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Amicus curiae to the International Monsanto Tribunal on the question of Ecocide; Dr Gwynn MacCarrick



International Monsanto Tribunal In The Hague - October 2016

TERMS OF REFERENCE 6

Les activités passées et présentes de la firme Monsanto sont-elles susceptibles de réunir les éléments constitutifs du crime d'écocide, entendu comme consistant dans le fait de porter une atteinte grave à l'environnement ou de détruire celui-ci de manière à altérer de façon grave et durable des communaux globaux ou des services écosystémiques dont dépendent certains groupes humains?

Could the past and present activities of Monsanto constitute a crime of ecocide, understood as causing serious damage or destroying the environment, so as to significantly and durably alter the global commons or ecosystem services upon which certain human groups rely?

INTERNATIONAL MONSANTO TRIBUNAL, HAGUE - OCTOBER 2016

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INTRODUCTION

Of this we are certain: “man has become a geophysical force” capable of modifying the vast balancing mechanisms of Earth, but also a force effecting apocalyptic transformation of the future.²

Honourable Tribunal members,

A few formalities before we start.

Owing to time constraints, oral submissions will extract the salient points from this written Brief

Accordingly, we respectfully ask;

1. That the written Brief be taken as read into evidence.
2. That full citations be dispensed with, and refer the tribunal to the complete referencing contained in the written brief and its footnotes.
3. Formally ask the tribunal to adopt the working definition of Ecocide, as proposed by the organisation End Ecocide on the Earth, and appended to the foot of this brief.

¹ This submission is prepared for the International Monsanto Tribunal in my capacity as amicus curiae on the question of Ecocide. Special thanks to my research assistant John Marmarinos. I wish to also recognise the assistance of the Environment Protection Clinic, Yale Law School see; Report by McKenna Cutler-Freese and William, Liang Environment Protection Clinic Yale Law School May 2016, and the guidance of Koffie Dogbivi, International Environmental Law Jurist and co-coordinator of Amendment Drafting, End Ecocide on the Earth.

² Emilie Gaillard Crimes Against Future Generations; e-pública revista electrónica de direito público Special Issue Número 5, 2015 p7, quoting V. Vernadsky, *La biosphère*, éd. F. Alcan, 1929, 231p.

Overview

The defendant Company Monsanto is a publicly traded American multinational agrochemical and agricultural biotechnology corporation with headquarters in Missouri, USA.³

Monsanto is one of the first companies to genetically modify plant cells, and conduct field trials of genetically modified crops. They have played a major role in changing global agricultural practices, including; engineering biotechnology products; promoting the ubiquitous use of agrochemicals in the production of food and feed crops; the patenting and promoting of transgenic crops that have contaminated organic farming; along with a history of complicit involvement in the use of chemicals on ecological areas with the specific intention of targeting human populations for military objectives.

These activities together with Monsanto's complete lack of corporate social responsibility have placed the defendant in the spotlight and the forefront of this Tribunal's scrutiny. Monsanto is the obvious defendant, in every respect an exemplar of the wanton environmental destruction that form the basis and substance of the crime of Ecocide. Such an allegation is not new to Monsanto. History has recorded Monsanto's liability for environmental harm through the enormous weight of lawsuits that this company alone has generated. The countless law suits and out of court settlements that Monsanto has defended already tell the picture.

This forum seeks primarily to search for an alternative to the unaccountable conduct of corporations that, thus far, have proven impervious to the reach of the law. It is hoped that through this international civil society initiative, that support will grow for a criminal enforcement framework that is capable of bringing multinationals to account, for their catastrophic environmental footprint.

This is a legal action which is both a defensive and an affirmative claim to halt environmental damage. Through an immense legal efforts it is hoped that this Tribunal can provide an international authoritative advisory opinion that ecocide meets the threshold to be considered as a *jus cogens* crime.

Whilst this people's court cannot make a binding decision, its findings nevertheless support the efforts of communities across the world to seek justice by referencing the opinion and guidance of eminent jurists, and their prediction about the future direction of international law. Undoubtedly the work of this Tribunal will contribute to the progressive development of international law by clarifying the content of the human rights responsibilities of companies and informing the debate on whether international criminal law should recognise the crime of Ecocide.

³ In September 2016 the board of Monsanto agreed to accept the offer of Bayer to purchase Monsanto for \$66 billion US (\$128/share) pending regulatory approval.

The finding of this tribunal will signal a turning point in history. For the first time a citizens initiative is attempting to bridge the 'accountability gap' of multinational companies engaging in environmental destruction injurious to the common interests of humankind. Such a task has evaded the league of nation states because the exploitation of resources have always been the entitlement of statehood. However, the subject matter and focus of this Tribunal has a wider remit - world assets that move beyond State territorial boundaries; collectively shared resources; global commons; fragile ecosystems with indeterminate boundaries; and ecosystem services of the Earth that sustain all living life forms.

We will hear the testimonies of victims that can attest to the fact that Monsanto by its act or omissions have been the human agent in the destruction of whole ecosystems and have presided over, and been complicit in, the criminal conduct that has significantly and durably altered ecosystem services relied upon for human wellbeing and survival.

We will hear of Vietnamese farming districts transformed into wastelands, as a direct result of the calculated and premeditated actions of Monsanto that provided the means to inflict enduring ecological and human harm, with the putative knowledge that the substances they were providing to military efforts, in pursuit of profit, were wrong under international law. Monsanto will be shown to be complicit in unleashing a mischief that targeted ecologies, with an intent to cause human suffering in direct violation of established norms of international law.

But this is not an isolated incidence in which global commons and ecologies have been directly targeted by Monsanto. This Tribunal will also hear of the so called Plan Colombia, a military and diplomatic aid initiative, that was conceived by the US and Colombian governments, and facilitated by Monsanto who provided concentration of Glyphosate for the aerial fumigation and eradicate of coca crops. This anti-narcotic strategy caused direct damages to legal agriculture and continues to impact adversely the ecology and ecological services of the Colombian territories effected by aerial spraying (incl water sources, pastures, livestock) and potentially severe effects on the fragile tropical rainforest.

These direct environmental assaults are coupled with a more insidious and far-reaching malfeasance – the engineering of genetically modified seeds that not only contaminate and disturb the organic and ecological balance of whole farming districts, but accelerate biodiversity loss and advance an intensive form of food production with enormous associated reliance on chemical herbicide. This industrial form of monopoly 'invents the ailment and then sells us the cure'. The extent of the human toll is yet uncertain. But for the purposes of this court it is enough that Monsanto has progressed and promoted its biotechnology regardless of the science, and has failed to take measures of precaution in the face of real and significant environmental harm and human health risks.

The Tribunal will hear the testimony of victims that will give a human face to what has been described as the ‘tragedy of the commons⁴’ or the ‘paradox of unintended consequences’⁵ brought about by the determination of Monsanto to bend and transform our natural world for its own profitable exploits. The fallout is that, while Monsanto’s profits from the exploitation of shared resources, there is a corresponding diminishing effect upon the collective capacity of human populations to thrive, if not survive.

The criminal activity that underscores these offences are of such a gravity that they shock the conscience of mankind. The motivation for these offences is greed, entitlement on a grandiose scale, and a military-industrial complex with an insatiable appetite.

By supporting war efforts Monsanto through provision of Agent Orange (a toxic defoliant), there exists an indispensable link between the military objectives and the murderous outcome, just as IG Farben, a German chemical industry conglomerate (which provided the Zyklon B cyanide-based pesticide that emerged as preferred killing tool of Nazi Germany for use in extermination camps during the Holocaust) was prosecuted for its complicity by the International Military Tribunal Nuremberg.⁶

The scourge of Monsanto’s legacy will surpass this generation. Today we are advocating for the rights of past and succeeding generations. At all relevant times all victims were protected under international law. This Tribunal will present a flame of hope for those afflicted and give notice to transnational corporation that they are recognised actors in the international law arena.

The recognition of the crime of Ecocide will herald a new era of corporate criminal responsibility. In the same way that the body of international criminal law rapidly evolved in two and a half decades (1918-1945—the interwar years) to recognise the notion of individual criminal responsibility for crimes committed by individual actors. Never again will corporations responsible or complicit in the breaches of international law, stand behind the traditional corporate veil thus giving them de-facto impunity even when they violate international customs and norms.

To do nothing is to condone the notion that private interests can subordinate the collective interests of mankind with impunity.

Whilst global environmental harm is not new, there is an emerging ‘green criminology’⁷ and a greater awareness of our interconnectedness, which

⁴ The concept and name originate in an essay written in 1833 by the Victorian economist William Forster Lloyd, who used a hypothetical example of the effects of unregulated grazing on common land (then colloquially called “the commons”) in the British Isles *Lloyd, William Forster (1833). Two lectures on the checks to population*. England: Oxford University

⁵ Swimme B and Tucker ME *Journey of the Universe* (2011) p99.

⁶ *Zyklon B Case, Trial of Bruno Tesch and Two Others*, 1–5 L Rep of Trials of War Criminals 93–102 (UN War Crimes Comm’n ed, 1949). Interestingly in 1967: Monsanto entered into a joint venture with IG Farben the German chemical firm that was the financial core of the Hitler regime, and was the main supplier of Zyklon-B gas to the German government during the extermination phase of the Holocaust. IG Farben was not dissolved until 2003

⁷ E.g., R. White and D. Heckenberg, *Green Criminology: An Introduction to the Study of Environmental Harm* (2014).

together with a significant body of scientific research and empirical evidence, is founding an imperative for action. No longer will the world community acquiesce to the near sighted corporate profiteering at our collective expense.⁸ To this end, the citizens tribunal represent a social movement which has in its sights environmental justice through a new arm of international law; environmental crime.

An eco-global criminology will provide an international framework of analysis as it simultaneously tackles three intertwining concepts that govern the relationship of humans to their natural environment; ecology, transnationality and criminality.⁹

PART I SIGNIFICANCE

1.1 Significance of the finding of the IMT Tribunal

The significance of the findings of this tribunal of eminent international jurists is immense.

The world looks to this Tribunal for a statement that Ecocide is a *jus cogens* crime. The recognition and adoption of the crime Ecocide, by this court will address the following deficiencies in existing international law;

1. The relevant articles in international law do not provide adequate protection to the environment due to the stringent criteria used to demonstrate damage;
2. Some provisions in humanitarian law that protect civilian property offer indirect protection of the environment, but this remains vague;
3. There is a lack of case law on protecting the environment during both peace and wartime due to the limited number of cases brought to international judicial bodies;
4. There is no permanent international mechanism to monitor and address environmental damage/destruction that significantly and durably alter the global commons or ecosystem services;
5. While international environment law has matured through the adoption of treaties and conventions that have a bearing on the

⁸ Higgins, P and D. Short and N. South, 'Protecting the Planet: A Proposal for a Law of Ecocide', 59 *Crime, Law and Social Change* (2013) 251.

⁹ White R *Transnational Environmental Crime – Towards and eco-global criminology* Routledge 2001 t p.2

protection of the environment; criminal and humanitarian law remain insufficient to prevent significant ecological harm.

Affirmative action is what is needed. History will judge our actions and either praise us for our efforts or condemn us as having become: ‘*accustomed in the most terrifying way to the actual fact of the menace (...)* so we are not just blind to the apocalypse (...) we are also deaf.’¹⁰

PART II STANDING

2.1 Forum *non conveniens* and *forum necessitates*

To be able to preside over a case a court/tribunal must possess the power to hear the subject matter.

It is a generally accepted principle that the country in which the human rights abuse occurred has jurisdiction over a claim—this is the principle that links harm and territoriality. The basis of this being a state’s jurisdiction over all persons, property and activities that occur within its boundaries/territory.

However, there has been a trend towards claims against multinational companies initiated in the country that the corporation is incorporated or domiciled. This type of claim relies on nationality as opposed to the principle of territoriality. Claims in the *home* country as opposed to the *host* country are complex and are only successful where it can be established that a claim taken in the effected territory would not be more suitable.

The question as to which is the suitable forum, and which State should be seized of a case, has led to the emergence of two doctrine; the doctrines of *forum non conveniens* and *forum necessitatis*.

According to the *forum non conveniens* doctrine courts have the discretion to grant a stay on proceedings despite a real and substantial connection between the forum and the subject matter of the claim. Case law and jurisprudence of Common Law courts¹¹ have often granted stays in favour of the forum in which the case may be ‘tried more suitably for the interests of all the parties and the ends of justice’¹²

The basis of the legal doctrine of *forum necessitatis* is fairness. This is manifested strongly through in the case law and jurisprudence in Civil Law traditions. It allows a court to assert jurisdiction over a case even if the standard conditions are not fully met so long as no other forum that is

¹⁰ The philosopher Günther Anders has clearly denounced the reality of a total catastrophe see G. Anders, , *La menace nucléaire*, éd. Du Rocher, 2006, p. 11.

¹¹ The doctrine is mostly applied in common law traditions.

¹² *Spiliada Maritime Corporation v Cansulex* [1987] AC 460 at 476.

capable of providing a fair trial is reasonably available to the victim and there is some connection between the forums.¹³

The doctrine of necessity embedded in Civil Law legal traditions is arguably anchored in Article 6 of the *European Convention on Human Rights* which is a pivot in facilitating victim access to legal remedies according to the Guiding Principles. It allows courts to accept a complaint for corporate human rights abuses even if the standard conditions for jurisdiction are not met— *provided no other forum is available*.¹⁴

An additional legal doctrine is the well-established concept of *ordre public* (or public order). In private international law, the doctrine of *ordre public* concerns the body of principles that underpin the operation of legal systems in each state. To a certain extent, these underlying principles interact with (and sometimes overlap) civil rights and human rights. A number of these rights are defined at a supranational level granting states leeway for states to consider the extent to which international principles of law are to be allowed to influence the operation of law within their territories.

The international community has worked hard to produce harmonised principles but are sometime faced with the prospect that a victim may not get as fair a hearing in the state in which a human rights abuse occurred or a lawsuit might produce a different result. These issues are resolved under the systems of law known as ‘conflict of laws.’

So whether in the interests of justice (*forum non conveniens*) or because no other available venue exists (*forum necessitatis*) or whether the venue that exist would produce an inferior result (*ordre public*) there is a strong basis for this Tribunal having standing. All three legal doctrine provide a fulcrum to support granting *locus standi* (legal standing) to bring a claim before this Tribunal.

Not that this Tribunal, which draws authority from global citizenry, would need to concern its self with an artificial or overtly legalistic obstruction.

¹³ Nwapi C, Jurisdiction by necessity and the regulation of the transnational corporate actor’ (2014) 30 *Utrecht Journal of International and European Law* 24.

¹⁴ Article 6 of the *European Convention on Human Rights*

PART III

COMPETENCE OF IMT

3.1 A citizens/ peoples tribunal

The International Monsanto Tribunal derives its legitimacy from its transparent method of establishment and its mandate. All interested parties have been invited to submit briefs related to the six questions the Tribunal is asked to consider. The Tribunal will deliver an Advisory Opinion that is fully informed, having heard legal argument and the evidence of victims who can attest to Monsanto's activities. This procedure is analogous to that followed by the International Court of Justice under chapter IV of its Statute. In its deliberations the Tribunal shall include an examination of the written briefs submitted to the Tribunal complemented by testimonies of victims.

Whilst the International Monsanto Tribunal is not established by government or State mechanisms, nor does it have any powers to issue binding decisions, this is not an impediment to the courts competence.

The Tribunal is acting on the authority of global citizenry, its legitimacy come from its international advisory function, and the authoritative opinion it disseminates to the global community. The IMT operates under a direct mandate from the people who are not objects of international law, but subjects.

The IMT is not presenting itself as a substitute to courts established at domestic level, who could receive claims against Monsanto, or of mechanisms, such as the *UN Working Group on Business and Human Rights*, set up at international level to inquire about the activities of companies, but rather as an supranational tribunal vested with the authority to hear a legal matter, where no other suitable forum exists.

This is what makes the IMT a unique enterprise, with few equivalents across the world. The closest analogue is the Permanent Peoples Tribunal, which also includes eminent lawyers in its composition. There are also investigatory or quasi-judicial bodies in the formal UN system, such as Commissions of Inquiry, Panels of Experts and Fact-Finding Missions, appointed by the political bodies of the UN or the UN Secretary-General, which may play a role judicial review.¹⁵

However, never in history, have claims involving environmental/ecological harm come before an international tribunal. One of the reasons this Tribunal has no precedent is that in international adjudications the parties opt into or out of jurisdiction by means of:

- a) a general acceptance of jurisdiction;
- b) a specific treaty jurisdictional clause;

¹⁵ See, eg. the UN Human Rights Commission-appointed Commission of Inquiry on Libya: Human Rights Council, *Report of the International Commission of Inquiry on Libya*, 19th sess, Agenda Item 4, UN Doc A/HRC/19/68 (2 March 2012); *Report of the Secretary-General's Panel of Accountability in Sri Lanka*, 31 March 2011, <http://www.un.org/News/dh/infocus/Sri_Lanka/POE_Report_Full.pdf>; Human Rights Council, *Human Rights in Palestine and Other Occupied Arab Territories: Report of the United Nations Fact Finding Mission on the Gaza Conflict*, 12th sess, Agenda Item 7, UN Doc A/HRC/12/48 (25 September 2009). See also José E Alvarez, *International Organizations as Law Makers* (Oxford University Press, 2005)

- c) a specific agreement to refer an individual case for adjudication; or
- d) the parties concerned all consent to the jurisdiction of the relevant tribunal in relation to their special case

It goes without saying that parties are slow to submit to binding international adjudication where vital interests are concerned. In the case of corporations they usually prefer a politically negotiated outcome. This means that aggrieved parties, who consider resorting to adjudication as a means of seeking legal redress have limited options. At present there is only the possibility of a civil suit in a domestic court. Whilst the possibility of injunctive or interim measures exists legal actions are usually protracted and binding judicial decisions a rare. Many environmental matters never make it into court, but rather result in negotiated settlements that are all too often legally and politically advantageous to the defendant multinational company. Why would they enter a court room if they could avoid it?

