting commercial activity and religious taxes.

The numbers given here represent updates on a body of work accumulated over the last few years featuring best estimates based on official reports, academic assessments and criminal intelligence. Insurgent groups primarily finance their activities by illegal taxation of the populace, illicit commercial activity, whether in drugs, minerals, gold, charcoal, timber, or through taxation of migrants. If they do not exert territorial control, which is typical for terrorist groups, incomes more typically involve mobility, such as kidnapping for ransom, or smuggling of high-value goods, like drugs.

The seven major non-state armed groups here all feature elements of insurgency and terrorism. None is either a pure terrorist or pure insurgent group, but the motivational characteristics of terrorism or insurgency can be plotted on a continuum between the two. They are insurgents, in that they seek political change over a ruling regime, and hold or aspire to hold territory. These dimensions apply particularly to FARC and the Taliban, but also in considerable measure to al-Shabaab and Islamic State as well. They are all terrorists too, in that they use fear generating violence and coercion without legal or moral restraint against civilians, for its effect on various audiences. This applies particularly to JNIM, HTS, Boko Haram and Islamic State, but also to the Taliban and, to some extent, FARC.
Islamic State remains the most serious threat because of the organization's international reach and suspected financial reserves. As of May 2017, the group was making up to US$10 million a month in revenues. In mid-2018, its funding in Iraq and Syria is likely to be a tenth of that – a total of US$6 million to US$24 million a year. A large, unknown amount, but possibly over US$100 million, has been funnelled out of Iraq and Syria, and some of this has been laundered in investments in Iraq, Syria and neighbouring countries. The group’s estimated strength is currently around 15 600 including 5 600 returned foreign fighters, with a remaining force in Syria and Iraq of 5 000 active fighters – and probably at least a similar amount laying low.

HTS is a merger of what used to be al-Qaeda groups, which for a time took the name ‘Jabhat al-Nusra’ in Syria. Their relationship with the al-Qaeda central command is currently under much debate, but should not be underestimated. They are about 10 000 strong, funded by taxation, donations and kidnap for ransom, but are underfunded at about US$8 million a year. With expenses of US$19 million, they are dependent on expat finance from organizations to the tune of about US$11 million.

JNIM is the al-Qaeda central merger in the Sahel of the former AQIM Sahara branch, Katibat Macina, and Ansar Dine and Al-Mourabitoun. They have been very active recently, attacking UN forces in Mali from neighbouring countries. JNIM are funded by revenue from cigarette smuggling, drugs and other taxation forms, extortion, possibly migrant taxation and kidnapping for ransom. Their income range is likely to be in the range of US$18 million to US$35 million. Kidnapping for ransom provides the major chunk of their funding, at US$8 million in 2017 alone. Their strength is estimated to be at about 3 500 to 4 500 fighters.
The **Taliban**'s roughly 40,000 full-time members control or influence at least 13% of districts in Afghanistan (see Chapter 10). Their funding sources are highly disputed but are believed to include taxation of the biggest cash crop in the country, opium. The 2017 poppy crop was 9,000 metric tonnes. The Taliban are able to tax 60% of this crop at a rate of 1.125 kg per hectare and US$52–US$155 per kilogram for an estimated 221.4 tonnes of opium, worth a total of between US$11.5 million and US$34.3 million. In addition, they are funded by taxation of transportation at checkpoints, but this is very hard to quantify without specific intelligence. Their funding from Pakistan is also very well documented, although precise figures are difficult to come by. Given the expenses incurred by maintaining a permanent force of 40,000, with another 20,000 out of the country, and ambitions to make savings towards governance in future, it is likely that the group's annual funding would need to be in the US$50 million to US$100 million range (and probably closer to US$100 million), where one-third comes from opium, amounting to a total annual funding of US$75–95 million.

**Boko Haram** has suffered serious setbacks following Nigerian military offensives supported by a joint task force from neighbouring countries. Their fighting strength has dwindled to about 4,000, which is further weakened by their split into two factions in 2016, one led by Abubakar Shekau and the other by Abu Musab al-Barnawi. Shekau is on the run and is striking back against civilian targets using suicide bombers, increasingly children. Barnawi is based around Lake Chad and is slowly building up military capacity and attacking military targets. Barnawi remains loyal to Boko Haram's allegiance to Islamic State. The group's income is reckoned to be no more than US$5–10 million a year, mainly from extortion, donations made by individuals, charities and groups like AQIM, kidnapping for ransom and bank robberies, as well as taxing migrants and human traffickers.

