The organisation of eco-crime and corruption in 'green' Ukraine

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Introduction

Ukraine's wooded regions are considered one of the treasure houses of nature that deserves dedication and conservation management. In contrast, as we will see, the management of these treasures rather fits the warnings of the 2021 report of the UN climate platform, the IPCC. This report provides the most recent survey of the environmental outcome of the relentless exploitation of the richness of the earth. Much of this exploitation is not criminal, even if it damages essential eco-systems which may protect us against extremes of draught or floods. This is changing and an increasing number of harmful ways to exploit the natural environment are brought under the system of law, if only as a licenced activity, of which non-compliance is misdemeanour or administrative offence. This implies that offences against the environment are in general rated as less serious than a common crime. This has the ironic effect that illegally felling a tree is rated in the Criminal Code as less serious than stealing the sawn timber of the same tree. This is often used as an explanation of the ineffectiveness of criminal law interventions: the offences have a low criminal law status, punishments are not sufficiently dissuasive and perpetrators get away with a lenient punishment, if prosecuted at all (Wildlife Crime, 2016). This leads to demotivation in the law enforcement agencies: why should they make efforts to maintain laws with such a low legal status?

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This chapter was researched and written prior to the Russian invasion of Ukraine.

This dismay is understandable as the alleged low criminal law rating does not take into account the ways eco-crimes are organised into successful undertakings. Eco-crime as an enterprise is a serious organisational undertaking.

We have argued earlier (van Duyne, 1995; Von Lampe, 2018) that crime-for-profit in essence consists of criminal risk management in which the actual implementation is determined by the physical shape of the illegal commodity: veiling crime for profit is determined by the nature and size of the object 'under the veil'. And so it is with eco-crime: compare the smuggling of elephant tusks with protected precious birds. Disguising such contraband itself may involve criminal actions being more severely sanctioned than the core business: forgery of transport documents, label fraud, corruption and in the end money-laundering. In addition, the organisation of crime must be defended against criminal interlopers and extortionists, which may involve violence. If the organisation of eco-crime entails this serious accompanying law breaking its criminal-code rating deserves reconsideration, if only to further a sense of awareness. This is taking place in Ukraine, albeit slowly and often with (sometimes silent) opposition.

Such an awareness of the seriousness of eco-crime was expressed in March 2020, by President Zelensky when he addressed the heads of Ukrainian law enforcement and other competent officials. However, he had to admit a fundamental flaw: "... there is still insufficient information on punishments for high-profile crimes in this area, especially those committed by organised crime groups" (President of Ukraine, 2021). However, this apparently tolerated lack of information does not reveal a sense of urgency; Ukraine's natural treasures are at risk and thus far nobody takes interest in this sad story.

This lack of interest is highlighted by Malko (2018) who states that there is no political will to introduce effective monitoring of environmental criminality. Malko (2018) took stock of what has been done in compliance with the Bern Convention.³ This is an international instrument from 1979:

https://www.president.gov.ua/en/news/suspilna-nebezpeka-ekologichnoyizlochinnosti-vimagaye-vid-d-67149.

The 1979 CoE Bern Convention on the Conservation of European Wildlife and Natural Habitats is a binding international legal instrument in the field of nature conservation, covering most of the natural heritage of the European continent and extending to some States of Africa. As part of its commitment to

the institutional response to crimes against the environment which appears to have a history spanning many decades. Despite this long history the author found that virtually nothing is known about the agreed upon development and implementation of an ecosystem policy. Such implementation would require updated harmonised data flows and comparable indicators of the intended eco-sites (protected territories). But the designated institution (with 21 staff) was abolished. Malko (2018) argues that "if there is no monitoring, then all these [national and international] actions will not make any sense, because we will not know how they influence the environment" [...] He concluded: "there is no desire to create [such a monitoring] agency" (ibid., pp. 12-14).

This example of lack of interest of the authorities in the state of the Ukrainian eco-systems does not bode well for an effective 'green' law enforcement policy. This concerns particularly the biggest eco-system in Ukraine: its forests. These represent a significant ecological value in terms of habitat of wild live, but also in economic terms of raw material: timber and amber, the precious stones found in the soil under the trees to be felled.

According to media reports this economic value is exploited illegally by criminal entrepreneurs: local workers, criminal entrepreneurs from outside, and corrupt officials working in these economic sectors. From a criminological angle this raises the question about the extent of their criminal exploitation and the relationship between these criminal operators, working sometimes in the same forests but for two different markets: amber and wood.

This chapter will critically explore the developments of the amber and timber sectors in Ukraine with the focus on corruption, corporate or organised criminality as well as cross-border transactions.

preserving the country's biological diversity, Ukraine works on the setting-up of the 'Emerald Network' since 2008 of which nothing was heard since.

Methodology

In our introduction we referred to the survey of Malko who faced the problem of flawed and opaque information management. In our field of amber and timber crime the situation is not much different. This opaqueness is not compensated by academic research on eco-criminality in Ukraine. Therefore, our research is based on a critical analysis of the open sources available in English, Ukrainian and German. These include various portals of the Ukrainian authorities (for example, the Security Service of Ukraine (SBU) and the National Bureau on Corruption in Ukraine (NABU)), the EU, as well as Non-Governmental Organisations (NGOs) such as the World Wildlife Fund (WWF), the Earthsight and various other NGOs. We also drew on the important investigative journalistic work of the Austrian Addendum investigative journalists who shed light on the EU-side of timber crime.

As the ways of organising eco-crime for profit are likely to have much in common with what is researched as 'organised crime' we also analysed the organised crime related data. However, we found more statements about organised crime than facts. Organised Crime Observatory (OCO, 2015, p. 2) remarked about relevant data reliability in this field: "Statistics made public by the Ministry of Interior do not reflect the proper situation" of organised crime. This still holds.

The nature of two criminal markets

This section will elaborate the organisation of crime in the amber mining and timber production which almost literally share a common ground: the amber is in the soil on which the trees stand. But otherwise, the difference in product determines the ways in which the two types of crime are committed. Therefore, we discuss them in two different sections.

1. Illegal amber mining

a. The general situation

Amber consists of the fossilised resin of pine trees in forests that some 18.000 years ago covered large stretches of land between the Baltic Sea and Ukraine (Wendle, 2017; Besser, 2020). After several millennia the pieces of amber were covered by layers of alluvial sediment. In Northern Ukraine amber can be found at a depth of 2-10 meters (Piechal, 2017).⁴ Finely tooled into a piece of semi-precious gemstone it is a much-coveted jewel. The history of large scale illegal amber mining in Ukraine is relatively recent and determined by rising prices from the 1990s onwards (Ambertrip, 2016).⁵ Then in 1993, the Ukrainian government established the first amber mining company. In 2001, two subsidiaries were established, all running at a loss (Besser, 2020). Concession for mining can be obtained, which implies a complicated tortuous procedure (Piechal, 2017). Moreover, adding to the ineffectiveness, processing and trading illegally extracted amber was until recently not an offence. The most important demand country appears to be China. Most amber is smuggled to Poland being the main transit country to importing countries such as China.