This is the exact reason Monsanto is unlikely to attend these proceedings.

Since the advent of the Alien Torts Act (US legislation) it has been possible to scrutinise the human rights abuses of multinationals (provided they had a parent company registered in US).¹⁶ However even the most ardent supporters of transnational human rights suits concede that “the direct economic benefit to individual plaintiffs has been limited [and] [f]ew Alien Tort Statute plaintiffs have received monetary compensation from their perpetrators.”¹⁷

Scholars who have extensively studied the cases where human rights claims have been pursued under the ATS and have concluded that it is not a fertile fora for good case law, given the lack of enforcement with respect to judgments and the high dismissal rate.¹⁸

*In a more perfect world, none of these human rights victims would have chosen to file civil lawsuits in the United States. But the combined efforts of international and domestic legal systems offer very little in the way of enforcement or compensation to them or others like them around the world. More importantly, civil litigation in their home countries and criminal prosecution of those responsible are both clearly impossible.*¹⁹

Usually citizens Tribunals are organised on *ad hoc* basis and made pronouncements on the applicability of existing international law to the legal situations that have been brought before them. Whether composed entirely of jurists or a mixture of jurists and other prominent intellectuals or highly respected international figures, citizens tribunals have engaged in formal, public deliberative process, in which evidence is placed before the Tribunal and is the subject of a reasoned conclusion on the compatibility of the actions of those ‘indicted’ or ‘charged’ with violations of international

¹⁶ In 1979, the first successful transnational human rights case was filed under a little known part of the U.S. Code called the Alien Tort Statute (ATS), which entitles aliens to civil damages for violations of the law of nations

¹⁷Roxanna Altholz, *Chronicle of a Death Foretold: The Future of U.S. Human Rights Litigation Post-Kiobel*, 102 *CALIF. L. REV.* 1495, 1501 (2014) at 1500 & n.24, 1501 & n.25

¹⁸ Cortelyou C. Kenney Measuring Transnational Human Rights *Fordham Law Review* (2015) Vol 84, p1053 at 1113.

¹⁹ Beth Stephens, Taking Pride in International Human Rights Litigation, 2 *CHI. J. INT’L L.* 485, 486 (2001) (discussing the reasons human rights victims filed in the United States, including both substantive and procedural advantages of the U.S. legal system over those of foreign nations.)

law.

While the pronouncements of this tribunal will not have any ‘official’ legal force, tribunals such as the present IMT find their legitimacy in their ability to mobilise consensus about the actions of a primary international law actor—in this case Monsanto—through the impact on public opinion. What separates the IMT from a politicised ‘show trial’ is the stature, integrity and expertise of its members (who act on behalf of the global citizenry) are committed to an impartial process of evaluating evidence through reasoned and fair-minded deliberations devoid of considerations of realpolitik.

This Tribunal is an example of a broader phenomenon of international peoples’ tribunals which have a substantial history, especially over the last 60 years. This Tribunal like others of its type shares familiar features such as the application of orthodox international law standards, the deliberative public process of consideration of evidence, and the adoption of reasoned conclusions.

While this Tribunal lacks state authorisation or endorsement— the flip side is that peoples’ tribunals can fulfil a role that state authorized courts cannot. That is to say, they may be regarded as a fore-runner to official courts that mobilise States to fill an identified ‘gap’ in the international legal system. This Tribunal serves a precise function— an international adjudicative procedure where no such avenue exists.

The first major international peoples’ tribunal of the post-World War II era was the Russell Tribunal established by Bertrand Russell and colleagues in order to inquire into the conduct of the war in Vietnam by the US and its allies.²⁰ The Russell Tribunal followed on from the legacy of the International Military Tribunals at Nuremberg and Tokyo that was being submerged under geo-political considerations. Jean-Paul Sartre, one of the organisers and members of the Tribunal, wrote:

Why did we appoint ourselves? For the precise reason that no one else did it. Governments or peoples could have done it. But governments want to retain the ability to commit war crimes without running the risk of being judged; they are therefore not about to set up an international body responsible for judging them. As for the people, save in time of revolution they do not appoint tribunals; therefore they could not appoint us.²¹

Although it was much criticised, the Tribunal provided an important model for future tribunals and also collected a significant amount of documentation, which brought to public notice events that might otherwise not have been revealed to the West.

²⁰ See John Duffett (ed), *Against the Crime of Silence: Proceedings of the International War Crimes Tribunal* (Simon & Schuster, 1970); Peter Limquenco and Peter Weiss (eds), *Prevent the Crime of Silence: Reports from the Sessions of the International War Crimes Tribunal founded by Bertrand Russell* (Allen Lane, 1971); The proceedings of the First Russell Tribunal can also be found at ‘War Crimes Tribunal’ on *A Vietnamese- American Experience* <http://tuantran.noblogs.org/war-crimes-tribunal>.

²¹ Peter Limquenco and Peter Weiss (eds), *Prevent the Crime of Silence: Reports from the Sessions of the International War Crimes Tribunal founded by Bertrand Russell* (Allen Lane, 1971)

Professor Richard Falk avers:

The Russell Tribunal may not have been 'legal' as understood from conventional governmental perspectives, but it was 'legitimate' in responding to double standards, by calling attention to massive crimes and dangerous criminals who otherwise enjoy a free pass, and by providing a reliable and comprehensive narrative account of criminal patterns of wrongdoing that destroy or disrupt the lives of entire societies and millions of people. As it happens, these societal initiatives require a great effort, and only occur where the criminality seems severe and extreme, and where a geopolitical mobilisation precludes inquiry by established institutions of criminal law.²²

So whilst it may be seen as a symbolic exercise (in some ways it is). However civil society has over the decades been an active participant and contributor to the development, and fleshing out, of peripherally contested aspects of international law.

3.2 No other suitable forum

It is precisely because it sits outside of the state endorsed and controlled judicial arena that this Tribunal can regard itself as a precursor to an official court or tribunal. The IMT Tribunal stands to be a significant vanguard in providing a forum for new conversations in a campaign to compel states to re-assess the need for a criminal enforcement mechanisms for environmental crime, while simultaneously sending a warning to corporations that business activity is not neutral activity.

This Tribunal should not be dismissed as an example of '*a motley collection of vigilantes*'²³ The work of this Tribunal can be seen as both a complements to state-based mechanisms and an alternative pathway that bridges the gap between established domestic case law and case law on criminality of corporations by linking the doctrines and principles to those that exist currently and putatively to international law.

Louis Bickford refers to three functions that unofficial truth projects (in which category he would place this tribunals):

- a) as a replacement for an official body,
- b) as a precursor to such a commission, and
- c) as a complement to such a body.

There is one exception whilst the competence of the International Court of Justice ('ICJ') to decide disputes between states is governed by the fact that the parties involved accepted the jurisdiction of the ICJ in relation to the subject matter of the dispute, this Tribunal is not so constrained.

Like this Tribunal, the ICJ has the power to consider the alleged violation of both treaty rules and customary international law rules, however the extent of the ICJ's substantive jurisdiction, in an individual case, is dependent on the extent to which 'the contending states' accepts its competence. A refusal

²² Richard Falk, 'Toward a Jurisprudence of Conscience' on Richard Falk, *Citizen Pilgrimage* (26 November 2011) <http://richardfalk.wordpress.com/2011/11/26/toward-a-jurisprudence-of-conscience>.

²³ *Kuala Lumpur War Crimes Commission v George W Bush and Anthony L Blair*, Kuala Lumpur War Crimes Tribunal, Case No 1-CP-2011, *Notes of Proceedings*, 19 November 2011, 49 [17].

to recognise and/or accept the jurisdiction of this Tribunal is not an impediment.

The defendant (Monsanto) has been given a right of reply. Monsanto has elected to be a Defendant *in absentia*. There is no election or 'opting in' because this is a peoples' court. The authority vested in this Court and the competence to hear the claim emanates from the people not from the parties.

This Tribunal is a forum, albeit imperfect, for the formal determination of a claim based on evidence and articulated reasoning. More than simply plugging a jurisdictional gaps this Tribunal offers a qualitatively different types of international justice, an important feature of which is the right of peoples, rather than states, to articulate, interpret and apply international law.

This claim has been initiated by a civil society group, rather than a states thereby providing an opportunity for communities to claim access to a formal pronouncement on international law, of which all of humanity is a beneficiary.

Every human being living on the planet has a stake in these proceedings.

3.3 Complementarity and the ICC

As a rule the International Criminal Court was established on the basis of complementarity with States. The principle of complementarity governs the exercise of jurisdiction of the ICC and recognises that States have first responsibility and right to prosecute international crimes. The ICC can only exercise jurisdiction where national legal systems fail. Based upon considerations of efficiency and effectiveness the ICC is a complimentary jurisdiction which is operative when States prove *unwilling* or *unable* to respond. It is intended that the ICC not compete with States for jurisdiction but rather intervene only when a suitable jurisdiction was not available (ie court of last resort).

Provided that this tribunal is satisfied that the actions of Monsanto give rise to state responsibility and that the State is either unwilling or unable to prosecute, it does not offend the principle of complementary under the *Rome Statute* to hear the matter. To date no State has claimed jurisdiction over international environmental harm²⁴ most likely because the apparatus or domestic legislation is inadequate to deal with crimes that undermine essential principles necessary for the survival of humanity.

In keeping with the principle of complementarity the IMT would only have competence in circumstances where a State has proven unwilling or unable to prosecute. Given that no state has demonstrated a competing claim it is safe to say that the work of the IMT is complimentary to State jurisdiction.

Moreover the ICC have recently announced a widening of its remit to include environmental crimes. On the 15th of September 2016 the ICC Prosecutor Fatou Bensouda recognised, in a recent announcement by the ICC, that the Office of the Prosecutor will widen the Courts remit to include environmental destruction cases within the existing legal framework.²⁵

²⁴ Except in a limited way through the *US Alien Torts Act*.

²⁵ The Guardian ICC widens its remit to include environmental destruction cases' Friday 16 September (2016) <https://www.theguardian.com/global/2016/sep/15/hague-court-widens-remit-to-include-environmental-destruction-cases?Op19G=c>

The ICC statement said it would prioritise crimes that resulted in the destruction of the environment. Specifically the *ICC policy paper on case selection and prioritisation* declared that;

The Office [of the Prosecutor] will give particular consideration to prosecuting Rome Statute crimes that are committed by means of, or the result in, inter alia, the destruction of the environment, the illegal exploitation of natural resources or the illegal dispossession of land.”²⁶

In the spirit of complementarity, in an climate of growing awareness of the gravity of certain forms of conduct and the imperfect systems we have in place to deal with them and the acceptance that a new mechanism is required, all international efforts that raise awareness are congruent and accord with the notion of forum of ‘last resort’. In the case of the IMT it has no other rival.

PART IV JURISDICTION

4.1 Universal Jurisdiction

Universal jurisdiction is the legal doctrine that extends to domestic courts the jurisdiction to try and punish perpetrators of crimes that are considered *beyond the pale*, so egregious that they offend the common consciousness of mankind. Provided the crime meets the threshold it can be tried on the basis of universal jurisdiction regardless of where the alleged crime was committed or the nationality of the victims or perpetrator.

In judging international human rights, humanitarian law and international criminal law claims against multinational corporations, this Tribunal is acting as a quasi-international tribunal.²⁷

“[I]nternational law allows states to exercise universal jurisdiction over certain acts which threaten the international community as a whole and which are in all countries, such as war crimes”²⁸

²⁶ ICC Press Release 15 September 2016 ‘ICC Prosecutor Fatou Bensouda, publishes comprehensive Policy Paper on Case Selection and Prioritisation’ citing the policy document <https://www.icc-cpi.int/Pages/item.aspx?name=policy-paper-on-case-selection-and-prioritisation>

²⁷ Thomas H. Lee, The Supreme Court of the United States as Quasi- International Tribunal: Reclaiming the Court’s Original and Exclusive Jurisdiction over Treaty-Based Suits by Foreign States against States, 104 *Colum. L. Rev.* 1765 (2004) discussing universal jurisdiction;. See also, e.g., Lori Fisler Damrosch, Louis Henkin, Richard Crawford Pugh, Oscar Schachter & Hans Smit, *International Law Cases and Materials* 645 (4th ed. 2001) “The international law of human rights parallels and supplements national law, superseding and supplying the deficiencies of national constitutions and laws”

²⁸ Peter Malanczuk, Akehurst’s *Modern Introduction to International Law* (Routledge 7th rev. ed. 1997); Paul R. Dubinsky, Human Rights Law Meets Private Law Harmonization: The Coming Conflict, 30 *Yale J. Int’l L.* 211, 268–82 (2005).

International crimes affect the peace or safety of more than one state *or* are so reprehensible in nature and extent as that they justify the intervention of international agencies in the investigation and prosecution thereof. The severity and widespread nature of these crimes often means they move beyond the ability of any one state to respond, by their impact they affect us all universally, by their nature they are so heinous (or beyond the pale) that they offend the collective ‘conscience’ of mankind.

*“Conservation crime can be defined as any intentional or negligent human activity or manipulation that impacts negatively on the earth’s biotic and/or abiotic natural resources, resulting in immediately noticeable or indiscernible natural resource trauma of any magnitude.”*²⁹

Actions such as those perpetrated or facilitated by Monsanto undoubtedly effect the global commons and the ability of effected ecosystems to sustain life³⁰

Crimes prosecuted under Universal jurisdiction are considered to be crimes against all humanity and closely linked to the idea that some international norms are considered to be *erga omnes* (or an obligation owed to the whole world). These crimes are also considered to be too serious to allow the practice of *jurisdictional arbitrage* (ie the practice of taking advantage of the discrepancies that exist between competing jurisdiction – or forum shopping).

The International Criminal Court established by the Rome Statute³¹ exercises universal jurisdiction over crime defined under the statute including genocide, crimes against humanity and war crimes. To date the crime of Ecocide has not been included in the list of international crimes attracting universal jurisdiction. However it possesses all the characteristics of a universal crime, especially considering environmental destruction cases not only result in health risks and loss of life for effected populations but also have transboundary and global impact on humanity as a whole.

When we combine the universal impact of the offending and the fact that control of the environment is *de jure* or *de facto* decentralised (ie in the hands of multinational corporations), there is a heighten need for a co-ordinated international legal response that would complement state jurisdiction.

The inclusion of Ecocide under the Rome Statute would recognise the universal nature of the crime and provide access to an international criminal

²⁹ White R, (Ed) *Environmental Crime: A Reader*, Willan Publishing, Devon, 2009.

³⁰ See Jeanne Mager Stellman et al., The Extent and Patterns of Usage of Agent Orange and Other Herbicides in Vietnam, 422 *Nature* 681 (2003); see also Declan Butler, Flight Records Reveal Full Extent of Agent Orange Contamination, 422 *Nature* 649 (2003) (Stellman’s study shows that herbicides were directly sprayed on hamlets containing between two and four million people.

³¹ *Rome Statute, International Criminal Court*
http://legal.un.org/icc/statute/99_corr/cstatute.htm

machinery that is equipped with dealing with offending on a trans-border and international scale.

It is also possible that universal jurisdiction attaches to environmental destruction cases by virtue of the fact that it threatens our common interests. Thus the notions of universality and commonality interrelate. That is to say, the crime of ecocide attracts universal jurisdiction because it diminishes the shared resources upon which, both immediate and future generations collectively rely. A universal approach is the only effective response to halt environmental criminal conduct.

4.2 'Common Heritage of Mankind'

The "common heritage of mankind" is both an ethical and a general concept of international law.³² The central premise is that; some localities belong to all humanity and that their resources are available for the common use and benefit. This means they cannot be appropriated/exploited. An underlying assumption of common heritage principle is that certain global commons or elements regarded as beneficial to humanity, as a whole, should not be unilaterally exploited by individual states, their nationals, or by multinational corporations or other entities. Notwithstanding the suitability of this basic assumption to conservation effort, it seems that attempts to invoke the principle in relation to international environmental protection have proved less than straight forward.

The legal concept incorporates a responsibility to preserve the integrity of these common resources for future generations and is intended to achieve aspects of the sustainable development of humanity's common spaces and their resources.³³ The foundation of the common heritage principle's antecedents include the legal public trust doctrine³⁴ and contemporary usage of the concept of humanity's common heritage represents a historic step towards taking into account intergenerational equity.³⁵

³² Baslar, Kemal. 1997. *The Concept of the Common Heritage of Mankind in International Law*. The Hague, The Netherlands. Kluwer Law International.

³³ Taylor, P. 1998. *An Ecological Approach to International Law: Responding to Challenges of Climate Change*. London. Routledge. See also Taylor, Prue. 2011. "Common Heritage of Mankind Principle." In Klaus Bosselmann, Daniel Fogel, and J. B. Ruhl, Eds. *The Encyclopedia of Sustainability, Vol. 3: The Law and Politics of Sustainability*. 64–69. Great Barrington, MA. Berkshire Publishing.

