

# World Atlas of Illicit Flows



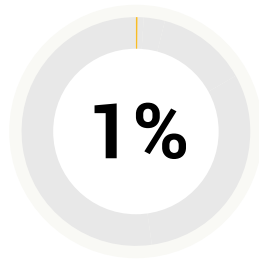
INTERPOL



RHIPTO



THE GLOBAL INITIATIVE  
AGAINST TRANSNATIONAL  
ORGANIZED CRIME



**1%**  
of the income of  
the largest armed  
groups is derived from  
charcoal

## 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.<sup>44</sup> 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.<sup>45</sup> 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.<sup>46</sup>

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.<sup>47</sup>

## 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.<sup>48</sup> Al-Shabaab have been linked to over 4 500 fatalities in 2017.<sup>49</sup> Their largest attack to date happened in October 2017, when more than 300 were killed by a truck bomb in Mogadishu.<sup>50</sup> 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.<sup>51</sup>

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.<sup>52</sup> 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<sup>53</sup>, 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.

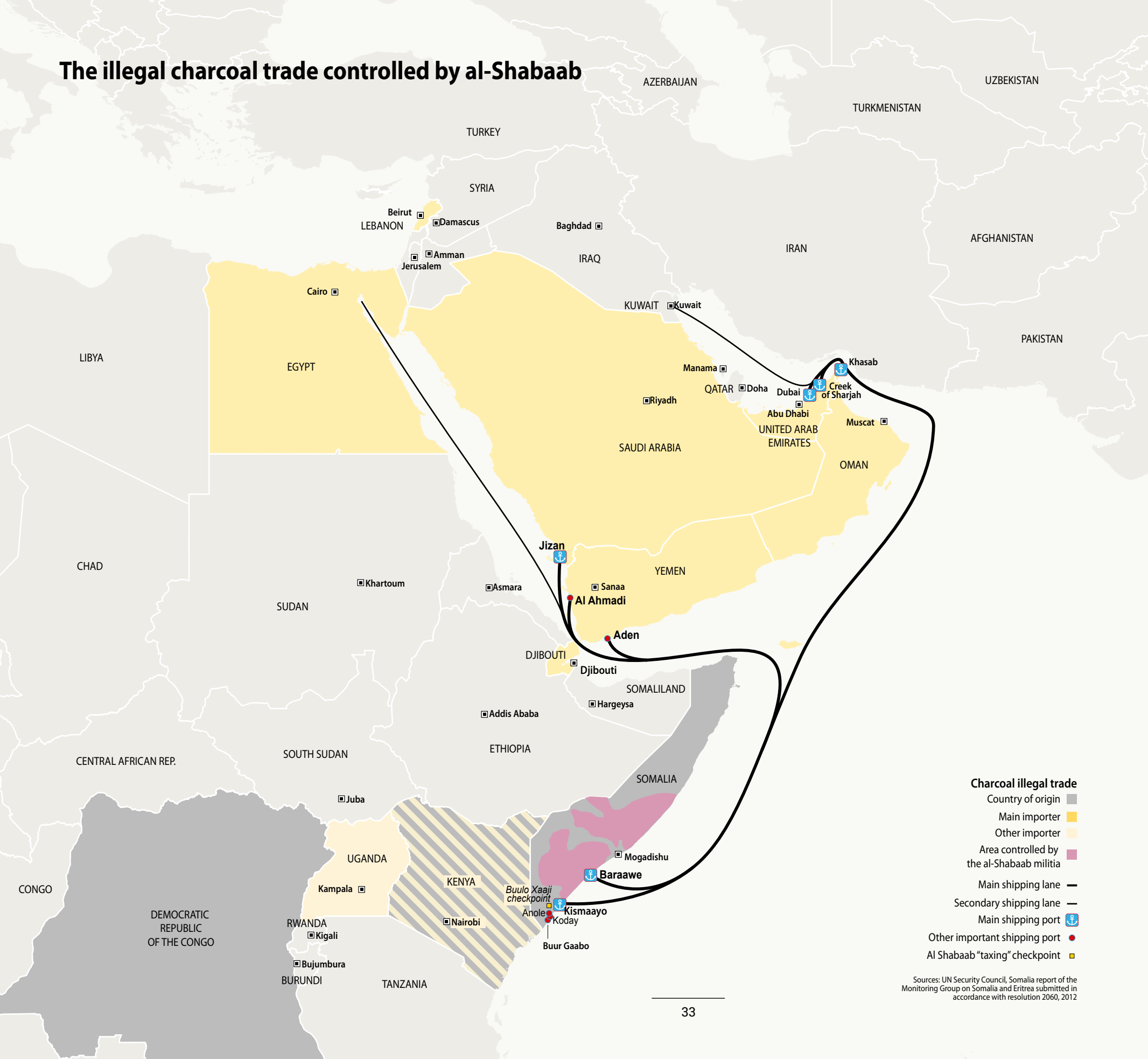
Although they were the major player in this illicit market, not all of the income from the trade benefited al-Shabaab. Later they were squeezed out in large measure by the Kenya Defence Forces (KDF). Al-Shabaab were also making money from a series of other taxation activities, including taxing sugar imports into Kismayo, although this generated only a modest US\$400 000 to US\$800 000 a year.<sup>54</sup> 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.<sup>55</sup>

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.<sup>56</sup> 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.<sup>57</sup>

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



## Charcoal illegal trade

- Country of origin
- Main importer
- Other importer
- Area controlled by the al-Shabaab militia
- Main shipping lane
- Secondary shipping lane
- Main shipping port ⚓
- Other important shipping port
- Al Shabaab "taxing" checkpoint

Sources: UN Security Council, Somalia report of the Monitoring Group on Somalia and Eritrea submitted in accordance with resolution 2060, 2012



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 Khamis



livestock taxation, and they train young cadres as tax collectors, identifiable by their uniforms.<sup>58</sup> The group has also intensified the taxation of distribution of development aid as well as commerce, using checkpoints, which has driven up local prices.<sup>59</sup>

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.<sup>60</sup> The charcoal trade in general, and therefore al-Shabaab's tax revenue, is smaller however,<sup>61</sup> as is reflected in the lower tax of US\$2.5 per bag, down from US\$3 in 2016.<sup>62</sup> The group's estimated revenue from charcoal is currently about US\$10 million a year.<sup>63</sup> 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.<sup>64</sup> 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,<sup>65</sup> 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.<sup>66</sup> 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.<sup>67</sup> 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 impede their political influence over clan leaders in Somalia.