**Al Shabaab** remain a significant threat in Somalia, with their most violent attack to date happening in Mogadishu in October 2017, which killed over 300. They were responsible for killing over 4,500 people in 2017. Their current strength (as of 2018) is about 5,000 fighters, compared with about 250 Islamic State combatants in Somalia. Their estimated revenue from charcoal is currently about US$10 million a year; but this is down dramatically from 2012 when they were making US$38–56 million. Al-Shabaab for various reasons imposed their own ban on the trade in charcoal in their own area, but after about a year they returned to charcoal as a revenue source. The shift back was possibly due to their having found that alternative income sources proved both resource-intensive to collect and less fruitful. In addition to their charcoal income, al-Shabaab probably make another US$10 million from other forms of illicit taxation. Just over 40% of their income is spent on salaries, and the rest for other costs, including transportation, ammunition, food, training camps, religious education and bribes.

**FARC**, now officially disbanded, numbered about 8,000 at the time they disarmed and became a political movement, but also had a very large number of part-time supporters in various functions. Today, about 10,000 of them have accepted the peace process, whereas about 2,500 did not or went rogue and joined various criminal activities, including an ex-FARC mafia network running drugs. Their income, calculated in 2015, but likely to be similar in 2017 at the time of the disbandment, was made up as follows: about US$267 million a year from the cocaine trade, heroin (US$5 million), marijuana (US$30 million), cattle taxation (US$4.5 million), extortion of businesses (US$76.8 million a year) and illegal mining (US$200 million), giving a total of US$580 million in 2015, of which about US$200 million was taken by corrupt commanders. At the time of their disbandment, the group had declared assets of US$332 million, believed by some to be as high as US$580 million if one includes drugs and illegal mining. This figure excludes the group’s overseas assets.
SOMALIA – Amisom troops prepare for battle.
© United Nations / Flickr
Organized crime and insurgent groups' finances

Total Income to organized crime in and around conflict areas
Million USD
31 539

Part of the income that goes to insurgent and terrorist groups
4%

Origin of the incomes for selected insurgent and terrorist groups
Million USD

- Drugs: 330
- Oil and gas: 230
- Antiquities: 15
- Charcoal: 36
- Taxation and extortion (excluding drugs): 197
- External funding and donations: 36
- Confiscations and looting: 99

Part of the income that goes to insurgent and terrorist groups

- TALIBAN: 580
  - Finances Million dollars
  - Averaged full time members, 2015-2018
  - 8 000

- ISIS: 290
  - 17 900

- ISIS: 620
  - 40 000

- NUSRAT AL-ISLAM / JAMA'A NUSRAT UL-ISLAM WA AL-MUSLIMIN' (JNIM): 290
  - 4 000

- AL-SHABAAB: 20
  - 5 000

- MILITIAS IN DRC: 18
  - 8 000

- HAI'YAT TAHIR AL-SHAM (HTS): 6
  - 10 000

- BOKO HARAM: 5
  - 4 000
JORDAN – A Syrian refugee child in front of his tent in Zaatari refugee camp. © Shutterstock / Melih Cevdet Teksen
12 Conclusion

The cost of war

environmental crime surges as threat finance for war profiteers
GHANA – Fevered by hopes of striking it rich, illegal miners claw sacks of “money stone”—gold ore—from the Pra River in Ghana. Their toil feeds the world’s hunger for gold, and leaves a ruined landscape in its wake.
© National Geographic / Randy Olson
Conclusion: The cost of war – environmental crime surges as threat finance for war profiteers

If one looks beyond groups designated as terrorist organizations to include regular organized crime that occurs in and around conflict, the scale of criminal economies is in the range of US$24 billion to US$39 billion by turnover, although profits are far lower. Threat finance revenue to terrorism and major insurgencies represents only about 4% of the total illicit finance in or near areas of conflict. Despite their high profile, such armed groups operate within an environment where exponentially higher incomes go to transnational organized crime. The armed groups take part in these activities, and feed off the income streams, but they are not the dominant financial players.

Powerful elites engaged in organized crime gain from sustaining conflicts and fund non-state armed groups, which undermines the rule of law and good governance. This, in turn, enables criminal elites to benefit from instability, violence and lack of enforcement and, hence, subsequent exploitation of illicit flows during conflict.

Strengthening information and analysis is essential to be able to prevent, disrupt and defeat, before it is too late, both violent armed groups and the organized-criminal actors that provide these armed groups (and themselves) with an environment of impunity and instability.

