

## Criminalisation as stronghold against worldwide environmental harm

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*Environmental damage caused by actions that can be considered international environmental crimes is increasing and taking a larger share of the total global environmental degradation. Though countermeasures on the national and the international level have been taken through criminal sanctions, this field of green collar crimes is still on the rise. This contribution is looking into the question, whether international criminalisation of certain acts leading to environmental harm would help protect the natural environment from further degradation.*

*The first part of this article reflects on the current environmental crime crisis. The second and the third part questions the efforts being taken on national as well as on the international level to condemn international environmental harm resulting from potential environmental crimes. The remainder of the article considers the need for environmental criminalisation on the international level.*

**Keywords:** international environmental crime, ecocide, environmental criminal law, criminalisation, environmental harm, International Criminal Court, Article 8(2)(b)(iv) of the Rome Statute

### I. Introduction

A stronghold refers to a place of security and survival.<sup>1</sup> In ancient times strongholds were fortified castles build to withstand the toughest attacks of envious armies: Carcassonne still stands as its biggest representative in Europe. Today the military necessity of strongholds as fortified buildings has passed and the need for strongholds has shifted. It is not the time for thick walls and invulnerable fortresses, but the time for security through common agreements and negotiations. Now the law shall provide the protection, that long was served by powerful buildings and armies.

Just as strongholds were the most vigorous protection against a hostile army, criminal law is the sharpest sword of jurisprudence to bring justice. In this essence, international criminal law is the first line of defence. It protects the very base of societal ground-rules. As the environment forms the basis for human existence in general, it needs to be protected to sustain this base for future generations. This basis – the natural global environment – is currently under severe stress and potentially criminal activities contribute to a wide extent to this bad state. The topicality and the urgency of this matter are once more underlined by the call from the Belgian foreign minister, Sophie Wilmès, in December 2020 to name ecocide a crime under international law.<sup>2</sup> While this is a welcome proclamation, ecocide is only the tip of the iceberg in the sphere of international environmental criminality. Much of the harm done stays under cover. However, the overall negative impact on the environment of all these potentially criminal conducts is enormous.

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<sup>1</sup> “*Stronghold*” in Meriam-Webster Dictionary, <<https://www.merriam-webster.com/dictionary/stronghold>>.

<sup>2</sup> Belgium is the first country to promote the idea of an ecocide provision under the cloak of the Rome; Alan Hope, *Make ecocide an international crime, says Sophie Wilmès*, (30 December 2020) Brussels Times <<https://www.brusselstimes.com>>.

This work will take up the urgent need to address environmental degradation through potentially criminal acts. It calls for immediate action in case of environmental protection at the international level and focuses on the reasons why criminalisation is a key part on the path to a more sustainable world. Why does the global environment need an international “stronghold” of legal/criminal rules for its protection? Could criminalisation – or rather international criminalisation – help to contain the environmental degradation of our planet?

To analyse these questions the first part of this article introduces the ongoing global environmental crime crisis. The following section then explores why criminalisation might be a solution to condemn environmental harm. We can analyse the potential of environmental criminalisation, by looking into national jurisdictions, as well as existing approaches at the international level. This article ends with an explanation about why there is an urgent need for coherent international action in tackling international environmental crimes.

## II. The environmental crime crisis

The world is facing a plethora of environmental problems: climate change, biodiversity loss, or widespread pollution of ecosystems, to name but a few. There are numerous reasons for these problems and the rise in human-made decline of the natural environment. Even though potential international environmental crimes are not the most central issue within these problems, they do have a vital share in the overall environmental degradation of the planet.<sup>3</sup> In fact, in terms of value, environmental crimes are even ranked as the fourth largest criminal sector in the world.<sup>4</sup> They are still seen as “one of the most profitable forms of criminal activity”.<sup>5</sup> The acts in question are a combination of various different actions with major economic, political, social, environmental, and also international security related, impacts.<sup>6</sup> They are often followed or accompanied by other serious misdemeanours such as money laundering, bribery, or even murder.<sup>7</sup> Involvement of various stakeholders, such as governments or criminal syndicates, drivers connected to poverty and greed, impacts ranging from minor local effects to massive global problems, links to economic, social, humanitarian and safety related consequences, ties to other criminal areas, and a dynamic development in general characterises international environmental crimes. The problem of international environmental harm is therefore a juggling act between individuals, criminal organisations, governments, intergovernmental organisations, non-governmental organisations and the global human community in general.

Examples for potential criminal behaviour resulting in environmental harm are plentiful: Carcasses of giant elephants with their ivory tusks brutally removed, burned rainforest, devastated landscape around the Chernobyl nuclear reactor after its meltdown, mercury-poisoned puddles within a lively jungle, whaling ships chasing the majestic animals at sea. All these above present powerful images that appear in our mind’s eye when speaking of human-made environmental harm with criminal influences.

Nevertheless, international environmental crimes still seem to be on the periphery of international law, international criminal law respectively.<sup>8</sup> A universally agreed definition for what an international environmental crime actually entails has not yet been developed.<sup>9</sup> This

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<sup>3</sup> Christian Nellemann and others, *The rise of environmental crime* (UNEP, Nairobi, 2016) at 4.

<sup>4</sup> *Id.* at 7.

<sup>5</sup> Banks and others, *Environmental Crime - A Threat to our Future*, (EIA, London, 2008) at 2.

<sup>6</sup> Christelle Himbert, *A comprehensive approach to combating the criminal networks behind environmental crime* 51 UN Chronicle 20 (2014) at 20; Nellemann and others, *supra* note 3, at 7.

<sup>7</sup> Nellemann and others, *supra* note 3, at 9, 58.

<sup>8</sup> Tanya Wyatt, *Wildlife Trafficking: A Deconstruction of the Crime, the Victims and the Offenders*, (Palgrave Macmillan, London, 2013) at 9; Michael J Lynch and Paul B Stretesky, *Green Criminology*, (Oxford University Press, Oxford, 2012) at 5.

<sup>9</sup> Melanie Wellsmith, *Wildlife Crime: The Problem of Enforcement*, 17 European Journal on Criminal Policy and Research 125 (2011) at 127; Nellemann and others, *supra* note 3, at 7.

lack of a definition is in many ways a obstacle on the road to condemn environmental harm through potentially criminal behaviour. Particularly in criminal law, definitions are of utmost importance in determining guilt. In order to fill this lack of a definition, a new expert-drafting panel was established in 2020.<sup>10</sup> The crime of ecocide is proposed to become the fifth crime under the Rome Statute to accompany genocide, crimes against humanity, war crimes, and aggression.<sup>11</sup>

Although an agreed upon definition is still in the making, it is common fact that certain conducts are falling under the term “international environmental crime”.<sup>12</sup> These various environmental harms comprise, for example, but not exhaustively, poaching and illegal trade in wildlife, whaling, illegal trade in ozone depleting substances, local and transboundary pollution, dumping of toxic waste, trafficking, or dumping radioactive materials or biopiracy.<sup>13</sup> The most heinous of these environmentally harmful acts are named ecocide.<sup>14</sup>

This term is derived from its counterpart genocide and aims at environmental disasters of the scale such as, for example, the Deepwater Horizon explosion.<sup>15</sup> This incident stands as a “classic” example of a well-known potential international environmental crime/ecocide. The Deepwater Horizon oil rig exploded in 2010.<sup>16</sup> Not only were eleven workers killed, but following the explosion, more than 800,000 barrels of oil were pumped into the Gulf of Mexico.<sup>17</sup> This led to an environmental disaster, affecting not only the USA, in which territory waters the rig was placed, but also the other littoral states.<sup>18</sup> Devastating environmental consequences are still seen to this day, more than ten years after the explosion.<sup>19</sup> More recently the Norilsk oil spill can be named as an example, too. 20,000 tons of diesel oil leaked into the Ambarnaya river within the fragile ecosystem of the Arctic.<sup>20</sup> The company claimed that the thawing permafrost caused the spill, but later an old and unfit fuel tank was uncovered as the

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<sup>10</sup> International lawyer Philippe Sands QC and international judge Justice Florence Mumba are co-chairing an expert drafting panel on the legal definition of “*ecocide*” as a potential international crime that could sit alongside War Crimes, Genocide and Crimes Against Humanity. The panel has been convened by the Stop Ecocide Foundation on the request of interested parliamentarians from governing parties in Sweden. It is planned to issue a suggestion for a definition of ecocide within 2021; <[https://www.stopecocide.earth/expert-drafting-panel?fbclid=IwAR3HcNyPC4N0tiTtUHIO8pv9A4jTm6U5\\_2JvvcVQMcpyS3zQKf3YuY8VbDQ](https://www.stopecocide.earth/expert-drafting-panel?fbclid=IwAR3HcNyPC4N0tiTtUHIO8pv9A4jTm6U5_2JvvcVQMcpyS3zQKf3YuY8VbDQ)>.

