

Transnational organized environmental crime

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Introduction

In January 2019, Instagram model Stephanie Scolaro pleaded guilty to wildlife crime after investigations by Scotland Yard's wildlife unit found that she unlawfully sold accessories (baseball caps, handbags, phone cases) made of snakeskin in her London stores, on her website and advertised them via her Instagram account. The investigation started after German customs discovered the skins of a protected python's species in a travel bag which originated in Indonesia. The judge criticized the self-centeredness of Scolaro – daughter of an Italian mining mogul – and sentenced her to community service. In a later interview, she wondered what harm she had caused (Dodd, 2019).

In September 2020, the Wu organized crime group (OCG) was shut down by US law enforcement for alleged involvement in international drug trafficking, money laundering and illegal wildlife trade. Operation Apex, the integrated cooperation between multiple agencies but spearheaded by the US Fish and Wildlife Service (USFWS) and the Drugs Enforcement Agency (DEA), was initiated after 900 kilos of cocaine was found in an illegal shipment of frozen sharks. The USFWS' law enforcement division went undercover in the seafood business and found that the illegal trade in shark fins and totoaba bladders was used to launder drug proceeds. The OCG – of which 12 members were charged by the US District Attorney's Office - had set-up two limited liability companies (LLCs) and dozens of bank accounts and deposited millions of dollars in business accounts of numerous third parties. This transnational criminal organization allegedly continued their smuggling activities of wildlife trafficking, drug trafficking and money laundering between Mexico, Canada, Hong Kong and the US for over 10 years (Department of Justice, 2020).

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Both cases illustrate the multifaceted nature of transnational organized environmental crime. They show that the underworld and upperworld are intertwined and that the line between organized, corporate, white-collar and financial crime is often difficult to draw in cases of environmental crime. This organized-environmental crime nexus is the focus of this chapter. This refers to the involvement of organized crime networks and/or the occurrence of organized crime activities in environmentally harmful behavior. The transnational dimension of it could refer to the border crossing of black-market environmental goods and services but also to the cross-border environmental harm. The organized dimension refers to groups who systematically commit crimes with serious consequences for society, who are primarily focused on profit and who manage to keep their activities hidden by exerting influence via (the threat of) violence or by corrupting business or government employees (Fijnaut et al., 1996, p. 24 (own translation)). This chapter does not follow the definition of an organized criminal group (art. 2a) in the *United Nations Convention against Transnational Organized Crime* (UNTOC)³ because using the severity of the punishment – ‘committing at least one crime punishable by at least four years’ incarceration’ - foregoes many crimes that are environmentally harmful (Wyatt et al., 2020). An elaborate overview of the conceptual debate about (transnational) organized crime can be found in the introduction to this handbook. As an introduction to this chapter, suffice to say that “*organized crime should not be conceptualized as a dysfunction in society, nor as an alien force impinging upon society. Rather, organized crime is part and parcel of the economic system.*” (Kappeler & Potter, 2018, p. 148). Exactly because it is so inherently connected to the legal economy, our attention also goes to the organized-corporate nexus in environmental crimes.

Transnational organized environmental crime manifests itself as black markets of wildlife, (hazardous) waste and natural resources, including fish, timber and domestic animals (Boekhout van Solinge, 2014; Maher & Wyatt, 2019; Ruggiero & South, 2010). The environmental black market has been vastly increasing and is estimated to be the worlds’ fourth largest crime sector after drugs, weapons and human trafficking (UNEP-INTERPOL, 2016: 7). Sometimes the black market involves traditional organized crime groups. In many other cases, the actors involved are much more fluid, complex networks

³ ‘A group of three or more persons that was not randomly formed; existing for a period of time; acting in concert with the aim of committing at least one crime punishable by at least four years’ incarceration; in order to obtain, directly or indirectly, a financial or other material benefit.’ (UNTOC, article 2)

of legal and illegal actors and organizations. Sometimes it involves both violence and corruption, other times there is no immediate violence aimed at humans, but there is always harm inflicted upon the environment. These harms are both visible and invisible, both unknown and purposely hidden. As a whole, transnational organized environmental crime harms biodiversity, species habitats, and significantly hampers the sustainability of the planet, while also negatively affecting human rights to health and livelihoods and draining governments' resources via corruption and money laundering (Hall, 2015; Sollund, 2013; Tacconi, 2007; van Uhm & Moreto, 2018).