With rising prices and ineffective law enforcement in the rural areas, amber mining became a boom. Kush (2020) argues that the amber boom took place between 2014 and 2015, when Ukraine produced about 300-400 metric tons of amber per year (most of it illegally), selling amber at the world market at \$2.000 per kilogram and an estimated market value of around \$600-800 million per year.

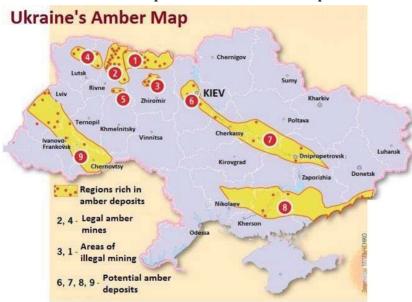
However, since the pandemic of 2020, the market has plummeted: The volume of the market went down from \$300-400 million to \$12 million. It is unclear how this will affect the illegal amber mining, the diggers and officials

The regions where most illegal amber mining takes place cover a geographical area from eastern Poland along the Belarus frontier to western Russia: they are the Rivne, Volyn, and Zhytomyr oblasts (provinces), together called Polissya, meaning 'woodland'.

⁴ http://aei.pitt.edu/87015/.

⁵ https://ambertrip.com/ru/novosti/subpage2001.

In terms of economy and 'state attention' these regions can be considered as neglected. The sandy soil is poor, job opportunities are scarce and 70% of the people have an income of less than €220 (Kalzcunski, 2019⁶; Mas, 2017). Historically the meagre incomes have been supplemented by what could be collected from the forests: mushrooms, cherries or wood and pieces of amber. When amber prices went up in the past decades, illegal digging provided an additional or even full income. "People who work in the illicit amber trade can make much more money than the average Ukrainian salary. As a result, a large portion of the population of the Rivne, Jytomyr and Volhynie regions, located on the border with Belarus, now make their living this way" (Mas, 2017, npn).



Map 1: Ukraine's amber map

Source: Kyiv Post, 2016

b. Artisan toilers and industrialised crime entrepreneurs

In the northern regions which have the richest deposits, the amber is mostly located a few meters below the surface of the soil. Therefore, the excavation requires little technique: for artisan excavation a shovel would be

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http://blogs.shu.edu/journalofdiplomacy/2019/1.2/shadow-economies-the-de-stabilizing-threat-posed-by-amber-mining-in-ukraine/.

enough. This has resulted in a popular participation: reports suggest that from 3 - 7 thousand people can be involved in illegal amber extraction on a daily basis (Besser, 2020), from housewives to priests (Maksimov, 2018). While this artisan digging is a back breaking job, those who can afford the use of powerful pumps can operate on a more industrial scale by injecting water into the soil, if necessary after having made pits with explosions. As amber has a lighter gravity, lumps can float to the surface where they can be shovelled up. On a larger scale a surface of the size of a football field is inundated from a brook or river and the soil churned up to extract the lumps of raw amber. This way of amber mining is expensive and may need 'protection' (Piechal, 2017).

Not everybody has become super rich, but some villages and towns have experienced a much-needed renovation while elsewhere spending on consumer goods went up to the satisfaction of the local shopkeepers (Veluchko, 2021⁷). We found no systematic study of the nature and composition of this 'democratisised' law breaking: anyone can join the excavation, from artisan diggers to those who invest in powerful pumps.

Two distinct time spans could be discerned. In the first one, under President Yanukovych until 2014, amber mining – legal and illegal – was strictly supervised, or kept 'under the roof' of security services and high level state officials: ultimately the President, his son and his circle of cronies, together called 'the Family'. The system developed was such that the local diggers knew whom to pay and how (Wendle, 2017; Ksenz, 2020⁸).

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⁷ https://texty.org.ua/d/amber/

http://www.ukrrudprom.com/digest/Glavnoe_chtobi_kitaytsi_vizdoroveli_Pochemu_v_Ukraine_aktiviziruetsya_nelegalnaya_dobicha_yantarya.html.

Figure 1
Illegal amber pit: A 'destructive' criminal economy



Source, Mas (2017)

However, after 2014, this centralised corrupt system of protection crumbled (Wendle, 2017; International Crisis Group, 2017). Not knowing whom to turn to for protection (called the 'roof') also created uncertainty: "At least under Yanukovych there was one hand to pay" [...] "But right now it's not clear who the roof is," said the informant Yuri to a journalist. "That's why there are so many problems," he said, "it's not clear who is the boss" (Wendle, 2017, npn).

Indeed, after the ousting of the Family, illegal amber mining became a far from peaceful business. For example, reports suggest that many local amber gangs in the Volyn region were using weapons that became easily available due to the conflict in the Donbas (Piechal, 2017; Maksimov, 2018). The woods are open and everybody who wants to engage in amber digging may do so: 'in principle', because, as mentioned above, there may be other claimants better armed to enforce 'their rights'.

Moroz, *et al.* (2017) describe the situation as a "state within a state", with regular armed clashes between rival gangs resented by the local artisan diggers. Image 2 shows the local protection hired by the gangs.

Moroz et al. (2018) quote: "The trouble started when the bandits came", says Vasilyes, a seasoned digger. "To dig, you have to pay the mafia – the protection money ranges from 300 to even 1.000 dollars a day for

one pump."... "Mobsters share their profits with corrupt policemen, local politicians, prosecutors and even special services." Moroz et al. (2018, npn).

Figure 2

"A security guard hired by the mafia is keeping an eye on the mining.

A still from the TVN program Superwizjer".



Does this represent 'a state within a state' in which a 'mafia' holds the illegal amber mining in its grip? While the 'amber mafia' is often referred to, the situation is too fragmented to come to such a conclusion. Yes, there were strong men extorting fees but they were not all-powerful. Some brigades are mentioned as operating independently, refusing to pay fees or bribes. To that end they were well armed, ready to defend their 'right' with turf wars as consequence (Zabyelina and Kalczynski, 2020; p. 253).

Checkpoints were established along roads leading to deposit sites to keep unwanted strangers out or to warn of approaching police cars (Piechal, 2017, p. 3). This situation has induced not only intimidation to extort 'entry fees', but also actual lethal shoot-outs and other forms of violent dispute settlement with three lethal victims.

Naturally amber diggers were not eager to pay bribes or to resort to violence; some were even prepared to apply for licences, for which they created an NGO to lobby for legalisation (Zabyelina and Kalczynski, 2020; p. 254; Zabyelina, 2019b). But at that time such an aim did not stand a

chance with a government that had made the concession procedure so unduly complicated that any application was in fact blocked. Illegal mining was then the best option for making (more than) a living (Piechal, 2017; p.4). So, "villages flush with new amber money have next to no tax base." (International Crisis Group, 2017).

c. Corruption and complicity

Allegations of high-level state corruption are easier made than proven, especially against the background of a halting prosecution of corruption. Nevertheless, there is evidence that the police and prosecution were seriously compromised: *e.g.*, offering protection or extorting a fee for a 'digging permit' (Kromykh, 2018; Maksimov, 2018). In 2016, SBU reported that "the deputy prosecutor of the Rivni oblast was arrested for leading an organised crime group consisting of a lieutenant-colonel of the Security Service, former employees of the Ministry of Internal Affairs, the Forestry Department and representatives of the local self-government bodies". However, the prosecutor was released after a year detention and called his case a "revenge of the amber mafia" he was about to attack if only he had not been arrested (SBU, 2016).