<sup>11</sup> Polly Higgins, Damien Short and Nigel South, *Protecting the Planet: a Proposal for a Law of Ecocide*, 59(3) Crime, Law and Social Change 251 (2013) at 254.

<sup>12</sup> Nellemann and others, *supra* note 3, at 7; Rob White, *Transnational Harm and Eco-Global Criminology*, in Shlomo G. Shoham, Paul Knepper, Martin Kett, *International Handbook of Criminology* (CRC Press, Boca Raton, 2010) at 231; “*Biopiracy*” means when especially Western companies usurp ownership and control over plants developed using traditional methods, often involving indigenous peoples in less-developed countries (see White above).

<sup>13</sup> Nellemann and others, *supra* note 3, at 7; White, *supra* note 12, at 231.

<sup>14</sup> Polly Higgins, *Eradicating Ecocide*, (Shepherd-Walwyn, London, 2010) at 61; In the general sphere of international environmental crimes “*ecocide*” takes the top of the crime pyramid, similar to genocide within the ICC-crimes. In many ways ecocide illustrates the environmental counterpart of genocide. It has to be noted, however, that international environmental crimes stretch further than “*ecocide*”.

Higgins defines ecocide as “*extensive destruction, damage or loss of ecosystems of a given territory, whether by human agency or other causes, to such extent that peaceful enjoyment by the inhabitants of that territory has been severely diminished*” (Higgins, *supra* note 14, at 62).

<sup>15</sup> Higgins, *supra* note 14, at X.

<sup>16</sup> *Id.*

<sup>17</sup> *Id.*

<sup>18</sup> *Id.*; US Environmental Protection Agency, *Deepwater Horizon – BP Gulf of Mexico Oil Spill*, <<https://www.epa.gov/enforcement/deepwater-horizon-bp-gulf-mexico-oil-spill>>.

<sup>19</sup> These long term effects can especially be observed with the longer-lived species, such as whales, dolphins and sea turtles; Joan Meiners, *Ten years later, BP oil spill continues to harm wildlife-especially dophins*, (17 April 2020) National Geographic <<https://www.nationalgeographic.com>>.

<sup>20</sup> BBC, *Arctic Circle oil spill prompts Putin to declare state of emergency*, (05 June 2020) BBC <<https://www.bbc.com>>.

reason.<sup>21</sup> Even though no other state territory was directly harmed by this incident, it can still be considered an international environmental crime/ecocide for several reasons. The affected region can no longer be enjoyed by its inhabitants to the extent it was before, and on a broader scale, the Arctic region is important for worldwide climate balance and can therefore be regarded as an area of “international concern”. The long-term effects of this disaster are yet to be calculated. It is a fact that both of these incidents have created major consequences for the environment on a wide scale.

However, it is not wise to reduce international environmental criminality to these media-effective one-off events. The majority of the environmental harm through potentially criminal acts takes place “in the shadows” or under the cloak of corporate or even State actions. The illegal trafficking of wildlife or wildlife products (most prominently ivory, rhino horn or tiger skins), or illegally harvested timber is happening on a “day to day” basis.<sup>22</sup> Equally, the poisoning of waterways through the usage of mercury or other toxic substances in order to operate illegal mining businesses is a daily occurrence.<sup>23</sup> When it comes to crime reporting, the media’s coverage is decidedly human-focused. We tend to see reporting on illegal drugs and weapons, but rarely on the exploitation of our natural resources, despite the fact that it happens all over the globe and might be a criminal offence. A further problem is that environmental crimes are both hard to track and prove.<sup>24</sup> The dark face of environmental crimes remains high.<sup>25</sup>

This relates to the problem that environmentally related crime is often disregarded as a “second class crime”. Criminal acts directed at human suffering or with direct human impact tend to be classified as more important. Without disregarding the horrors of human related crime, it is dangerous and short-sighted to downgrade environmental crimes, just because they might not have direct human impact. Their effect on humans is much more silent and evolves over a long period of time. Often, the consequences are beyond human control, and the world sits on the sidelines, watching the environment suffer. However, the acts involved are often not recognised as actual crimes.

There is no doubt: the world is in the middle of an environmental crime crisis. In the light of the current situation, one might speak of an environmental crime pandemic.

### III. Criminalisation as a solution to environmental degradation

Article 1(1) of the Charter of the United Nations sets out universal peace as the main goal of the United Nations Organisation.<sup>26</sup> Due to the rapid expansion of environmental harm throughout the globe, it ought to be understood as a global problem and addressed as an international threat to this universal peace.<sup>27</sup> In essence, all criminal activity is a form of chaos. This chaos forms a counterpart to the peace that is promoted by the UN-Charter. The legal answer to this chaos and threat for peace are criminal codes prohibiting certain behaviours and bringing structure into this disarray. Criminalisation of certain behaviours might therefore work as an anchor to stop the growing environmental harm resulting from the conduct in question.

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<sup>21</sup> Andrew Osborn, Tom Balmforth, *Russia’s Nor nickel fights cover-up accusations over Arctic oil spill*, (10 July 2020) Reuters <<https://www.reuters.com>>.

<sup>22</sup> Nellemann and others, *supra* note 3, at 41 ff.

<sup>23</sup> Deutsche Welle, *Illegal gold mines destroying Amazon rainforest: study*, (11 December 2018) DW <<https://www.dw.com>>.

<sup>24</sup> Florence Schulz, Environmental law expert: Detecting environmental crime is quite a problem, (24. March 2020) Euractiv <<https://www.euractiv.com>>.

<sup>25</sup> Christiane Gerstetter and others, *Status quo und Weiterentwicklung des Umweltstrafrechts und anderer Sanktionen: Instrumente zur Verbesserung der Befolgung von Umweltrecht*, (Umweltbundesamt, 2019) at 131.

<sup>26</sup> Charter of the United Nations, entered into force 24 October, 1945, as amended by A/Res/1991 (XVIII) 17 December, 1963, entered into force 31 August, 1965, 557 U.N.T.S. 143, entered into force 12 June 1968, 638 U.N.T.S. 308 and 2847 (XXVI) of 20 December, 1971, entered into force 24 September, 1973, 892 U.N.O.TS 119, art. 1(1).

<sup>27</sup> Nellemann and others, *supra* note 3, at 4.

Metaphorically speaking the problem of environmental degradation through potentially criminal actions is like storing several electric cables in a drawer. By the time one of the cables is needed they will be badly muddled. This represents the aforementioned chaos. It is impossible to loosen them by simply pulling on one end. To solve the issue, it is necessary to work with all given ends. At this point we are thinking of opening the drawer and contemplating untangling the mess created by humanity. The law shall help in trying to determine which strings to pull and push and therefore lead the way to a final solution.

Where the first part of this paper has described how environmentally harmful misconduct has grown into a global crisis, this following section aims to show that criminalisation could work as an anchor for further global environmental protection. In this light, the question has to be posed, whether international criminal regulation can stop the ongoing harm? Following this, existing national and international approaches on environmental criminalisation will be examined. This part will end by commenting on the question of whether further criminalisation is needed at an international level?