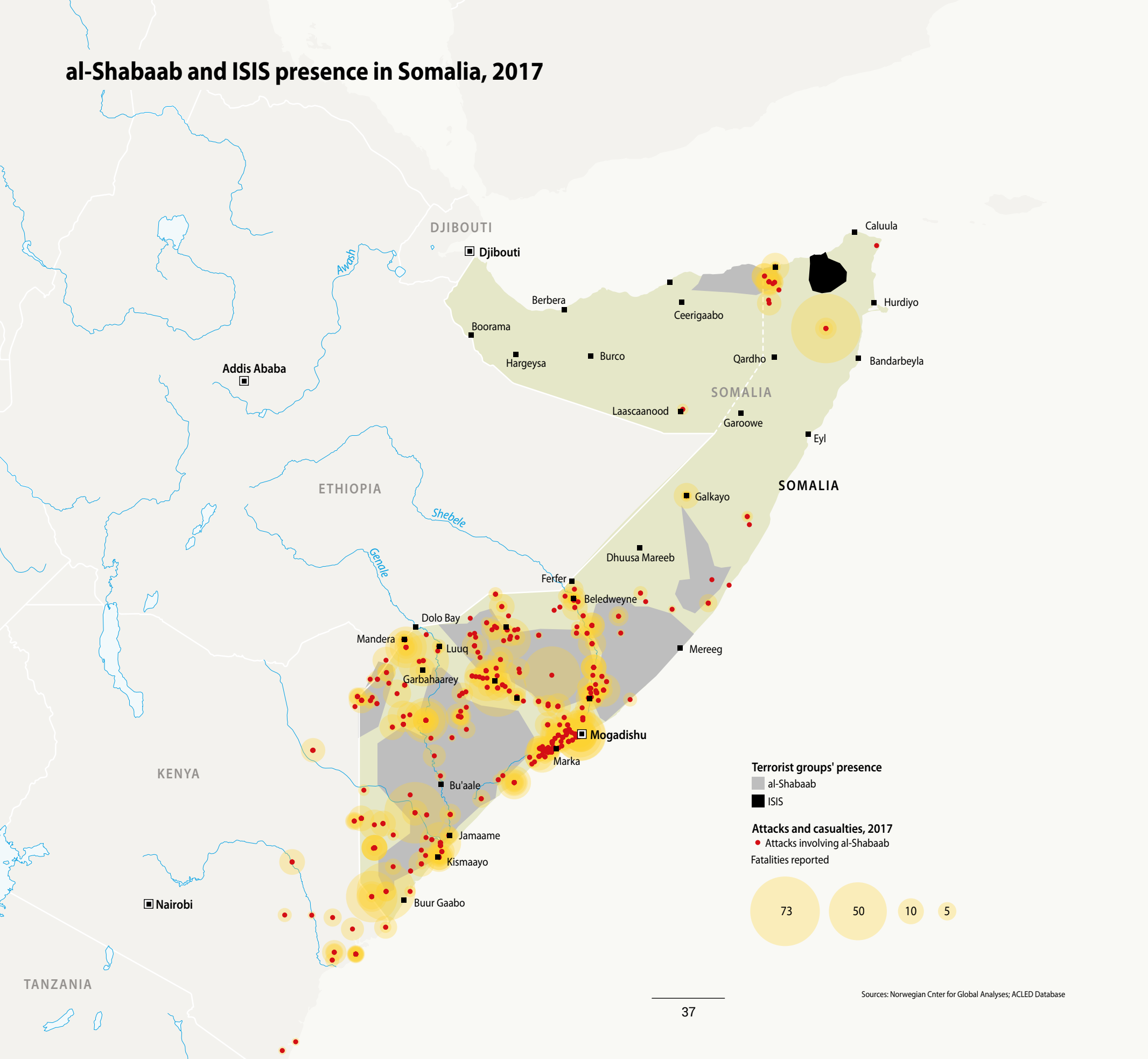
For African countries experiencing ongoing conflicts, including Mali, Central African Republic, DRC, Sudan and Somalia, a conservative estimate is that, in total, the militia and terrorist groups in those countries may gain US\$111–289 million annually, depending upon prices, from their involvement in, and taxing of, the illegal or unregulated charcoal trade.<sup>68</sup>

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.<sup>69</sup> 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.<sup>70</sup> 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

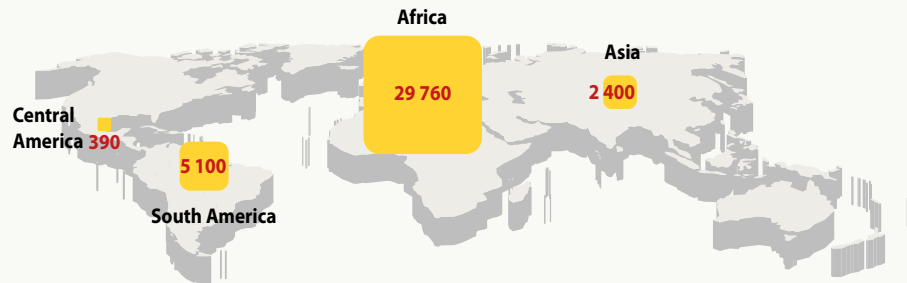
# al-Shabaab and ISIS presence in Somalia, 2017



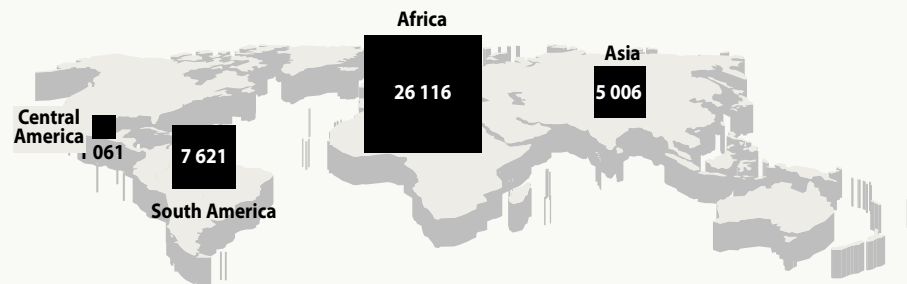
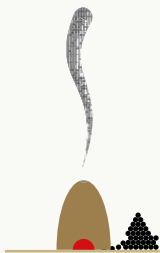
Sources: Norwegian Center for Global Analyses; ACLED Database

# The impacts of unsustainable charcoal production

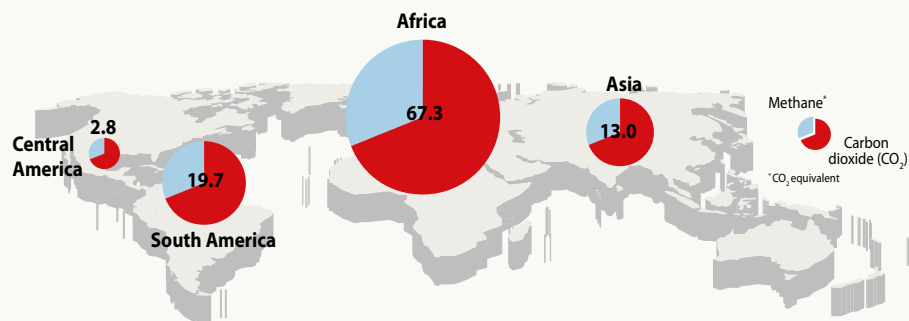
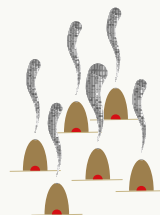
**Estimated annual deforestation rates caused by charcoal production**  
Square kilometres, 2009



**Charcoal production**  
Million tonnes, 2009



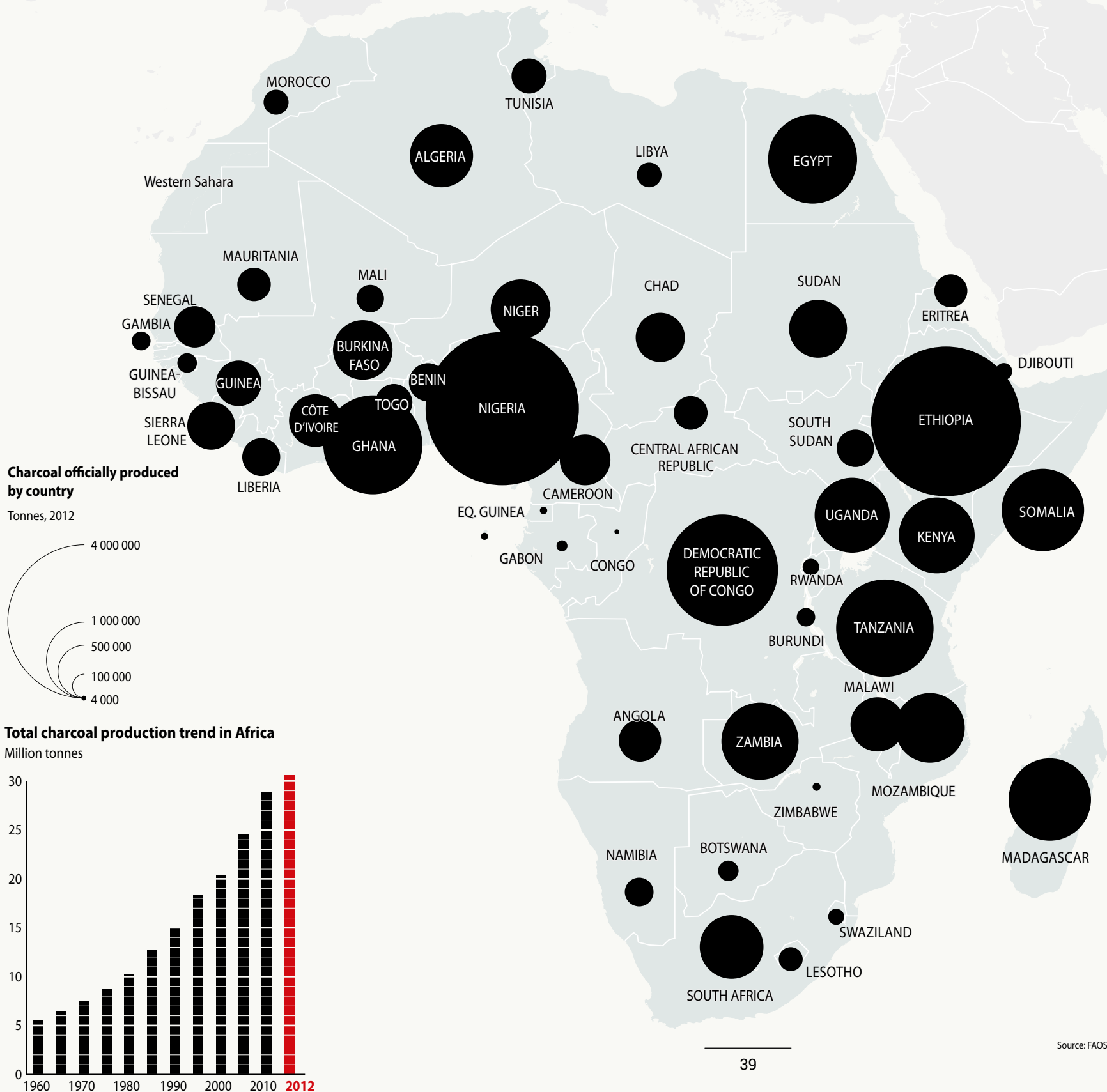
**Greenhouse gas emissions caused by charcoal production**  
Million tonnes, 2009