In taking a green criminological approach to transnational organized environmental crime, a broad concept of environmental crime is used (Walters, 2014). A mere legal definition of environmental crime is too narrow because much environmentally harmful behavior escapes the boundaries of (inter)national law-making. Therefore, environmental harm is the core focus, extending beyond what is officially classified as an infringement of rules and regulations (Halsey & White, 1998; South, 1998a). Environmental crime then refers to immediately noticeable or measurable harm as well as harm that only manifests itself after a long period of time or that is harmful across borders (White, 2011). Environmental victimization extends beyond an anthropocentric perspective to include people, non-human animals, plants and ecosystems (Hall, 2015; Shearing, 2015; South, 1998a). It considers the rights of animals, plants and ecosystems as direct and indirect victims of environmental crime (Beirne & South, 2007; Halsey & White, 1998). This for instance refers to the effect that pollution – a type of waste – has on the air, water or soil quality, even when this concerns only minimal quantities that cause damage only after prolonged exposure (Lynch & Stretesky, 2001). Moreover, this critical perspective also pays attention to the systemic causes of environmental harm (South, 1998b; White, 2015). This includes a focus on activities that are perfectly legal in most situations, such as logging or fishing, but are defined as environmental crime in certain circumstances (Cardwell et al., 2011). This considers that industrial activities (e.g. agro-industry and gas extraction), while not intrinsically criminal, may contribute to the exploitation of natural resources. Moreover, this pays attention to the unequal distribution of harm between world regions and populations (e.g. race, gender, socio-economic status) and to the potential long-term effects (Lynch, 2013; Mohai & Saha, 2007). This view of social and ecological damage thus allows attention to be paid to the externalization of harm from richer to poorer regions and from the powerful to the powerless (Brisman & South, 2013).

Based on three case studies of transnational organized environmental crime, this chapter, on the one hand, aims to illustrate these direct and indirect harms caused by environmental black markets. On the other hand, we aim to critically assess the often-artificial distinction between organized and corporate crime in environmental crimes. In what follows, this will be illustrated based on several subtypes of transnational organized environmental crime: (1) waste, (2) wildlife and (3) natural resources. This is not an exhaustive overview of environmental crimes which involve organized crime groups and/or activities. For each type of transnational organized environmental crime, a broad stroke overview is provided of the actors involved and the harms caused and we also zoom in on a particular case study for each environmental crime type. Before each of these types are discussed in more detail, this chapter continues with a discussion of the development of the organized-environmental crime nexus on the policy agenda and in (green) criminological research.

The organized-environmental crime nexus in policy-making and (green) criminology

Since the first studies on environmental damage were published in the 1960s, exact scientists have been studying environmental evolutions, such as global climate and seawater levels to argue there are (or should be) limits to economic growth (Meadows et al., 2004). In the 1970s and 1980s, the environment became a more prominent topic for policy, when the first ministries for the environment were established and the *United Nations* (UN) held its first environmental conference and created the *UN Environment Programme*. This coincided with the founding of non-governmental organizations (NGOs) such as *Greenpeace*, the *WorldWatch Institute* and the *Environmental Investigation Agency* to bring environmental problems and disasters to the public's attention. During the following decades, hundreds of multilateral environmental agreements on waste, pollution, endangered animals and plants, biodiversity, etc. were established. Many of these primarily sought to regulate trade in environmental goods, but some explicitly criminalized behaviors which were considered significant threats to the survival of humans and the planet. More specifically, the trade in hazardous waste and in endangered species became front and center (Ayling, 2013; Bisschop, 2016).

Increasingly, these intergovernmental organizations focus on the involvement of organized crime in environmental crimes (Nellemann et al., 2018; UNODC, 2019). In 2010, five intergovernmental organizations – *Interpol*, *United Nations Office on Drugs*

and Crime, World Bank, World Customs Organization and CITES Secretariat – joined forces in creating the *International Consortium on Combating Wildlife Crime* (ICWC) to fight poaching and smuggling of endangered species, but also earlier intergovernmental conferences, reports and threat assessments already expressed concern about organized crime involvement in environmental crime (i.e. money laundering, corruption, trafficking, fraud) (Elliott, 2012). Reports by intergovernmental and international policing organizations have for instance referred to cases of African, Irish, Italian and Hong Kong organized crime groups getting involved in trafficking of waste, minerals and wildlife (products) (EnviCrimeNet, 2014; Europol, 2015; Nellemann et al., 2018; UNODC, 2019). Over the years, environmental NGOs and activists also played an important role in raising awareness about the involvement of organized crime groups in environmental crime (Block, 2002).