### 1. Can criminalisation stop the environmental harm?

Criminal law is the *ultima ratio*, the last resort in bringing order to the chaos created by lawlessness. Criminalising means on the one hand “to turn an *activity* into a criminal offence by making it illegal” and on the other hand “to turn *someone* into a criminal by making their activities illegal”.<sup>28</sup> Criminalisation is thus a reaction by the state or institution to a certain behaviour, which possibly violates the rules of society. Because this reaction is a significant – if not the most significant – curtailment of freedom and personal rights, they have to be balanced carefully. Legitimation through law, as well as ethical and rational reasons have to be considered. Before blindly criminalising certain behaviours, the question has to be raised, whether criminalisation can stop the harm in question, and whether the particular criminal law provides protection for potential victims. Thus, in this case it has to be asked, whether global criminalisation of environmental harm can put a stop to the worldwide environmental degradation, prevent further environmental harm from happening, and whether potential victims could be spared?

The general goal of criminalisation is to prevent certain kinds of behaviours or events from happening, in order to prevent harm to someone or something.<sup>29</sup> However, often the punishment is seen as the primary factor in criminal law. This assumption is misleading. Penalising the perpetrator would bring no greater benefit to the environment, long after the damage had taken place. That of course, does not mean that prevention and remediation exclude each other, as they are not applied in the same timeframe. They are not necessarily pointed towards the same results, either. Criminal legal mechanisms serve well as general prevention, but tend to be much more anthropocentric regarding the results, while preventive mechanisms, achieved mostly through other legal and economic means of sanctioning, are pointed more towards the protection of nature, and are therefore more eco-centric regarding their results. Particularly in environmental criminal activities this poses a problem, as the victim of environmental crimes is found on different levels: the victim is, on the one hand, the environment and, on the other hand, a specific group of humans or even humanity in general. A third group of victims might be added, when considering that the environment of the planet is left in a bad state for future generations. International environmental crimes might therefore even be called a crime on future generations. To protect these groups of potential victims the focus needs to be on the prevention-protection aspect. Punishment remains only a secondary element, indirectly bringing the “deterrence-effect” into play.

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<sup>28</sup> “*Criminalising*” Merriam-Webster Dictionary, <<https://www.merriam-webster.com/dictionary/criminalize>>.

<sup>29</sup> Rob White, *Transnational environmental crime: Toward and eco-global criminology*, (Taylor and Francis, Cullompton, 2011) at 5.

To mark a specific conduct as a crime can most certainly help reduce this conduct from happening. Criminalisation gives an act a certain level of respect, it sharpens public awareness about this matter and helps to further develop a moral duty to avoid the criminalised act. The appellation alone creates a mental hurdle for potential perpetrators. The inner decision to perform a criminal activity is more difficult than that taken to commit a non-punishable act or even a mere offense. Threatened punishment brings along a “deterrence-effect”. The application of internationally valid criminal regulations to individuals often increases the efficiency and the deterrence-effect of the given provision.<sup>30</sup> Already a principal reason for outlawing environmentally harmful conduct within international conventions is to deter harmful acts that are agreed upon at the domestic and the international level.<sup>31</sup> The consciousness of the community demands reactions when accepted codes of conduct are violated. Thoughtless degradation of nature is unethical and widely seen as an affront to humanity, nature and, in some circumstances, God.<sup>32</sup> This mindset – of environmental awareness – is becoming more and more widespread. This is due to growing scientific evidence of human-made environmental destruction. Within the last years people have started to see and feel negative environmental changes in their daily life, which are especially climate change related. Environmental destruction is not an abstract concept only proclaimed by scientists anymore. This growing recognition can also be observed by the rising activism, such as the “Fridays for Future” movement.

To fight international environmental harm effectively, numerous areas have to coalesce. For the best enforcement results, deterrence, prevention and punishment are vital ingredients.<sup>33</sup> The strengthening of legal enforcement in the environmental criminal sector, adequate human and financial capacity, raising further public awareness, fighting corruption and poverty, environmental education, and supporting national legislation, has to happen with criminalisation. Simply outlawing certain behaviours is not enough. A potential crime of ecocide or a named international environmental crime has to be coupled with alternative and robust methods of enforcement and resistance.<sup>34</sup> A common problem with the enforcement structures of environmental harmful conduct is that only the front men are being caught and charged. Often the “big players” remain untouched.<sup>35</sup> Poaching and the trade of ivory can be used as a prime example in this regard. Poor villagers in the area are recruited as poachers on the front line, whereas the actual international criminal networks driving the trade are operating behind the front line.<sup>36</sup>

However, it would be erroneous to think that criminalisation would bring immediate improvement to the environment. In fact, criminalisation creates problems in itself. The three main issues are the costs involved, the paradox of growing attractivity through criminalisation, as well as the problem of over-criminalisation.

The strengthening of international environmental criminal laws will, of course, trigger higher short-term costs to strengthen enforcement, conduct criminal investigations and press

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<sup>30</sup> David Jensen and Silja Halle, *Protecting the Environment During Armed Conflict: An Inventory and Analysis of International Law*, (UNEP, Nairobi, 2009) at 47.

<sup>31</sup> Byung-Sun Cho, *Emergence of an International Environmental Criminal Law*, 19(1) *UCLA Journal of Environmental Law* 11 (2000) at 12.

<sup>32</sup> Mark A Gray, *The international crime of ecocide*, 26(2) *California Western International Law Journal* 215 (1996) at 216.

<sup>33</sup> Rymn J Parsons, *The Fight to Save the Planet: U.S. Armed Forces, “Greenkeeping”, and Enforcement of the Pertaining to Environmental Protection During Armed Conflict*, 10(2) *Georgetown International Environmental Law Review* 441 (1998) at 480.

<sup>34</sup> Tom Lindgren, *Ecocide, genocide and the disregard of alternate life-systems*, 22:4 *The International Journal of Human Rights* 525 (2018) at 540.

<sup>35</sup> Nellesmann and others, *supra* note 3, at 41.

<sup>36</sup> *Id.* at 51.

criminal charges.<sup>37</sup> This is especially true for less-developed countries, who simply do not have the means to provide this form of monetary support for environmental issues. Nevertheless, these short-term costs should be seen in the light of the many environmental, economic and human health benefits in the long-term following a better environmental management through criminal law.

Criminalisation often brings along a paradox that criminalising a specific conduct makes it more prone to criminal activity. High profit is achieved due to high prices on the world market for certain goods. Paradoxically the decline of certain species increases their market value, which makes them even more of a target for illegal poaching and trade.<sup>38</sup> Rhinoceros horn, for example, was priced at approximately USD 65.000 per kilogram in 2014, making it more valuable than gold at the time.<sup>39</sup> Reduced supply, opposite high demand, especially in Asian countries for medicinal and superstitious reasons, drive up the price.<sup>40</sup> Successful anti-poaching campaigns and tightened general enforcement contribute to rising prices as well.<sup>41</sup> A similar concerning development can be observed in the illegal trade in ozone-depleting substances.<sup>42</sup> As restrictions on usage and production are rising, the supply is dropping and prices are increasing, making this field more attractive to criminals.<sup>43</sup> This high-profit structure of international environmental crimes is a main reason that potential criminals are attracted to it,<sup>44</sup> coupled with the current low-risk structure seen in environmental crimes.<sup>45</sup> This is one of the reasons the Environmental Investigation Agency<sup>46</sup> refers to international environmental crime as “one of the most profitable forms of criminal activity”.<sup>47</sup>

Taking these issues into consideration, the balance between criminalisation and legalisation must be considered. The problem of over-criminalisation needs to be kept in mind. The drug abuse epidemic in the USA has led to serious restrictions and laws trying to contain this crisis. This has taken on such proportions that this coined the term “war on drugs”. The values involved in the drug trafficking business make it the largest criminal sector in the world.<sup>48</sup> The massive expenditure of about USD 51 billion has proved to be ineffective.<sup>49</sup> Despite some major drug raids the “war” is still ongoing and turning in circles. Within the last years, a trend of legalisation has begun. Uruguay, for example, has legalised marijuana and even states in the USA have legalised weaker forms of drugs.<sup>50</sup> This renunciation of criminalisation of certain types of drugs is considered to be a huge success, so far.<sup>51</sup> Where the effectiveness of certain measures taken in context of the “war on drugs” may certainly be

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<sup>37</sup> *Id.* at 41.