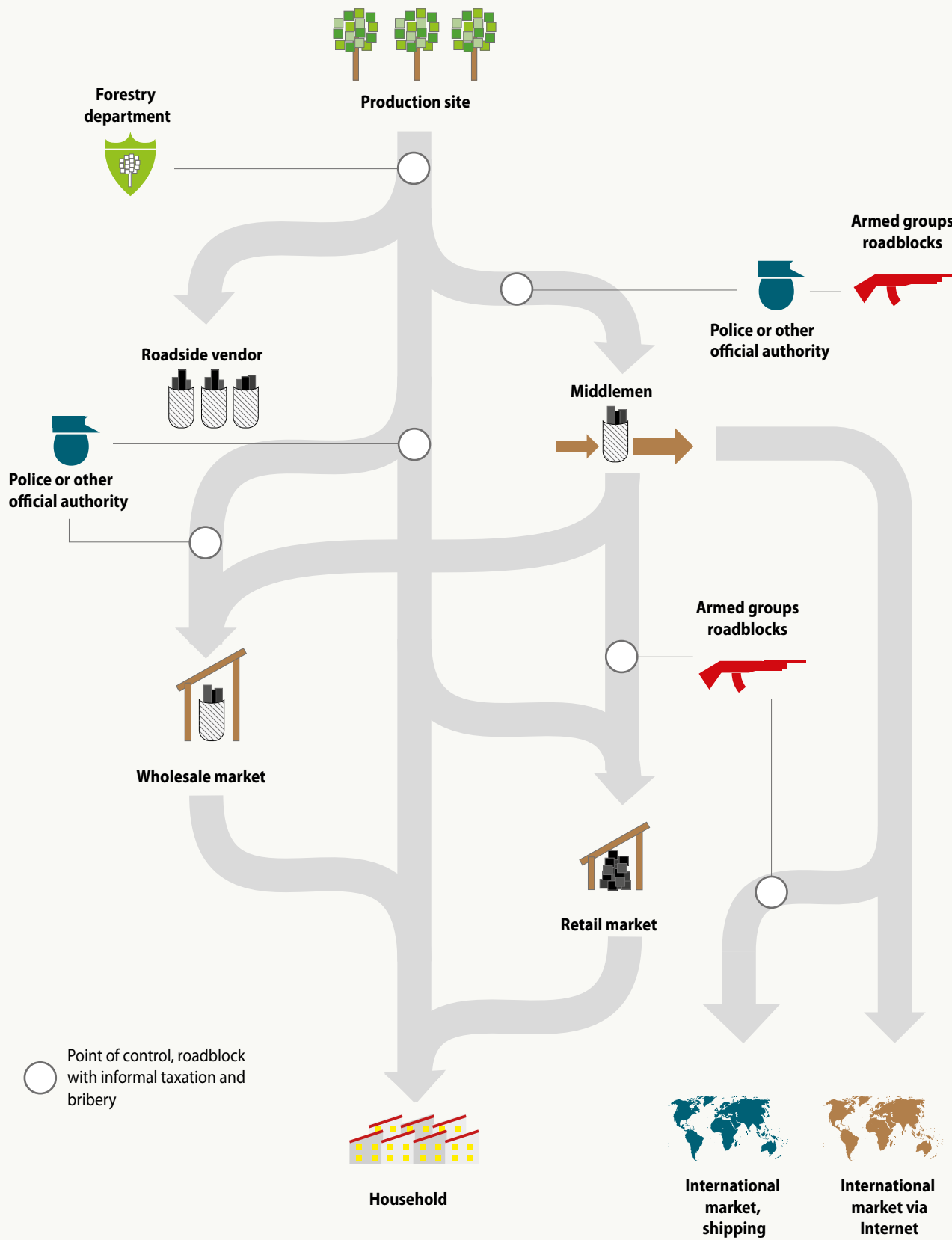
Bags of charcoal line a road in Africa.  
© SHUTTERSTOCK / Peter Wollinga



# Wood charcoal production in Africa



# The charcoal supply chain



## Price of a bag of charcoal at retail market

Percentage of the total selling price, Malawi

Producer

33

6

Packing

12

Private taxes and bribes

25

Transport

3

Market fee

21

Retailer



SOMALIA - Naasa Hablood mountain in Somaliland.  
© iStock / Muendo

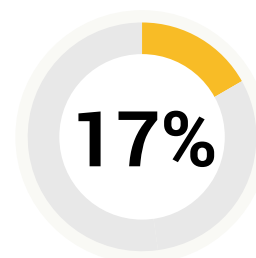


SOMALIA — Boys pan for gold at a riverside at Iga Barriere, 25 km (15 miles) from Bunia, in the resource-rich Ituri region of eastern Congo February 16, 2009.  
© Reuters / Finbarr O'Reilly

# 04 Illegal mining in contexts of conflict



# Illegal mining in contexts of conflict



of the income financing the largest armed groups is derived from illegal mining

## 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:

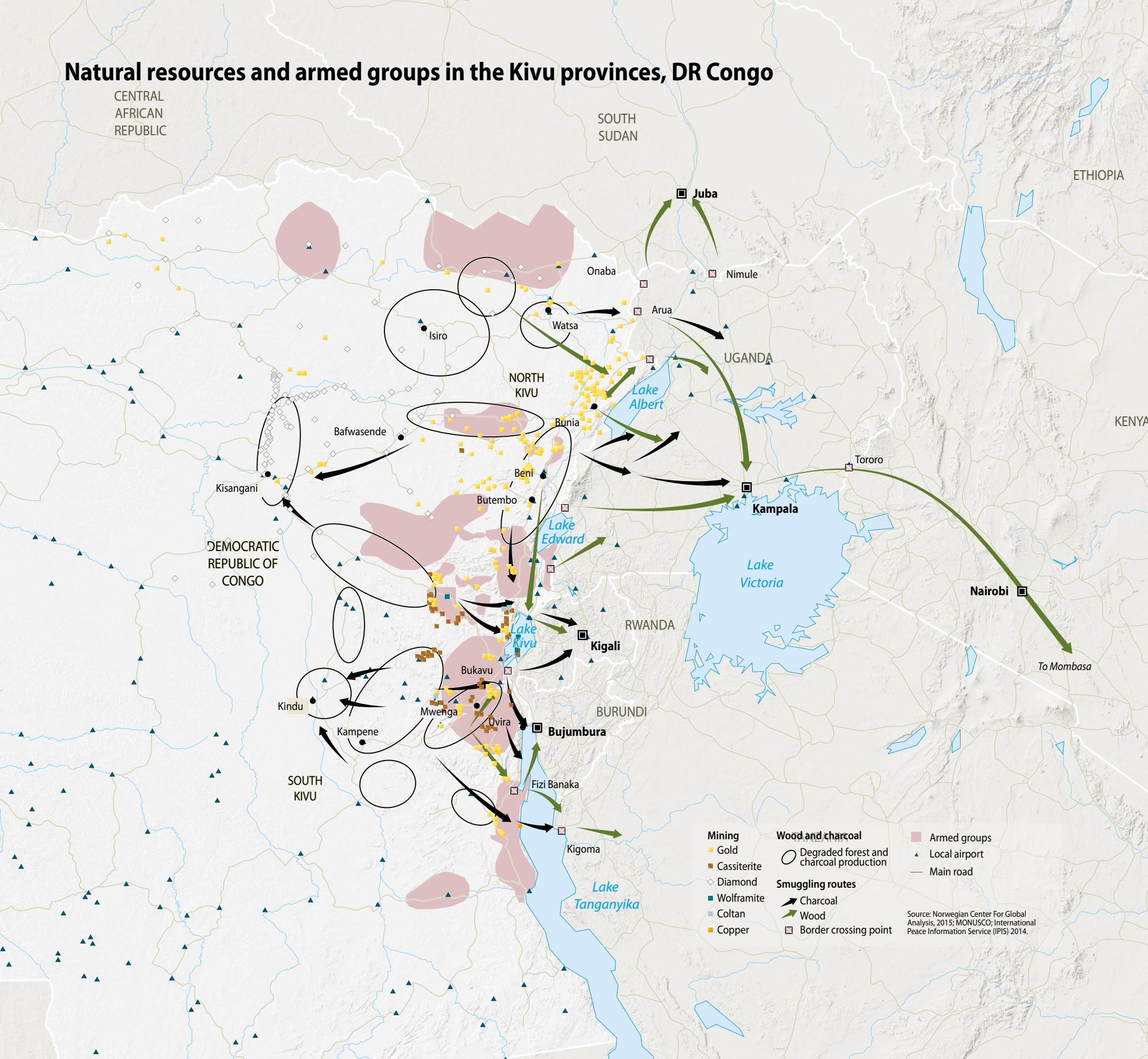
- i) Gold (US\$40–120 million)
- ii) Timber (US\$16–48 million)
- iii) Charcoal (US\$12–35 million)
- iv) 3T minerals (US\$7.5–22.6 million)
- v) Diamonds sourced mainly from outside the conflict zone (US\$16–48 million)
- vi) Other, including wildlife (ivory and fisheries), local taxation schemes, cannabis 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).<sup>71</sup>