Compared to the exact sciences, criminology (and other social sciences) were much slower in embracing the environmental problem as one worthy of academic scrutiny. Environmental crime has of course been part of the studies on ‘crimes of the powerful’ ever since Bonger (1916) and Sutherland (1945) asked attention for crimes in business and government suites, rather than merely street crimes. The environment was not the primary focus of these studies, but they did speak about the environmental consequences of corporate and/or governmental wrongdoing. Since the 1990s, so-called ‘green criminologists’ have critically studied the environment in the broadest sense of the word, focusing on various forms of environmental harm, crime and regulation, often drawing parallels between ecological and socio-economic or political inequalities (Brisman & South, 2013). This approach questions legalistic definitions of crime and broadens the view to crime committed by the most powerful in society (Hillyard & Tombs, 2007; Sutherland, 1961; Tombs, 2008). For a long time, studies about environmental crime remained scarce, probably because criminology was challenged in studying the complexity of harm, criminalization, etiology and control of environmental crime, especially when that affected non-humans (Halsey & White, 1998; Lynch, 2013; White & Heckenberg, 2014). Environmental harm is often hard to measure, affects multiple species and even entire eco-systems, extending far beyond an anthropocentric world view (Shearing, 2015).

Several criminological studies – both from a green criminological and a situational crime prevention perspective - have drawn parallels between organized and environmental crime. For instance, South and Wyatt (2011) and van Uhm and Moreto (2018) have shown how some (transnational) organized crime groups who previously engaged in drugs and/or

human trafficking diversify their ‘traditional’ portfolio to include smuggling minerals, wildlife, charcoal and timber. Given the high profitability and low risks of getting caught – lower law enforcement priority than other black markets – organized crime groups are thought to be increasingly engaging in environmental crime. Moreover, also the involvement of legal and illegal organizations – the organized-corporate nexus - in environmental crime is yet to be explored fully. Whereas the responsibilities of corporations for environmental harm have been addressed in studies about the waste sector (e.g. Bisschop & Huisman, 2018; Ruggiero & South, 2013), chemical industry (e.g. Kluin, 2014; Pearce & Tombs, 1998) or the timber trade (Bartley, 2007), the interfaces between organized crime groups and legitimate corporations in environmental crime deserves further examination. ‘While there are numerous examples of criminal networks with a high degree of opportunism and low level of organization, well-organized forms of corporate and organized crime involved in wildlife trafficking do actively and structurally commit wildlife crimes’ (Wyatt et al., 2020, p. 12). The organized-corporate-environmental crime nexus is yet to be explored in more detail by for instance studying the motivations and awareness of corporations who engage in laundering wildlife in the legal trade, but also by examining the potential organized-corporate nexus in cases of environmental harm who are currently addressed merely regulatory (Wyatt et al., 2020).

Transnational organized waste crime

Waste crime is the trade, treatment or disposal of waste in ways that breach international or domestic environmental legislation and cause harm or risk to the environment and human health (Bisschop & Huisman, 2018). The reasons for the illegal trade and dumping of (hazardous) waste lie mainly in the search for cheaper ways to treat and/or dispose of the waste.

Waste trafficking and dumping has been connected to (transnational) organized crime groups and activities for many decades. In official reporting on (serious and) organized crime, Europol (2015, 2017) and Interpol (2009) consider the involvement of organized crime in waste crime as significant threats. This concerns the illegal trade in e-waste, ozone-depleting substances and other hazardous waste, but also household waste can be trafficked and dumped. Organized waste crime also goes hand in hand with document fraud, money laundering and corruption and in some cases a connection to drugs and human trafficking was found (EnviCrimeNet, 2014).