<sup>38</sup> David Hunter, James Salzman and Durwood Zaelke, *International Environmental Law and Policy*, (4th ed, Foundation Press/Thomson Reuters, New York, 2011) at 1069.

<sup>39</sup> Achim Steiner, *Putting a stop to global environmental crime has become an imperative*, <<https://www.un.org/en/chronicle/article/putting-stop-global-environmental-crime-has-become-imperative>>.

<sup>40</sup> Nellemann and others, *supra* note 3, at 41.

<sup>41</sup> *Id.* at 75.

<sup>42</sup> Hunter, Salzman and Zaelke, *supra* note 38, at 1069.

<sup>43</sup> *Id.*

<sup>44</sup> Banks and others, *supra* note 5, at 1; Himbert, *supra* note 6, at 20; Nellemann and others, *supra* note 3, at 9; Onelica Andrade, *Environmental crime summit*, 42(3) *Environmental Policy and Law* 159 (2012) at 161.

<sup>45</sup> Banks and others, *supra* note 5, at 1; Himbert, *supra* note 6, at 20; Nellemann and others, *supra* note 3, at 9; Andrade, *supra* note 44, at 161.

<sup>46</sup> The Environmental Investigation Agency (EIA) is an international NGO that investigates and campaigns against environmental crime and abuse; <<https://eia-international.org/>>.

<sup>47</sup> Banks and others, *supra* note 5, at 2.

<sup>48</sup> Nellemann and others, *supra* note 3, at 7.

<sup>49</sup> Drug Policy Alliance, *Drug war statistics*, (2014) Drug Policy Alliance <[www.drugpolicy.org](http://www.drugpolicy.org)>.

<sup>50</sup> Uki Goni, *Uruguay's legal marijuana policy en route to next phase of regulation*, (24 March 2016) *The Guardian* <[www.theguardian.com](http://www.theguardian.com)>; Thomas Fuller, *Californians legalise marijuana in vote that could echo nationally*, (9 November 2016) *The New York Times* <[www.nyt.com](http://www.nyt.com)>.

<sup>51</sup> N-tv, *Uruguay wagt die freie Graswirtschaft*, (22 January 2017) N-tv <[www.n-tv.de](http://www.n-tv.de)>.

questionable, the general direction of criminalisation is correct. Thus, this development of legalisation is not an option for environmental crimes. The legalisation process involved a lengthy period of education of the public and scientific research. Furthermore, the damage caused by soft drugs is at first only personal and secondly not as dangerous and complex as environmental harm. Some behaviours that cannot be tolerated must be outlawed with the help of criminal sanctions. Otherwise, the State would be neglecting its duty to care for and protect its inhabitants. The State would, in the end, risk its position as guarantor for stability. Therefore, environmental crimes should be better prioritised on the ladder of crimes. Self-regulation of states, companies or individuals for better environmental management in general, as is used for some environmental issues, is also not an ideal form of control over international environmental crimes. It simply provides too much leeway and lacks national and international alignment.

Criminal law is being used by states to preserve common values and social standards among its citizens. Within absolutist legal thinking, criminal law was and still is the solution for various social, political, cultural and economic problems.<sup>52</sup> To secure a sufficient protection of the environment, every instrument possible has to be used, despite the potential flaws that could occur. Criminalisation cannot stop the harm alone, but criminalisation – used in the right dose – can be a tool to reduce the harm to an acceptable amount. Therefore, criminal law should be regarded as one central element in environmental protection. Criminalisation of certain environmental harmful acts can thus be a setscrew in the complex structure of the protection of the natural environment as a whole and the pursuit of global peace as put forward in article 1(1) of the UN-Charter.

## 2. Environmental criminalisation on national level

Before turning to environmental crimes at an international level, it is worth looking at the national legal application of environmental crimes. Even within national legislation environmental crimes can still be regarded as a relatively new form of crime. The novelty of this field of law should not be used as an excuse not to act on these issues or not to take this field of law seriously. In the meantime, many States have introduced laws criminalising environmental harm, even though it remains a niche within national criminal law.

Some States have not yet passed an environmental criminal law and if they have, they often lack a strong will to enforce their own environmental provisions.<sup>53</sup> The enforcement and policing of environmental crimes is simply not effective enough.<sup>54</sup> Often national judicial systems are not equipped judicially and suffer from rising corruption in the environmental area.<sup>55</sup> Lots of the destruction takes place in less developed countries, which do not have a properly developed judicial sector, lack financial assets to fund proper investigations, and where corruption is common.<sup>56</sup> Governments often treat environmental crimes as low-priority matters, which leads to a weaker response through criminal justice tools.<sup>57</sup> In fact, people have no faith in their own courts.<sup>58</sup> This variety of legal approaches opens doors for environmental “dumping”, competing jurisdiction, creeping domestic jurisdiction and waste in prosecutorial

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<sup>52</sup> Antonio Vercher, *The use of criminal law for the protection of the environment in Europe: Council of Europe resolution*, (77)28, *Northwestern Journal of International Law and Business* (1990) at 442.

<sup>53</sup> Frederic Megret, *The challenge of an international environmental criminal law*, *Social Science Research Network Electronic Journal* (2010) at 16.

<sup>54</sup> Hamdan Qudah, *Towards international criminalisation of transboundary environmental crimes*, Diss. Pace University (2014) at 121.

<sup>55</sup> Steven R. Donziger, *Rainforest Chernobyl: Litigating Inidgenuos Rights and the environment in Latin America*, 12(2) *Human Rights Brief* (2004) at 2.

<sup>56</sup> CITES Secretary “Wildlife crime” CITES <[www.cites.org](http://www.cites.org)>.

<sup>57</sup> Charlotte Davies, *Environmental criminals’ perceptions on crime, corruption and CITES*, in Angus Nurse (ed) *Critical Perspective on Green Criminology* (*Internet Journal of Criminology*, 2014) at 44.

<sup>58</sup> Donziger, *supra* note 55, at 2.



resources.<sup>59</sup> Less-developed states are exploited by corporate structures as well as powerful states and criminal networks because of their weak laws and poor enforcement.<sup>60</sup> That way the companies avoid applying the (potentially) stricter environmental rules of their home state.<sup>61</sup> The reverse of this is that the affected less-developed states rely on the investments made in their economy.<sup>62</sup> That way strong environmental laws and enforcement puts the countries at an economic disadvantage.

At its beginning, environmental wrongdoing was not placed within the core criminal code, but outside of the main crimes. Environmental matters are often dealt with on a civil or administrative basis which, when compared to a criminal approach, is softer and lacks the necessary stigmatisation and deterrence.<sup>63</sup> Comparable to this, environmental misconduct was sometimes not even categorised as a crime per se, but merely as an offense, which were not enforced heavily.<sup>64</sup> In Germany it was not until 1980 that environmental criminal provisions were integrated into the criminal code – StGB.<sup>65</sup> Despite this valorisation of environmental crimes in Germany the numbers of registered environmental crime cases dropped by 32% between 2004 and 2016.<sup>66</sup> Only a small percentage of these cases end up in court and with a prison sentence; mostly fines are issued.<sup>67</sup> Overall, the prosecution of environmental crimes is deficient.<sup>68</sup> This is often due to missing personnel and a reduced budget, missing specialisation on environmental issues and lack of technical expertise.<sup>69</sup> These issues found in Germany can be compared to other member states in the European Union.<sup>70</sup>

This shows that even if there is a potentially functioning enforcement mechanism at a national level, it often remains a Sisyphean challenge. Illegal gold mines within the Amazon rainforest have a wide impact on the health of this important ecosystem, as well as on the health of the inhabitants (mainly indigenous people).<sup>71</sup> This is due not only to the destruction of the primary forest, but also mainly through the usage of mercury to extract the gold.<sup>72</sup> Often it is only one prosecutor accompanied by elite soldiers hunting within the vastness of the forest for illegal mines. The mines which are found are destroyed immediately to stop the illegal extraction.<sup>73</sup> The miners are mostly gone by then and have already begun setting up a new mining operation.<sup>74</sup> This cat-and-mouse game will not lead to sufficient environmental protection. Again, the problem is clear; only little fish are caught, and the big players remain untouched.