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-crime 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.<sup>72</sup>

DEMOCRATIC REPUBLIC OF CONGO – Karawa, August 24, 2013. An unpaved road in rural Congo, a lot of people are walking on the road which connects two villages in the province of Equateur.  
© iStock / Guenter Guni

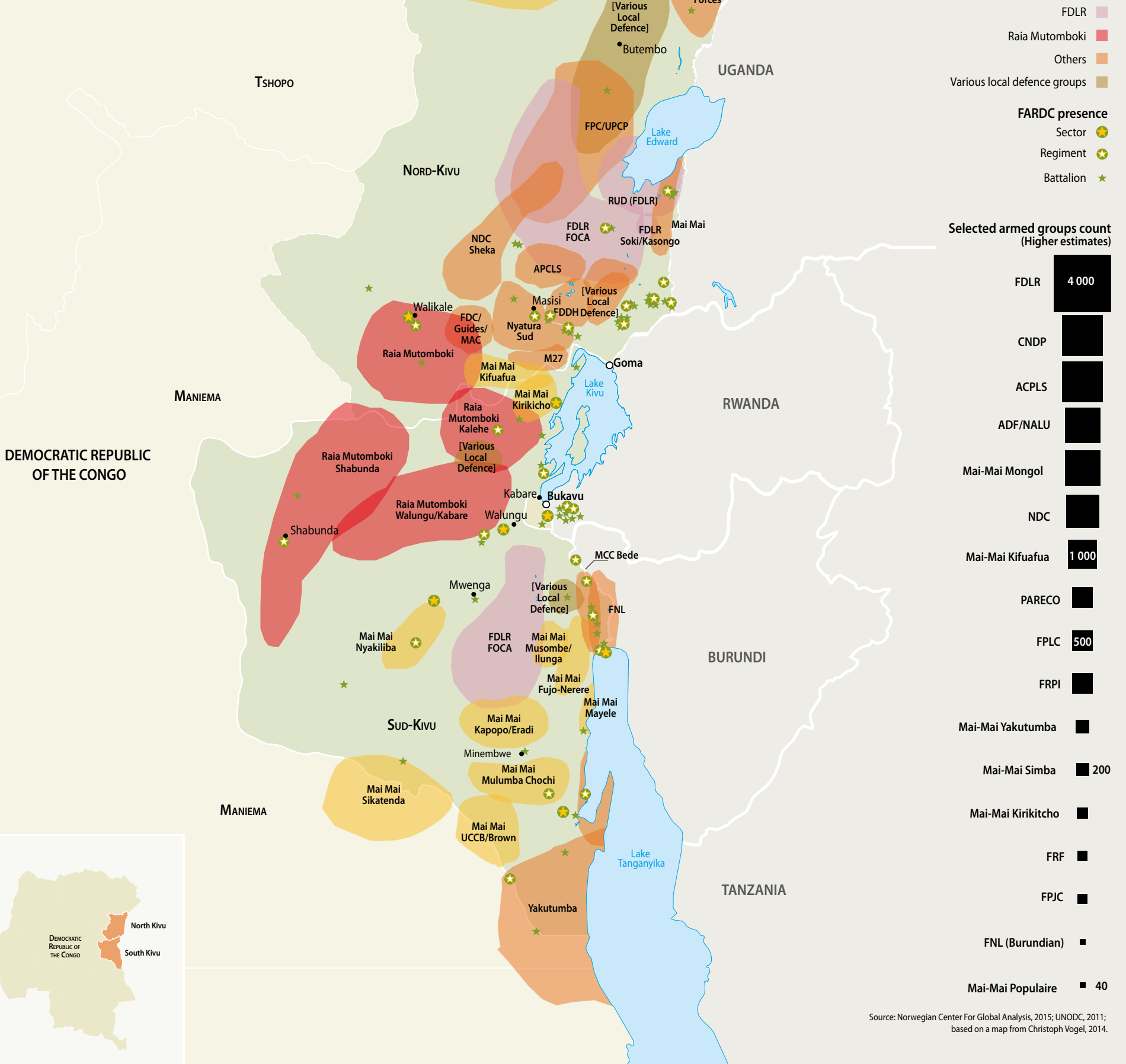
# Natural resources and armed groups in the Kivu provinces, DR Congo



- Mining**
- Gold
- Cassiterite
- ◇ Diamond
- Wolframite
- Coltan
- Copper
- Wood and charcoal**
- Degraded forest and charcoal production
- Smuggling routes**
- Charcoal
- Wood
- Border crossing point
- Armed groups
- ▲ Local airport
- Main road

Source: Norwegian Center For Global Analysis, 2015; MONUSCO; International Peace Information Service (IPIS) 2014.