³⁴ See Baslar, K. *The concept of the Common Heritage of Mankind in International Law* (1998) p 65-68; Ved P. Nanda & George Pring, *International Environmental Law for the 21st century* § 2.1.10 (2003); Anand, R P., Common Heritage of Mankind: Mutilation of an Idea, 37 *Indian J. Int'l L.* 1 (1997); Elisabeth Mann Borgese, The Common Heritage of Mankind: from Non-living to Living Resources and Beyond, in 2 *Liber Amicorum Judge Shigeru Oda* 1313 (Nisuke Ando et al. eds., 2002); Brownlie, I., Legal Status of Natural Resources in International law (some aspects), in 162 *Recueil des cours* 249, 294-300 (1979)

³⁵ In 1995 Malta invoked the common heritage principle in proposing that the U.N. Trusteeship Council be transformed "from a guardian of dependent territories to a body that acts as guardian and trustee of the global commons and the common concerns in the interest of present and future generations," a proposal directed at conserving the international environment. Malta has played an influential role in the development of the concept of common heritage see August 1967 speech of Ambassador Arvid Pardo of Malta to the U.N. General Assembly. In that speech, Pardo asserted that "[t]he seabed and the ocean floor are a common heritage of mankind and should be used and exploited for peaceful purposes and for the exclusive benefit of mankind as a whole."

*From the viewpoint of juridical epistemology, this concept set in train a veritable legal revolution in as much as it gives new intellectual support to the idea of collective ownership.*³⁶

Wolfgang Friedman observed that *emerging international law of co-operation has begun to significantly modify the classical law of co-existence of states.*³⁷ Similarly Bruno Simma traced the shift from bilateralism to community interest.³⁸ Through common interests normative patterns are woven into general principles.³⁹ In the case of collective international environmental concerns there have emerged general legal principles such as 'common areas', 'common heritage' and 'common concerns.'⁴⁰

The term 'common heritage of mankind' has been developed in connection with codification activities concerning the progressive development of international law within the framework of the United Nations. The main influence of common heritage principle remains the establishment of an international administration for areas open to the use of all States (international commons)

The concept of *Common Heritage of Mankind*, however, was first mentioned in the preamble to the 1954 *Hague Convention for the Protection of Cultural Property in the Event of Armed Conflict*⁴¹ and specifically stated as a legal obligation under international law in the Outer Space Treaty of 1967.⁴² It is the basis of *Part XI* of the *UN Convention on the Law of the Sea* concerning the deep seabed and was also introduced in

³⁶ The public trust doctrine is the principle that the Sovereign holds in trust for public use some resources regardless of private ownership

³⁷ Freidmann W., *The Changing structure of international law* NY; Columbia University Press (1964)

³⁸ Simma B., *Bilateralism to Community Interest in International Law* (1994) 250 *Recueil des cours* 217.

³⁹ Hey E., *Teaching International Law* The Hague Kluwer Law International (2003) at p. 7

⁴⁰ The influential 2002 New Delhi Declaration of the International Law Association on the *Principles of International Law Relating to Sustainable Development* categorized "the proper management of climate system, biological diversity and fauna and flora of the Earth" as "the *common concern of humankind*," while grouping "[t]he resources of outer space and celestial bodies and of the sea-bed, ocean floor and subsoil thereof beyond the limits of national jurisdiction" as "the common heritage of humankind." ⁴⁰ So it would seem there are sub-categories of the principle that largely fall into; 'common heritage' 'common concern' and 'common areas' ⁴¹Trarlock D., in D Brodansky, J Brunnee and E Hay (eds) *Oxford Handbook of International Environmental Law* (2005) Oxford Press, see Chapter 23 at p.550.

⁴¹ Convention for the Protection of Cultural Property in the Event of Armed Conflict, The Hague 14 May 1954
see:http://portal.unesco.org/en/ev.phpURL_ID=13637&URL_DO=DO_TOPIC&URL_SECTION=201.html

⁴² Treaty on Principles Governing the Activities of States in the Exploration and Use of Outer Space, Including the Moon and Other Celestial Bodies, Jan. 27, 1967, 18 U.S.T. 2410, 610 U.N.T.S. 205 In a June 1967 speech, Ambassador Aldo A. Cocca of Argentina, during deliberations of the U.N. Outer Space Committee, argued that "the international community has endowed [a] new subject of international law - mankind - with the vast [] common property" of outer space. U.N. Legal Subcomm. of the U.N. Comm. on the Peaceful Uses of Outerspace, 75th mtg. at 7-8, U.N. Doc. A/AC.105/C.2/SR.75 (Nov. 13, 1967).

1967 into the beginning discussions on a legal regime for outer space⁴³ and to a lesser extent it impacted legal framework for Antarctica.

So what are the elements of the common heritage principle?

Features often associated with it include:

- a) a *prohibition of acquisition* of, or exercise of *sovereignty* over, the area or resources in question;
- b) the *vesting of rights* to the resources in question in humankind as a *whole*;
- c) reservation of the area in question for *peaceful purposes*;
- d) *protection* of the natural environment;
- e) an *equitable sharing* of benefits associated with the exploitation of the resources in question,; and
- f) *governance* via a common management regime.⁴⁴

The first two of these features relate to the juridical status of the legal doctrine, specifically the prohibition against appropriation or exercise of sovereignty and the vesting of legal rights in humanity as a whole. The first - prohibition on sovereignty - is not unique to a common heritage regime: for example, it has long been accepted that no state may exercise sovereignty over the high seas. The notion that rights vest in humankind as a whole does, however, radically diverge from traditional concept of international law.

The last feature, governance through a common management system, reflects the view that "humankind" as a whole is responsible for managing the area or resource in question.

So how the principle would be invoked? There have been some attempts to invoke the legal concept; for example, the Stockholm Declaration of the United Nations Conference on the Human Environment stated:

The non-renewable resources of the earth must be employed in such a way as to guard against the danger of their future exhaustion and to ensure that benefits from such employment are shared by all mankind.

Thus far, international environmental law has been unable to embrace the full spectrum of the common heritage principle. Scholars who have noted the challenges associated with state sovereignty have pointed to evidence that international law is being expanded and adjusted to promote the 'greater interests of humanity.' Writers frequently point to the

⁴³ UN Committee on the Peaceful Uses of Outer Space, Legal Subcommittee, 'Summary Record of the Two Hundred and Sixteenth Meeting, Geneva, Friday, 17 May 1974' UN Doc A/AC.105/C.2/SR.216 see also 1979 Agreement Governing the Activities of States on the Moon and Other Celestial Bodies art. 11, Dec. 5, 1979, 1363 U.N.T.S. 3 [Moon Treaty]. Article 11 of the 1979 Moon Treaty, now in force for thirteen states (albeit none of the space powers), explicitly incorporates the common heritage principle.

⁴⁴ Noyes J E., 'The Common Heritage of Mankind; Past Present and Future' 40 Denv. J. Int'l L. & Pol'y 447 2011-2012 at p 450.

developments in international environmental law for evidence of such expansion.

Recent developments in international environmental law would appear to be motivated by a dawning realisation that the cooperative action of State is the only means of containing larger ecological problems such as climate change, greenhouse emissions and conservation of biodiversity. Developments are reshaping the international public law in areas where environmental harm would appear to transgress state boundaries. These environmental concerns, where institutionalised co-operation has become an inescapable reality, have necessitated international environmental agreements, such as the Kyoto Protocol to the United Nations Framework Convention on Climate Change, which sets out 'common interests', and designate shared responsibility.

However assertions about the legal status of the common heritage principle have varied widely. Some have argued that it sets out a fundamental and non-derogable norm, constituting a *jus cogens* obligation.⁴⁵ Some have concluded that the principle has attained the status of customary international law.⁴⁶ For instance Judge Wolfrum found that;

*[t]he common heritage principle, as far as the use of common spaces is concerned, is a part of customary international law, [constituting] "a distinct basic principle providing general . . . legal obligations with respect to the utilization of areas beyond national jurisdiction."*⁴⁷

Others have found the common heritage principle is too indeterminate and too lacking in accompanying state practice and *opinio juris* to have gained acceptance in customary international law.⁴⁸ In general, terms the principle coincide with long-held values about the need to act internationally to protect humanity's common interest in our ecological systems, genetic material, biodiversity, food security. This comes at a time in history when it was important to develop legal guidance concerning common space resources.

⁴⁵ Baslar, K, *The concept of the Common Heritage of Mankind in International Law* (1998) p 65-68 however this is usually in the context of international law of the Seas (and the seabed),

⁴⁶ Declaration on the Progressive Development of Principles of Public International Law Relating to a New International Economic Order § 7, in Int'l Law Ass'n, Report of the Sixty-Second Conference 8 (1987) [ILA Seoul Declaration]. The International Law Association's 1986 Seoul Declaration, for example, provides that "[t]he concept of the common heritage of mankind as a general legal principle has entered into the corpus of public international law."

⁴⁷ Wolfrum, Rüdiger 'The Principle of the Common Heritage of Mankind', 43 *Zeitschrift für Ausländisches Öffentliches Recht und Völkerrecht* 312 (1983). Professors Ved Nanda and George Pring accurately but cautiously report that the common heritage concept "has received very favourable support from many expert commentators" Ved P. Nanda & George Pring, *International Environmental Law for the 21st century* § 2.1.10 (2003). Professor Ved Nanda has stated that the underpinnings of an asserted right to development include "enhanc[ing] the human condition, recogniz[ing] basic needs, and foster[ing] participatory and sustainable development."

⁴⁸ Joyner, Christopher C. *Legal Implications of the Concept of the Common Heritage of Mankind*, 35 INT'L & COMP. L.Q. 190 (1986); albeit writing in before the 1994 Implementation Agreement and the ensuing widespread acceptance of the *Law of the Sea* Convention.

Application of common heritage principles to the issue of environmental protection?

The application of common heritage principles to the issue of environmental protection is more complex, especially when it comes to whole ecosystems and ecosystem services which support diverse global commons. This has led some commentators and international organizations to propose that a range of other, non-common space resources that are essential to humans and of widely shared interest should be governed under a common heritage regime. Such resources include, for example, rain forests, genetic resources (even when found within national boundaries), cultural heritage, and food.⁴⁹

Inevitably there is a wide divergence of opinion on the question as to whether Common heritage principles could apply to globally significant spaces and resources that exist within the territory of a state (eg. rainforest, diversity of flora /fauna).

Arguably the IMT has discretion in relation to the application of the Common Heritage of Mankind principle. This is because:

*Any decision maker faced with applying the [common heritage] principle to a legal dispute would have considerable discretion in interpreting its meaning and status.*⁵⁰

No one global forum has arrived at consensus on the meaning of common heritage such that the legal status and elements of the principle have been left to commentators, who so far, do not agree.

In many respects common heritage has been an underutilised concept when it comes to environmental protection. One rationale for this is that the common heritage principle does not adequately cover the environment, because owing to its historical development, the principle has evolved to define those commonly owned domains (or *res communis* - public domain) such as the ocean and not those domains that are open for appropriation (or *res nullius* – no body's property) such as the sea bed.

Largely because the exercise of state control over the exploitation of its own resources, the idea of applying the common heritage principle to environmental resources within a territorial boundary of state has proven controversial. Consequently, the principle has gained traction only with respect to some common space resources, (particularly deep seabed minerals).

Conceivably there is room to elaborate and extend the concept to unallocated commons and resources that are not subject to states exclusive jurisdiction, either because international law determines that such

⁴⁹ Sands, P *Principles of International Environmental Law* 552 (2d ed. 2003) (discussing FAO Conf. Res. 5189 (1989), an Agreed Interpretation of the International Undertaking, recognizing plant genetic resources as "a common heritage of mankind to be preserved, and to be freely available for use, for the benefit of present and future generations");

⁵⁰ Noyes J E., 'The Common Heritage of Mankind; Past Present and Future' 40 *Denv. J. Int'l L. & Pol'y* 447 2011-2012 at p 456

resources are of global significance or common to the collective survival and therefore carry a duty to conserve. This would extend the reach of the common heritage principle beyond oceans, Antarctica and outer space to ecosystems, biodiversity and genetic material.⁵¹

Need for paradigm shift? Broadening the concept of Common Heritage of Mankind involves a paradigm shift away from seeing our common heritage as limited to the earth's resources that are commonly owned and cannot be appropriated; towards those common spaces and resources that are critical to our collective survival and the survival of future generations.

Undoubtedly escalating global ecological destruction will ensure the ongoing relevance of the common heritage concept as the world struggles for a response to the international *tragedy of the commons*.⁵² It follows that if Ecocide translates as a crime of killing the earth, which is made up of a network of integrated and interdependent ecological systems, then the contamination, modification or destruction of these ecosystems (rivers, air, flora and fauna) is of common concern to humanity because it diminishes or collectively shared resource.⁵³ The need to protect resources common to our collective survival (such as biodiversity and genetic material) has led some legal scholars to propose a realigning of state sovereignty to accommodate notions of stewardship.⁵⁴

Most notably Professor Edith Brown Weiss gave influential support for the idea of a planetary trust.⁵⁵ This is mainly a matter of imagining and placing limits upon various human activities. This idea more recently termed 'stewardship sovereignty' is an evolving concept which has its foundations in the core international environmental law duty - not to do transboundary harm. Within the concept of 'stewardship sovereignty' there are three principles:

1. Intergenerational equity - future generations
2. Environmental sustainability
3. Precautionary principle

Prof Edith Brown Weiss⁵⁶ describes the principle of *intergenerational equity* as a constraint upon the exploitation of resources, not to leave the reserves in a worse condition than when the utilization started. This is derived from an obligation to protect resources for future users.

⁴⁴ Taylor Pru The common heritage of Mankind Bold Doctrine kept within Strict Boundaries in D Bollier and S Helfrich The wealth of commons a world beyond market & state

⁵² Hardin 1968

⁴⁶ N Matz-Lück, 'The Concept of the Common Heritage of Mankind: Its Viability as a Management Tool for Deep Sea Genetic Resources', in E Molenaar and A Oude Elferink (eds), The International Legal Regime of Areas beyond National Jurisdiction: Current and Future Developments (Brill The Hague 2010) 61-75

⁴⁷ Tarlock D., in D Brodansky, J Brunnee and E Hay (eds) Oxford Handbook of International Environmental Law (2005) Oxford Press, p593.

⁵⁵ Brown-Weiss E, In Fairness to Future Generations: international law, common patrimony and intergenerational equity, Transnational publishers, 1989, 385 p.; Prof Edith Brown Weiss, The planetary trust: conservation and intergenerational equity, in Ecology Law Quarterly, 1984, vol. 11, number 4, p. 495

⁴⁹ Brown-Weiss E., In Fairness to future generations; International Law, Common Patrimony and Intergenerational (Dobbs Ferry NY; Transnational Publishers 1989).

The second principle of *sustainability* again places limits on the unrestrained appropriation of resources at the expense of future generations. The final *principle of precaution* minimizes the potential risk of ecosystem function loss, by incorporating scientific information and proceeding with caution.

This notion of Stewardship Sovereignty builds upon two jurisprudential traditions; Grotian idealism and the idea of the international social contract.⁵⁷

4.2.1 Case law evoking the common heritage principle

This idea is similar to the principle of “*fideicommis in the name of Humanity*” which was formulated in 1893 in the *Behring Sea sealskin fur affair*.⁵⁸ According to professor Sands:

The US based its claim on its jurisdiction over the Bering Sea and on a right of protection and property in the fur seals found outside the ordinary three mile limit... based upon the established principles of the common and the civil law, upon the practice of nations, upon the law of natural history, and upon the common interests of mankind.

In this case the US argued that property rights entitled it to preserve the fur seals from destruction by the use of ‘such reasonable force as may be necessary’, and that even if it did not have property rights it had an interest in the ‘legitimate and proper use of the seal herd on its territory’ which it was entitled to protect against wanton destruction.⁵⁹ Moreover, it argued that it alone possessed the power of preserving seals and that it was acting as the trustee:

*...for the benefit of mankind and should be permitted to discharge their trust without hindrance.*⁶⁰

Nearly one hundred years later, a similar argument was run in the *yellow-fin tuna case* in which the US argued that no part of the high sea was open to individuals for the purpose of destroying national interests of such a character and importance.⁶¹

⁵⁴ Tarlock D., in D Brodansky, J Brunnee and E Hay (eds) Oxford Handbook of International Environmental Law (2005) Oxford Press, p593.

⁵⁸ Behring Sea Fur Seal Arbitration (US v UK) Arbitral Award (1898) 1 Moore’s International Arbitration Awards 755 Reprint in 1 IEL Rep 43 (1999)

⁵⁹ Sands P, Principles of *International Environmental Law*, Vol. 1, Frameworks, standards and implementation, Manchester University Press, 1995, pp. 417-418.

⁶⁰ Behring Sea Fur Seal Arbitration (US v UK) Arbitral Award (1898) 1 Moore’s International Arbitration Awards 755 Reprint in 1 IEL Rep 43 (1999).