Several countries across the globe have attributed rights to nature. Therefore they created legal entities in the form of natural occurrences. The fact that, next to humans, non-human entities can be considered as victims is one of the reasons that governments, enforcement agencies and criminal law in general struggle with appropriate responses to international environmental crimes.<sup>75</sup> Granting personhood to the environment or environmental entities

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<sup>59</sup> Megret, *supra* note 53, at 16.

<sup>60</sup> Qudah, *supra* note 54, at. 121, 122.

<sup>61</sup> *Id.*

<sup>62</sup> *Id.*

<sup>63</sup> Megret, *supra* note 53, at 12.

<sup>64</sup> *Id.*

<sup>65</sup> Paul Krell, *Umweltstrafrecht*, (CF Müller, Heidelberg, 2017) at 1; e.g. § 325 StGB regarding „Air pollution“.

<sup>66</sup> Christiane Gerstetter and others, *supra* note 25, at 43.

<sup>67</sup> *Id.* at 45.

<sup>68</sup> *Id.* at 131 ff.

<sup>69</sup> *Id.* at 90 ff.

<sup>70</sup> *Id.* at 131 ff.

<sup>71</sup> Deutsche Welle, *supra* note 23.

<sup>72</sup> *Id.*

<sup>73</sup> *Id.*

<sup>74</sup> *Id.*

<sup>75</sup> *Id.*

might dissolve the issue of non-human victims. The possibility to grant certain rights to natural bodies was, for example, shown by New Zealand. In 2018 the island nation declared the Whanganui River as a person in legal matters.<sup>76</sup> The river was recognized as an "indivisible and living whole, comprising the Whanganui River from the mountains to the sea, incorporating all its physical and metaphysical elements".<sup>77</sup> This personhood for environmental entities could help with environmental protection. Under criminal law the Whanganui can now be regarded as a victim equal to a human being. How this plays out from a criminal legal perspective in reality remains to be seen. This development has set a precedent and can now be observed in other states as well.<sup>78</sup>

When speaking of criminalisation, it is crucial to turn to sanction methods as well. Penalties by law shall enable compensation for the damage caused, provide retribution for the violation of the legal rules, and offer protection for third parties or society at large.<sup>79</sup>

The most common instruments at national and international level for punishment in general are fines, restoration and imprisonment.<sup>80</sup> Fines and compensation for the commission of an international environmental crime are especially important to help renew the damaged ecosystem. This approach follows the recognised "polluter pays" principle in international environmental law.<sup>81</sup> Imprisonment of individuals should only be imposed for the committing of serious crimes and therefore remain the ultimate threat.<sup>82</sup> Imprisonment is arguably the most serious personal punishment but does not provide any redemption for the environment. It can also be an option, if the perpetrator cannot pay for the compensation or if fines are passed on to customers or shareholders.<sup>83</sup> The effectiveness of softer options such as warnings, bans from a profession or settlements, depends on the existence and on the application of incarceration as the ultimate penalty.<sup>84</sup> A perpetrator takes a warning more seriously with the threat of imprisonment than the "threat" of just another warning. The moral stigma of this *ultimum remedium* is an instrument to control governmental or corporate officials and groups or individuals.<sup>85</sup> The environmental harm, however, cannot be remedied via classical means, such as reprisal, restitution or compensation.<sup>86</sup> The principle of *restitution in integrum* is inapplicable and any compensation is mostly inadequate for irreparable environmental damage.<sup>87</sup> But sanctions might stop harm in the first place and also provide some resources to curb the overall environmental harm.

Impunity can actually drive the harmful conduct even more. Criminal "masterminds" often remain untouched, because of the internationality of the cases and the fact that it is almost impossible to get to them through international jurisdiction. In the context of human rights, a "culture of impunity" is a strong reason for the permanent renewal of human rights violations

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<sup>76</sup> Te Awa Tupua (Whanganui River Claims Settlement) Act of 2017, No 17 (2017), § 14.

<sup>77</sup> *Id.*

<sup>78</sup> E.g. India granting the Ganges and Yamuna Rivers the status of legal persons in an effort to combat their pollution.

<sup>79</sup> Carole M Billiet and Sandra Rousseau, *How real is the threat of imprisonment for environmental crime?*, 37(2) *European Journal for Law and Economics* 183 (2011) at 184.

<sup>80</sup> *Id.* at 183.

<sup>81</sup> Patricia Birnie and Alan Boyle, *International Law and the Environment*, (2nd ed, Oxford University Press, Oxford, 2002) at 268.

<sup>82</sup> Billiet and Rousseau, *supra* note 79, at 191.

<sup>83</sup> *Id.* at 184, 185.

<sup>84</sup> *Id.* at 197.

<sup>85</sup> *Id.* at 185.

<sup>86</sup> Hisashi Owada, *International Environmental Law and the International Court of Justice*, (Inaugural Lecture at the Fellowship Programme on International and Comparative Environmental Law), Pazmany Peter Catholic University of Budapest, 2006.

<sup>87</sup> *Id.*

throughout the world.<sup>88</sup> According to the UNSC the prosecution and penalisation of the culprits is a tool that contributes to the prevention of human rights violations.<sup>89</sup> This finding can also be an indication for positive results of extended criminalisation in environmental issues.

However, the fact that the environment deserves stronger protection under the law is increasingly understood among the international community. Yet, the world today is witnessing alarming developments in key national states to focus on themselves. This retreat on inner state issues, which some propose as a healing factor, can be observed in Great Britain and the USA. Growing movements for this policy of separation are also happening in some countries of the EU. For environmental issues it is most notable that a known climate change denier was leading the US Environmental Protection Agency (EPA) under the presidency of Donald Trump.<sup>90</sup> With this misguided focus and the retreat solely on national interests it will not be possible to solve the worldwide environmental problems. To turn one's back and run from the aforementioned problems will only result in bigger international dilemmas and the problems will overtake us eventually. Bosselmann identifies a sovereignty paradox, meaning that states hold on to outmoded ideas even in a situation where only global cooperation can gain better development.<sup>91</sup> On the one hand there is the desire of many states to open up for economic reasons and sacrifice sovereignty for economic growth, but there is less cooperation in environmental matters.<sup>92</sup> The solution for this sovereignty paradox might be differentiation. More sovereignty where needed, less where necessary, whereby the field for international environmental crimes clearly belongs to the areas of necessity.<sup>93</sup> National environmental protection through criminal law can also help prevent environmental crimes from spreading across state borders.

The 1983 Bhopal disaster can be named as an example for a potential national environmental crime. The release of toxic chemicals by an American company in India resulted in at least 3,500 deaths and more than 200,000 people affected with serious long-term ramifications.<sup>94</sup> Though this incident took place in India, claims were filed in courts in the USA. These inter-American courts dismissed the suit against officials of the company on *forum non-conveniens* grounds, which was partly based on deference to India's regulatory and environmental regime.<sup>95</sup> It was not until 26 years later that India itself, respectively Indian courts, convicted seven officials of the responsible US company Union Carbide and sentenced them to two years in prison for negligence.<sup>96</sup> These convictions, however, were insignificant in comparison to the damage caused and were only directed against Indian nationals leaving the heads of the company unpunished.<sup>97</sup> Another downside from an environmental point of view of these convictions is that the Courts were focused on the human victims and had no regard for the vast environmental damage caused. This example shows that in a globalised world

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<sup>88</sup> Cherif Bassiouni, *The philosophy and policy in international criminal justice*, in Lal C Vorah and others (ed) *Man's inhumanity to men: Essays in international law in honour of Antonio Cassese* (Martinus Nijhoff Publishers, Leiden, 2003) 65 at 119, 120.

<sup>89</sup> United Nation Security Council Resolution S Res 827, S/RES/827 (1993).