The endemic nature of corruption and the involvement of state officials in the illegal amber trade was particularly visible in the case against two members of Parliament (Verkhovna Rada). The Anti-Corruption Unit, NABU, reported that a number of individuals, including two MPs, were "demanding and receiving improper advantage for the assistance to a foreign company in the realization of amber mining in Ukraine" (NABU, 2018).

d. The consequences of illegal amber mining

Boreiko (2020)⁹ describes illegal amber mining as an environmental disaster with whole forests clear felled: "forest were cut and pits were dug out by hand or with the use of explosives and filled with water pumped from a nearby source. [. . .] When a piece of wood has been logged, the wood

https://censor.net/ru/news/3221779/izza_nezakonnoyi_dobychi_yantarya_ukraine_grozit_i_ekonomicheskaya_i_ekologicheskaya_katastrofa_ekspert.

illegally sold and the amber stones are collected, a destructed and barren pockmarked moon landscape remains" (Boreiko, 2020).

Figure 3
A destroyed forest in preparation of illegal amber mining in Zhytomyr Oblast, June 19, 2015.



Photo by UNIAN

There is not only a destroyed forest, but also damage to the natural drainage of the water, while the ground water gets polluted and the fertile soil is washed away. The scale of natural disaster in the areas affected is still not properly understood (Myroniuk, et al., 2020). Myroniuk et al., (2020: p. 5) argue that "places affected by mining operations usually have little chance of recovery". In the region Polissya, investigated by Achasova (2020) it appeared that of the 3.260 disturbed hectares on only 375 hectares regrowth emerged. Satellite mapping showed a 'land of leprosy'

Figure 3 visualises the damage. There is also a less visible potential damage and danger: the turned over sand from the depth of a meter may be radioactively contaminated from the Chernobyl nuclear power plant explosion near the Belarus border in 1988. Polissya has indeed become an "environmental disaster area" (Mirovalev, 2020)¹⁰.

 $^{^{10}\,}$ https://www.aljazeera.com/features/2020/3/6/in-chernobyls-radioactive-zone-a-shadow-economy-thrives.

e. Recent legislation

In February 2020 a new 'Amber Law' was adopted that introduced the system of concessions for amber extraction purposes (Law No. 2240 "On Amending of Certain Legislative Acts of Ukraine regarding Regulation of Extraction of Amber" (the "Amber Law"). Generally speaking, the law deals with the legalisation of amber extraction, provides a framework for the mechanisms of tax collection and land exploitation. Unlawful amber extraction will be punished by imprisonment of up to 3 years for the first offence and from 4-7 years for related repeat offences. The law introduces fines for transportation and sale of illegal amber (up to 170.000 Hrv; = \in 5.100). The official guilty of "machinations" can be punished with imprisonment of five to eight years.

Whether this law will have an effect will depend on the strictness of law enforcement. Though the law may be too recent to expect an evaluation, we searched for indications of its enforcement. The Security Service of Ukraine (SBU) reported in March and September 2020 that it halted illegal amber mining carried out by two groups: 15 villagers in the Rokytne district and a group of eight locals in the Klesiv district. The confiscation of ten and eight motor pumps led to resistance which had to be overcome (SBU, 2020). In September 2021 police in Rivne region conduced a special operation targeting illegal amber digging and confiscated 13 illegal pumps, 15 kg of illegal amber, small weapons and motorbikes (RivnePost, 2021).

Locals from one amber region report a significant reduction in the number of people coming to the area to extract amber illegally (Buhalo, 2021). Is the law working? Buhalo (2021) notices a serious shortcoming in the administration to make the concession work: the Cabinet has not yet agreed on the standard contract that has to be signed prior to the beginning of the work. So, concession holders could not exercise their rights for which they

Draft Law of Ukraine On Amendments to Certain Legislative Acts on Settlement of Amber Mining, No.2240; and Draft Resolution on Adoption of the Draft Law of Ukraine on Amendments to Certain Legislative Acts of Ukraine Concerning Settlement of the issue of Amber mining No. 2241).

had paid. Meanwhile, on their allocated plot illegal diggers continued their activities. A good step forward can, in Ukraine, soon grind to a halt.

2. Illegal logging

a. General aspects of the wood sector

Before we discuss the criminality in the forest sector, we first give a simple outline of the administrative structure of the wood industry which represents at present 3,6% of Ukraine's GDP. Ukraine's forests are a real 'national treasury', commercially and in terms of presenting one of the last 'virgin' ecosystems in Eastern Europe: the habitat of the bear, lynx and wolf and a wealth of diverse flora. About 16,7% of total land in Ukraine is forested land (UNWCMC, 2020). In 2011, the economic value of the forest sector was estimated to be around 0,5-1% of the GDP (World Bank, 2020 or UMWCMC, 2020). The forest industry employs about 350.000 staff directly, plus 150.000 indirectly employed people (UNWCMC, 2020).

Almost all forests are state-owned and state managed. The Ministry of Agrarian Policy and Food is formally the centre of policy making and management, but it operates via the State Agency for Forestry Resources (SAFR) responsible for 73% of the wooded surface. Provincial and local governments manage another 13% and the remainder is divided over four other agencies; 1% is privately owned (UNWCMC, 2020). Under the SAFR, 24 Regional Forestry Management Boards (RFMB) see to the implementation of the central policy. They issue felling permits and certificates of origin to the real working units: the 310 State Forestry Enterprises (SFEs) (EU report TAIEX, 2018). Together the SFEs harvest 83% of all the logs of which they process a small part. The remainder is to be sold at local auctions, that since December 2019 have been automated. However, this provision is often evaded or rigged (Earthsight, 2018, p. 5, 22) and the unsold lots "sold by negotiation" (World Bank, 2020; p 23). Since February 2020, electronic auctions are mandatory for all timber (World Bank, 2020; p. 55).

Kravets (2015) notes that in order to implement its supervisory role, the SAFR has ordered that the SFEs use an up-to-date track and tracing system: after felling, all logs must immediately be given a plastic tag having

a unique barcode with essential details for log identification. Every enterprise, state owned or otherwise, must use a valid certification of origin issued by the Regional Forest Management Boards (RFMBs), which —in theory— allows the SAFR full control over what happens in the field (Kravets, 2015).

The social and economic level of the population is about the same as that of the amber regions (International Crisis Group, 2017). In some regions where both wood and amber are found they naturally overlap. The wages are low and unemployment is widespread. If not exported most of the harvested wood is processed in the many illegal sawmills.

b. Lack of data and opacity

Research about the timber sector is also hampered by a scarcity of reliable data, which is underlined by the World Bank (2020) and the UN WCMC (2020). This is again not compensated by empirical Ukrainian academic studies. Consequently, we will draw on the reports issued by NGOs, such as the Earthsight report 2018, the TAIEX report of the EU, a WWF study and investigative journalistic publications, in particular the investigation of the Austrian journalist collective *Addendum*.