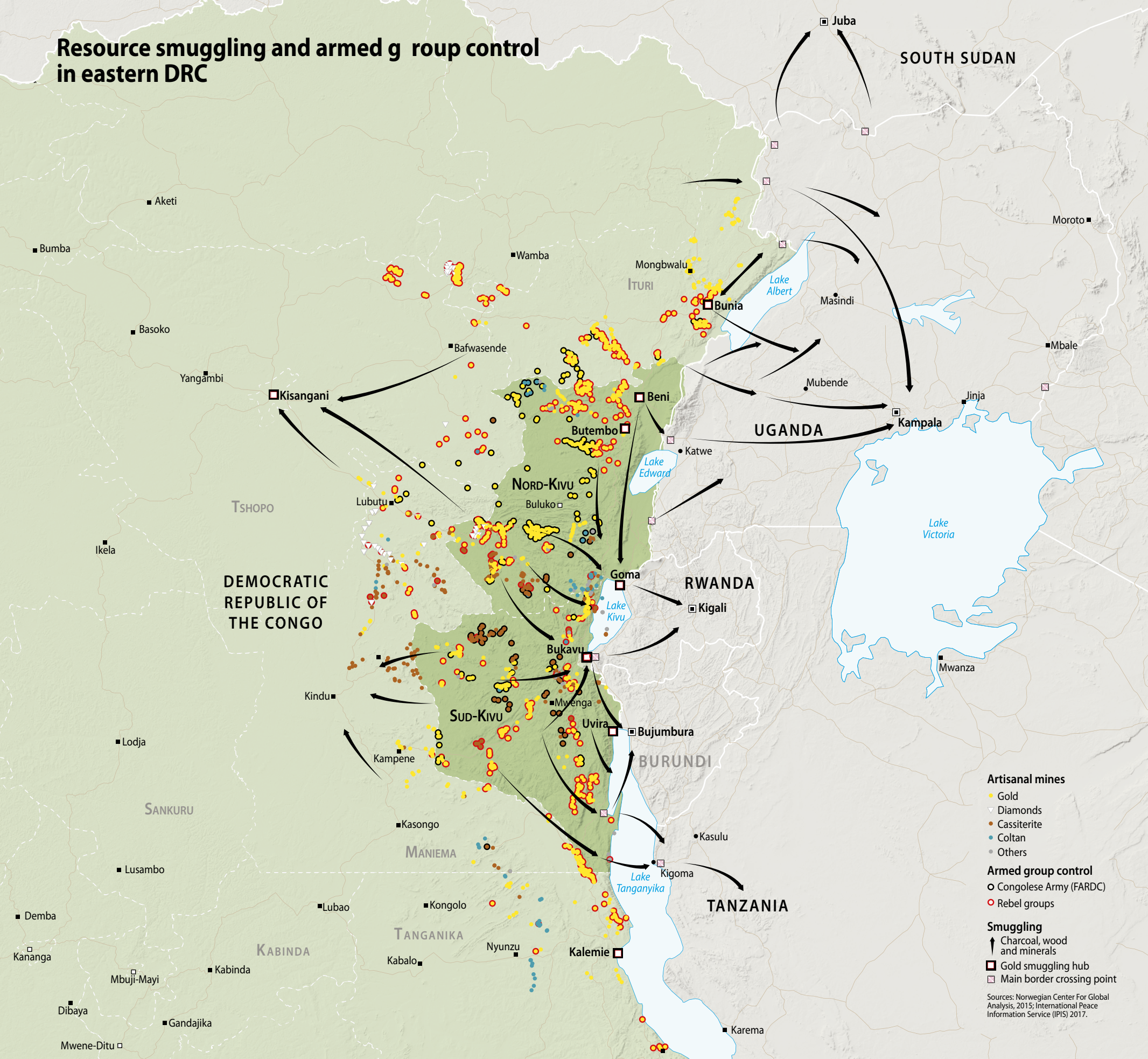
# Kivu armed groups' areas of influence



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

Sources: Norwegian Center For Global Analysis, 2015; International Peace Information Service (IPI) 2017.



DRC – Chai, North Kivu, March 29, 2014:  
FDLR rebel soldiers reloading ammo before patrols start in Chai,  
North Kivu, DR Congo.  
© iStock / Jon Brown

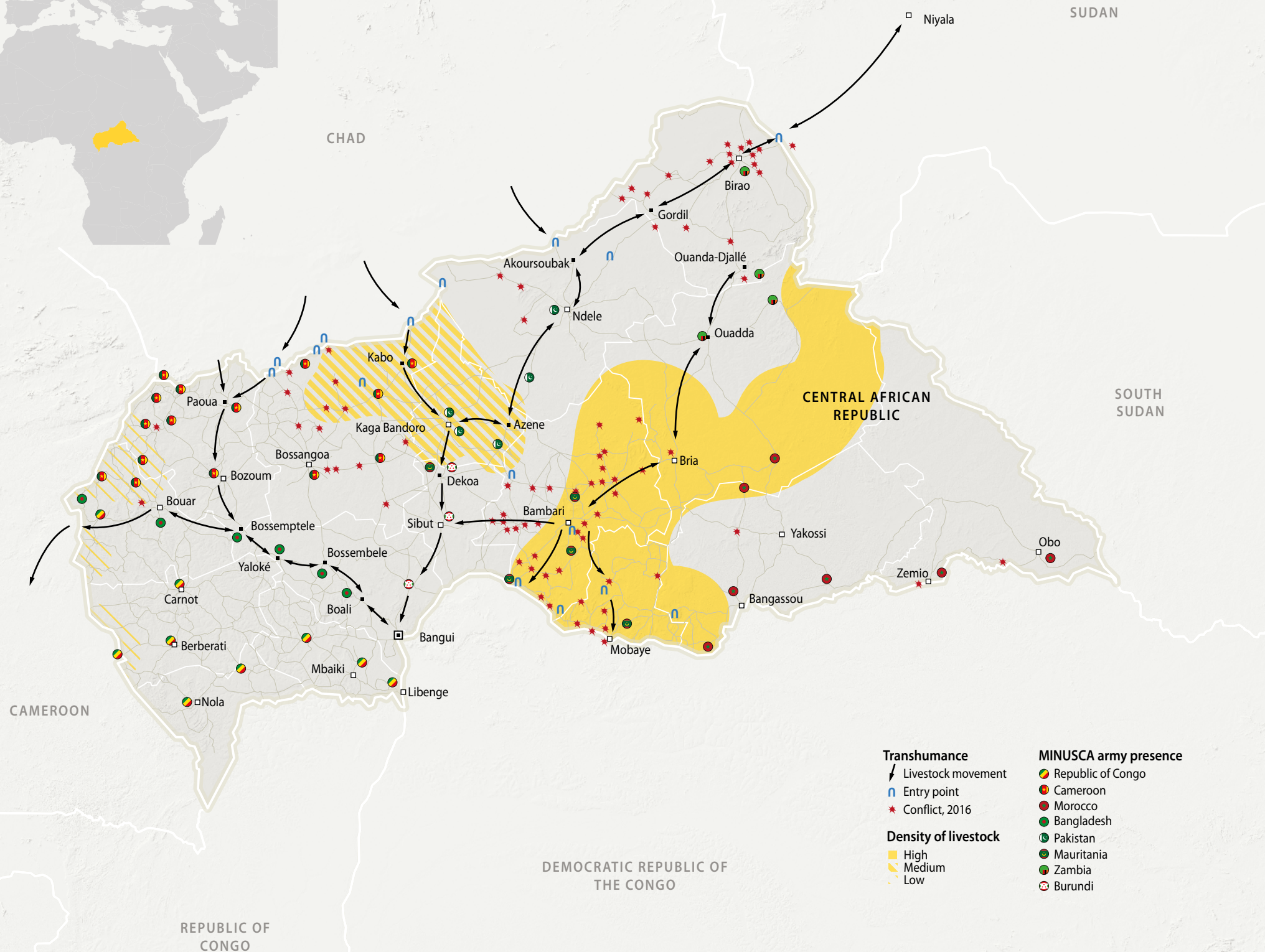




CENTRAL AFRICAN REPUBLIC – Prospectors work at an open-pit at the Ndassima gold mine, near Djoubissi north of Bambari May 9, 2014.  
© Reuters / Siegfried Modola

# Armed groups, border-corridor movement and clashes in CAR

## October 2017



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



# 05 Illegal logging

The largest, least risky and most profitable illicit environmental industry

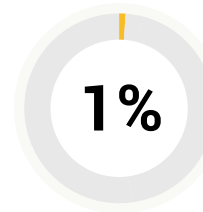




MADAGASCAR – Toamasina, April 12, 2014: Loading of rosewood on trucks at the port of Toamasina (Tamatave).  
© iStock / Pierre-Yves Babelon