In both Italy and the United States, the involvement of organized crime groups in waste trafficking and dumping is well documented (Block & Scarpitti, 1985; D'Amato & Zoli, 2011; Ruggiero, 1996; Szasz, 1986). Italian organized crime groups have engaged in waste crimes for many decades although they often hide their activities behind smokescreens of legal waste traders and other entrepreneurs (D'Amato et al., 2013; Massari & Monzini, 2004). Under the guise of legal waste activities, they charge their customers for removal, treatment or disposal, but in fact illegally dump it, generating massive profits. About half of the waste crimes happen in Campania, Apulia, Sicily and Lombardy, yet only a minority of cases investigated by the *Direzioni Nazionali Antimafia* (National Antimafia Directorate) can be explicitly tied to mafia clans (i.e. Casalesi, part of Camorra) (Germani et al., 2018, p. 52). The waste trade might be exported outside of Italy and be dumped in Eastern European, Western or Northern African or even Asian countries, but the hazardous might as well be dumped domestically in construction sites, landfills or sold as fertilizer (Eman, 2013; Legambiente, 2014; Liddick, 2009). Local officials have failed to hold these criminals accountable for several decades as the following case illustrates (D'Amato & Zoli, 2011; Past, 2013).

The Land of Fires or The Triangle of Death

Campania (Italy) is known for its mozzarella and tomatoes, but unfortunately also for the dumping and burning of hazardous waste, which had led (part of) the region to be called the land of fires and the triangle of death (Senior & Mazza, 2004). Albeit that government officials often still deny the causal link of Campania's high rates of leukemia, birth defects and various types of cancer with the decades of illegal dumping and burning of waste in the region, environmental groups, investigative journalists, the Catholic church and local physicians are outspoken about organized waste crime being the cause (Burgalassi et al., 2010; Luzi & Bellino, 2014). Health studies also indicate that environmental pressures are particularly heavy in Campania, resulting in possible threats to human health (Mazza et al., 2018). Already back in 1997 during a parliamentary inquiry, mafia witness Carmine Schiavone referred to Camorra's decades of illegal dumping (toxic) waste in Campania (D'Alisa et al., 2017; Scalia, 1997). The structural opportunities offered by abandoned quarries, construction sites without oversight and remote warehouses, the occupational opportunities of environmental advisors and lawyers who knew how to circumvent regulations and enforcement and the close ties between mafia clans and local politicians were fertile breeding ground for toxic waste dumping. Albeit linked to traditional mafia groups, this also

includes the involvement of local businesses in waste treatment and logistics as well as involving financial advisors and lawyers as facilitators – and thus corporate and white-collar crime. Although this waste is dumped in Italy, the involvement of the ‘eco-mafia’ also extends across its borders with the so-called ‘poison ships’ sunk off the coast of Italy or trafficking hazardous waste to Africa (Greenpeace, 2010). Although originally a geographical area in southern Italy, the land of fires extends far beyond, both in the geographical sense of the word and in its interconnection between traditional mafia clans, local businesses and politicians, and international trade (Germani et al., 2016).

Like Italy, also the United States is known for the involvement of organized crime in waste. Organized crime groups in New Jersey and New York, with other major US cities such as Chicago and Boston following suit, saw organized crime groups (Italian American Mafia) dominate the waste market of the 1970s and 1980s (Block, 2002; Block & Scarpitti, 1985). The price-setting for waste hauling was predatory, often also amounting to racketeering and protection practices. The organized crime groups resorted to violence (including murder) towards competitors and customers and they corrupted public officials to look the other way in attempting to regulate or control their criminal – albeit disguised as legal – waste businesses (Jacobs, 2007; Jacobs et al., 1992). Also more recently, La Cosa Nostra members were involved in and indicted for waste crimes (Department of Justice, 2013; Rashbaum & Goldstein, 2013).

However, the organization of waste crime is, in many other cases, inextricably tied to criminal activities of legal businesses who work in the production, disposal or treatment of waste (Bisschop & Huisman, 2018; Carter, 1999). Criminal and legal businesses might be virtually indistinguishable. Moreover, legal and illegal actors often cooperate in the illegal waste trade and boundaries between the licit and the illicit are fluid (Ruggiero & South, 2010). In other words, the concept illegal enterprise (Chambliss, 1978) fits the glove because organized criminals, businesses and authorities together shape (organized) waste crime (Bisschop & Huisman, 2018).