The difficulty of getting a clear picture of illegal logging becomes apparent when one compares the SAFR's statistics with that of other expert estimates. For the year 2018, the SAFR reports that 17.700 m³ timber had been illegally cut: that is 0,17% of the official timber production (*ibid*, p. 14). This would imply that illegal logging would be a 'minor problem', which contradicts most other expert estimates. As a matter of fact, SAFR only reports third party illegal logging (individual poaching) and does not look at state enterprises level. But recent data for 2019 indicate a sixfold increase of detected illegal timber by the same agency (World Bank, 2020, p. 13).

With the help of the Ukraine's State Audit Service, Earthsight attempted to come to a more accurate estimate. Looking at the difference between licenced and harvested timber it concluded to a gap in the order of 1,2 million m³ of which one million was exported but could not be accounted for from the books of 2016. While addressing these questions, the State Audit Service observed many illegalities and "a general failure of the State Agency of Forest Resources to adequately carry out its conservation

objectives, including its duties to oversee protected areas" (ibid, 15). Indeed, its data base has not been updated since 1996 (Yurovska *et al.*, 2019; p. 5096).

For almost every region the auditors concluded "unauthorised felling of forest resources worth more than 37 million hryvnias (\$1,4 million) which were observed in almost every region." Part of the illegally felled trees easily finds its way to the many non-registered sawmills: the 12.000 illegal 'shadow sawmills' far outnumber the 9.200 legal ones (*ibid.*, 15). The data at the website of the government are of little help: just annual crude frequencies, without breakdown. Without context they are difficult to interpret. There is also a conflict of interests: for the transgressions reported on their land or with their timber the SFEs can be levied a fine (World Bank, 2020; p. 13), which does not stimulate reporting. The Security Service of Ukraine provides regular updates of ongoing criminal cases, but these are presented as 'news': a picture gallery of unsorted cases.

c. Corruption and complicity

In various reports issued by NGOs, concern has been expressed about the exploitation of the Ukrainian forests. According to the Earthsight report (2018), the wood industry sector is marred with illegality at all levels, enabled and upheld by engrained corruption we described earlier (Van Duyne and Svyatokum, 2020). The studies by Earthsight, the EU report TAIEX and the publications of investigative journalists underline the widespread corruption. But corruption in the timber industry is not only an issue of national concern. It also involves the wood importing and processing corporations in the EU. And eventually it affects the international 'green' retail outlets claiming to sell wood products from sustainable methods. But the title of the Earthsight's report "Complicit in Corruption" sheds doubts on these claims and the regime of sustainability certification as issued by the Forest Stewardship Council.¹⁴

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https://fsc-watch.com/2020/07/02/ikeas-ukrainian-illegal-timber-problem-that-fsc-didnt-notice/. FSC certification ensures that products come from responsibly managed forests that provide environmental, social and economic benefits. Close observation in the field sheds doubts on this claim. See Connif, (2018). https://e360.yale.edu/features/greenwashed-timber-how-sustainable-forest-certification-has-failed and Stockmans (2020).

The publicised SBU (2020) summaries underline the existence of organised criminal supply chains beginning at the place of felling. It starts at least with corrupt forestry officials turning a blind eye, allowing or organising the felling, followed by corruption along the whole chain of supply until exportation to fictitious firms in the EU.¹⁵

There has been clear mismanagement concerning labels under which logs are accounted for. That is underlined by the observations of the WWF (2018): there are no proper definitions "of 'raw wood', 'firewood fuel', 'fuel wood' and others", which is a basic condition for transparent accounting.

Even if such definitions were officially determined, there are too few staff for supervision: one badly paid forest guard per 1.000 hectares (Earthsight, 2018, p. 16; World Bank, 2020). Furthermore, there is a serious conflict of interest because of lack of independent oversight: the state enterprises which issue the permits must also supervise their own execution. Unsurprisingly the SBU files frequently submitted 'notices of suspicion' to officials of the State Forest Enterprises. It is telling that there is no information about their follow-up in the judicial system: prosecution or sentencing.

For monitoring the implementation of the Annual Allowance of logging, special local committees are established. But there is no requirement that these must be independent. Instead, these committees are often composed of relatives and local friends or acquaintances (*ibid*, p. 17). Within this system of nepotism and local friendship ties, it is not surprising that restrictions on so-called 'sanitary felling' (of which more below) to protect the most precious woods against diseases (*e.g.*, old forests or wooded slopes) are flouted and, in the end, the cubic metres cut for 'sanitary reasons' far exceed the volume of allowed annual felling: 12,4 against 9,4 million cube metres (*ibid.*, 18). Illegal sanitary logging has been observed in fifteen national parks, including the special Carpathian Biosphere Reserve (Earthsight, 2018).

d. Forms of illegally exploiting the forests

The illegal exploitation of the forests implies in the first place cutting more trees than is allowed. One method is the abuse of the above mentioned

https://www.sbu.gov.ua/en/news/1/category/1/view/7446#.j1yF8EXU.dpbs. 248

'sanitary logging'. This works as follows. To conserve the forest, it is normal to take away trees affected by all sorts diseases such as parasites, bugs and funguses fungi to prevent the spreading of such infections. This sanitary felling may require the cutting of surrounding trees. However, under a negligent or corrupt supervision this leads to an unjustifiable extension of this sanitary provision: clear cutting of hectares of healthy wood, making the Annual Allowable Cut (AAC) intended for a sustainable management, a mockery (*ibid*, 18). For example, in the Carpathians only a third of the trees was felled under the AAC. If such an abusive extension of the allowable cut does not yield enough logs, the top of healthy trees are set on fire to create a 'sick forest' for more sanitary felling (EJAtlas, 2020)¹⁶. The authorities may approve such illegal action, as was observed with the Department of Ecology of the Lviv State Administration, which approved the felling of 50.000 cubic meters illegal timber in protected forests (2014-2015) (Ecoethics, 2015)¹⁷.

Illegal sanitary logging was also carried out in the Exclusion Zone around Chernobyl of which the soil is still contaminated by radioactivity (Kramer, 2015). Nevertheless, logging was condoned, the harvested wood was mixed with logs from elsewhere; exported to Romania and transited to other EU states (Kramer, 2015).

Earthsight also commissioned an international team of forest experts to take a random sample across four provinces in the Carpathians and to assess the compliance of the rules on sanitary felling (WWF-Germany, 2018). In 14 of the 18 areas the classifications of health were considered inappropriate. One State Forest Enterprise even used a fantasy category 'urgent clear cut': being "not described in the national forestry legislation". Otherwise, in some cases "no boundaries of the harvesting site were identified" or some trees were selected "without reason for sanitary logging" (ibid., p. 13).

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https://ejatlas.org/conflict/illegal-timber-trade-in-oleshky-forest-ukraine.