⁶¹ *Yellow-fin tuna case United States Restriction on import of Tuna Report of the Panel DS21R/- 39S/155 3 September 1991 available* <http://www.worldtradelaw.net/document.php?id=reports/gattpanels/tunadolphinl.pdf>

A case study in the use of these provisions was provided by the *Franklin Dam case* in Australia. This was a case that was against the construction of a dam of Australia's last wild river; the case was heard before the Australian High Court. In this landmark decision, Justice Lionel Murphy wrote about the *Common Heritage of Humanity* principle:

The preservation of the world's heritage must not be looked at in isolation but as part of the co-operation between nations which is calculated to achieve intellectual and moral solidarity of mankind and so reinforce the bonds between people which promote peace and displace those of narrow nationalism and alienation which promote war...[t]he encouragement of people to think internationally, to regard the culture of their own country as part of world culture, to conceive a physical, spiritual and intellectual world heritage, is important in the endeavour to avoid the destruction of humanity. ⁶²

The *common heritage of mankind* is a principle of international law which holds that certain elements of humanity's common heritage (both cultural and natural) should be held in *trust* for future generations and be protected from exploitation by individual nation states or corporations. The property argument inherent in the common heritage of mankind principle is based upon the belief that *title* is coupled with a *trust* for the benefit of mankind. It is the responsibility of the trust to act in such a manner as to preserve the natural/cultural heritage for those humans who are entitled to participate in the enjoyment of those collective title interests ⁶³

4.2.2 Biodiversity and the common heritage principle

Proposals to extend the reach of common heritage concepts beyond the common areas (ie; high sea, atmosphere and outer space) to biodiversity is controversial. This is because the application of the concept was reserved for commonly own areas/resources and not originally intended to cover resources located within a State territory. It is argued that this would convert a state property into common property.

The 1992 *Convention on Biological Diversity* states only that biological diversity is a 'common concern of humankind' (see preamble) and goes on to '[reaffirm] that States have sovereign rights over their own biological resources.' This represents a rejection of the stronger classification of bio diversity that might positively constrain national sovereignty.

Nevertheless this signals that the States freedom of action may be subject to the limits envisaged by the no harm principle. The limits placed upon the degradation of certain areas or resources flows from its conservation value or designation as an area of common concern. That is to say, even if bio diversity is not considered to be encompassed in the common heritage

⁶² Commonwealth v Tasmania 1983) 46 ALR 625 at 733 and 734

⁶³ Sands P., Principles of international environmental law, Vol. 1, Frameworks, standards and implementation, Manchester University Press, 1995, pp. 417-418.

regime, it is none the less considered a concept of common concern and has the potential to significantly widen the remit of international environmental protection owed *ergo omnes*.

It is precisely because individual states have limited ability to tackle collective environmental interest in biodiversity, that treaties play a vital role. An important dimension of treaty made law is that it institutionalises collective concerns.⁶⁴ By declaring bio diversity to be a 'common concern of humankind' it:

*'places them on the international agenda and declares it to be a legitimate object of international regulation and supervision thus overriding the domain of domestic jurisdiction.'*⁶⁵

The issue, albeit divisive, is perhaps the fault line for the common heritage principle which not only highlights its limitations but also the untapped potential. Professor Philip Sands is a proponent of the view that the conservation of bio-diversity of plant and animal life on the planet is a common concern (which is a conceptually more open ended notion), if not, a common heritage matter.⁶⁶

Owing to new scientific insights and to a growing awareness of the risks causing harm at an unconsidered and unabated rate, the ICJ in the case of *Gabcikovo- Nagymaros* case, called for new norms and standards for future. The ICJ said:

*Throughout the ages, mankind has, for economic and other reasons, constantly interfered with nature. In the past this was often done without consideration of the effects upon the environment. Owing to new scientific insights and to a growing awareness of the risks for mankind – for present and future generations – of pursuit of such interventions at an unconsidered and unabated pace, new norms and standards have been developed [and], set forth in a great number of instruments during the last two decades. Such new norms have to be taken into consideration, and such new standards given proper weight, not only when States contemplate new activities, but also when continuing with activities begun in the past.'*⁶⁷

However owing to the slow evolution of the concept such as obligations and the related legal responsibility, international law continues to struggle with the collective and community aspirations. Irrespective of the binding force and the sluggish evolution of concept of common heritage it has

⁶⁴ Biermann F., Common Concerns of Mankind and national sovereignty in Globalism; *People Profits and Progress; Proceedings of the Thirtieth Annual Conference of the Canadian Council of International Law* (2002) 158.

⁶⁵ Birnie PW. And AE Boyle *International Law and the Environment* Oxford University Press (2002) at 100.

⁶⁶ Sands Philip *Principles of International Environmental Law* 2nd Ed., Cambridge University Press Chapter 11

⁶⁷ (1997) ICJ Reports 78, para. 140.

nevertheless played a significant role in framing based efforts to address collective environmental concerns.

As treaties adapt and expand the concept of 'common heritage' beyond the traditional common property (that all States have open access to and are open to exploit) to a common concern framework (where States have obligation not to harm) to emerging normative patterns will undoubtedly reframe along the lines of States responsibilities, which is rarely invoked.

It is safe to predict that treaty-made law will remain the primary venue for the protection against environmental violations of collective or global commons. To this end international criminal law will play a significant role in sanctioning the perpetration of significant environmental harm; thereby mitigating individual State self-interest and the unbridled sovereign right of States to exploit resources within their territory without recourse to the 'global concerns of humanity as a whole.'⁶⁸

4.2.3 Plant genetics and the common heritage principle

It was erroneously assumed that until the 1990's when the *Convention on Biological Diversity* came into force that the biogenetic resources found within territorial boundaries were subject to the common heritage of mankind principle. Whilst it is true that the 1983 *International Undertaking on Plant Genetic Resources IUPGR* treated plant genetics as common heritage this was not a legally binding agreement. However Article 3 and 15 of the *Convention on Biological diversity* recognised the sovereign right of States to control and grant access to genetic resources.

Generally speaking opposition to the inclusion of plant genetic material within the common heritage regime came from developing countries who felt that it diminished their intellectual property rights to plant variation protection, giving pharmaceutical companies and seed companies open access to their genetic resources, without being required to redistribute the profits of their exploits.

The notion that plant resources form part of the 'common heritage' was formally rejected by the 2001 *International Treaty on Plant Genetic Resources for Food and Agriculture*⁶⁹

4.2.4 Global Commons

The global commons refers to resources, domains or areas that lie outside the political reach of any one nation state. International law identifies four global commons high seas; the atmosphere; Antarctica and outer space.

⁶⁸ Per Judge Weeramantry in the *case of Gabčíkovo- Nagymaros Project Hungary v Slovakia* [1997] ICJ Rep 7.

⁶⁹ Mgbeoji I., Beyond Rhetoric; State Sovereignty, Common Concerns and the Inapplicability of the Common Heritage Concept to Plant Genetic Resources (2003) 16 *Leiden J Int'l L* 821.

In every respect these supranational or global resources that fall with the definition of a global common if the same domains that are currently encompassed by the common heritage principle. Consequently global common may not be appropriated by any one state and no one state can be excluded from enjoying.

In the *World Conservation Strategy Report* published by the International Union for Conservation of Nature and Natural Resources (IUCN), UNESCO, United Nations Environmental Programme (UNEP) and World Wildlife Fund (WWF) a global common was defined as:

*A common is a tract of land or water owned or used by members of a community. The global commons includes those parts of the earth's surface beyond national jurisdictions- notably the open ocean and the living resources found there – or held in common – notably the atmosphere. The only land mass that may be regarded as part of the global commons is Antarctica*⁷⁰

⁷⁰ *World Conservation Strategy Report* published by the International Union for Conservation of Nature and Natural Resources Chapter 18 'Global Commons'.

PART V DEFENCES

5.1 Government Contractor Defence Not Applicable

In relation to the claim of complicity to War Crimes and/or in other relevant circumstances where Monsanto provided chemical agents to the US Government for use in military aerial spraying, there is a precedent for the manufacturer Defendant claiming the Government Contractor defence.⁷¹

The government contractor defence does not apply to violations of human rights, norms of international law and related theories.⁷²

5.2 Criminal liability of corporations

**See Complicity to War Crimes Brief Dr Jackson Maogoto*

Individual accountability is an established principle of criminal law and there is precedent for prosecuting directors and other non-military leaders within international and national criminal jurisdictions.

There is precedent for prosecuting directors and other non-military leaders for aiding and abetting and/or conspiracy charges of genocide/crimes against humanity/war crimes such as Wilhelm Frick in the Nuremberg trials.

The removal of the corporate veil has been tentatively recognised in various domestic and international judicial and quasi-judicial tribunals.

The renowned investigative Spanish judge—Balthasar Garzon—in 2015 in his role as advisor to ICC on the subject of transboundary corporate responsibility made positive comments.⁷³ He noted that: *‘International law should expand to include crimes committed by corporations, which have lasting impacts on local populations’* in a call to widen international law to target corporations that carry out economic or environmental crimes.

⁷¹ Agent Orange Product Liability Litigation, Re, Vietnam Association For Victims Of Agent Orange/Dioxin and ors v Dow Chemical Company and ors, First Instance, 373 F.Supp.2d 7 (E.D.N.Y. 2005), ILDC 123 (US 2005), 10th March 2005, District Court for the Eastern District of New York [E.D.N.Y.]

⁷² See, e.g., Zyklon B Case (Trial of Bruno Tesch and Two Others), 1–5 Law Reports of Trials of War Criminals 93–102 (William S. Hein & Co. 1997) (U.N. War Crimes Comm’n ed., 1949); United States v. Krupp, 9 Trials of War Criminals Before the Nuremberg Military Tribunals under Control Council Law No. 10, at 1327, 1437–39 (photo. reprint 1997) (1950) [hereinafter Trials of War Criminals]; United States v. Flick, 6 Trials of War Criminals 1187, 1198, 1202 (photo. reprint 1997) (1952);

⁷³ See <http://www.theguardian.com/world/2015/aug/20/spain-judge-baltasar-garzon-prosecute-globalcorporations>

The mechanism for prosecution would be universal jurisdiction, a provision in international law that allows judges to try cases of human rights abuses committed in other countries. The doctrine would be particularly helpful in going after large corporations, as it would allow the law to equally pursue perpetrators regardless of where their headquarters are located.⁷⁴

5.3 Non crimin sine leges and retrospectivity

On the merits, the defendants may argue that international law at the time of the alleged violations did not proscribe the military use of herbicides⁷⁵ or the significant destruction of global commons that

The principle that the law cannot be applied retrospectively as reflected in the legal maxim *non crimin sine leges* (no law without crime) has long been argued in international criminal trials, since the Nuremberg trials. Critics of the Nuremberg military trials contended that they were premised upon a false jurisdiction and applied ‘after the fact’ or *ex post facto* laws. Many of the defendants in these early military trials raised the defence, that there could be no crime without established laws.⁷⁶ However, it was established by the Nuremberg Tribunal,⁷⁷ after examining various sources including general principles of law, international customs and treaty law,⁷⁸ as well as the writings of highly qualified publicists, international conventions and judicial decisions, that there could be little doubt that international law had designated, as crimes, acts so specified in the Charter.⁷⁹ Consequently, a net result of the Nuremberg and Tokyo prosecutions was that, if the retrospective nature of the offences was ever in doubt, the criminal status

⁷⁴ <http://www.democraticunderground.com/110843146>

⁷⁵ The action brought by Vietnamese nationals against manufacturers of herbicides, was dismissed on the ground that the Torture Victim Protection Act of 1991, the War Crimes Act of 1996, and the Hague Convention (IV) Respecting the Laws and Customs of War on Land, did not provide a basis for recognizing a cause of action for the use of herbicides during the Vietnam War. See *Nguyen Thang Loi v. Dow Chem. Co.* (In re Agent Orange Prod. Liab. Litig.), 373 F. Supp. 2d 7, 2005 U.S. Dist. LEXIS 3644, CCH Prod. Liab. Rep. P17,342 (E.D.N.Y. 2005).

⁷⁶ *non crimin sine legis* or otherwise expressed as *nullum crimen, nulla poena sine praevia lege poenali* Is a latin legal maxim which means that there can be neither crime nor punishment unless there is a penal law first.

⁷⁷ Forbes G.W., “Some Aspects of the Nuremberg Trial” *Canadian Bar Review*, vol xxiv. (1946) at p 598.

⁷⁸ By the time World War II began belligerent state were governed by a custom of command responsibility codified by the Hague Convention 1907 and the Red Cross Convention 1929 and a warning that should have been evident from the unfulfilled demands of the Versailles Treaty that criminal responsibility would be enforce in any future conflict.

⁷⁹ Wright Q. The Law of the Nuremberg Trial 41 AJIL p38 at p59

of these crimes was secured thereafter by the spawning of 'a legacy of treaty regimes which criminalised acts.'⁸⁰

This Nuremberg defence and has been raised in many contemporary international criminal tribunals, with no success. This is because certain crimes are said to have achieved customary law or practice (ie international laws recently entered into force are said to enunciate existing well established principle or practices).

The vital principle of *non crimin sine lege* articulates that there is no crime without law. In the case of Ecocide the defendant would be correct in raising the defence that at the relevant time, no law criminalising significant damage and destruction of ecosystems in peacetime, existed. They might argue that the Terms of Reference of the IMT is a retrospective attempt to apply a legal standard that did not exist at the time of offending.

In order to pre-empt the age old defence of *non crimin sine leges* (or no crime without law) the Tribunal will need to satisfy itself that the inclusion of Ecocide into the *Rome Statute* is merely a formality, reflecting already existing customs and practices.

A second consideration is that there is a temporal restriction on the jurisdiction of the ICC. The Rome Statute cannot apply the provisions of the Rome Statute retrospectively to events that occurred prior to 1 July 2002. As a consequence the ICC does not have the power to hear matters that occurred prior to the commencement of the Statute.

The IMT is not so restricted. In fact the IMT is the only forum in which we might get a positive statement about Monsanto's complicity re the provision of Agent Orange to the US government for use in the territory of Vietnam between the years 1962 -1975. It is not however conceded that while this Tribunal's terms of reference extend to events that occurred prior to the commencement of the *Rome Statute*, that the principles, norms, legal standards, and customary practices, which relate to the commission of environmental crimes, existed at the relevant time that the offences were committed.

⁸⁰ McCormack TLH, *Selective Reaction to Atrocity; War Crimes and the Development of International Law*, Albany Law Review, Vol. 60., (1997) p681 at p 720 see also Lunder, Dr. Karl Heinz, 'The Nuremberg Judgment' in *Nuremberg: German Views of the War Crimes Trials*, edited by Benton and Grimm, Southern Methodist University Press, Dallas, 1955 As Dr Lunder argues; 'It is immaterial whether the Charter and the judgement of Nuremberg created new international law or whether existing international law has merely been clarified.'

PART VI

CUSTOMARY INTERNATIONAL LAW

6.1 Development of environmental law doctrine

Public international law is designed to govern the relation between states. Consequently the structure and practices reflect a tradition firmly anchored in the Westphalian foundations. In the absence of a central law-making authority that can legislate of issues of 'common interest' then 'shared understanding' must be interpreted from customs, practices, and judicial deliberation that demonstrate consensus among states.

Customary international law is defined as a general practice among nation states carried out in such a way as to be evidence of a belief that the practice is rendered obligatory, by the existence of the rule requiring it.

As evidence of state practice and *opinio juris* the plaintiff relies on domestic and international law norms. International law relating to the protection of the environment now have well established doctrines and principles that are widely accepted, relating to the protection of the environment.

According to ICJ Judge Weeramantry in the *Case concerning the Gabcikovo-Nagymaros Project*

We have entered an erain which international law subserves not only the interests of individual states, but look beyond them and their parochial concerns to the greater interests of humanity and the planetary welfare ... International environmental law will need to proceed beyond weighing ... rights and obligations ... within a close compartment of individual State self-interest, unrelated to the global concerns of humanity as a whole.⁸¹

As well as in International Environmental Law doctrines and principles also have been reinforced and enshrined in the provisions of the Law of Armed Conflict that place limits upon the means and methods of warfare, aimed at protecting of the environment. They have also developed out of international environmental law and the magnitude of treaties that have the protection of the environment as their central focus.

The general principles and rules of international environmental law are reflected in treaties, binding acts of international organisations, state practice, and soft law commitments. It is possible to discern general rules and principles which have broad, if not necessarily universal, support and are frequently endorsed in practice.

⁸¹ *Hungry V Slovakia* [1997] I.C.J. Report Rep 7 separate opinion of judge Weeramantry

6.2 General principle; Sovereignty and the obligation not to cause transnational harm.⁸²

The obligation reflected in Principle 21 of the *Stockholm Declaration on the Human Environment*⁸³ and Principle 2 of the *Rio Declaration*⁸⁴, namely, that states have sovereignty over their natural resources and the responsibility not to cause transboundary environmental damage; now reflect an international customary legal obligation the violation of which would give rise to a free-standing legal remedy.

That is to say, Principle 21 and Principle 2 are sufficiently well established to provide the basis for an international cause of action.