Transnational organized wildlife crime

Wildlife crime is one of the areas that has long been recognized as a key environmental crisis. Many species, both big and small, are on the brink of extinction or have gone extinct because of (illegal) trade and poaching. Many criminologists have already studied the illegal trade in endangered animals (e.g. reptiles, monkeys, birds of prey) or animals

products (e.g. rhino horn, ivory, pangolin scales) (Ayling, 2013; Herbig, 2010; Lemieux & Clarke, 2009; Petrossian, 2015; van Uhm & Moreto, 2018; Wyatt, 2009 among many others). These wildlife crimes are committed by local populations in tropical forests, facilitated by corrupt government officials who are supposed to enforce international environmental conventions (e.g. CITES) but who take or ask a bribe to close their eyes to the smuggling, but also international transport companies and banks or insurers play a role in facilitating the smuggling (Naylor, 2004; Pires & Clarke, 2012). Poaching is definitely not merely an individual practice for subsistence reasons but is instead increasingly perceived as an illicit activity in the hands of organized crime (Nelleman et al., 2016). In their typology of OCGs in the illegal drug and wildlife trade, South and Wyatt (2011) for instance found various types of groups existed, each with different motivations to be involved and yet with similar dynamics for both illegal trades. Given the similarities in history, structure, motivations and use of opportunities – and even the potential overlap between the black markets - the authors stress the importance of law enforcement cooperation and information sharing between both fields of expertise (South & Wyatt, 2011, p. 557).

Building on these insights, Tanya Wyatt, Daan van Uhm and Angus Nurse (2020) combined empirical data from their previous wildlife crime studies to study the overlap and interaction between organized crime and wildlife crime. Their comparative analysis demonstrates that a diversity of groups are involved, each with different approaches. They refer to organized crime groups as those groups with a high degree of continuity and organization, demonstrated by using violence and corruption. They found this to be most prevalent for trafficking in rhino horn and caviar, and in some cases ivory. Some of these groups even diversified their activities as they are also involved in drugs trafficking or have switched trades. Wyatt et al (2020) found other wildlife crimes to be in the hands of so-called ‘disorganized crime networks’ (Reuter, 1983) who profit from the opportunities for smuggling present in particular occupations (e.g. logistics, customs) or in fluid relationships facilitated by brokers. They found this to be the case for trafficking in birds (parrots, hummingbirds) and monkeys as well as some types of ivory trade. Similar to what was observed for waste trafficking, also wildlife trafficking exhibits many characteristics of or overlaps with corporate crime, because legal entities are involved. “[L]egally registered animal traders, zoos, circuses, antique shops, fashion trading companies or breeding companies of exotic animals [...] could provide a perfect cover for wildlife laundering” (Wyatt et al., 2020, p. 8). This has for instance occurred for reptile and caviar trafficking but also the trafficking of wildlife to become pets.

Slippery smuggling of glass eels

The most trafficked animal in numbers might not be as picture perfect as a rhino, elephant or monkey. One of the most frequently trafficked species is a slippery little creature: the glass eel, or baby eel. European eels are protected under the *Convention on the International Trade in Endangered Species of Flora and Fauna* (CITES) (Crook & Nakamura, 2013). Since 2010, the export of European glass eels has been banned as a consequence of dramatically declining numbers of eels in European rivers (Hanel et al., 2019). Fishing for glass eel within Europe is permitted by licensed fishermen and only during specific time periods. Fishing is prohibited for export but allowed for domestic European farming and restocking purposes. European eel farms need to catch and release eel in rivers to sustain farming for human consumption, as eels do not breed in captivity but only in spring in the Sargasso Sea, the start of their migratory life (Diggins, 2020). Glass eel trafficking is a lucrative business: glass eel caught in Europe goes for about 300 euro per kilogram, the illegal smugglers ask about a 1000 euro and when it arrives in Asia its value is at 6000 euro. In Asia, the glass eels are grown – often on clandestine farms - into adults for human consumption. In 2018, about 15 million glass eels or 5,7 ton were seized by European authorities, but an estimated 100 ton or 350 million glass eels are trafficked each year, with a 2.2 billion-euro value at the consumer level (Stein, 2018). Glass eel are most often smuggled in oxygenated wet plastic bags in suitcases of people flying to Asia, which is the main destination for trafficked eel (Stein et al., 2016). But this is more organized than it might seem. Recent investigations have found professionally organized facilities in Europe with walls full of suitcases ready for transport. *Operation Fame, River and Lake* by *Europol* but also *Operation Broken Glass* by the *Federal Bureau of Investigation* (USA) recently uncovered several smuggling networks towards Asia (Ebersole, 2017; *Europol*, 2020). Illegally caught glass eel as well as adult eel meat has been found in legal shipments of other seafood products such as mussels or fish or declared as unprotected – and thus legal – eel species in air freight cargo containers (Stein, 2018). In February 2020, a British seafood trader was convicted for trafficking an estimated 6.5 tons of eels from Spain to the UK, intended for Hong Kong. Eel is the only indigenous European animal which is critically endangered, it is Europe's ivory so to speak.