¹⁷ http://ecoethics.ru/massovyie-narusheniya-zakona-pri-organizatsii-sani-tarnyih-rubok-v-obektah-pzf/.

e. Corruption higher-up internationally

There is not only corruption at local level to circumvent the limitations of harvesting; corruption affects the whole chain of supply. This begins with the family enterprises and local networks or, the SFE, ready to turn 'a blind eye', if not itself fully involved. Subsequently the chain of corruption stretches allegedly to the central offices in Kyiv, from where the favoured foreign 'wood barons' can be served with cheap and high-quality wood. At this level, Earthsight (2018) observes a further professionalism: shielding the beneficiary by one or more middlemen, some heading letterbox firms in the UK, but also in offshore financial centres (*ibid*, p. 26), a finding shared by the investigative journalists of the Austrian *Addendum* (2019).

Of course, a pre-condition is a high level of corruption at the customs which has been a severely financial drain to the country. According to the head of the customs service, losses to the state ranged from \$ 4-8 billion per year. He announced a stiff purge of the staff: 80% for the Kyiv office and 40% at the border posts in 2019 (Radio Free Europe, 2019¹⁸). Whether that has helped is uncertain. A year later, SBU reported the initiation of 47 criminal cases and the confiscation of contraband worth \$ 7,23 million (112.com, 2020¹⁹). The customs service remains a battlefield of reformers and vested interests in maintaining the corrupt status quo (Pliner, 2020).²⁰ At any rate, there are no indications of a customs' impact on illegal wood exportation to the EU.²¹

The essence of the clandestine operations remains 'smuggling by mislabelling': the false classification of the wood, its legal origin, quality, size and volume. *E.g.*, exporting high quality of birch under the label of 'fuel wood' that at the end of the chain of delivery emerges as high-quality chairs.

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https://www.rferl.org/a/ukrainian-customs-agency-corruption-nefyodov/30321344.html.

https://112.international/ukraine-top-news/ukraines-security-service-opens-47-criminal-proceeding-due-to-corruption-at-customs-service-54928.html.

https://www.brusselstimes.com/opinion/123600/the-price-of-the-fight-against-corruption-in-ukraine-miroslav-prodan/.

²¹ https://www.mo.be/en/report/illegal-wood-does-not-disappear-ukrainian-for-ests-itself.

f. Organising cross-border timber crime and grand corruption

A steady supply of timber shipments to the multinational customers requires a well-coordinated network between (corrupted) actors. One needs a skilled crew for logging but starting felling in the middle of the Zakarpatia or Polissya only makes sense when you know that the paperwork, such as the certificates of origin, will be properly executed and that the logistics runs smoothly. Also, the international flow of paperwork should be consistent, such that the foreign importing corporation must not be connected to preceding irregularities so they can say "we did not know".

According to the Earthsight 2018 report, the political management of the wood sector during the period of Yanukovyc (2010-2014) was characterised by a systematic grand corruption of which the management was delegated to the President's tennis friend, Victor Sivet, who was nominated head of the central wood department, the SAFR. Under his rule it was common that foreign firms were forced to pay bribes to obtain access to timber (*ibid*, 24). Did this corrupt system change after Yanukovyc and his cronies were ousted? We found no answer to this question. However, there is evidence of covert cooperation between supposedly independent SFEs, which still restricts the free competitive access to timber. At the side of the EU importing firms, in 2015, the export was shifted to two letterbox companies in London (earlier used by Yanukovyc and his cronies), (ibid, 26).²² However, the cargos ('fuel wood') did not go to these formal buyers residing at these addresses but went straight over the border to Romanian mills owned by EU multinational wood corporations. Under a 'Forest Steward Councilcertificate' testifying its sustainability, the 'fuel wood' proved to be good enough for making the 'green' chairs and tables.²³ One can call it the final 'green washing'. After the Maidan revolt, 2013/14, much of the old practices continued (Van Duyne and Svyatokum, 2020) as the following example two years later shows.

In August 2016, a joint team of police and prosecution discovered that multi-thousand cubes of timber were exported to Romania by a criminal enterprise headed by a gang consisting of two high officials of two different agencies, lawyers and bankers. We may consider this as the inner

https://detectives.org.ua/eng/archive/koroli-ukrainskogo-lisu-chastinaetia-advokat/7.

circle around which other figures played essential roles in the execution of the crime: *e.g.* forged certificates of origin (200 pieces). For laundering purposes, the group established front firms in Belize, the British Virgin Islands and Panama. According to the prosecution, the group also sold counterfeit certificates of origin to other enterprises, indicating at a broader 'corruption swamp' which was exposed in a following investigation a year later. In this case the head of the provincial forestry and three heads of SFEs were involved in illegal exportation to the EU (Earthsight, 2018, 36).

One may argue that ingrained practices are difficult to eliminate, as underlined by Earthsight's follow-up report.²⁴ We also took stock of the disclosed cases as presented on the SBU website in the first three months of 2020. *Interfax* reports regularly updates on the illegal timber trade. The profile of the cases is very similar: it involves state enterprises, corrupt managers and forest guards. The cases also mention inundations as a consequence of clear-cutting slopes and criminal negligence in water management.

Some cases came to the open due to worried nearby citizens who started their own investigation: *e.g.* the perpetrators have been in operation for three years aided by all layers active in this local branch: lumberjacks, the administrators and head of the SFE, and beyond.

In other cases, security personnel facilitated the illegal logging in the Lviv region. In addition to falsely relabelling logs, the head of a state-owned enterprise also organised with his customers and staff a labour scam by paying the local villagers a minimum salary cash while pocketing the difference with the official salaries. Apart from the illegal logging by the state enterprises and accompanying bribery, the SBU also discovered a large batch of labels to be used fraudulently to 'launder' illegally felled trees or for sale to other State Forest Enterprises. The USB news site mentioned only one conviction with a tariff of five years imprisonment.

Cases presented by the media are illustrative anecdotes, but still unconnected pieces of an incomplete puzzle. This is due to the various 'evidence holes', of which the most importance concerns the foreign side of the timber traffic. The SBU summaries concern often illegal export to EU member

²⁴ Flatpåcked förests. IKEA's illegal timber problem and the flawed green label behind it.

states, whether or not to fictitious firms, but then the information stops at the border: no follow-up of the trail of documents to the ultimate beneficiary. We also found no requests for foreign legal assistance.

Would it be proper to qualify such cases as 'organised crime'? In the TAIEX Report (2018, p. 11) the interviewed police mentioned six 'organised crime groups', without further elaboration, which is too thin to draw conclusions. While refraining from one more definition debate, we can say all organisational elements are present. As mentioned earlier, the road from standing trees to sawn timber ready to the processing companies and final outlet of 'green fast furniture' is difficult to imagine without a criminal professional organisation: logging, transport, sawing, passing the border and financial management (laundering). Organised crime is here not an outside menace that 'threatens' a clean industry. On the contrary, as in so many organised economic crime cases, the crime begins within an established licit organisation.