In the absence of judicial authority it is difficult to establish the parameters or the international legal implication of this general principle or rule. The

⁸² See Phillip Sands *International Environmental Law* Cambridge University Press. (2003) General Principles and rules Part II where he cites; B. Bramsen, 'Transnational Pollution and International Law', 42 *Nordisk tidsskrift for International Ret* 153 (1972); L. K. Caldwell, 'Concepts in Development of International Environmental Policies', 13 *Natural Resources Journal* 190 (1973); M.S. McDougal and J. Schneider, 'The Protection of the Environment and World Public Order: Some Recent Developments', 45 *Mississippi Law Journal* 1085 (1974); G. Handl, 'Territorial Sovereignty and the Problem of Transnational Pollution', 69 *AJIL* 50 (1975); A. Adede, 'United Nations Efforts Toward the Development of an Environmental Code of Conduct for States Concerning Harmonious Utilisation of Shared Natural Resources', 43 *Albany Law Review* 448 (1979); OECD, *Legal Aspects of Transfrontier Pollution* (1977). A. L. Springer, *The International Law of Pollution: Protecting the Global Environment in a World of Sovereign States* (1983); 'Corpus of Principles and Rules Relative to the Protection of the Environment Against Transfrontier Pollution Established by the French Speaking Section' in Centre for Studies and Research in International Law and International Relations, Hague Academy of International Law, *La Pollution Transfrontiere et le Droit International* (1985), 27; World Commission on Environment and Development, *Our Common Future* (1987); R. D. Munro and J. Lammers, *Environmental Protection and Sustainable Development: Legal Principles and Recommendations* (1987); Shimizu, 'Legal Principles and Recommendations on Environmental Protection and Sustainable Development', 14 *Nippon Seikyo Kenkyusho-Kiyo* 13 (1990); F. Perrez, 'The Relationship Between Permanent Sovereignty and the Obligation Not to Cause Transboundary Environmental Damage', 26 *Environmental Law* 1187 (1996); N. Schrijver, *Sovereignty Over Natural Resources* (1997); F. Perrez, *Co-operative Sovereignty: From Independence to Interdependence in International Environmental Law* (2000).

⁸³ The United Nations Conference on the Human Environment was held in Stockholm, Sweden from June 5–16 in 1972. The meeting agreed upon a Declaration containing 26 principles concerning the environment and development; an Action Plan with 109 recommendations, and a Resolution. Principle 21 of the Stockholm Declaration declares that; *States may exploit their resources as they wish but must not endanger others.*

⁸⁴ The Rio Declaration on Environment and Development, often shortened to Rio Declaration, was a short document produced at the 1992 United Nations "Conference on Environment and Development" (UNCED), informally known as the Earth Summit. The Rio Declaration consisted of 27 principles intended to guide countries in future sustainable development. It was signed by over 170 countries. Principle 2 states; *States have, in accordance with the Charter of the United Nations and the principles of international law, the sovereign right to exploit their own resources pursuant to their own environmental and developmental policies, and the responsibility to ensure that activities within their jurisdiction or control do not cause damage to the environment of other States or of areas beyond the limits of national jurisdiction.*

application of the principle not to cause transnational harm would need to be reviewed on a case by case basis, taking into consideration; the particular activity at issue; the environmental and other consequences of the activity; and the circumstances in which it occurs (including the actors and the geographical region).

According to Prof. Philip Sands there is inherent in this general obligation not to do transboundary harm a number of assumptions, they are; the requirement to take preventive action; the necessity of co-operation; the guiding standard of sustainable development; the basic tenet to act in a precautionary manner ; the polluter-pays principle; and the principle of common but differentiated responsibility.⁸⁵

References to principles and rules of general application have long been found in the pre-ambular sections of treaties and other international acts, and in the jurisprudence of international courts and tribunals. More recently, however, principles of general or specific application have been incorporated into the operative part of some treaties.⁸⁶ For the purposes of this case it is worth noting that Article 3 of the 1992 *Biodiversity Convention* introduces the text of Principle 21 of the *Stockholm Declaration* as the sole 'Principle'.

The rules of international environmental law have developed within the context of these two fundamental objectives pulling in opposing directions: that states have sovereign rights over their natural resources; and that states must not cause damage to the environment.

These objectives are set out in Principle 21 of the *Stockholm Declaration*, which provides that:

States have, in accordance with the Charter of the United Nations and the principles of international law, the sovereign right to exploit their own resources pursuant to their own environmental policies, and the responsibility to ensure that activities within their jurisdiction or control do not cause damage to the

⁸⁵ Sands, Philippe.; *Principles of International Environmental Law* Cambridge University Press. (2003) C. Kiss, 'La Notion de patrimoine commun de l'humanité', 175 RdC 99 (1982); B. Larschan and B. C. Brennan, 'Common Heritage of Mankind Principle in International Law', 21 Columbia Journal of Transnational Law 305 (1983); D. Magraw, 'Legal Treatment of Developing Countries: Differential Contextual and Absolute Norms', 1Colorado Journal of International Environmental Law and Policy 69 (1990); D. Attard, Proceedings of the Meeting of the Group of Legal Experts to Examine the Concept of the Common Concern of Mankind in Relation to Global Environmental Issues (UNEP, 1991); F. Biermann, 'Common Concern of Humankind: The Emergence of a New Concept of International Environmental Law', 34 Archiv der Volkerrechts 426 (1996); D. French, 'Developing States and International Environmental Law: The Importance of Differentiated Responsibilities', 49 ICLQ 35 (2000).

⁸⁶ For example ; Article 3 of the 1992 Climate Change Convention lists 'Principles' intended to guide the parties '[i]n their actions to achieve the objective of the Convention and to implement its provisions'.

environment of other States or of areas beyond the limits of national jurisdiction.

Principle 21 remains the cornerstone of international environmental law; twenty years after its adoption, states negotiating the *Rio Declaration* were unable to improve significantly upon, develop, scale back or otherwise alter the language in adopting Principle 2.

The *Stockholm Declaration*, Principle 21 and the *Rio Declaration* Principle 2 each comprise two elements which cannot be separated without fundamentally changing their sense and effect: the sovereign right of states to exploit their own natural resources; and the responsibility, or obligation, not to cause damage to the environment of other states or of areas beyond the limits of national jurisdiction.

Since 1972 states have avoided the un-coupling of the two principles⁸⁷ it is widely accepted that these principles establish the basic obligation underlying international environmental law and the source of its further elaboration in rules of greater specificity⁸⁸.

The principle of state sovereignty allows States, within limits established by international law, to conduct or authorise such activities as they choose within their territories, including activities which may have adverse effects on their own environment.⁸⁹ The importance placed by states on the principle of permanent sovereignty over natural resources is also reflected by its frequent invocation, in various forms, in international environmental agreements and during their negotiation.⁹⁰

The sovereign right to exploit natural resources includes the right to be free from external interference over their exploitation.⁹¹ This was brought into

⁸⁷ Sands p, *International Environmental Law* 2002 p 237

⁸⁸ *Ibid.* 237

⁸⁹ This fundamental principle underlies the first part of Principle 21 of *Stockholm Convention* and Principle 2 of *Rio Convention*. The extension of the sovereignty principle into environmental affairs pre-dates the Stockholm Declaration and is rooted in the principle of permanent sovereignty over natural resources as formulated in various resolutions of the UN General Assembly regularly adopted after 1952 See e.g. UNGA Res. 523 (VI) (1950); Res. 626 (VII) (1952); Res. 837 (IX) (1954); Res. 1314 (XIII) (1958); Res. 1515 (XV) (1960). In 1972, before the Stockholm Conference, the UN General Assembly declared that 'each country has the right to formulate, in accordance with its own particular situation and in full enjoyment of its national sovereignty, its own national policies on the human environment'. UNGA Res. 2849 (XXVI) (1971). These resolutions addressed the need for states and foreign companies (particularly oil and gas) to balance the rights of the sovereign state over its resources with the desire of foreign companies to ensure legal certainty in the stability of its investment.

⁹⁰ The 1933 *London Convention* Art. 9(6) affirmed that all animal trophies were 'the property of the Government of the territory concerned'; The 1971 *Ramsar Convention* Art. 2(3) emphasised that the inclusion of national wetland sites in its List of Wetlands did 'not prejudice the exclusive sovereign rights of . . . the party in whose territory the wetland is situated'. The 1983 *International Tropical Timber Agreement* Art 1 recalled 'the sovereignty of producing members over their natural resources'. See now 1994 *International Tropical Timber Agreement*, Art. 1.

⁹¹ The 1992 Biodiversity Convention more specifically reaffirmed that states have 'sovereign rights . . . over their natural resources', and that 'the authority to determine

question in disputes over the extra-territorial application of environmental laws of one state to activities taking place in areas beyond its national jurisdiction.

A landmark resolution was adopted by the UN General Assembly in 1962, when it resolved that the '*rights of peoples and nations to permanent sovereignty over their natural wealth and resources must be exercised in the interest of their national development of the well-being of the people of the state concerned*'.⁹² This resolution reflects the contemporary position in international environmental law that the right to permanent sovereignty over national resources is now modified by the 'no harm' rule, and has been accepted by some international tribunals as reflecting customary international law.⁹³

Accordingly, this 'no harm' principle implies an obligation owed *erga omnes*.

6.3 Legal Effect of recognising a general principle;

Once we have identified established principles the next question is; what consequences flow from the characterisation of a legal obligation as a legal principle or a legal rule?

The leading case is the *Gentini case*, in 1903 adopted the following distinction, which may provide some guidance about the legal effect of principles and their relationship to rules:

*A 'rule'... 'is essentially practical and, moreover, binding...[T]here are rules of art as there are rules of government' while principle 'expresses a general truth, which guides our action, serves as a theoretical basis for the various acts of our life, and the application of which to reality produces a given consequence.'*⁹⁴

Or as Dworkin puts it, positive rules of law may be treated as the

*'practical formulation of the principles', and the 'application of the principle to the infinitely varying circumstances of practical life aims at bringing about substantive justice in every case.'*⁹⁵

access to genetic resources rests with the national governments and is subject to national legislation'.

⁹² UNGA Res. 1803 (XVII) (1962).

⁹³ *Texaco Overseas Petroleum Co. and California Asiatic Oil Co. v. Libya*, 53 ILR 389 (1977), para. 87;

Kuwait v. American Independent Oil Co., 21 ILM 976 (1982).

⁹⁴ *Gentini case (Italy v. Venezuela) M.C.C.* (1903), J. H. Ralston and W. T. S. Doyle, *Venezuelan Arbitrations of 1903 etc.* (1904), 720, 725, cited in B. Cheng, *General Principles of Law as Applied by International Courts and Tribunals* (1953), 376

⁹⁵ R. Dworkin, *Taking Rights Seriously* (1977), 24, 26.

The IMT can make a conclusion that a principle '*embodies a legal standard, but the standards they contain are more general than commitments and do not specify particular actions*', unlike legal rules.⁹⁶ This approach has been upheld in practice of international courts⁹⁷

The current status of international environmental legal principles, is that, much like legal rules, they can have international legal consequences in the *interim* period whilst their content is being formalised or elaborated into treaties.

*The international community has not adopted a binding international instrument of global application which purports to set out the general rights and obligations of the international community on environmental matters. No equivalent to the Universal Declaration of Human Rights, the International Covenant on Civil and Political Rights or the International Covenant on Economic, Social and Cultural Rights has yet been adopted, and none appears imminent. Any effort to identify general principles and rules of international environmental law must necessarily be based on a considered assessment of state practice, including the adoption and implementation of treaties and other international legal acts, as well as the growing number of decisions of international courts and tribunals.*⁹⁸

To this end there are many nongovernmental environmental organisations and advocacy groups who have concentrated their efforts on the task of assessing the evidence which supports the existence of principles and rules, in an attempt to give some guidance to the tribunal. This citizen advocacy and legal campaign to identify general principles, state practices and judicial precedents, has a subsequent influential effect on international law-making.

Of course the most persuasive evidence is when these principles, practices, and jurisprudence is enshrined in treaty law. This is a definitive distillation of a legal principle and; 'to the extent any international instrument can do so, the current consensus of values and priorities in environment and development'.⁹⁹

⁹⁶ Bodansky, D 'The United Nations Framework Convention on Climate Change: A Commentary', 18 *Yale Journal of International Law* 451 at 501 (1993).

⁹⁷ Case C-2/90, *EC Commission v. Belgium* [1993] 1 CMLR 365, where the ECJ relied on the principle that environmental damage should be rectified.

⁹⁸ Sands, Philippe. *Principles of International Environmental Law* Cambridge University Press. (2003) p.

⁹⁹ Porras, I., 'The Rio Declaration: A New Basis for International Co-operation', 1 *RECIEL* 245 (1992).

6.4 General principle applied to shared natural resources

What is the international law position if the natural resources that are sought to be protected are shared?

For '*shared natural resources*' for which states do not have sovereignty or exercise sovereign rights, it is unlikely that the principle of territorial sovereignty, or permanent sovereignty over natural resources, can provide much assistance in allocating legal rights and responsibilities.

Here we must look to the precedent in the *Lotus case*. The PCIJ has stated that;

'the first and foremost restriction imposed by international law upon a state is that – failing the existence of a permissive rule to the contrary – it may not exercise its power in any form in the territory of another state outside its territory except by virtue of a permissive rule derived from international custom or from a convention'.¹⁰⁰

However, in the same case the PCIJ went on to state that

'international law as it stands at present' [does not contain] *'a general prohibition to states to extend the application of their laws and the jurisdiction of their courts to persons, property and acts outside their territory'*

Importantly for this tribunal the PCIJ made specific reference to criminal acts and stated clearly that the;

[Territoriality of criminal law was] *'not an absolute principle of international law and by no means coincides with territorial sovereignty'*¹⁰¹

From this landmark case we might deduce that there is no prohibition on the extra-territorial application of environmental criminal law. Or put another way, where an individual or corporate entity commits a criminal act that results in a transboundary harm there would seem to be a permissive rule that evokes an extra territorial power to extend the laws of a state and the jurisdiction of their courts to persons, property and acts outside their territory.

The problem is that since *Lotus case* state practice, as well as decisions of international tribunals, have not determined precisely the circumstances in which a state may take measures over activities outside its territory in relation to the conservation of shared resources.¹⁰²

¹⁰⁰ *Lotus case (France v. Turkey)*, PCIJ Ser. A, No. 10, 19–20

¹⁰¹ *Ibid*

¹⁰² The Case Concerning Fisheries Jurisdiction (Spain v Canada) *Jurisdiction of the Court Judgment 4 December 1998* available <http://www.icj-cij.org/docket/files/96/7535.pdf> was

Whilst the case law may be unclear on the subject, there has been an increasing willingness in international environmental law to place limits¹⁰³ on the application of the principle of state sovereignty over natural resources and an emerging acceptance of the international community of the necessity to co-operate to protect the environment.¹⁰⁴

*In the absence of generally accepted international standards of environmental protection and conservation, states with strict national environmental standards may seek to extend their application to activities carried out in areas beyond their territory, particularly where they believe that such activities cause significant environmental damage to shared resources (such as migratory species, transboundary watercourses, or air quality and the climate system) or affect vital economic interests.*¹⁰⁵

In 1893, the tribunal in the *Fur Seals Arbitration*¹⁰⁶ rejected a claim by the US to be entitled to protect fur seals in areas beyond the three-mile limit of the territorial sea and the right to interfere in the internal affairs of other states to secure the enjoyment of their share in the 'common property of mankind'.

Nearly one hundred years later, in the *yellow-fin tuna* case¹⁰⁷ there was another opportunity to assess the extraterritorial application of environmental standard. In this case, the focus of the GATT panel was on decision by the US to banned the import of *yellow-fin tuna* caught by Mexican vessels, in Mexico's exclusive economic zone and on the high seas, with purse-seine nets. In this case it was held that to allow the 'extra jurisdictional' application of its environmental law would allow the US to 'unilaterally determine the conservation policies' of Mexico.¹⁰⁸

a lost opportunity. In the *Fisheries Jurisdiction case*, Spain challenged the application and enforcement by Canada of its fisheries conservation legislation in areas beyond its exclusive economic zone, but the ICJ declined jurisdiction, and the case did not reach the merits phase.¹⁰³ The responsibility of states not to cause environmental damage in areas outside their jurisdiction pre-dates the Stockholm Conference, and is related to the obligation of all states 'to protect within the territory the rights of other states, in particular their right to integrity and inviolability in peace and war'. PCA, *Palmas Case*, 2 HCR (1928) 84 at 93.

¹⁰⁴ The Preamble to the 1992 Climate Change Convention reaffirmed 'the principle of sovereignty of states in international co-operation to address climate change'.

¹⁰⁵ Sands P International Environmental law Cambridge University Press. (2003) p. 273

¹⁰⁶ *Yellow-fin tuna case - United States Restriction on Import of Tuna Report of the Panel DS21R/ 39S/155 3 September 1991 (available*

http://www.worldtradelaw.net/document.php?id=reports/gattpanels/tunadolphinl.pdf
¹⁰⁷ Ibid.

¹⁰⁸ This 'extra-jurisdictional' application of US environmental standards was rejected by a GATT panel as being contrary to the GATT, holding that a country 'can effectively control the production or consumption of an exhaustible natural resource only to the extent that the production or consumption is under its jurisdiction' and that to allow the 'extra jurisdictional' application of its environmental law would allow the US to 'unilaterally determine the conservation policies' of Mexico.