## Illegal logging: The largest, least risky and most profitable illicit environmental industry



**Less than 1% of the income of the largest armed groups comes from timber**

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.<sup>73</sup>

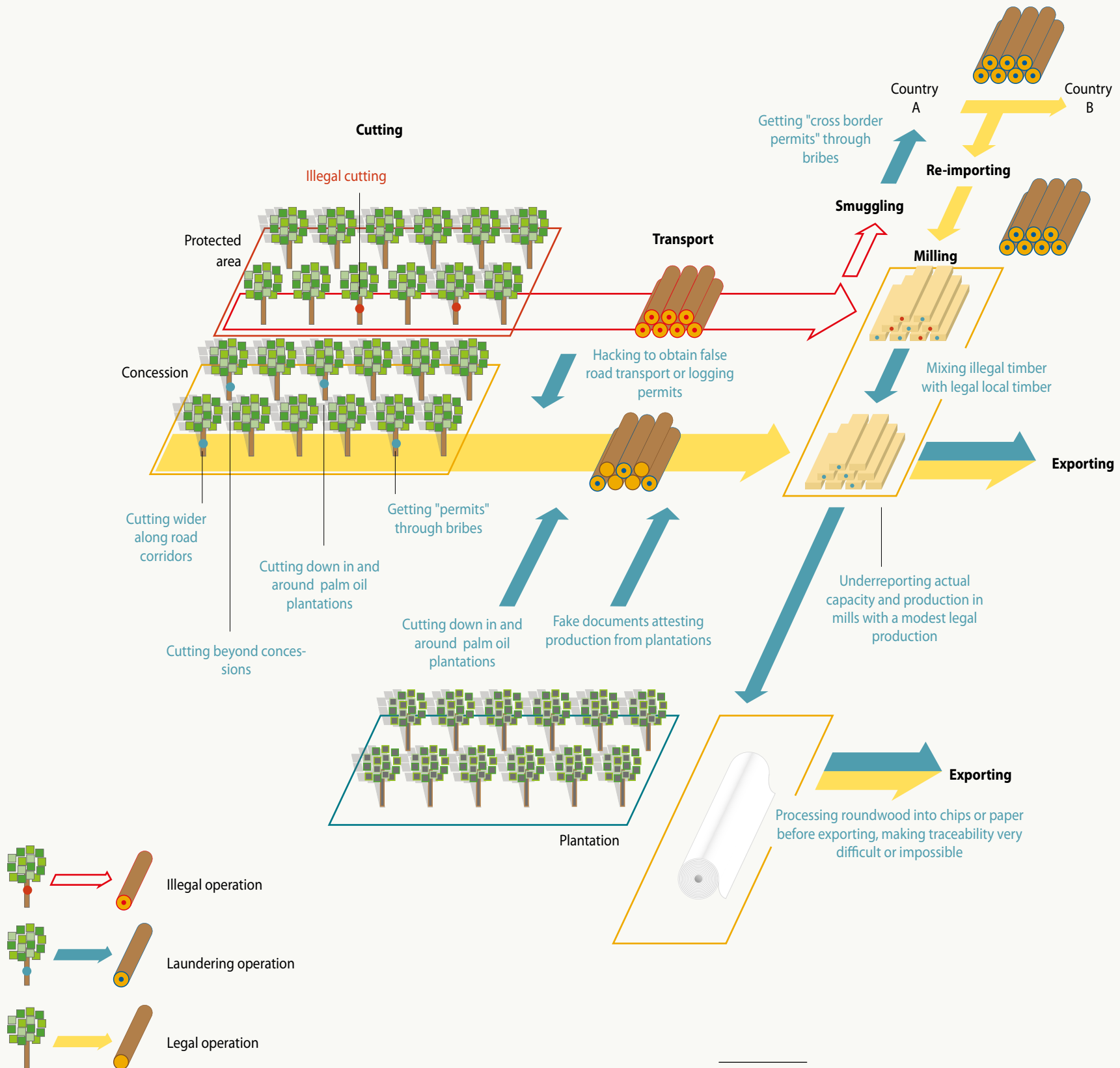
The more than 30% lower market prices fetched by illegal tropical wood in recent years – of which INTERPOL has estimated that 50% to 90% of the wood felled in tropical countries is traded illegally – has probably contributed to the downfall of many European forestry and paper industries, and the loss of over 270 000 jobs in the industry from 2000 to 2010.<sup>74</sup> 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.<sup>75</sup>



BRAZIL – Forest on Awá land is being illegally cleared by settlers.  
© Survival / Fiona Watson

# Illegal logging and log laundering





# 06 Wildlife crime & waste



# Primary ivory trafficking routes in Tanzania



- Protected areas**
  - National park
  - Other protected area
- Trafficking routes**
  - Main route
  - Other route

Sources: Norwegian Center for Global Analysis, 2015, UNEP, WCMC, Protected Planet



# 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.<sup>76</sup> For the forest elephant, the population is estimated to have declined by about 62% between 2002 and 2011.<sup>77</sup> 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.<sup>78</sup>

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.<sup>79</sup> 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.<sup>80</sup>

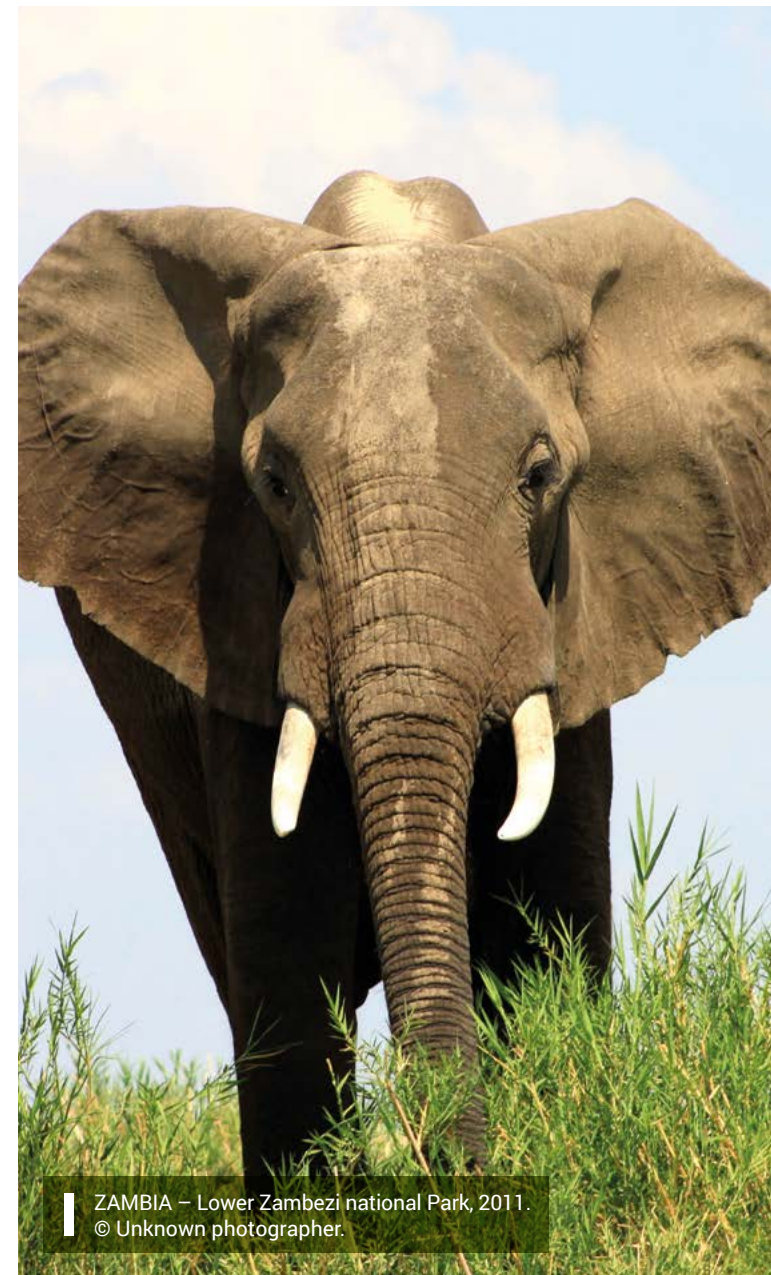
Wildlife and forest crime play a relatively small role in threat finance to organized crime and non-state armed groups, including terrorist groups. It is estimated that less than 1% of the overall income to non-state armed groups comes from ivory. Ivory provides a portion of the income raised by militia 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.<sup>81</sup>

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).