What have we observed? On the Ukrainian side the criminal investigations have often exposed the involvement of a corrupt managerial staff at all levels: local forest enterprises, regional management boards and leading staff in central agencies, displaying sufficient cooperation and coordination to speak of criminal organisations, though we are reluctant to use the phrase 'mafia'. On the side of importing corporations, we find numerous front firms, opaque 'middlemen' who take the rap in case an inspection reveals illegal imports. As is common practice in fraud schemes, the front firms are dissolved, the straw men prosecuted and the principals go scotfree claiming to have put the wrongdoer on their black list. Meanwhile a new middleman stands ready to take over, which explains why law enforcement action does not make a dent in the continuous supply of logs to the firms of among others, Egger, Schweighofer or Swiss-kondo (Addendum, 2019). With such a security of supply the EU 'wood barons' do not need involvement in Ukrainian criminal networks. The illegal logs are coming anyhow.²⁵

https://www.mo.be/en/report/illegal-wood-does-not-disappear-ukrainian-forests-itself.

3. Overlap and differences between the two sectors

There is an obvious overlap of illegal logging and amber mining and not only because they can take place on the same soil. We have seen that when amber is hidden under a forested area, the trees are felled and sold in the informal market or exported illegally. Such an operation requires the support of lumber jacks, the forester, and transport to an illegal timber mill or exporter. Then follows the amber digging or mining which is almost literally an underground activity of which the yield, bits and pieces or bigger lumps of raw amber, needs little transport organisation other than a ruck-sack or suitcase for smuggling to Poland without further sophisticated operations with forged documents.

In contrast to illegal amber mining, the organisation of illegal logging must be viewed as an 'upperworld' criminal undertaking as its basic product, logs, is too bulky a commodity to be handled unseen or to be handled in small parcels. Transport goes by trucks of train waggons. That does not exclude the 'disappearance' of large cargos of harvested logs that are diverted to one or more of the 12.000 illegal 'shadow sawmills' (Earthsight, p. 5).²⁶ Also, cargos can slip through custom control due to corruption. In most cases the disappearance is 'on paper' only, by mis-labelling under another, cheaper classification: *e.g.* mentioning 'fire wood' for oak or birch.

The facilitating function of corruption is mentioned for both markets. In the amber market there is not only mention of bribing local officials to turn a blind eye but also of more direct involvement. In the criminal timber market, the case descriptions point also at active involvement: officials of state enterprises being themselves a part of the scheme from illegal logging to transactions higher up in the chain of supply.

4. Violence, civil society and police in both markets

The illegal economic interests of the amber and timber trade are high while the level and integrity of law enforcement is low. Thus, for the protection

VGSM, a Ukrainian furniture and timber company carried out much of the illegal logging of which the products were allegedly sold to IKEA.

of the criminal interests, law breakers have to turn turn to a private 'muscled' form of protection. Threat to business interests can come from fellow crime entrepreneurs which is particularly observed in the amber mining. Collecting 'protection' money from amber diggers or (preferably) richer pump owners, requires a convincing show of force. First, in the Yanukovyc period, this was applied in a 'disciplined' way. After Yanukovyc discipline broke down: amber mining developed into a kind of gold rush or 'wild west', inclusive with shoot-outs, at least in the experience of the miners. But despite the frequent mentions to armed conflicts ("Amber Wars") only three casualties were recorded (Piechal, 2017; pp. 3-4).

In the criminal timber sector, we do not find the wild-west style of violence between crime-entrepreneurs. Here threats to the criminal business interests come bottom-up from civil society: concerned citizens and NGOs who expose examples of eco-criminality by companies, managers, a public administration or other authorities. In many cases civil society actors rallied against illegal logging: either to halt illegal over-exploitation; or prevent cutting parks for estate development without licence (or licence obtained on false grounds). Apart from the negative publicity, complainants sometimes succeed in thwarting the planned illegal undertakings.

Civil actions against high-level eco-crime is regularly countered by intimidation, physical threat and attacks on health and life of activists as is documented in various publications such as "*Dangerous Work*" by the USA based NGO "*Crude Accountability*" and "*Activizm*" (2020), published by *Zmina Human Rights Centre*.²⁷ Here we draw on the descriptions of Ukraine cases of murder, arson, assaults and harassment in which 'green activists' were victimised.²⁸ We also note the role of the authorities (police, prosecutors) in *inaction*.

The most known murder was that of *Ekaterina Gandzyuk* who was a member of the city council of Kherson in 2018. She criticised the local authorities and law enforcement agencies because of not investigating attacks on environmentalists opposing local illegal logging. Subsequently she became a victim of murder herself: someone poured sulphur acid over her causing severe burning. After many operations she died, 33 years old.

²⁷ https://crudeaccountability.org/dangerous-work-report-2/.

²⁸ But the list is longer: human and civil rights activists against other forms of abuse share the same experience of threats and violence.

At first the police rated this assault as 'hooliganism'. Under public pressure the police had to upgrade this qualification and hastily arrested a suspect who could not possibly have committed the crime. In the end eight suspects were charged of whom four confessed to have acted for money. Who was that mastermind? Two persons were mentioned: a member of the Kherson Regional Council and a local 'crime boss'. Then, most interestingly, the Prosecutor General, Yuriy Lutsenko, suspended the investigation against these suspects.²⁹

Another environmental activist, Nikolay Bychko, who died of unnatural causes, investigated the illegal pollution of two rivers. His body was found hanging from a tree. Suicide? For the police that was the easy conclusion for closing the case, though forensic investigation started only months later; a delay leading to loss of evidence. Later, an *ad hoc* Parliamentary investigative committee found multiple investigative irregularities: the victim committed suicide after his nose was broken, jumped from a tree stump he could not have set up. The lawyer who brought this to the open received serious threats.

In April 2018, Igor Lukashenko, sustained serious head injuries when he tried to stop tree cutting in the Yalansky Park. In November 2018, Dmitry Malyar, defending the green zone around his city, was assaulted by "three athletic men breaking his arm".

Valentina Aksenova, journalist and activist of the *Protect the Forest Initiative*, active since 2014, to protect the Vumivsky Forest, has been subject to a protracted smear, threat and violence campaign. Her cars were set on fire. Criminal investigations against her and fellow activists were initiated by way of harassment. She fled Ukraine after threats against the life of her young son.

Another whistle blower, a businessman from Latvia, was shot at when he reported the mislabelling of (non-existent) 'technological wood'. Further details are lacking (Earthsight, 2018, p. 29). Critical outsiders, civil society activists, journalists, but also the forest guards themselves recorded

Lutsenko was suspected of abuse of office related to the case of Hunter Biden and Trump. He was suspected of leaking information about the Biden family to Giuliani, the personal advisor to Trump.

intimidation, physical assault and destruction of recording equipment.³⁰ Sometimes they were 'escorted' out of the forest at gun point.³¹

We stress the importance of the attitude of law enforcement, *i.e.*, the police and prosecution office. In the first place, the general complaint is that the police are usually hardly prepared to file and process reported threats and violence against eco-activists as well as other human/civil rights activists or even the forest guards (TAIEX, 2017, p. 11). On the other hand, the police notes that many cases handed over by the State Forest Resource Agency lack evidence or are "misleading by purpose" (*ibid*, p. 11). And if a case is accepted there comes the long road of procedural delays, allegedly caused by ill-will or technically inept handling. In contrast, activists are more likely to be investigated and prosecuted than the office holders whose law breaking they disclose.³² It is a plausible assumption that this contributes to an under-investigation of crimes by corrupt office holders whose 'smoking gun' is rarely found.