More recently, in the *Shrimp/Turtle case*¹⁰⁹ however, the WTO's Appellate Body has taken a broader approach, and recognised the existence of a 'sufficient nexus' between migratory and endangered populations of sea-turtles located in Asian waters and the United States to allow the latter to claim an interest in their conservation.¹¹⁰

Again the obligation not to cause transboundary harm was relied upon, and elaborated, by the arbitral tribunal in the much-cited *Trail Smelter case*, which stated that;

*Under the principles of international law . . . no state has the right to use or permit the use of territory in such a manner as to cause injury by fumes in or to the territory of another of the properties or persons therein, when the case is of serious consequence and the injury is established by clear and convincing evidence.*¹¹¹

The right of states to exercise jurisdiction over harmful environmental practices in or in the interest of conservation, either by legislation or adjudication, over the activities of other states, or in areas beyond national jurisdiction, is unclear. However, most writers accepted the formulation of the *Trail Smelter case* as a rule of customary international law and it was cited, with apparent approval, by Judge de Castro in his dissent in the *Nuclear Tests case*¹¹²

We can also instructive to look at the obiter comments in the ICJ case *Barcelona Traction, Light and Power Company Ltd (Belgium V Spain)* where it was stated that it has come to be an accepted principle that

'there exists (obligations of states towards the international community as a whole.' [It was also stated that] *'these obligations ... by their very nature are the concerns of all States'* [and that] *'all states can be held to have a legal interest in their protection.'*¹¹³

The precedent that arises from these leading test cases have been reinforced by the International Court of Justice in an Advisory Opinion, on *The Legality of the Threat or Use of Nuclear* stated that:

¹⁰⁹ *Shrimp/Turtle case*, (India et al v US) WTO Appellate Body (1998). Doc WT/DS58/AB/R(6 Nov 1998) para 180

¹¹⁰ *Ibid* para 133

¹¹¹ *United States v. Canada*, 3 RIAA 1907 (1941); citing Eagleton, *Responsibility of States* (1928), 80;

¹¹² (Australia v France New Zealand v France) ICJ Judgment 20 December 1974 ICJ Rep 253 *Australia v. France* (1974) ICJ Reports 253 at 389 it was stated: *'If it is admitted as a general rule that there is a right to demand prohibition of the emission by neighbouring properties of noxious fumes, the consequences must be drawn, by an obvious analogy, that the Applicant is entitled to ask the Court to uphold its claim that France should put an end to the deposit of radio-active fall-out on its territory.'*

¹¹³ *Belgium v Spain* [1970] I.C.J. Rep 3 at para 33.

*The existence of the general obligation of States to ensure that activities within their jurisdiction and control respect the environment of other States or of areas beyond national control is now part of the corpus of international law relating to the environment.*¹¹⁴

Following the ICJ's Advisory Opinion there is no question but that Stockholm Convention Principle 21 reflects a rule of customary international law, placing international legal constraints on the rights of states in respect of activities carried out within their territory or under their jurisdiction.

The support given to the rule reflected in *Stockholm Declaration* Principle 21 (and now the *Rio Declaration* Principle 2) by states, by the ICJ and by other international actors over the past three decades indicates the central role now played by the rule. The scope and application of the rule, in particular to the difficult question of what constitutes 'environmental harm' (or damage) for the purposes of triggering liability and allowing international claims to be brought, are separate questions.

At the very least, we can confirm that the rights of states over their natural resources in the exercise of permanent sovereignty are not unlimited, and are subject to significant constraints of an environmental character. Beyond that, the rule may provide a legal basis for bringing claims under customary law asserting liability for environmental damage. The specific application of the rule will turn on the facts and circumstances of each particular case or situation.

Recognition of a legal claim however is only of partial assistance in support of an international prosecution for environmental harm. It is however the first important step.

The tribunal must then turn its mind to the context of activity which causes environmental degradation/harm, and address other questions relating to the specific case at hand, including :

- i. What is the environmental damage alleged?
- ii. What level of environmental damage is prohibited (ie; any damage, or just damage which is serious or significant)?
- iii. What is the standard of care applicable to the obligation (absolute, strict or fault)?
- iv. What are the consequences of a violation (including appropriate reparation)? and;
- v. What is the extent of any liability (including what appropriate sanction that should apply)?

¹¹⁴ (1996) *ICJ Reports* 226, para. 29

PART VII

RELEVANT DEVELOPMENTS

INTERNATIONAL ENVIRONMENTAL LAW

7.1 The development of international environmental protection - A new world paradigm

The modern history of environmental protection goes back at least 400 years to various acts of parliament to preserve the habitat that sustain human populations. However there is now an international body of scientific evidence that supports a tectonic shift in our world view on the need to address global environmental harm.

Criminal prosecutions of corporate polluters have highlighted the failure of civil sanctions to deter illegal conduct of corporate actors. This has historically been because 'statutory benefits associated with environmental crime outweigh statutory penalties.'¹¹⁵ These corporate actors have deep pockets, and view statutory penalties as the cost of doing business. So regulation is not an effective way to respond to environmental damage. These companies, however, operate and indeed prosper, on the basis of reputation, and goodwill – so that prosecution based upon negative publicity and stigma can have greater influence.

Moving from a regulatory to a criminal framework where statutes authorise the imprisonment of corporate officers and employees in the personal capacity it not without precedent.¹¹⁶ But perhaps the greatest “impetus for the criminalisation of environmental law and an important factor contributing to increased enforcement efforts has been the emergence of an environmental consciousness”¹¹⁷

*The populace at large now views environmental offences as more akin to traditional crimes rather than mere regulatory violations.*¹¹⁸

Our post-industrialist world now values environmental protection over the exploitation of natural resources – this is the 'New Industrialist Paradigm.'¹¹⁹

This heightened consciousness has been accompanied by a rise of customary practices and jurisprudence supporting the inclusion of Ecocide as an international crime based upon established doctrines and principles

¹¹⁵ Deeb R, Environmental Criminal Liability (1993) 2 *S.C. Env'tl L J* 159 at 162

¹¹⁶ Lazarus, R.J. Assimilating Environmental protections Into legal Rules and the Problem with Environmental Crimes 27 *Loyola L.A. L. Rev.* (1994) 867 at 880.

¹¹⁷ Schofield T The Environment as an Ideological Weapon; A proposal to Criminalise Environmental Terrorism. 26 *BC Env'tl Affairs Law Review* (1998-99) 619 at 640.

¹¹⁸ *Ibid.*

¹¹⁹ Hedman S., Expressive Function of Criminal Sanctions in Environmental Law 59 *Geo Wash L Rev* (1991) 889 at 890.

of environmental law that link humanity with the environment as trustees or stewards.

From Stockholm to Rio, we find support for this paradigm shift. The international community has increasingly emphasised the need for environmental protections and international law has developed accordingly.¹²⁰

Initially international environmental law began to recognise the need to protect Antarctica¹²¹ and our Oceans¹²², but a major change occurred, signified by the *United Nations Conference on the Human Environment* in Stockholm 1972 (the hereafter the Stockholm Conference) which established the United Nation Environmental Program UNEP. The Stockholm Conference adopted a non-binding Declaration¹²³ which set out at Principle 1 that humans have a;

*Fundamental right to freedom, equality and adequate condition of life, in an environment of quality that permits a life of dignity and well-being and [they] bear a solemn responsibility to protect and improve the environment for the present and future generations*¹²⁴

This has prompted some academic commentators to argue that this Declaration marked the formal recognition, along with the practice of states, and the acknowledgment in international tribunals, that the right to a healthy environment had now passed into the corpus of customary international law.¹²⁵ Those commentators who agree that the right to a healthy environment is recognised as a customary norm, also contend that there is a corresponding duty to prosecute those who violate the principle for the crime of Ecocide, understood to be the destruction, in whole, or in part, of any portion of the global ecosystems. This is because the right to a healthy environment is meaningless without a criminal remedy for breach.

Notwithstanding that international environmental law has been recognized since at least 1941,¹²⁶ a criminal law framework is still relatively undeveloped. However, criminologists have initiated a discourse that examine environmental harms through an emerging field termed 'green criminology'.¹²⁷ Scholarly writing in the discipline of criminology have

¹²⁰ Barat L., 'Defending the Right to a Healthy Environment; Towards a Crime of Geocide in International Law' 11 *B.U. Intntl L.J.* (1993) 237 at 330.

¹²¹ Antarctica Treaty 1959

¹²² Convention on the prevention of Marine Pollution by Dumping Waste and Other Matters 1972

¹²³ The Conference issued and adopted a Declaration that articulated 26 non-binding principles focused on environmental protection/enhancement, with 113 countries adopting the Declaration.

¹²⁴ Barat L., 'Defending the Right to a Healthy Environment; Towards a Crime of Geocide in International Law' 11 *B.U. Intntl L.J.* (1993) 237 at 331.

¹²⁵ Barat L., 'Defending the Right to a Healthy Environment; Towards a Crime of Geocide in International Law' 11 *B.U. Intntl L.J.* (1993) 237 at 341-43; Gray M.A., *The International Crime of Ecocide*, 26 *Cal W Int'l L J* (1996) 215 at 216; Teclaff L.A., *Beyond Restoration – The Case of Ecocide* 34 *Nat Resources J.* (1994) 933 at 952

¹²⁶ Gray, MA., 'The International Crime of Ecocide', 26 *California Western International Law Journal* (1996) 215, at 237-238.

¹²⁷ See the leading work of Prof Rob White and D. Heckenberg, *Green Criminology: An Introduction to the Study of Environmental Harm* (2014).

drawn analogies between environmental harm and traditional criminal conduct such as killing, looting, wanton destruction¹²⁸ as well as challenging orthodoxies such as extending the notion of victimhood to non-human species.¹²⁹

7.2 Protection of future generations¹³⁰

Global actors such as the Defendant Company have an increased potential to have a destructive impact on our global environment. Corporations engaged in food production, with its associated land clearing and pesticide control, have long term effects on the ecosystems in which they operate, a destructive impact of local habitats, and profoundly diminish or destroy the human capacity to sustain livelihoods and even life itself.

By the end of the twentieth century the world had entered the technological age and this civilisation necessitated an ethical theory capable of instituting respect for the future.¹³¹ Humans had acquired unprecedented power over humanity's future, significantly impacting the conditions essential for life on earth.¹³² This new vulnerability of humankind requires us to think out and transpose a new obligatory ethical framework in respect of future generations and a holistic means of preserving their inheritance.

The problem however is that the law has always been confined to a temporal matrix which limits its application to interpersonal relationships. Traditionally law has excluded the protection of future generations: on the basis that it could not seek to bind unborn generations or seek to exercise control over unseen and therefor unimaginable harms. This is because the vision of law belongs within a paradigm of juridical reciprocity, and there can be no reciprocity with those generations yet to exist.

There are however a number of international law concepts that are challenging this long held conceptual restraint. For a specific treatment of the notion that this intellectual tendency is in process of spreading out into the contemporary juridical field see the work of Gaillard¹³³ The arrival of

¹²⁸White R and D. Heckenberg, *Green Criminology: An Introduction to the Study of Environmental Harm* (2014), at 77.

¹²⁹ *Ibid* 176.

¹³⁰ E. Brown Weiss, *In Fairness to Future Generations: International Law, Common Patrimony and Intergenerational Equity* (1989); A. D'Amato, 'Do We Owe a Duty to Future Generations to Preserve the Global Environment?', 84 *AJIL* 190 (1990); E. Brown Weiss, 'Our Rights and Obligations to Future Generations for the Environment', 84 *AJIL* 198 (1990); L. Gundling, 'Our Responsibility to Future Generations,' 84 *AJIL* 207 (1990); G. Supanich, 'The Legal Basis of Intergenerational Responsibility: An Alternative View – The Sense of Intergenerational Identity', 3 *Yearbook of International Environmental Law* 94 (1992); R. Westin, 'Intergenerational Equity and Third World Mining', 13 *University of Pennsylvania Journal of International Business Law* 181 (1992); E. Agius and S. Busuttill, *Future Generations and International Law* (1998).

¹³¹ Jonas, H., *The Imperative of Responsibility: In Search of Ethics for the Technological Age*, University of Chicago Press, 1984, 255p.

¹³² "The work of technology includes possible effects which, taken cumulatively, have all-encompassing

scope and depth, to an extent that they can endanger either the whole of existence or the entire essence of humankind in the future", H. JONAS, *Le Principe Responsabilité*, éd. Champs Flammarion 1990, p.83

¹³³ For a thesis specially dedicated to the analysis of those dynamics: E. Gaillard, *Génération futures et droit privé. Vers un droit des générations futures*, préf. M. Delmas-Marty, éd. LGDJ, 2011, 673p.

concepts such as the ‘*Common heritage of humanity*’, ‘*universal jurisdiction*’ ‘*sustainable development*’, and more particularly that of “*Future generations*”, have come to confirm that international law has evolved to embrace a consideration of, if not an actual duty to hold respect for, future generations.

There is at the very least a *domino effect*, one that can be addressed and clarified through the lens of a new juridical imperative: that of juridical preservation of existing ecosystem services so as to halt the implications for future generations.¹³⁴ If international law can address the existing destructive behaviours through the promotion of a positive right for humans to enjoy to a healthy environment, this would of course have implications for future generations. Put simply this is a judicial recognition of the systemic relationship between the respect for life and the environment. This is what Emelie Gaillard calls ‘*epistemological leaps approaching juridical alchemy*’.¹³⁵

The idea that as ‘members of the present generation, we hold the earth in trust for future generations’¹³⁶ is well known to international law, having been relied upon as early as 1898 by the United States in the *Fur Seals Arbitration*.¹³⁷ It is also expressly or implicitly referred to in many of the early environmental treaties, including the 1946 *International Whaling Convention*¹³⁸ the 1968 *African Conservation Convention*¹³⁹ and the 1972 *World Heritage Convention*¹⁴⁰ Other, more recent treaties have sought to preserve particular natural resources and other environmental assets for the benefit of present and future generations, these include wild flora and fauna,¹⁴¹ the marine environment;¹⁴²

However the arrival of international criminal law, with its claim to a right to prosecute matters that offend the common consciousness of mankind, has heralded a major practical and theoretical shift. The emergence of a crime against humanity has a strong symbolical dimension, signifying an acceptance and willingness in international law to address unimaginable and unqualifiable harm.

See also the work of ; E. Brown-Weiss, *In fairness to Future Generations: International Law, Common Patrimony and Intergenerational Equity*, Transnational Publishers, 1989, 385p.

¹³⁴ By way of illustration, human rights are no longer necessarily and exclusively understood as individual rights to be invoked simply for the benefit of people now alive.

¹³⁵ Emelie Gaillard Crimes Against Future Generations; e-pública revista electrónica de direito público Special Issue Número 5, 2015 p4.

¹³⁶ Brown Weiss, E ‘Our Rights and Obligations to Future Generations for the Environment’, 84 AJIL 198 at 199 (1990).

¹³⁷ Bering Fur Seal Arbitration (1898) 1 Moore’s International Arbitration Award 755 reprinted in the 1 IEL Rep. 43 (1999).

¹³⁸ The Preamble recognises the ‘interest of the nations of the world in safeguarding for future generations the great nature resources represented by the whale stocks’.

¹³⁹ The Preamble provides that natural resources should be conserved, utilised and developed ‘by establishing and maintaining their rational utilisation for the present and future welfare of mankind’.

¹⁴⁰ Under Art. 4, the parties agree to protect, conserve, present and transmit cultural and natural heritage to ‘future generations’.

¹⁴¹ 1973 CITES, Preamble.

¹⁴² 1978 *Kuwait Convention*, Preamble; 1983 *Cartagena de Indias Protocol*, Preamble; 1982 *Jeddah Convention*, Art. 1(1).

We can certainly look backwards to evaluate the ‘heritage of lasting danger’ already caused, and the ‘heritage of durable harm’, so it ought not to be such a large conceptual leap to see harm in transgenerational terms. Undoubtedly, halting environmental harm is a necessity in view of the complex, systemic and intergenerational implications born out of technology.

7.3 Precautionary principle ¹⁴³

This principle has been applied by the ECJ¹⁴⁴ and by the EEA Court, which ruled that:

in cases relating to the effects on human health of certain products, and where there may be a great measure of scientific and practical uncertainty linked to the issue under consideration, the application of the precautionary principle is justified and ‘presupposes, firstly, an identification of potentially negative health consequences arising, in the present case, from a proposed fortification, and, secondly, a comprehensive evaluation of the risk to health based on the most recent scientific information’.

The Court went on:

When the insufficiency, or the inconclusiveness, or the imprecise nature of the conclusions to be drawn from those considerations make it impossible to determine with

¹⁴³ L. Gundling, ‘The Status in International Law of the Principle of Precautionary Action’, 5 *International Journal of Estuarine and Coastal Law* 23 (1990); D. Bodansky, ‘Scientific Uncertainty and the Precautionary Principle’, 33 *Environment* 4 (1991); J. Cameron and J. Abouchar, ‘The Precautionary Principle: A Fundamental Principle of Law and Policy for the Protection of the Global Environment’, 14 *BCICLR* 1 (1991); D. Freestone, ‘The Precautionary Principle’, in R. Churchill and D. Freestone (eds.), *International Law and Global Climate Change* (1991), 21; C. Boyden Gray and D. Rivkin, ‘A “No Regrets” Environmental Policy’, 83 *Foreign Policy* 47 (1991); R. Reh binder, ‘Das Vorsorgeprinzip in Internationalen Rechtsvergleich (1991); E. Hey, ‘The Precautionary Concept in Environmental Policy and Law: Institutionalising Caution’, 4 *Georgetown International Environmental Law Review* 303 (1992); H. Hohmann, *Precautionary Legal Duties and Principles of Modern International Environmental Law* (1994); T. O’Riordan and J. Cameron (eds.), *Interpreting the Precautionary Principle* (1994); D. Freestone and E. Hey, *The Precautionary Principle and International Law* (1995); A. Fabra, ‘The LOSC and the Implementation of the Precautionary Principle’, 10 *Yearbook of International Environmental Law* 15 (1999); D. Freestone, ‘Caution or Precaution: “A Rose by Any Other Name . . .”?’ 10 *Yearbook of International Environmental Law* 25 (1999); N. de Sadeleer, ‘R’efl’exions sur le statut juridique du principe de pr’ecaut ion’, in E. Zacc ai and J.-N. Missa, *Le principe de pr’ecaut ion* (2000); A. Trouwborst, *Evolution and Status of the Precautionary Principle in International Law* (2002); N. de Sadeleer, *Environmental Principles in an Age of Risk* (2003); S. Marr, *The Precautionary Principle in the Law of the Sea – Modern Decision-Making in International Law* (2003).