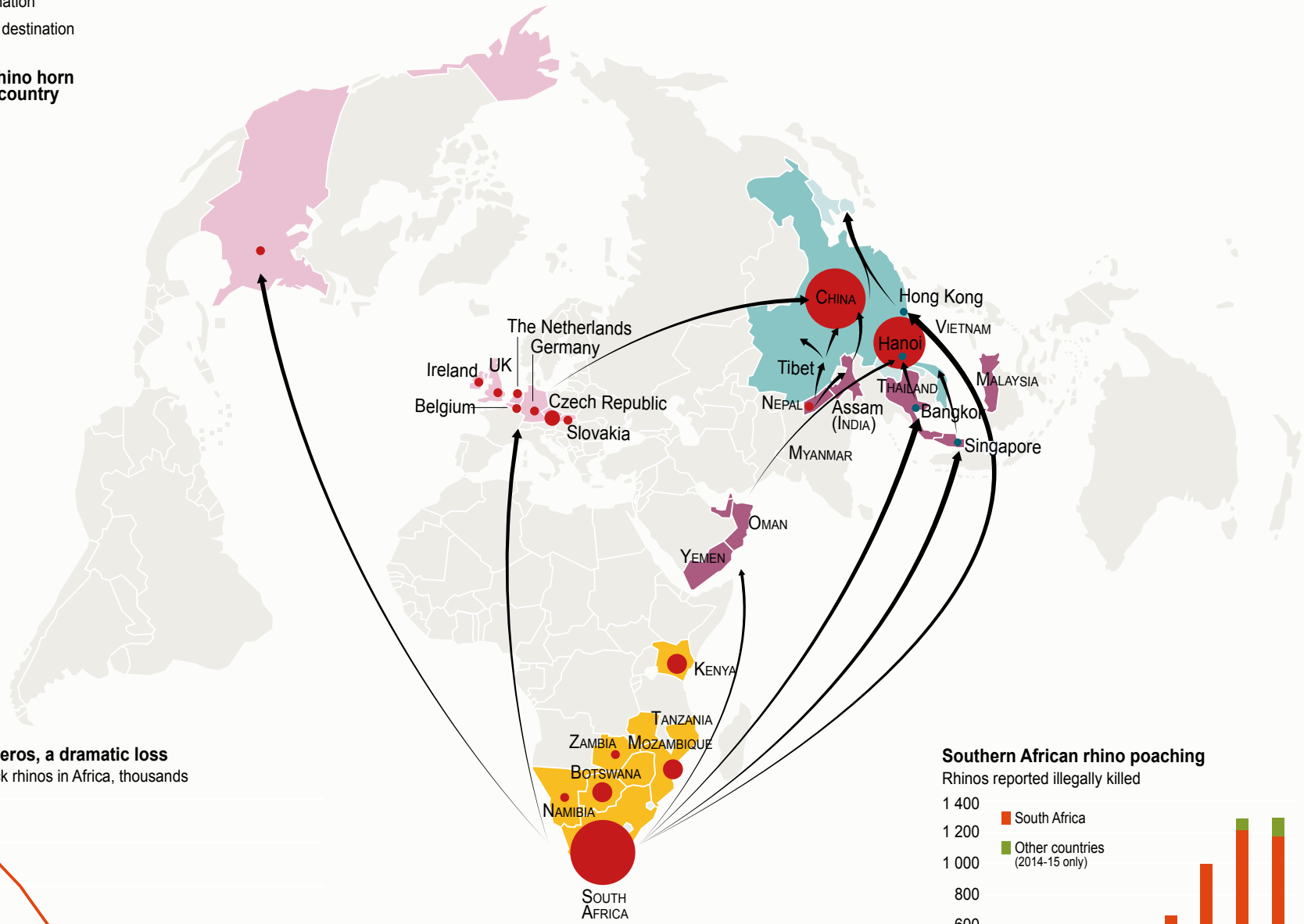
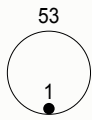


ZAMBIA – Lower Zambezi national Park, 2011.  
© Unknown photographer.

# African rhino smuggling

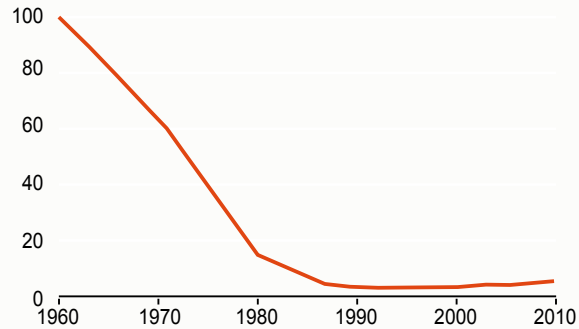
- Main trafficking hubs
- ➔ Main routes
- Main country of origin
- Main transit country
- Secondary transit country
- Main destination
- Secondary destination

## Number of rhino horn seizures by country



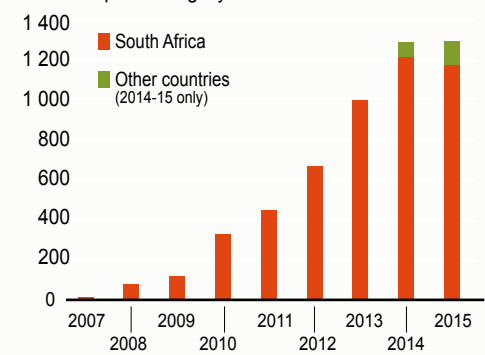
## Black rhinoceros, a dramatic loss

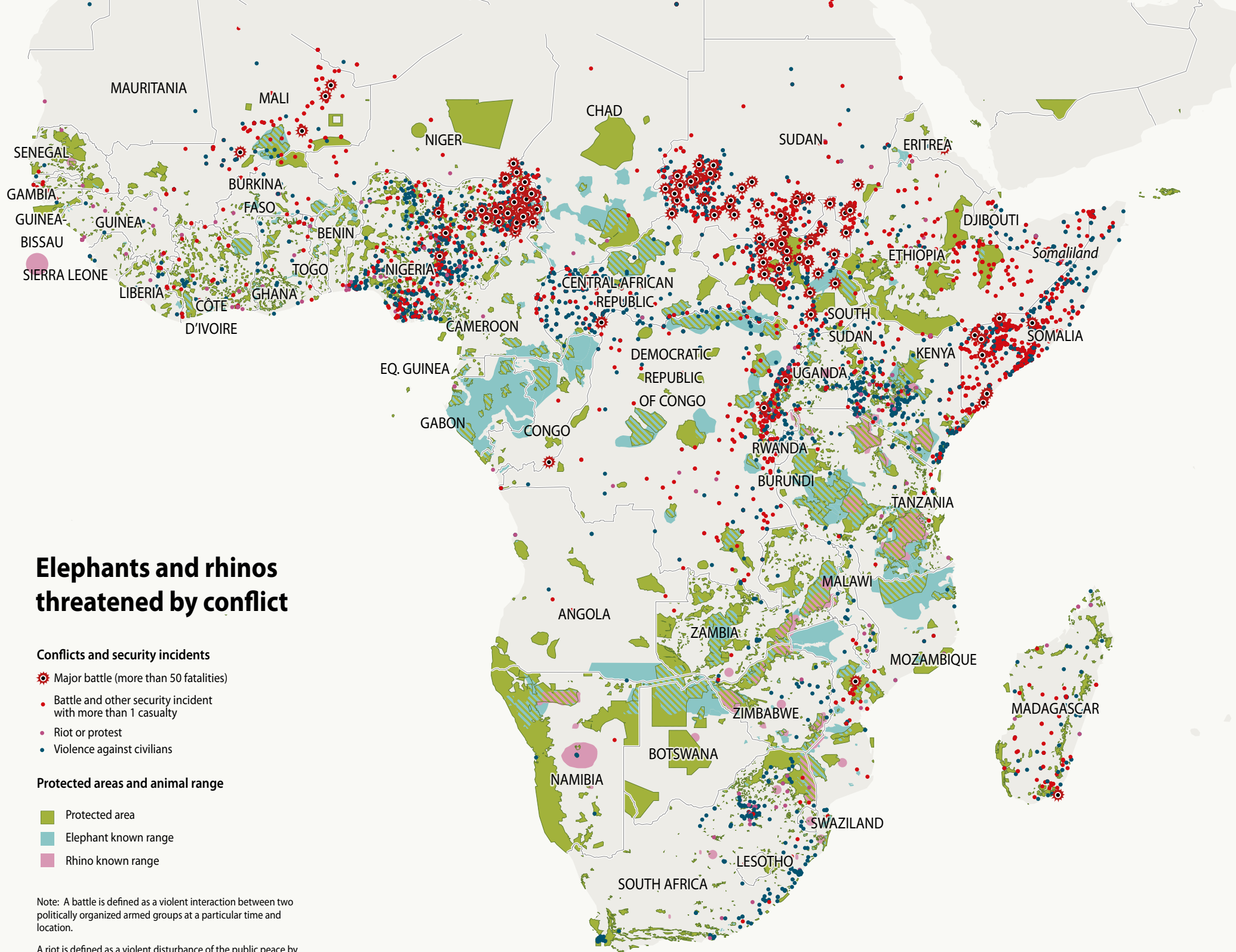
Number of black rhinos in Africa, thousands



## Southern African rhino poaching





Rhinos reported illegally killed








## 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.

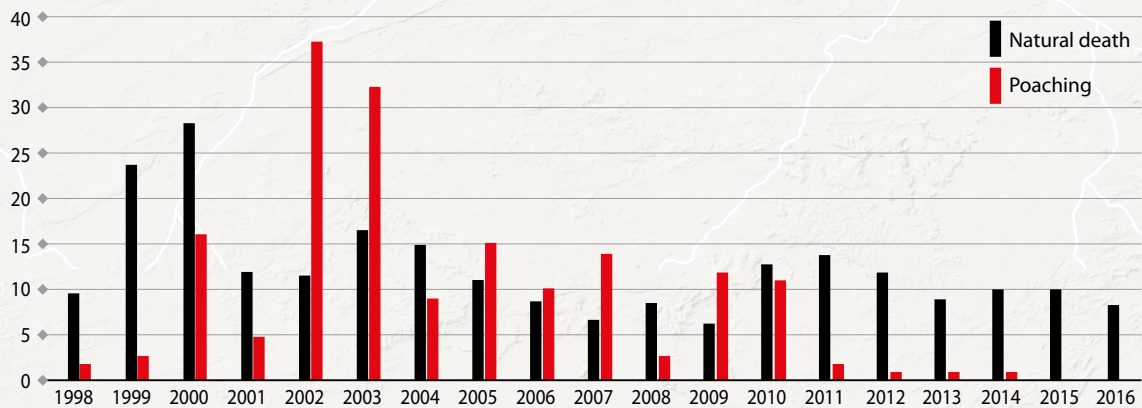
A riot is defined as a violent disturbance of the public peace by three or more persons assembled for a common purpose.