5. Enabling and complicit 'Europe'

Now that we have observed aspects of the cross-border organisation of timber crime, it is time to look at how the 'enablers of crime' at the EU side are regulated. What kind of role should the legal EU wood firms be allocated in these criminal schemes? The answer to this question should be based on (a) a so-called knowledge principle and (b) on a restraint principle neatly included in the EU timber regulation (EUTR).

The *knowledge* principle is not a permissive moral encouragement to refrain from business only when you positively know that a transaction is based on fraud and corruption. The principle is much stricter and formulated in the EU Timber Regulation or EUTR 2013, which prohibits the import of wood illegally harvested in the country of origin.³³ The EUTR 2013 also makes it clear that an 'operator' or trading firm has the obligation to apply a 'due diligence system' to minimise the risk of importing illegally

³¹ See also: *Dangerous work, reprisals against environmental defenders*. Published by Crude Accountability, Alexandria, USA..

https://zmina.ua/content/uploads/sites/2/2020/10/activizm2020_iiiengl_web.

Regulation (Eu) No 995/2010 Of the European Parliament and of The Council.

harvested timber. The application of that due diligence system must be more intensive to the degree that the source country or the relevant region has a bad corruption rating. In case of a bad integrity rating the reliability of documents should not be taken for granted, rather distrusted. The Guideline to EURTR is clear: "In cases where the risk of corruption is not negligible, even official documents issued by authorities cannot be considered reliable".³⁴

The results of a strictly applied due diligence must be in line with the should-not-act principle. This is similar to a professional who should not buy a Rolex for half the price; not even with a 'certificate of origin'; and if you do that on a regular basis, you can face the charge of receiving or 'fencing'.

How should the conduct of the EU 'wood barons' figuring in some of the Ukrainian criminal investigations be interpreted, not in formal criminal law terms, but from the knowledge and restraint principle above?

First, the EU importing firms are assumed to have expert knowledge of the countries and their delivering firms in their supply chain. Though that is made explicit in the EUTR, it also follows from known business experience: there is always a corruption risk in a country like Ukraine. In addition, there are publications on the amber and wood 'mafias', giving sufficient reasons to carry out a 'due diligence' vetting (Addendum, 2019). However, the effectiveness of the EUTR depends on the extent to which this regulation is known in the timber sector. This knowledge is less than it should be: a survey carried out by Köthke (2019, p. 8-9) revealed that 32 % of German operators know the EUTR well, 10 % heard about it and 57 % did not know about it despite being a relevant operator.³⁵

Secondly, there are the many 'red flag' indications that should lead to deeper digging. For example, there are complicated transaction lines going through letter box firms in offshore financial centres: firms in the UK, all residing in one address in London; constructions well known in the literature on (organised) economic crime and money laundering. Some are indicated in the guide documents on EUTR.

³⁴ Guidance Document for the EU Timber Regulation. 2016, p. 7.

Operators could add their opinions about the efficiency of the EUTR. Many expressed to have problems with the unwieldy red tape, the administrative expenses for the operator as well as exporting firms. The requested information is too detailed. "unreal", "unworldly" (Köthke, 2020, pp. 39-43).

If the red flags would not be enough, there are the published initiated criminal investigations, indictments and convictions (if any), spelled out in the media which should activate the due diligence system of the importing firms and call for restraint in continuing commercial relationships. The team of Earthsight checked whether such negative information had an impact on the volume and nature of the export. Their findings showed that the multinationals such as Schweighofer, Egger, the Swiss-Krono and International Paper (Poland), continued to receive the same volumes of timber as before the published criminal investigations as confirmed by EU Customs (*ibid*, p. 40). Earthsight concluded: "Egger and Schweighofer's 'due diligence' systems [either] failed to pick up on this publicly available information" (*ibid*, p. 39), confirmed by Stockmans (2020) two years later. All the EU importing firms stated blandly that they followed the EUTR guidelines, even if an Earthsight undercover operation in which 'cheap' timber was offered to respectable firms showed the opposite (*ibid*.).

Conclusions and discussion

In this chapter we studied the criminal amber and timber markets. We argue that Ukrainian state agencies shaped both illegal sectors by allowing mal governance in which corruption is embedded. This situation is not only a domestic problem. It also affects Ukraine's international status: agreements and multi-country eco-protection projects are flouted, while their implementation remains shrouded in the fog of data mismanagement: we know very little about the compliance with the Bern Convention (see introduction), very little systematic about illegal amber mining or timber crime and what we know is mainly due to foreign investigations by NGOs and investigative journalists, also mainly abroad. We find no trace of interest in evidence-based policy making, implementation and evaluation. The authorities' and business' attitude to the few investigations is rather defensive. Their response to civil society exposures is nothing short of hostile: the law enforcement rather investigates activists than the plunderers of Ukraine's treasures. This is the socio-political background of the criminal eco-markets of amber and wood.

The characteristics of the two markets are reflected in the different profiles of perpetrators but do not differ much in environmental harm. The amber market can be characterised as a boom market, something like a gold rush, as many participants experienced themselves. The prospect of high profits and low level of law enforcement attracted a diverse set of local luck seekers and adventurous entrepreneurs leading (after the ousting of Yanukovyc) to a disorder of artisan, professional and industrial diggers. But as usual, not everybody is equal: some strong men claim to offer 'protection' to individual diggers, an offer 'that cannot be refused'. Whether this represents a real 'Amber Mafia' is uncertain: a popular name and multiple quotes are no proof of reality. Nevertheless, various sources mention violent competition between strong men (the 'bosses') sometimes leading to real shoot-outs. There was also evidence of local law enforcement involvement in the criminal mining.

In contrast to the criminal amber market, the organisation of timber crime is directly or indirectly in the hands of officials of the state agencies as they have the resources and skills to handle the bulky illegally harvested logs. Consequently, the state tends to be involved in timber crime: either as victim or as perpetrator through its corrupt officials. This can contribute to a bias in the presentation of the seriousness of the timber crime. Thus, according to the central State Agency for Forestry Resources (SAFR) the proportion of illegally felled trees is only 0,17%. However, it is telling how this responsible agency plays down the actual volume of criminal logging: this percentage only covers illegal logging by third actors, such as poaching (Earthsight, 2017, p. 14). So, it does not encompass timber crime by the own agencies: illegal exports, bribery by foreign traders and illegal sanitary logging (World Bank, 2020). Though one would expect a thorough cleaning-up after President Yanukovych, the changes look rather cosmetic (Stockmans, 2020); such as announcing more intensive oversight and then installing one badly paid forest guard per 1.000 hectares.