<sup>90</sup> Chris Mooney, Brady Dennis and Steven Mufson, *Trump names Scott Pruitt, Oklahoma Attorney General Suing EPA on Climate Change, to Head the EPA*, (8 December 2016) Washington Post <[www.washingtonpost.com](http://www.washingtonpost.com)>.

<sup>91</sup> Klaus Bosselmann, *Earth Governance: Trusteeship of the Global Commons*, (Elgar, Auckland, 2015) at 268.

<sup>92</sup> *Id.* at 269.

<sup>93</sup> *Id.*

<sup>94</sup> Mark Magnier and Anshul Rana, *India Convicts 7 In 1984 Bhopal Gas Disaster*, (7 June 2010) Los Angeles Times <[www.latimes.com](http://www.latimes.com)>.

<sup>95</sup> Kenneth F McCallion and Rajan Sharma, *Environmental Justice without Borders: The Need for an International Court of the Environment to Protect Fundamental Environmental Rights*, 32(3) *The George Washington Journal of International Law and Economics* 351 (2000) at 362.

<sup>96</sup> Magnier and Rana, *supra* note 94, at 383.

<sup>97</sup> *Id.*

national law cannot be the only starting point for environmental criminalisation: a globally active company from state A is involved in (globally relevant) environmental harm in state B. This international context of environmental harm is why the next part will introduce environmental crime at the international level.

### 3. Environmental criminalisation at the international level

As established above, states cannot hide behind their national borders or their own national laws to fight environmental harm through potential environmental crimes, because the issue is transboundary and global by its very nature. In the end planet Earth provides one coherent ecosystem. Any environmental harm following from potentially illegal acts impacts on this one and only ecosystem. Argentina's former minister of the environment, Bergman, speaks of "only one house, we're all living in".<sup>98</sup> With this in mind, the focus of environmental criminal law should be on the international level. However, this assumption shall not lead to a disregard of using criminal law against human environmental harm within national jurisdictions. Similar to the criminal provisions of the Rome Statute, national and international law should support each other within the field of international environmental crimes also.<sup>99</sup> The same failure to criminalise and punish acts harming the environment at a national level occurs at the international level. Where national criminal law already presents the *ultima ratio* at a national level, international criminal law is the last resort, one level above. It steps in when national law cannot find the right answer to certain harmful acts.

Even though the Codex of Hammurabi listed environmental provisions in 1754 BC, environmental law remained a niche in the international legal cosmos. The Stockholm Conference in 1972 brought a major boost for general international environmental law. It cannot be denied that since then environmental protection has made progress at the international level.<sup>100</sup> However, the criminalisation of certain behaviours, which results in transnational ramifications, has not found its way into international agreements. Moreover, international environmental law itself is already a complex self-contained regime within international law, but is unfortunately characterised by soft regulation, soft enforcement, and soft compliance.<sup>101</sup> Due to international agreements, conventions etc. some norms have been derived, which might be seen as international environmental criminal laws.<sup>102</sup> These norms can be found in different characteristics.<sup>103</sup> For example, the Basel Convention on the Control of Transboundary Movements of Hazardous Waste states that its parties shall consider illegal traffic in hazardous wastes and other wastes to be criminal and will take appropriate national action.<sup>104</sup> Similar schemes can be observed in a variety of multilateral environmental agreements.<sup>105</sup>

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<sup>98</sup> Daniel Wetzel, *Unserer Welt gehen die Rohstoffe aus*, (16 March 2017) Die Welt <www.welt.de>.

<sup>99</sup> E.g. the German Völkerstrafgesetzbuch (VStGB) has adapted national German criminal law to the rules of international criminal law, in particular to the Rome Statute of the International Criminal Court. §§ 6-13 VStGB relate to the Rome Statute crimes genocide, crimes against humanity, war crimes and aggression. It creates the conditions for their prosecution by the German criminal justice system.

<sup>100</sup> E.g. the Montreal Protocol on Substances that Deplete the Ozone Layer 1522 UNTS 3 (opened for signature 16 September 1987, entered into force 01 January 1989) or the Paris Agreement – United Nations Framework Convention on Climate Change (open for signature 16 February 2016, entered into force 4 November 2016).

<sup>101</sup> Teresa Fajardo del Castillo, *International environmental law and environmental crime: An introduction*, (European Union Action to Fight Environmental Crime, 2015) at 6.

<sup>102</sup> Cho, *supra* note 31, at. 11.

<sup>103</sup> *Id.* at. 14-16.

<sup>104</sup> Convention on the Control of Transboundary Movements of Hazardous Waste, May 5, 1992, 1673 UNTS 57, art. 4(3).

<sup>105</sup> E.g. Convention on International Trade in Endangered Species of Wild Fauna and Flora, with Appendices, July 1, 1975, 993 UNTS 243, art. 8; for further examples see Cho, *supra* note 31, at. 14-16.

These rules within the international environmental agreements are not “hard” criminal law and they do not represent the entire spectrum of potential international environmental crimes. A solution might be the appointment of a crime of ecocide as the fifth crime under the Rome Statute, which was introduced earlier.<sup>106</sup> This would be a welcome addition to the Statute of the International Criminal Court (ICC). Nevertheless, most environmental harmful acts do not reach the threshold of being called an ecocide, even if they have widespread international impact.

This threshold-problem can already be observed with the handling of article 8(2)(b)(iv) of the Rome Statute. This norm is the first exclusively eco-centric war crime and international environmental crime in general, meaning that there does not have to be human harm next to the environmental damage to constitute a crime.<sup>107</sup> The use of Agent Orange during the Vietnam War and the burned-down Kuwaiti oil wells could have been potential prosecutable acts under the above-mentioned provision, if the Rome Statute had existed at those times.<sup>108</sup> Despite all the praise for the first eco-centric international crime, the threshold for proving such a crime is nearly unreachable and the actual application of Article 8(2)(b)(iv) of the Rome Statute is likely to be limited. The provision itself contains various limiting factors: it is only applicable during “international armed conflict”,<sup>109</sup> the physical act of the crime alone sets out a huge hurdle, as being “widespread, long-term and severe” must all simultaneously be demonstrated,<sup>110</sup> and the Article’s *mens rea* requires knowledge of the destructive effects, which could be difficult (up to impossible) to prove.<sup>111</sup> Due to these hurdles article 8(2)(b)(iv) of the Rome Statute has, up to now, never been applied. To save an ecocide provision from this fate, these hindrances from within the text of the norm should not be repeated. The discussion on ecocide – as the potential fifth crime under the Rome Statute – often remains at the macro level, but has to keep the micro level in mind.<sup>112</sup> Particularly in environmentally-related potential criminal acts this micro level is of high significance.<sup>113</sup> These “other” international environmental crimes should not be neglected for the sake of a handful of “threshold-reaching” crimes.

Even though the term “environment” is not mentioned under the other Rome Statute crimes, they all offer some potential to include environmental crimes in their scope. The preamble of the Rome Statute opens this door by referring to the “well-being of the world”, which encompasses a well-being of the environment as well.<sup>114</sup> An act of aggression resulting in a crime of aggression might be achievable via environmental means: Damming up a river, which is a lifeline for another country, and cutting the whole state from its water supply could well trigger this provision. Crimes against humanity are designed to protect fundamental human rights, such as life, health, freedom and dignity.<sup>115</sup> Fires in the Indonesian rain forest, illegally lit to gain more farmland, have been described by some as crimes against humanity, as they are polluting vast areas with toxic smoke.<sup>116</sup> Furthermore, environmental destruction in general is

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<sup>106</sup> Hope, *supra* note 2; Higgins, Short and South, *supra* note 11, at 254.

<sup>107</sup> Jessica C Lawrence and Kevin J Heller, *The First Ecocentric Environmental War Crime: The Limits of Article 8(2)(b)(iv) of the Rome Statute*, 20 *Geo International Environmental Law Review* 61 (2007) at 70-71.

<sup>108</sup> Steven Freeland, *Addressing the International Destruction of the Environment during Warfare under the Rome Statute of the International Criminal Court*, (Intersentia, Cambridge, 2015) at 282.