Transnational organized natural resource exploitation

Natural resource exploitation is another type of environmental crime which warrants attention when exploring the nexus with organized crime. Natural resources can refer to water, minerals, land, trees or other materials and substances that are present in nature. These resources can be traded and thus used to make a profit. Natural resources are present throughout the world but there are several regions which are considered very rich in natural resources such as the tropical rainforests. These same regions are often fraught with conflict and violence, often related exactly to those valuable resources (Bannon & Collier, 2003). Consider, for example, blood diamonds in Sierra Leone or Charles Taylor's illegal logging in Liberia (Boekhout van Solinge, 2008). The developmental, economic, social and political challenges some of these countries and regions face is known as the so-called 'natural resource curse' (Ross, 2003). Not only are these natural resources associated with (systemic) violence and exploitation, they are also fertile ground for criminal activities: "the resource curse is a crime curse, too: the presence of many natural resources correlates with crime and violence" (Boekhout van Solinge, 2014, p. 501). These resource rich and very biodiverse regions fall victim to illegal logging, illegal mineral mining, illegal clear-felling or burning (arson) for agro-industrial practices such as soy, palm oil and cattle farming (Mol, 2013). The illegal trade in (endangered) plants or the destruction of biodiversity through deforestation and land conversion harms animals, plants and people who depend on forests for their cultural or material survival (Boekhout van Solinge, 2014; Green et al., 2007; Hewitt, 2005). Aside from the exploitation of natural resource itself and the harm done to some of the most biodiverse regions in the world, this practice is also closely related with the violence against indigenous communities who rely on the resource rich regions for their sustenance and culture. Moreover, also the violence against environmental defenders and human rights activists are commonplace in these resource rich regions (Global Witness, 2014). Aside from the above-mentioned more immediate harms, natural resource crimes are indirectly harmful because they contribute to soil erosion and flooding and indirectly to climate change, also resulting in environmental refugees. Although the word illegal is used, in many cases these practices are condoned or sometimes even legal. Many of these forests crimes are in a twilight zone between corporate and organized crime. It is corporate crime because timber companies and agro-industry is involved, as well as the logistical and transport industry. Forest crimes are also organized crime because there are organized crime groups involved – some of which deal in timber as well as cocaine, using the same trade lines, and employ private militia to deal with forest defenders (Global Witness, 2020). This also implies that there

is a responsibility for state actors, both locally and globally in failing to control - or even (un)knowingly facilitating - these practices. Indeed, “traditional distinctions between corporate crime, governmental or state crime and organized crime [...] appear to rigid for the variety of relationships and collaborations between legal and illegal actors that are profiting from natural resource exploitation” (Boekhout van Solinge, 2014, p. 516).

Charcoal, timber and conflict in Virunga

Virunga National Park (Democratic Republic of Congo) has experienced decades of armed conflict which is closely tied to its abundant and profitable natural resources. During civil wars and the 1994 Rwanda genocide millions found refuge in the park, but cut down many trees for firewood (Milburn, 2016; Worrall, 2015). Various guerilla groups used Virunga’s natural resources to finance themselves by means of wildlife poaching, illegal fishing, illegal logging and illegal coal mining. The Congolese army also engaged in illegal logging and poaching and organized illegal trade of Virunga’s natural resources. In 2007, a criminal group involved in illegal coal mining massacred a family of mountain gorillas with the hope that the extinction of the mountain gorillas would result in further exploitation of Virunga’s natural resources (Nellemann et al., 2007; Verweijen & Marijnen, 2016). Decades of deforestation and poaching have harmed various animal and plant species and radically changed ecosystems. The survival of local populations that depend on the ecosystem for their livelihoods (e.g. fishermen) has been jeopardized. However, it is difficult to determine the exact extent of the damage. There are also many actors responsible for the damage, some more directly than others. The harm was caused by activities of rebel groups to finance civil wars, but also occurred with the involvement or at least the knowledge of logging and mining companies and government institutions (Bisschop & Janssens, 2016). A large majority of the hard wood which is consumed in Rwanda and Uganda for instance originates in illegal logging in DRC and then traded by timber companies as legally harvested timber (Mapesa et al., 2013).