In order to ensure early prevention and intervention in conflict, it is therefore imperative to forcefully address the role of organized crime and illicit flows in benefiting non-state armed groups and the powerful elites engaged in criminal activity.
BRAZIL – A boy plays with a kite in front of logs cut illegally from the Amazon rainforest at a sawmill in the city of Morais Almeida, Para state, June 27, 2013. © Reuters / Nacho Doce
One in four children in the world live in countries affected by conflict or disaster, often without access to medical care, quality education, proper nutrition and protection.

Sources: PRIO, The War on Children: Time to End Grave Violations against Children in Conflict, 2018, UNICEF, World Bank, 2018
Footnotes

1 Taxation of migration is not included here because the empirical basis is too thin to be able to accurately calculate what portion it forms of the seven big groups' funding. Other armed groups, particularly in Libya, are making very large incomes from this, but that is largely outside the realm of the seven.


4 RHIPTO Threat Network Assessment, ‘Islamic State funding and implications’ (18 September 2014).


7 Ibid.

8 RHIPTO Threat Network Assessment, ‘Strategic value, routes and incomes to armed groups in Libya from 143,000 – 343,000 migrants’ (18 January 2018).

9 Percentage average of US$993 million – 1 372 million compared with US$38–51 billion.


12 RHIPTO estimate based on multiple source reporting, including ACLED, media reports, official estimates and others from Afghanistan, Iraq, Mexico, Syria, Myanmar, Philippines, Ethiopia, DRC, Somalia, Nigeria, Algeria, Burkina Faso, Libya, Mali, Niger, Tunisia, Sudan, Cameroon, Chad, Yemen, Egypt, South Sudan, Mozambique and CAR.


15 World Bank, ‘Fragility, Conflict & Violence’.


23 Ibid. p 9–10.

24 Ibid. p 30.

25 Ibid. p 38.

26 0.91 USD/litre × (100 or 130 tankers) × (25 000 litres or 40 000 litres) × 365 days.


28 Given Brent crude average price from 2017 of US$54.25 per barrel.


30 (1.63m bpd × US$54.25 per barrel average in 2017 × 365 days × 0.05 or 0.15).


33 Ian M. Ralby, ‘Downstream Oil Theft’.


35 Ian M. Ralby, ‘Downstream Oil Theft’.

36 See separate section on Islamic State.


38 RHIPTO Threat Network Assessment, ‘Islamic State funding and implications’ (18 September 2014).


40 RHIPTO Threat Network Assessment, ‘Islamic State in Iraq-Syria financial situation’ (27 February 2016).

41 RHIPTO Threat Network Assessment, ‘Update on Islamic State financial situation in Syria-Iraq’ (07 June 2017).


47 S/2017/924 para 209.


58 S/2016/919 pp 70, 132.


60 S/2017/924 p 46.

61 In 2014 the Monitoring Group of Experts assessed the trade to be worth US$250m, and in 2017 only US$150m. See S/2014/726 and S/2017/924 p 47.

62 S/2016/919 p 42.

63 S/2017/924, p 46.

64 S/2017/924 pp 62, 63.

65 S/2017/924 p 64.


69 Ibid.

70 At 30% profit.


72 Ibid.


81 Ibid.


CIA specifies further that what distinguishes insurgency from terrorism is the objective of gaining control of a population or a particular territory, including its resources. US Government, ‘Guide to the Analysis of Insurgency’ (2012), p 1. Available at https://www.hsdl.org/?view&did=713599 accessed 26 June 2018.

NATO defines insurgency as including at least the following three elements: (1) actions or activities by an organized group, (2) a goal of some form of political change over a ruling regime, and (3) the use of violence or subversive activity. See NATO, ‘Counterinsurgency: A generic reference curriculum’ (no date), p 8. Available at https://www.nato.int/nato_static_fl2014/assets/pdf/pdf_2017_09/20170904_1709-counterinsurgency-rc.pdf accessed 26 June 2018.


Rajiv Chandrasekaran, Little America, p. 63.

US$1.16 billion total income to 7 + 1 armed groups constitutes 3.7% (rounded to 4) of the total income to organized crime in or near conflict areas, which is US$31.54 billion.


- Sergei Boeke, ”Al Qaeda in the Islamic Maghreb: Terrorism, insurgency, or organized crime?” (2016) Small Wars & Insurgencies 27-5, pp 914-936


- RHIPTO Threat Network Assessment, “Update on Islamic State financial situation in Syria-Iraq” (27 May 2017)
- RHIPTO Threat Network Assessment, “Update on Islamic State financial situation in Syria-Iraq” (07 June 2017).