<sup>109</sup> Rome Statute of the International Criminal Court, July 17 1998, 2187 U.N.T.S. 90, art 8(2)(b).

<sup>110</sup> Mark A Drumbl, *Waging war against the world: The need to move from war crimes to environmental crimes*, 22(1) *Fordham International Law Journal* 122 (1998) at 127.

<sup>111</sup> Lawrence and Heller, above n 107, at 79

<sup>112</sup> Janice Gray, *Drove my Chevy to the levee but the levee was dry: prosecuting water theft in the Murray Darling Basin of Australia*, 1 *Resolution Journal* 44 (2020) at 44.

<sup>113</sup> *Id.*

<sup>114</sup> Rome Statute, *supra* note 109, preamble.

<sup>115</sup> Gerhard Werle and Florian Jessberger, *Principles of International Criminal Law*, (3rd ed, Oxford University Press, Oxford, 2014) at 333.

<sup>116</sup> Oliver Balch, *Indonesian Forest Fires*, (11 November 2015) *The Guardian* <[www.theguardian.com](http://www.theguardian.com)>.

often rhetorically described as a crime against humanity.<sup>117</sup> Article 7(1)(k) of the Rome Statute, which opens prosecution to “other inhumane acts of a similar character intentionally causing great suffering, or serious injury to body or to mental or physical health”, might be a gateway to allow international environmental crimes to be prosecuted as crimes against humanity. This subsection is a “catch-all” provision and enables the jurisdiction of the ICC to absorb new developments and acts not specifically listed in the Rome Statute,<sup>118</sup> which might open the door for international environmental crimes. Even the crime of genocide has environmental implications, though they are the hardest to establish, as genocide is an anthropogenic crime. Nevertheless, the continuous loss of biodiversity could be conceived as “species genocide”, naming elephants or rhinoceros as examples, or the destructive treatment of some indigenous tribes might be interpreted to be an “environmental genocide”. Despite these links between the environment and the Rome Statute crimes they are not officially acknowledged yet. The policy paper of the office of the Prosecutor in 2016 does not change this fact.<sup>119</sup> Therefore, the ICC does not offer an international solution to international environmental crimes yet.

The question remains, where is this legal protection coming from? International environmental law is not only about state relationships, but also touches individuals, people, society, generations, animals and nature.<sup>120</sup> Inefficiency in regulation making and enforcing of current laws leads to the fact that environmental harm is flourishing today on an international scale.<sup>121</sup> Of course, there are some MEAs in place trying to harmonise environmental rules, but the uneven degree of incorporation of the regulations set out in these MEAs into the domestic legal systems is an ongoing challenge.<sup>122</sup> Mismatches, resulting from this uneven incorporation, offer legal loopholes for potential perpetrators of international environmental wrongs.<sup>123</sup> The way the structure of international law in general is set up hinders addressing the destruction of the global ecosystems and the protection of certain groups of people.<sup>124</sup> International law has been derived to operate in a human-to-human context, but not in a context of human-to-nature. International law should thus work as a powerful leverage of change in the direction of justice, not work against it.<sup>125</sup>

The above-mentioned example regarding the illegal gold mines within the Amazon has shown that national law, respectively national law enforcement, can reach its limits. It is therefore inevitable to empower specific international bodies with the ability to judge on environmental wrongs in the sphere of criminal law. INTERPOL has launched activities all over the world within the four main areas of environmental criminality (Fisheries, Forestry, Pollution and Wildlife).<sup>126</sup> They shall help dismantle criminal networks behind the environmental crimes.<sup>127</sup> Nevertheless, these efforts are all based on and limited by the national

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<sup>117</sup> Michael Kloepfer and Martin Heger, *Umweltstrafrecht*, (3rd ed, C. H. Beck, Munich, 2014) at 138; John Vidal and Owen Bowcott, *ICC Widens Remit to Include Environmental Destruction Cases*, (15 September 2016) The Guardian <[www.theguardian.com](http://www.theguardian.com)>.

<sup>118</sup> Christopher K Hall and Kai Ambos, *Crimes against Humanity*, in Otto Triffterer and Kai Ambos (ed) *Rome Statute of the International Criminal Court - A Commentary* (3rd ed, C.H. Beck, Munich, 2016) at 235.

<sup>119</sup> Office of the Prosecutor, *Policy Paper on case selection and prioritisation*, (15 September 2016) International Criminal Court <[www.icc-cpi.org](http://www.icc-cpi.org)>.

<sup>120</sup> Cynthia Giagnocavo and Howard Goldstein, *Law Reform or World Re-form: The Problem of Environmental Rights*, 35(2) McGill Law Journal 345 (1990) at 347.

<sup>121</sup> Nellemann and others, *supra* note 3, at 4.

<sup>122</sup> Antonio Cardesa-Salzmann, *Multilateral environmental agreements and illegality*, in Lorraine M Elliot, William H Schaedla (ed) *Handbook of transnational environmental crime* (Elgar, Northampton, 2016) at 309.

<sup>123</sup> *Id.*

<sup>124</sup> Lindgren, *supra* note 3, at 539.

<sup>125</sup> *Id.*

<sup>126</sup> Interpol, <https://www.interpol.int/en/Crimes/Environmental-crime/Our-response-to-environmental-crime>.

<sup>127</sup> *Id.*

laws of the countries involved. INTERPOL simply works as a coordinator and consultant within this collaboration.

Expanding globalisation leads to the expansion of the concept of international crimes.<sup>128</sup> It is simply not possible to solve the problem of environmental harm solely with the adoption of national laws. Scientists from different backgrounds hold an increasingly clear consensus that humans are having a devastating impact on the natural environment and that human activity is even changing the Earth's climate.<sup>129</sup> There is evidence suggesting that global laws are needed to govern human behaviour and avoid further irreversible damage to the planet.<sup>130</sup> Nowadays international environmental harmful acts represent a new form of global "crimes" with growing recognition.<sup>131</sup> They are endangering the global human community and create an equally shocking effect to that created by other recognised international crimes, including genocide.<sup>132</sup>

This is why some sort of reorientation is needed in international environmental governance, law enforcement and dispute resolution.<sup>133</sup> International environmental crimes have to be dealt with on an international level with the involvement of international entities. The question of what the right institution is, should be left aside at this stage.<sup>134</sup> It is therefore of high importance and in the interest of every nation to start governing worldwide environmental problems on a global scale via international entities for coordination, investigation and justice. An international approach can lead to the defence of transboundary environmental degradation, prevention of competitive distortion in international trade and restoration of destroyed areas. The circuitousness and the confusion of these crimes needs a combined approach. To have an effective international system combating environmental crimes, the international community has to internationalise the systems leading to international justice.<sup>135</sup>

#### 4. The need for criminalisation

While the crime crisis is looming, it has become evident that national and international legal approaches are not yet necessarily up to the task. Neither national law nor international law provides a sufficient answer to the environmental crime crisis. While in national legislations either no impactful and enforced environmental criminal regime exists, international law has not even found common ground regarding a definition on international environmental crimes.

In recent years science and research have shown that the nature on our planet is in a precarious state. However, this vast amount of gathered knowledge does not necessarily mean that immediate action has been taken. The response to the alarming signs of the scientists was rather slow or has even been opposed with non-scientific claims. Nevertheless, some efforts have been made to preserve the environment and stop the overall environmental degradation on

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<sup>128</sup> Ryan Gilman, *Expanding Environmental Justice after War: The need for universal Jurisdiction over environmental war crimes*, 22(3) Columbia Journal of International Environmental Law and Policy 447 (2011) at 470; Irina Marchuk, *The Fundamental Concept of Crime in International Criminal Law*, (Springer-Verlag, Heidelberg, Germany, 2014) at 69.

<sup>129</sup> ICE Coalition, *Environmental Institutions for the 21st Century: An International Court for the Environment*, (2011) Stakeholder Forum's Programme on Sustainable Development at 6.

<sup>130</sup> *Id.* at 6.

<sup>131</sup> *Id.* at 17.