Conclusion

Although this chapter has focused on the organized-environmental crime nexus, it can better be perceived an organizational-environmental nexus. In each of the three types of transnational organized environmental crimes discussed legal organizations play a role either as facilitators in the margins or initiators at the core of wildlife, waste or natural

resources trafficking. In environmental matters, the lines between organized crime and corporate crime are blurred. Corruption is often involved but that is as much (or even more) corporate as it is organized crime. Sea- and airports are key in environmental black markets because those are the physical location where the illegal goods pass through but they also provide the occupational opportunities for trafficking by means of complicit government or business employees. Finally, also in the financing of the trafficking – and in the laundering of the illegal proceeds - these environmental crimes are both corporate and organised in nature (Ayling, 2013; Viollaz et al., 2018).

As demonstrated above, the manifestations of transnational environmental crime have both organized and corporate crime characteristics and variations of these interfaces exist depending on the regional or local context. This has important implications for law enforcement. If environmental crime is – or can be labelled as - (transnational) organized crime it is more likely to become a priority for crime control, especially compared to corporate crime (Barrett & White, 2017; Bisschop & Huisman, 2018). Tackling organized crime allows for the use of special investigative methods and includes investigations into the financing of the activities and the laundering of proceeds (Kleemans, 2014). Investigation and prosecution of environmental crime is challenged, however, by difficulties in cross-border police and judicial cooperation (White, 2016). Moreover, environmental crimes might still be perceived as softer and hence subordinate to other organized crimes (Walters, 2014). The Scotland Yard wildlife unit, which investigated the snakeskin case we started this chapter with, has one fulltime employee. In terms of capacity and resources, environmental crime is often still seen as less important. This also implies that there might be a strategic benefit in being able to call environmental crime organized. It increases its perceived seriousness and its visibility, similar to how ‘serious crime’ in the UK and ‘undermining’ in the Netherlands were brought into the organized crime fold (Kolthoff & Khonraad, 2016; Lavorgna & Sergi, 2016).

In order to improve policy making and law enforcement, it is important to gain insights into the different types and motivations of (organized) criminals involved in environmental crimes (Wyatt et al., 2020). The diverse manifestations of transnational organized environmental crime also imply that some of these might be better dealt with outside of the criminal justice system and instead targeted administratively. It is unclear however to what extent administrative authorities – but also corporate actors involved in monitoring trade (e.g. at sea- and airports) - have enough expertise and capacity to take up this environmental challenge. The increased use of corporate structures in

environmental crime might also result in these formerly-known-as organized crime cases ending up with regulators who already have the environment as a core focus and expertise. These environmental regulators are however already stretched thin in terms of capacity. The crime prevention approach of ‘raising (administrative) barriers’ to hinder criminals in the execution of their crimes has proven promising for other types of (organised) crime and might also help law enforcement control or prevent (Bullock et al., 2010). Disruption of trafficking opportunities in strategic locations or sectors might indeed help in tackling transnational organized environmental crime, but does require inter-agency cooperation which has already proven challenging in many other crime areas (Barrett & White, 2017; Pink & White, 2015).

Transnational (organized) environmental crime is very much a product of the political, economic, social and cultural context. Regions and countries vary in terms of the types of actors involved because some are in source and other in transit or destination countries. Global criminogenic asymmetries – in laws, economy and culture - are at the core of waste, wildlife and natural resources trafficking (Passas, 1999). Also the externalization of harm is typical for each of these: victims and offenders are far removed, especially so in environmental matters (van Wingerde, 2015). Much remains to be studied, however, for instance the extent to which and the ways in which more ‘traditional’ transnational organized crime (e.g. drugs, human and weapons trafficking) and environmental crime are intertwined with each other. This also includes questions about how transnational organized environmental crime is embedded in legal structures, in legitimate activities by legal actors, including how policy makers and enforcements agencies, might be facilitating environmental crime.

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