A protest is defined as a spontaneous, non-violent gathering of civilians for a political purpose

# Greater one-horned rhino smuggling in Nepal



## Annual mortality of the greater one-horned rhinoceros in Nepal



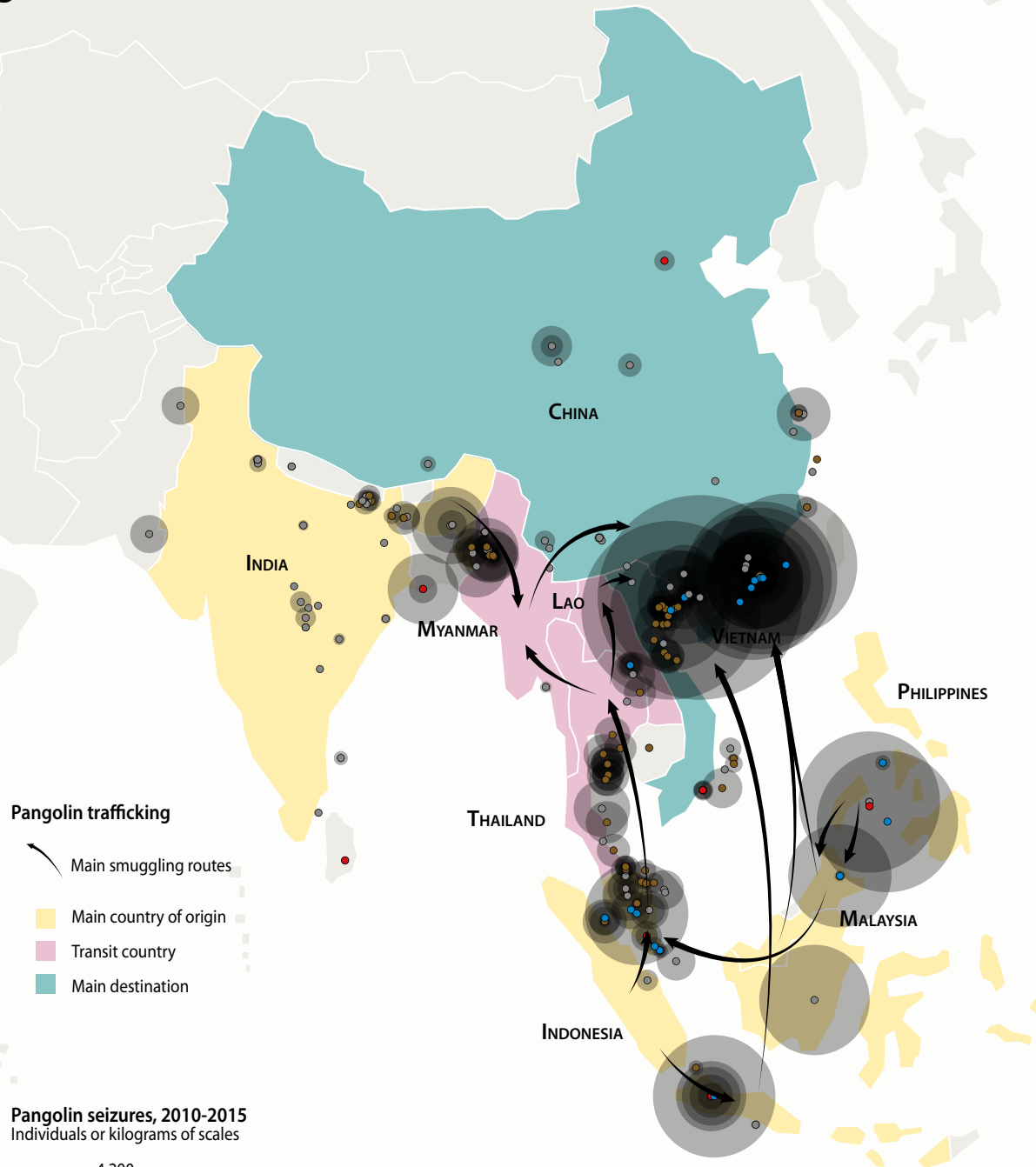
Sources: RHIPTO 2018; Thapa, K., et al., Past, present and future conservation of the greater one-horned rhinoceros *Rhinoceros unicornis* in Nepal, 2011; Nepal Department of National Parks and Wildlife Conservation, 2017



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



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,<sup>82</sup> 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.<sup>83</sup> 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).<sup>84</sup> In January 2017, Tanzanian authorities seized 6 000 kg of scales destined for Asian markets.<sup>85</sup>





Tiger  
© iStock / THEPALMER



# 85% of the global trade in tigers takes place within the EU





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.<sup>86</sup> 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.<sup>87</sup> 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.<sup>88</sup> 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.<sup>89</sup>

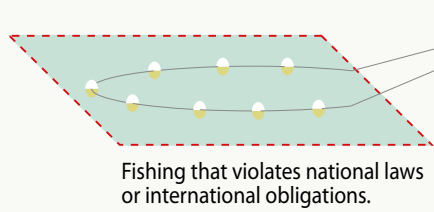
In Somalia, illegal fishing has been posited as a cause of the rise in piracy through lost livelihoods. Losses incurred by foreign illegal vessels off Somalia have been estimated to be in the region of US\$100–300 million.<sup>90</sup> IUU fishing off Senegal, with a catch of about 261 000 tonnes a year, incurred a loss of about US\$300 million in 2012, or 2% of GDP.<sup>91</sup> 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

## ILLEGAL FISHING



Fishing that violates national laws or international obligations.



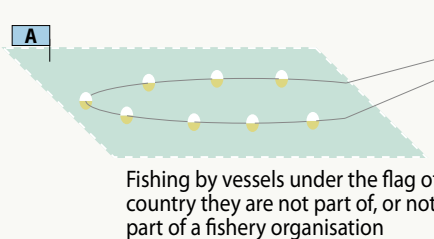
Fishing within a country's Exclusive Economic Zone without permission

## UNREPORTED FISHING

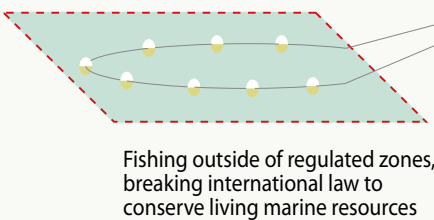


Fishing that has not been reported, or has been misreported, to the relevant national authority

## UNREGULATED FISHING

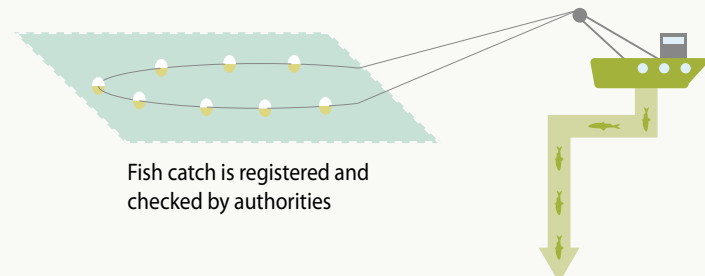


Fishing by vessels under the flag of a country they are not part of, or not part of a fishery organisation



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

## LEGAL FISHING

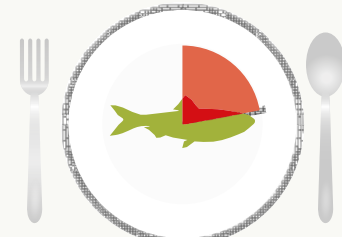
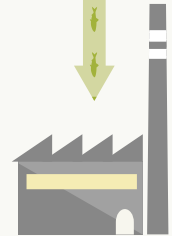
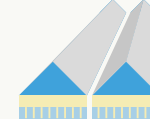


Fish catch is registered and checked by authorities



Fish gets to the market or to the processing factory

Documents are forged to provide legal ground to illegally caught fish



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



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