<sup>132</sup> *Id.* at 17.

<sup>133</sup> Giagnocavo and Goldstein, *supra* note 120, at 347.

<sup>134</sup> As mentioned above there are voices that promote ecocide as fifth crime under the Rome Statute, to allow the International Criminal Court to look into international environmental harm. Other ideas suggesting, for example, to set up an International Court for the Environment (ICE). Where international environmental crimes should be adjudicated on the international level remains to be subject of further investigation.

<sup>135</sup> Angus Nurse, *Introduction*, in Angus Nurse (ed) *Critical Perspective on Green Criminology* (Internet Journal of Criminology, 2014) at 3.

the planet. The greatest achievement was the signature of the 2014 Climate Agreement in Paris,<sup>136</sup> however its actual success remains to be seen in the future. In the light of the Paris Agreement, the Parliament of the European Union declared a climate and environment emergency in 2019.<sup>137</sup> This again underlines the state the climate and the environment are in. Although this act by the European Parliament is a step in the right direction, the European Parliament focussed its further outlines of the declaration on the problem of global warming. The problem of general environmental degradation, which includes the harm resulting from potential international environmental crimes and is similarly pressing, is not followed up by specific urges or calls from the members of the European parliament. Furthermore, a Europe-wide environmental crime regime or even the suggestion of one was not included. The Directive 2008/99/EG – called the Environmental Crime Directive – has formerly unified the national environmental criminal laws within the European Union, but there remains broad leeway for the member states.<sup>138</sup>

The complexity and unpredictability of potential international environmental crimes provide compelling arguments that international environmental harm is one of the most serious criminal areas in international regards: The main peculiarity is the possibility of harm towards everyone and everything. Environmental harm potentially covers a much broader range of consequences, and the interdependence of all species in one giant ecosystem must be considered.<sup>139</sup> Earth is one complex integrated system and should be treated that way. Harm to any part of this system – no matter how marginal it might seem at first glance – does harm to the whole fragile structure. Stable functioning of this earth system is the most basic requirement for human societies to build upon around the world. It is therefore vital to balance the complex relationship between humans and nature. The system between humans and nature is on the brink of losing its balance. Over millennia humans have concluded that they have subjugated nature and that they are the dominating species on the planet. Nature is not seen as a prerequisite for life but as an alien. Therefore it has been forgotten that humans are also a part of this nature and are, in fact, highly dependent on it. While the current generation is already feeling the negative effects of climate change and other environmental harm, this development is predicted to worsen within the next decades. It is, therefore, safe to say that an international environmental crime can be regarded not only as a criminal act against the environment and humans, but future generations have to be added to the list, too. It might sound exaggerated, but the survival of the human race is what is ultimately at stake here. One way or another the environment will outlast humankind, but humans may not be able to adapt to the new living conditions created, *inter alia*, by anthropogenic international environmental damage. That is why the earth's environment has to become a main focus of attention. It has to be kept in mind that the global environment in its entirety is a shared resource – shared among all nation-states, all human beings and all flora and fauna. The fate of shared resources is often neglected in terms of maintenance. They are exploited as fast as possible by the sharing parties to reel in most of the benefits, which then leads to a depleted resource. Garrett Hardin stated in his analysis of the tragedy of the commons that "freedom in a commons brings ruin to all."<sup>140</sup> To preserve the common "global environment" a need for international criminalisation becomes apparent.

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<sup>136</sup> Paris Agreement – United Nations Framework Convention on Climate Change (open for signature 16 February 2016, entered into force 4 November 2016).

<sup>137</sup> European Parliament resolution of 28 November 2019 on the climate and environment emergency (2019/2930(RSP)); Karoline Beisel, *Ein Klima- und Umweltnotstand für Europa*, (28. November 2019) SZ <<https://www.sueddeutsche.de>>.

<sup>138</sup> Council Directive (EC) 2008/99 concerning the protection of the environment through criminal law [2008] OJ L328.

<sup>139</sup> Lynn Berat, *Defending the right to a healthy environment: Toward a crime of geocide in international law*, 11(2) Boston University International Law Journal (1993) 327 at 343; Lynch and Stretesky, *supra* note 8, at 1.

<sup>140</sup> Garrett Hardin, *The Tragedy of the Commons*, 162 Science 1234 (1968).



One of the proposed solutions presented by Garrett Hardin is to appoint a “leader” to regulate access to the common.<sup>141</sup> An international criminal regime could be this regulating factor in this particular area; as suggested by Hardin.

#### IV. Conclusion

This paper has stated the urgent need for a solution in international criminal law to condemn international environmental harm. The answers given at a national level are simply not sufficient, especially because the global environment cannot be protected from within national borders, as it is essentially an international resource. At an international level, environmental criminalisation is not developed enough. The ICC as well as other agreements or conventions do not provide a specific international environmental crime provision.

The overarching nature of the global environment creates a unique but complicated context to generate solutions in international law. Numerous and widespread root causes, many disastrous consequences, the close connection to policy, security and other forms of crimes and the fact that international environmental crimes are of a global concern evoke a new challenge for the international community. In order to protect the environment and ensure sustainable development, it is crucial to prioritise international environmental security and international environmental crimes.<sup>142</sup> It has to be kept in mind that criminal law is the ultimate solution in tackling environmentally harmful conduct. It therefore has to be used carefully and at the right dose. Nevertheless, the state the natural environment is in leaves no choice but to install an international environmental crime regime. In this context it is therefore of utmost importance to understand that the global environment is the key and basis to human existence and all life, particularly for future generations to be able to thrive.<sup>143</sup> Further growth and proliferation of these crimes - which is predicted to happen - will increase the risk for the global community.<sup>144</sup> In the end, international environmental harm affects the world as a global community and not only a specific person or a group of persons.<sup>145</sup> Those crimes are contributing to further depletion of many third-world countries and fuelling a vicious cycle of poverty, crime and regression. They are aggravated through the uncertainty concerning their long-term impacts and the ongoing additional costs for future generations. The irreversible impacts underline the need for immediate action to contain these threats. Given the broad and intertwined nature of international environmental crimes, international law has a specific role to play. This is why a comprehensive response to these potential crimes is indeed for the international level to tackle one of the most pressing challenges of the current time.<sup>146</sup> This would be beneficial to a vast number of different national approaches.

When harmful or criminal behaviour is on the rise, it is, in general, tackled by the law. The criminal side of these regulations has put many into conflict with the law. Criminalising actions harming the environment at the international level would thus have two major implications: It would protect the earth’s environment and all its inhabitants (human and non-human); it would furthermore hold those in relevant positions on state, corporate or non-corporate level and individuals accountable for their actions in destroying the foundation of human existence.

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<sup>141</sup> *Id.*

<sup>142</sup> Andrade, *supra* note 44, at 164.

<sup>143</sup> Higgins, *supra* note 14, at 61.

<sup>144</sup> Duncan Brack, *The Growth and Control of International Environmental Crime*, 112 *Environmental Health Perspectives* 80 (2004) at 80; Nellesmann and others, *supra* note 3, at 4.

<sup>145</sup> Brack, *supra* note 144, at 81; Gavin Hayman and Duncan Brack, *International Environmental Crime – The Nature and Control of Environmental Black Markets*, (RIIA, London, 2009) at 7; Banks and others, *supra* note 5, at 3.

<sup>146</sup> Melanie Jarman, *Climate Change*, in CQ Press (ed) *World at risk* (CQ Press, Washington D.C., 2010) 299 at 299; Lynch and Stretesky, *supra* note 8, at 5.

Criminalisation is thus only one piece of the big puzzle of environmental protection, but it can help to break the vicious circle and prevent future environmental harm from happening. Criminalisation might not be the holy grail to solve environmental degradation. To complete a puzzle, it is vital to put all the pieces in place. Therefore, the criminalisation of environmental harm is unavoidable for this process. Coming back to the metaphor used at the beginning, a stronghold was never completely invulnerable. However, they proved their usefulness in past times. Therefore, as shown above, international criminal law can be used as a modern form of a stronghold to attack the looming environmental crime crisis.

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