¹⁴⁴ See e.g. Case C-180/96, *United Kingdom v. EC Commission* [1998] ECR I-2265 (‘the institutions may take protective measures without having to wait until the reality and seriousness of those risks become fully apparent’, at paras. 99 and 100); see also Case T-70/99, *Alpharma Inc. v. Council of the European Union*, Order of 30 June 1999 (Interim Measures) [1999] ECR II-2027, the President of the Court of First Instance referring to the principle and affirming that ‘requirements linked to the protection of public health should undoubtedly be given greater weight than economic considerations’. See also Case C-6/99, *Association Greenpeace France and Others v. Ministere de l’Agriculture et de la Peche and Others* [2000] ECR I-1651 (French edition) (in relation to Directive 90/220, observance of the precautionary principle is reflected in the notifier’s obligation immediately to notify the competent authority of new information regarding the risks of the product to human health or the environment: para. 44).

*certainty the risk or hazard, but the likelihood of harm still persists were the negative eventuality to occur, the precautionary principle would justify the taking of restrictive measures*¹⁴⁵

The precautionary principle or approach has now received widespread support by the international community in relation to a broad range of subject areas.

Halting environmental harm is a necessity in view of the complex, systemic and transgenerational implications born out of technology. There is no clearer example of this than Monsanto's

[industrial scale use of and] large scale diffusion of products whose toxicity and even their carcinogenic, mutagenic and repro-toxic properties are well known."

Consequently the IMT Tribunal has before it, an opportunity to consider blatant activities carried out by the defendant company that will undoubtedly cause intergenerational harm.

It is now recognised that many cases of infertility and cancer are directly linked to excessive exposure to pesticides.¹⁴⁶ Some scientist have suggested that due to a "cocktail effect"¹⁴⁷ pesticide are designated toxic to human, a factor in their finding is that the risk of harm is greatly increased by repeated and cumulative exposure to chemical substances. The same logic applies to GMO seed designed to resist herbicides.

It is therefore surprising that no long term epidemiological studies have been made about fundamentally modified foodstuffs due for cultivation on a global scale.¹⁴⁸

In many ways the calling of both scientific evidence supported by the evidence of witnesses before this Tribunal is an effort to link cause and effect. Having recourse to pesticides is already described by many scientists as a crime against humanity"¹⁴⁹ It is now recognised that many cases of infertility and cancer are directly linked to excessive exposure to pesticides. A *cocktail effect* has been clearly highlighted by some scientists in designating toxicity which is greatly increased by repeated and cumulative exposure to chemical substances. According to some scientists, it seems that the same logic, quite apart from any responsibility towards the future, may lie behind GMO seed designed to resist herbicides. It is at the very least

¹⁴⁵ Case E-3/00, EFTA Surveillance Authority v. Norway [2001] 2 CMLR 47.

¹⁴⁶ Séralini, Prof. G-E. Tous cobayes! OGM, pesticides, produits chimiques, Flammarion, 2012, 270p.

¹⁴⁷ Levine, H and S. H. Swan, "Is dietary pesticide exposure related to semen quality? Positive evidence from men attending a fertility clinic", *Human Reproduction*, vol. 30, Issue 6 June 2015.

¹⁴⁸ Gaillard E., *Crimes Against Future Generations*; e-pública revista electrónica de derecho público Special Issue Número 5, 2015 p4.

¹⁴⁹ Belpomme, D., "Pesticides are synonymous of crimes against Humanity", *Ces maladies créées par l'homme: comment la dégradation de l'environnement met en péril notre santé*, Albin Michel, 1994, 378p. – Prof. G-E. SÉRALINI, *Tous cobayes! OGM, pesticides, produits chimiques*, Flammarion, 2012, 270p

surprising that no long term epidemiological studies have been made about fundamentally modified foodstuffs due for cultivation on a global scale.

By hearing expert evidence and firsthand accounts of victims who have been the subject of harm, the Tribunal can decide for its self if there is a basis for action. If the tribunal concludes that real or apparent harm is likely to have occurred, or that continuing and durable harm can reasonably be anticipated to occur, then the underlying rationale for criminalisation of the defendant's actions exist. When actions, such as the defendant's, endangers the environment, and this is understood to have occurred in the context of certainty, a criminal prosecution would seem an obvious result. This behaviour can be described as criminal: because it constitutes a deliberate process of endangering the lives of other people and of life

Proponents of Ecocide have argued that the precautionary principle, which provides that:

*where there are threats of serious or irreversible environmental damage, lack of scientific certainty should not mean the postponing of measures to prevent environmental degradation*¹⁵⁰

should allow for liability to arise:

from knowledge or failure to realize ... that the act or omission ... would produce its immediate effects. ¹⁵¹

In this respect, it is the logic of anticipation, based on the principle of *precaution*, which will prove best suited in this case against Monsanto. That is, that the Tribunal can attribute liability arising from Monsanto's knowledge or failure to realize, that their act or omission, would produce immediate effects, irrespective of whether there existed scientific certainty about the serious or irreversible nature of the environmental damage so caused.

While more recent ecocide law advocates base their arguments upon the rights of nature and earth law, more traditional jurisprudence such as criminal law opens ecocide into the international criminal law constellation.¹⁵²

¹⁵⁰ M. A. Gray, 'The International Crime of Ecocide', 26 *California Western International Law Journal* (1996) 215, at 218.

¹⁵¹ M. A. Gray, 'The International Crime of Ecocide', 26 *California Western International Law Journal* (1996) 215, at 219

¹⁵² *Fordham International Law Journal* (1998), pp. 122 ss. Mark A. Dumbly, "International Human Rights, International Humanitarian Law, and Environmental Security: Can the International Criminal Court Bridge the Gaps?", *ILSA Journal of International & Comparative Law*, Vol. 6, Issue 2 (Spring 2000), pp. 305-342 Falk, Richard A. (1973): 'Environmental Warfare and Ecocide – Facts, Appraisal, and Proposals'. In: Thee, Marek (ed.), *Bulletin of Peace Proposals*. 1973, Vol. 1. Universitetsforlaget, Oslo, Bergen, Tromsø; pp.80–96. Tomuschat, Christian (1996). 'Crimes Against the Environment'. In: *Environmental Policy and Law*. 1996. Vol. 26, 6. p.243

7.4 Criminalising harm

Since the 1990s a whole area of criminological scholarship, termed environmental or 'green' criminology,¹⁵³ has emerged that seeks to identify important environmental harms and draws attention to their impacts for humans, non-human animals and ecosystems more generally as well as potential remedial action, including the criminalisation of environmental harms.

This body of scholarship¹⁵⁴ has recently considered the necessity of a law prohibiting ecocide and concluded that such a law is indispensable and arguably essential to protect the planet and its ecosystems from destruction.¹⁵⁵ Many international scholars of doctrine are now gravitating toward recognising ecocide in international law as a means of penal sanction against violent ecological harm.¹⁵⁶

Some crimes are so self-evidently wrong, while others reflect contemporary value system of the day. However, the underlying rationale for crime and criminality has universally been based upon principles of harm. This tribunal is being asked to view the acts of Monsanto as equating with that of a common criminals, to de-legitimise their actions and bring their activities within the traditional paradigm of criminal law. To recognize the acts of Monsanto as criminal conduct there would need to be an acceptance that such conduct was committed in furtherance of harmful objectives.

The purpose of criminal law is to "*conserve not only the safety and order, but also the moral welfare of the state.*"¹⁵⁷ Failure to prosecute, or leave criminal act unchecked, fails to accomplish this purpose. An international crime is a public wrong to which the international community responds with moral outrage. Since "[e]nvironmental protection [is] viewed as being as important to our collective wellbeing as national security..."¹⁵⁸ it is important that there be a symbolic representation of international condemnation against deliberate environmental destruction. It is not enough to address grave wrongs under the same regulatory regime that we treat corporate polluters.

¹⁵³ White, Prof R (ed) *Environmental Crime; A reader* Willan Publishing 2009; Prof Rob White *Transnational Environmental Harm* Routledge 2011 ; Prof Rob White (ed) *Global Environmental Harm Criminological Perspectives* Willan Publishing 2010; See also R Sollund *Global Harms Ecological Crime and Speciesism* Nova Science Publishers Inc New York 2011.

¹⁵⁴ Ibid.

¹⁵⁵ Higgins, P, Short, D and South, N (2013) 'Protecting the Planet: A proposal for a law of ecocide, *Crime, Law and Social Change*, 59, No1.

¹⁵⁶ Westra, L., *Ecoviolence and the Law: Supranational Normative Foundation of Ecocrime*, Brill, Nijhoff, 2004, 450p.; S. Freeland, 'Addressing the Intentional Destruction of the Environment during Warfare under the Rome Statute of the International Criminal Court', *Supranational Criminal Law*, vol.18, June 2015, 346p.; L. Neyret (dir.), *Des écocrimes à l'écocide. Le droit pénal au secours de l'environnement*, préf. M. Delmas-Marty Bruylant, 2015, 482p.; See C. Courtaigne, *L'adéquation du droit pénal à la protection de l'environnement*, Doctorate, Public law, University of Paris II (Panthéon-Assas), 15 septembre 2010, 709p.

¹⁵⁷ Nedelmann *Global Prohibition Regimes: The Evolution of Norms in International Society* 44 *Int'l Org* 479, 482 (1990).

¹⁵⁸ Hedman *SExpressive function of criminal sanction in Environmental Law* 59 *Geo. Wash. L. Rev* (1991), 889 at 890.

Through criminal sanction the international community expresses its moral outrage.¹⁵⁹ Criminalising acts of Ecocide codifies international outrage at such behaviour while enabling law enforcement officials to operate within the criminal paradigm.¹⁶⁰

In the criminal law context the impetus for criminalisation is the notion of harm. Regarding the crime of Ecocide, the focal point is the destruction of the global commons *upon which certain human groups rely*. What this means is that the proposed criminal provisions to be included into the Rome Statute are not environmental crimes *stricto sensu* but are “anthropocentric”— that is, they criminalize things or practices that are principally inhumane and only incidentally have devastating effects on the environment.¹⁶¹

Ecocide, then, is a vital part of an emergent jurisprudence that clarifies the criminal elements that constitute significant and durable harm to the global commons or ecosystem services *upon which human populations rely*.

So then intentional manipulation of the physical environment by Monsanto, which is deemed to have significantly or durably damage part of the global ecosystem, where such act were performed with knowledge, or reckless disregard for the immediate or long term effects upon that ecosystem, would constitute the relevant criminal conduct.

The causal link would be evidence of disruption or loss of ecosystems of a given territory, to such an extent that the survival of the inhabitants of that territory is endangered. Manifestations of this might be human fatalities, illness, congenital deformities, physical damage or ecological impact that can be directly attributed to the relevant criminal conduct.

A clear example of this would be the aerial spraying of herbicides over vast areas of South Vietnam during the Vietnam War, so as to destroy forest and vegetation and deny enemy cover, mobility and sustenance. Such an act significantly and durably damaged an ecosystem with complete disregard for the immediate or long term effects upon the enemy territory, or the disruption/loss to the ecosystem services upon which the survival of the inhabitants relied.

¹⁵⁹ Schofield T., *The Environment as an Ideological Weapon; A proposal to Criminalise Environmental Terrorism* 26 B. C. Env'tl. Aff. L Rev (1998-99) 619 at 644.

¹⁶⁰ *Ibid*, 645.

¹⁶¹ Drumbl, M. (2000). *International Human Rights, International Humanitarian Law, and Environmental Security: Can the International Criminal Court Bridge the Gaps?* ILSA Journal of International & Comparative Law, Vol. 5, No. 2. Drumbl, M.A., (1998-- - 1999). *Waging War Against the World: The Need To Move From War Crimes To Environmental Crimes*. 22 Fordham Int'l L.J. p. 122--153. Drumbl, Mark. 1999. 'Waging War Against the World: The Need to Move from War Crimes to Environmental Crimes', Fordham International Law Journal, 22, 1998-- - 99

In deed the actions, of which the defendant Company Monsanto was complicit, were deemed to be so abhorrent that international treaties and the laws of war now proscribe such tactics.¹⁶²

Already Article 8(2) (b)(iv) of the *Rome Statute* now criminalizes, as a war crime, in international armed conflict the “[intentional] launching an attack in the knowledge that such attack will cause ...widespread, long—term and severe damage to the natural environment which would be clearly excessive in relation to the concrete and direct overall military advantage anticipated.”

This inclusion into the definition of a war crime¹⁶³ is at present, the only ‘direct and explicit’ environmental crime in international law.¹⁶⁴ To date, however, there have been no prosecutions under this provision of the *Rome Statute*.¹⁶⁵ This Article is arguably the first international articulation of a ‘truly eco-centric’, (as opposed to anthropocentric), view of environmental war crimes, in that ‘[i]n theory, [it] could provide the nonhuman environment with previously unprecedented protection.’¹⁶⁶

Other war crimes, in the *Rome Statute*, that incidentally address environmental harms include;

- a) Article 8(2)(a)(iv) (prohibiting extensive destruction and appropriation of property not justified by military necessity and carried out wantonly and unlawfully);¹⁶⁷
- b) Article 8(2)(b)(xvii) (prohibiting the use of poison and poisoned weapons), and;
- c) Article 8(2)(b)(xviii) (prohibiting the employment of asphyxiating, poisonous, or other gases).

However, the existing provision in the *Rome Statute* are of limited application, because they appear under the definition of war crimes and have no application for environmental harm cause in peacetime (outside the context of armed conflict).

In order for the Tribunal to make a positive finding that the law of ecocide has emerged as a *jus cogens* crime, it must first be satisfied that there is a sound basis for criminalising and customary law support for its inclusion as an international crime.

¹⁶² Diederich M.D. (Jr) Law of War and Ecology – A proposal for a workable Approach to Protecting the Environment Through the Law of War 136 *Mil. L. Rev* (1992) 137 149-52

¹⁶³ Art. 8(2)(b)(iv) *Rome Statute*

¹⁶⁴ See T. Smith, ‘Creating a Framework for the Prosecution of Environmental Crimes in International Criminal Law’, in W. A. Schabas, Y. McDermott and N. Hayes (eds), *The Ashgate Research Companion to International Criminal Law: Critical Perspectives* (2013) 45, at 52.

¹⁶⁵ Mehta S and P. Merz, ‘Ecocide – A New Crime Against Peace?’, 17 *Environmental Law Review* (2015) 3, at 4.

¹⁶⁶ Lawrence JC., and K. J. Heller, ‘The First Ecocentric Environmental War Crime: The Limits of Article 8(2)(b)(iv) of the Rome Statute’, *Georgetown International Environmental Law Review* (2007) 61, at 62, 70.

¹⁶⁷ Note the language in Article 8(2)(b)(iv) borrows largely from ENMOD.

PART VIII

ECOCIDE AN EMERGING CRIME

8.1 Environmental crime; a timeline of critical events

As a parallel movement to the protection of the environment in a humanitarian law context (war time), there emerged a body of law dealing with environmental protection in peacetime. This environmental consciousness evolved over the course of the century, together with a shifting awareness of the vulnerability of humanity and the need to protect biodiversity, cultural heritage and the human genome.

This is the domain in which the concept of Ecocide has emerged, specifically the progression towards international support for a penal sanction against violent ecological harm which occur outside of the context of armed conflict and war.

1970

Undoubtedly, the concept of 'ecocide' emerged in the wake of the war in Vietnam. The first person to openly discuss ecocide was Professor Arthur Galston, the scientist whose research led to the invention of Agent Orange, the highly toxic herbicide which was to devastate Vietnam during its war.¹⁶⁸ Speaking in Washington, D.C. in 1970 before the Conference on War and National Responsibility, he called for a new international agreement to ban ecocide which he defined as: "... devastation and destruction which aim at damaging or destroying the ecology of geographic areas to the detriment of all life, whether human, animal or plant." Arthur Galston proposed a new international agreement to ban ecocide.¹⁶⁹ In the same year, in an obiter dictum in the 1970 *Barcelona Traction Case* judgement, the International Court of Justice identified a category of international obligations called 'erga omnes', namely obligations owed by states to the international community as a whole, intended to protect and promote the basic values and common interests of all.¹⁷⁰

1972

In 1972 at the United Nations Stockholm Conference on the Human Environment¹⁷¹ which adopted the *Stockholm Declaration* made references

¹⁶⁸ Galston was a US biologist who identified the defoliant effects of a chemical later developed into Agent Orange. Subsequently a bioethicist, he was the first in 1970 to name massive damage and destruction of ecosystems as an ecocide.

¹⁶⁹ Zierler, David (2011). *The Invention of Ecocide*. University of Georgia Press

¹⁷⁰ *The Barcelona Traction case* [1970] ICJ Rep 3, page 33, paras 33 & 34

¹⁷¹ Declaration of the United Nations Conference on the Human Environment (or Stockholm Declaration) adopted June 16, 1972 by the United Nations Conference on the Human Environment at the 21st plenary meeting as the first document in international environmental law to recognize the right to a healthy environment.