Naturally, as indicated above one should take account of the ways the entrepreneurial environment enables law breaking: engrained corruption, unethical deals with a local and international reach. Part of the enabling environment is Ukrainian's own doing, mainly by establishing an opaque organisational structure in which it is accepted that: "the (state) forest enterprises remain the authority to issue logging permits for themselves" (TAIEX report, 2017, p. 8). As a result, illegal sanitary logging (30-40%) occurred in many places "where cutting would have to be stopped" (ibid, p. 9). For the selling of the 'sanitary wood' there were no clear regulations: 260

the State Forest Enterprise could choose between open competition at an auction to get the best price or underhand contracting to rake in some bribe.

Such an underhand dealing is corruption prone, for which reason (after long delays and strong international insistence) a mandatory electronic auction system was designed and tried by way of pilot project from April 2020 till April 2021.³⁶ It is expected that it will reduce corruption in the sector (World Bank, 2020). At present, fall 2021, evaluative information about this pilot is not publicly available: turnover and deviation from previous auctions. And: what changes are to be expected in the light of a sixto-eight-fold increase of illegal logging from 2018 to 2019: that is 118.000m³ and UAH 814,2 million?³⁷ Are all these illegal loggers vanished together with the 118 thousand cube? What are the statistics of the SAFR concerning 'fuel wood'?

In addition, a compulsory electronic accounting system has been introduced for all forest users which is supported by the Forestry Innovative Analytical. At the time of writing, it registers 95% of all harvested timber. Further a new phone-based, crowd-sourcing system, 'Forest in the smartphone' has been introduced: it allows anyone with a smart phone to review the legitimacy of timber logging and verify the information online by checking the forest tickets (*ibid* 14). The Government Portal is quite enthusiast about its potential:

"If you see timber harvesting while strolling through the forest, you can enter LK.UKRFOREST.COM website and choose MAP option. The location setting should be enabled, then you can see your geographic location and consult the information about the harvesting permit." Cutting activities not shown on the map can be reported to the forestry or police.³⁸

This could be considered a breakthrough. However, also for this innovation there are no data to assess its impact: number of reports and 'hits' of illegal logging and further dealing with them.

https://112.international/finance/online-timber-auction-will-be-launched-in-april-the-government-46226.html.

https://open4business.com.ua/illegal-logging-increases-by-seven-times-in-ukraine-in-2019/.

https://www.kmu.gov.ua/en/news/lis-u-smartfoni-derzhlisagentstvo-zapustilo-pilotnij-proekt-e-reyestru-zagotivli-derevini-ta-onlajn-kartu-rubok.

Additionally, the criminal law sanction system has been updated. The main innovations are: illegal export of forest products can be punished by 3-5 years imprisonment and fine. In case of repeat offending or large-scale illegal traffic the punishment must be from 10 to 12 years. Punishable is also transporting, storage and sale of illegally harvested wood. Regarding the impact of this innovation we also grope in the dark due to a lack of court statistics.

Discussion: liability

Is the criminalisation of illegal export a recognition of the importance of the international environment related to the criminal timber market? Ukraine's wood products are mainly destined for export, partly illegal with forged labels. Thus, the question arises whether Ukrainian timber crime should be qualified as 'transnational organised crime'. If foreign companies bribe high-placed civil servants to get favoured access to (illegally logged) cheap timber, use shady middlemen for the invoicing and financial clearance through offshore centres, the qualification of 'transnational organised crime' is not merely a matter of 'interpretation'. Naturally, the internationally operating 'wood barons' will hide behind the excuse: 'we did not know'. But given the generally accepted 'due diligence principle', only a novice would not know.

Realising that EU-companies also acted with rent seeking short-sight-edness, the European Commission introduced the EU Timber Regulation (October 2010) EUTR) to further compliance of the EU traders.³⁹ It introduced the earlier mentioned well-known principle of 'Know Your Customer' or 'Due Diligence' principle, which boils down to the simple rule: don't trust the blue eyes of your customers but check his/her 'moral status' and 'look behind' seemingly official documents.

However, how serious is the EU? The implementation of this regulation by 27 Member States is after five years still disharmonious with a minimum of staff tasked for the maintenance of this policy (one full-time position), and a very diverse law enforcement. In its evaluation of the timber

³⁹ See for further updating https://ec.europa.eu/environment/forests/timber_regulation.htm.

regulation, the WWF was clear: "the EUTR was until now not able to stop imports of illegal timber products" (WWF, 2019, p. 5), a fact of which the EU was not unaware.⁴⁰

Though the intensions underlying the EUTR's are laudable, its effect is flawed because we think one simple principle is missing: objective risk liability. The principle of liability for illegal and dubious timber, as well as entering inaccurate data has been proposed by BRDO in 2020.⁴¹ We go a step further and propose that traders will be objectively liable for damage caused in the *preceding* links of the chain of supply irrespective guilt. Each link in that chain can be saddled with compensating the damage caused by defaulting market participants before him. This is roughly how the socialsecurity frauds have been addressed in the Netherlands. Principals in the construction sector could get away with violations of social-security regulations by using cheaply operating subcontractors who withheld the socialsecurity contributions and went bankrupt; then another firm took over the contracts which eventually went bankrupt too etc. And the principals always claimed: "I don't know, that is another firm". The Law Chain Liability neutralised this mechanism by making the principal objectively liable for the accumulated debts in his chain of subcontractors. 42 This had great impact on organised sub-contractor scams (Van Duyne and Houtzager, 2005).

This approach can be taken as a model for addressing the supply chain in the wood industry: the use of shady middlemen, complicated offshore constructions and bankrupt firms etc. become irrelevant as the damage is to be recouped from the last link in the chain if the rest goes bankrupt. With such a liability model, traders have just one interest: damage prevention by

⁴⁰ At the time of finalising this concept the EU-Commission finally issued it plan to "minimise consumption of products coming from supply chains associated with deforestation or forest degradation". The Commission realised that its present instruments was mainly directed against illegal logging and did not address deforestation as such. Proposal EU-Commission 17-11-2021; Brussels. COM(2021) 706 final.

⁴¹ Better Regulation Delivery Office. https://en.brdo.com.ua/news/ukraine-should-promote-sustainable-forest-management-next-steps-in-reforming-the-sector-from-brdo-experts/.

⁴² https://eng.mazars.nl/Home/Services/Tax/Employment-Tax-Services/Chain-Liability.

thoroughly knowing their customers.⁴³ A tool to do this is the new electronic accounting system.

This objective risk approach will not work in the amber market as it is an informal economy in which other incentives, such as prices and new legislation may have uncertain effects. Concerning the prices, one may expect that below a particular threshold toiling in an amber field is no longer rewarding. Though that may also depend on the individual level of income: the general income in the amber regions is still such that people may be tempted to eke out a living from anything in their surroundings, as before the onset of the amber boom ten years ago. Whether the new amber law will have an added value to this 'natural shrinking' of organised amber crime remains to be seen and should be determined by an independent evaluation. But if the law leaves the door ajar to corruption, there is no reason for optimism. We refer to the many brave activists, who have been threatened or injured, whose complaints were ignored but who were instead harassed by police investigations, which was apparently accepted.

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For a further discussion on the supply chain liability see https://www.law.kuleuven.be/apps/jura/public/art/55n2/bergkampsupplychainliability.pdf.

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