<http://www.unep.org/Documents.multilingual/Default.asp?DocumentID=97&ArticleID=1503>

to the Vietnam War as an ecocide in the discussions.¹⁷² A Working Group on Crimes Against the Environment was formed at the conference.¹⁷³ The following year (1973), Convention on Ecocidal War took place in Stockholm, Sweden.¹⁷⁴ The Convention called for a United Nations Convention on Ecocidal Warfare, which would amongst other matters seek to define and condemn ecocide as an international crime of war.

Professor Richard A. Falk drafted an Ecocide Convention in 1973, explicitly stating at the outset to recognise “*that man has consciously and unconsciously inflicted irreparable damage to the environment in times of war and peace*”¹⁷⁵ A draft Ecocide Convention was submitted to the United Nations in 1973 calling for ecocide to be recognised as an intentional war and peace crime.¹⁷⁶

Arthur Westing a scientist and prolific critic of the use of herbicide as an agent of chemical warfare held the view that the element of intent did not always apply. “*Intent may not only be impossible to establish without admission but, I believe, it is essentially irrelevant.*”¹⁷⁷

1978

Draft Code of *Crimes Against the Peace and Security of Mankind* discussions commenced in 1978.¹⁷⁸ At the same time, State responsibility and international crimes were discussed and drafted.¹⁷⁹ The ILC 1978 Yearbook’s which had the ‘*Draft articles on State Responsibility and*

¹⁷² Björk, Tord. “The emergence of popular participation in world politics: United Nations Conference on Human Environment 1972” (1996) Department of Political Science, University of Stockholm, page 15 At a United Nations (U.N.) conference in 1972, the Swedish Prime Minister ‘spoke explicitly ... of the Vietnam War as an “ecocide”’ see A. Gauger et al., ‘Ecocide is the Missing Fifth Crime Against Peace’, University of London School of Advanced Study Human Rights Consortium (2012), at 5. Note that other accounts suggest that the term was ‘actively canvassed at an international level’ as far back as the 1960s see; White R and D. Heckenberg, *Green Criminology: An Introduction to the Study of Environmental Harm* (2014), at 54

¹⁷³ Environmental Law Review 2015, Vol. 17(1) 3–7

¹⁷⁴ Dai Dong, a branch of the International Fellowship of Reconciliation sponsored the Convention on Ecocidal War in Stockholm. The Convention brought together many people including experts Richard A. Falk, expert on the international law of war crimes and Robert Jay Lifton, a psychohistorian.

¹⁷⁵ Falk, Richard A. “Environmental Warfare and Ecocide – Facts, Appraisal, and Proposals” In: Thee, Marek (ed.) *Bulletin of Peace Proposals* (1973) volume 1

¹⁷⁶ R.A. Falk, ‘Environmental Warfare and Ecocide – Facts, Appraisal, and Proposals’ (1973) 4 Security Dialogue 80–96. Richard A Falk, “Environmental Warfare and Ecocide – Facts, Appraisal, and Proposals” In: Thee, Marek (ed.) *Bulletin of Peace Proposals* (1973) volume 1

¹⁷⁷ Westing, Arthur H. (1974): ‘Proscription of Ecocide’. In: RA Falk *The Vietnam War and International Law*, Volume 4: The Concluding Phase Princeton University Press p 283

¹⁷⁸ Draft Code of Crimes Against the Peace and Security of Mankind with commentaries 1996. Text adopted by the International Law Commission at its forty-eighth session, in 1996, and submitted to the General Assembly as a part of the Commission’s report covering the work of that session (at para. 50). The report, which also contains commentaries on the draft articles, appears in Yearbook of the International Law Commission, 1996, vol. II, Part Two.

http://legal.un.org/ilc/texts/instruments/english/commentaries/7_4_1996.pdf

¹⁷⁹ A/CN.4/SER.A/1978/Add.1 (Part 2), Page 80, Article 19.2.

International Crime as an Annex included: “*an international crime (which) may result, inter alia, from: (d) a serious breach of an international obligation of essential importance for the safeguarding and preservation of the human environment, such as those prohibiting massive pollution of the atmosphere or of the seas.*”¹⁸⁰

Supporters who spoke out in favour of a crime of ecocide included Romania and the Holy See, Austria, Poland, Rwanda, Congo and Oman.¹⁸¹

1985

During the decade (1982-1992), international law relating to the environment really began to take shape, the theory of intergenerational justice and the concept of a human right to a healthy environment spread throughout international law.¹⁸²

The *Whitaker Report*, commissioned by the *Sub-Commission on the Promotion and Protection of Human Rights* on the question of the prevention and punishment of the crime of genocide was prepared by then Special Rapporteur, Benjamin Whitaker.¹⁸³ The report contained a passage that “*some members of the Sub-Commission have, however, proposed that the definition of genocide should be broadened to include cultural genocide or “ethnocide”, and also “ecocide”: adverse alterations, often irreparable, to the environment - for example through nuclear explosions, chemical weapons, serious pollution and acid rain, or destruction of the rain forest - which threaten the existence of entire populations, whether deliberately or with criminal negligence.*”¹⁸⁴

1987

The International Law Commission, where it was proposed that “*the list of international crimes include “ecocide”, as a reflection of the need to safeguard and preserve the environment, as well as the first use of nuclear weapons, colonialism, apartheid, economic aggression and mercenarism*”.¹⁸⁵

¹⁸⁰ A/CN.4/SER.A/1978/Add.1 (Part 2), Page 80, Article 19.3. (d)

¹⁸¹ Sub-Commission on Prevention of Discrimination and Protection of Minorities. Study of the Question of the Prevention and Punishment of the Crime of Genocide. 4 July 1978. E/CN.4/Sub.2/416, p.124 and p.130

¹⁸² Gaillard E., *Crimes Against Future Generations*; e-pública revista electrónica de direito público Special Issue Número 5, 2015 p18

¹⁸³ Whitaker Report; United Nations Economic and Social Council Commission on Human Rights Sub-Commission on Prevention of Discrimination and Protection of Minorities Thirty-eighth session, Item 4 of the provisional agenda, E/CN.4/Sub.2/1985/6.

¹⁸⁴ Whitaker Report E/CN.4/Sub.2/1985/6, page 17, para 33

<http://www.preventgenocide.org/prevent/UNdocs/whitaker/section6.htm> Also; T. Smith, ‘Creating a Framework for the Prosecution of Environmental Crimes in International Criminal Law’, in W. A. Schabas, Y. McDermott and N. Hayes (eds), *The Ashgate Research Companion to International Criminal Law: Critical Perspectives* (2013) 45, at 47.

¹⁸⁵ 1987 Yearbook of the ILC Vol I, p. 56, para 38, A/CN.4/SER.A/1987

1991-1993

The ILC '*Draft Code of Crimes Against the Peace and Security of Mankind*' of 1991 contained 12 crimes¹⁸⁶ One of those was 'wilful damage to the environment (Article 26)'.

As of 29 March 1993, the Secretary-General had received 23 replies from Member States and one reply from a non-member Stat.¹⁸⁷ Only three countries, the Netherlands, the United Kingdom and the United States of America, opposed the inclusion of an environmental crime.¹⁸⁸ The issue of adding a high test of intent ('wilful') was of concern: Austria commented: "Since perpetrators of this crime are usually acting out of a profit motive, intent should not be a condition for liability to punishment." Belgium and Uruguay also took the position that no element of intent was necessary for the crime of severe damage to the environment (Article 26).¹⁸⁹

1996

In 1996, Canadian/Australian lawyer Mark Gray published his proposal for an international crime of ecocide, based on established international environmental and human rights law.¹⁹⁰ He demonstrated that states, and arguably individuals and organisations, causing or permitting harm to the natural environment on a massive scale breach a duty of care owed to humanity in general. He proposed that such breaches, where deliberate, reckless or negligent, be identified as ecocide where they entail serious, and extensive or lasting, ecological damage; international consequences; and waste.¹⁹¹

Meanwhile, in the International Law Commission established a a working group to focus on the matter of "The Commission further decided that consultations would continue as regards [Article 26] ...the Commission decided ... to establish a working group that would meet ... to examine the

¹⁸⁶ Yearbook of the International Law Commission 1991 vol 1 Draft Code of Crimes Against the Peace and Security of Mankind' of 1991 A/CN.4/SER.A/1991 http://legal.un.org/ilc/publications/yearbooks/english/ilc_1991_v1.pdf

¹⁸⁷ Yearbook of the International Law Commission 1993 Vol 2 They were: Australia, Austria, Belarus, Belgium, Brazil, Bulgaria, Costa Rica, Ecuador, Greece, Netherlands, the Nordic countries (Denmark, Finland, Iceland, Norway, Sweden), Paraguay, Poland, Senegal, Sudan, Turkey, UK, USA, Uruguay and Switzerland. Many objections were raised (for a summarised commentary see the 1993 ILC Yearbook http://legal.un.org/ilc/publications/yearbooks/english/ilc_1993_v2_p1.pdf

¹⁸⁸ A/CN.4/448 and Yearbook of the ILC 1993, Vol. II, Pt. 1. Documents of the 45th session. A/CN.4/SER.A/1993/Add.1 (Part 1) see Netherlands: pp. 82-88; United Kingdom: pp. 97-102; United States of America: pp.102-105.

¹⁸⁹ 1993 Yearbook of the ILC Vol II, Part 1, A/CN.4/448 and Add.1 http://legal.un.org/ilc/publications/yearbooks/english/ilc_1993_v2_p1.pdf p.68, para 30 for Austria, Belgium p. 72 paras. 26 & 27; Uruguay P. 106 para 9.

¹⁹⁰ Gray, Mark Allan, 'The international crime of ecocide' (1996) 26 California Western International Law Journal 215; and 'The international crime of ecocide' (2003) in International Crimes, The Library of Essays in International Law, ed. N Passas, Ashgate Publishing, Aldershot UK.

¹⁹¹ Gray, Mark Allan, 'The international crime of ecocide' (1996) 26 California Western International Law Journal 215-271

possibility of covering in the draft Code the issue of wilful and severe damage to the environment ... the Commission decided by a vote to refer to the Drafting Committee only the text prepared by the working group for inclusion of wilful and severe damage to the environment as a war crime.

¹⁹²

1998

The final Draft Code was the basis for the *Rome Statute* at the United Nations Diplomatic Conference of Plenipotentiaries on the Establishment of an International Criminal Court, which was held in Rome. ¹⁹³ Ecocide was not included in the *Rome Statute* as a separate crime, but featured in relation to a war-crime. ¹⁹⁴

The test for environmental damage as a war crime - was narrower than previously proposed by requiring a stricter threshold test (ie a war crime under this provision must meet all three criteria). Under the *Environmental Modification Convention 1977 (ENMOD)* the test for war-time environmental destruction is 'widespread, long-term or severe' ¹⁹⁵ whereas Article 8(2) (b) of the *Rome Statute* 1998 modified the ENMOD test with the change of one word to 'widespread, long-term and severe.' ¹⁹⁶

Article 8(2) (b) limited environmental harm to circumstances when:

"Intentionally launching an attack in the knowledge that such attack will cause incidental loss of life or injury to civilians or damage to civilian objects or widespread, long-term and severe damage to the natural environment which would be clearly excessive in relation to the concrete and direct overall military advantage anticipated." ¹⁹⁷

¹⁹² 1996 Yearbook of the ILC Vol II, Part 2, p16, paras 40, 41 and 44, A/CN.4/SER.A/1996 Add.1 (Part 2)

¹⁹³ United Nations Diplomatic Conference of Plenipotentiaries on the Establishment of an International Criminal Court, Rome, 15 June-17 July 1998: Official Records, United Nations. The Rome Statute was the founding document of the International Criminal Court (ICC).

¹⁹⁴ The Rome Statute, Article 8(2)(b)(iv) https://www.icc-cpi.int/nr/rdonlyres/ea9aeff7-5752-4f84-be94-0a655eb30e16/0/rome_statute_english.pdf

¹⁹⁵ Article 1 of the Convention on the Prohibition of Military or Any Other Hostile Use of Environmental Modification Techniques (ENMOD)
<http://disarmament.un.org/treaties/t/enmod/text>

¹⁹⁶ The Rome Statute, Article 8(2)(b)(iv) https://www.icc-cpi.int/nr/rdonlyres/ea9aeff7-5752-4f84-be94-0a655eb30e16/0/rome_statute_english.pdf

¹⁹⁷ The Rome Statute, Article 8(2)(b)(iv)

2010

The proposal for the crime of Ecocide was submitted to the United Nations by a private party.¹⁹⁸ The proposal was to include the crime of Ecocide as a crime against peace.¹⁹⁹

2011

A mock Ecocide Act was drafted and then tested in the UK Supreme Court via a mock trial by The Hamilton Group.²⁰⁰

2012

In June 2012 the idea of making ecocide a crime was presented to legislators and judges from around the world at the *World Congress on Justice Governance and Law for Environmental Sustainability*,²⁰¹ held in Mangaratiba (Rio de Janeiro—Brazil) before the Rio +20 Earth Summit, the United Nations Conference on Sustainable Development. In this same year a concept paper on the Law of Ecocide²⁰² was sent out to governments.

In October 2012 the international conference for “*Environmental Crime: Current and Emerging Threats*” was held in Rome at the UN Food and Agricultural Organization headquarters²⁰³ This conference recognized that environmental crime is an important new form of transnational organized crime in need a greater response. A study into the definition of environmental crime was initiated.²⁰⁴

¹⁹⁸ British attorney Polly Higgins submitted a proposal to the U.N. Law Commission calling for ecocide to be reintroduced into the Rome Statute as a fifth crime against peace. See P. Higgins, D. Short and N. South, ‘Protecting the Planet: A Proposal for a Law of Ecocide’, 59 *Crime, Law and Social Change* (2013) 251., at 257. The full proposal, which was submitted to the International Law Commission, is set out in chapters 5 and 6 of her book *Eradicating Ecocide: Laws and Governance to Prevent the Destruction of our Planet*, Polly Higgins, Published by Shephard Walwyn: 2010.

¹⁹⁹ Higgins is not the only person to suggest adding ecocide as a fifth crime under the Rome Statute. See, e.g., J. Hellman, . Hellman, ‘The Fifth Crime Under International Criminal Law: Ecocide?’, in D. Brodowski et al. (eds), *Regulating Corporate Criminal Liability* (2014) 273 at 277.

²⁰⁰ Walsh, Bryan. “Is Ecocide a Crime?”. *Times*, Oct 2011

²⁰¹ Summary of the World Congress on Justice, Governance and Law for Environmental Sustainability, 17-20 June 2012, Rio de Janeiro, Brazil”. www.iisd.ca. Note also that making ecocide an international crime was voted as one of the top twenty solutions to achieving sustainable development at the World Youth Congress in Rio de Janeiro in June 2012.

²⁰² Closing the door to dangerous industrial activity: A concept paper for governments to implement emergency measures. The Earth Community Trust <http://eradicatingecocide.com/wp-content/uploads/2012/06/Concept-Paper-Closing-the-Door-to-Dangerous-Industrial-Activity.pdf>

²⁰³ This conference was hosted by the United Nations Interregional Crime and Justice Research Institute (UNICRI) in cooperation with United Nations Environmental Programme (UNEP) and the Ministry of the Environment (Italy).

²⁰⁴ International Conference on *Environmental Crime: Current and Emerging Threats: Action Plan on Combating Environmental Crime*” (PDF) www.unicri.it.

8.2 European Citizen Initiative for criminalising ecocide

On January 22, 2013, a committee of eleven citizens from nine EU countries officially launched the European Citizens Initiative “End Ecocide in Europe”.²⁰⁵ The European Citizens’ Initiative, or ECI, is a tool created by the *Lisbon Treaty*²⁰⁶ to promote petition the EU parliament to recognise Ecocide and urge the UN to establish an international crime.²⁰⁷ This initiative aimed at criminalising the extensive damage and destruction of ecosystems.

The organisation End Ecocide on the Earth²⁰⁸ have been instrumental in formulating the crime of Ecocide and authored the drafted amendments to the ICC and the Crime of Ecocide. EEE’s model law is attached to this brief and is the working definition of Ecocide that informs the submissions to the International Monsanto Tribunal.²⁰⁹

8.3 Early adopters of domestic Ecocide laws²¹⁰

²⁰⁵ See the work of End Ecocide in Europe www2.endecocide.eu

²⁰⁶ *Treaty of Lisbon amending the Treaty on European Union and the Treaty establishing the European Community* signed at Lisbon 13 December 2007 OJ C 306 17.12.2007.p.1.271

²⁰⁷ The ECI is a way for EU citizens to propose new or suggest amendments to legislation directly to the European Commission which is the institution proposing new EU laws.

²⁰⁸ See the work of this organisation www.endecocide.org.

²⁰⁹ See Annexure I and II to this document.

²¹⁰ **Georgia 1999** Article 409. Ecocide: “Ecocide, i.e. contamination of atmosphere, land and water resources, mass destruction of flora and fauna or any other action that could have caused ecological disaster - shall be punishable by ...” Criminal Code of Georgia 1999 Article 409 | **Republic of Armenia 2003** Article 394. Ecocide: “Mass destruction of flora or fauna, poisoning the environment, the soils or water resources, as well as implementation of other actions causing an ecological catastrophe, is punished ...” [Criminal Code of the Republic of Armenia 2003 Article 394] | **Ukraine 2001** Article 441. Ecocide: “Mass destruction of flora and fauna, poisoning of air or water resources, and also any other actions that may cause an environmental disaster, - shall be punishable by ...” Criminal Code of Ukraine 2001 Article 441 | **Belarus 1999** Art 131. Ecocide: “Deliberate mass destruction of flora and fauna, or poisoning the air or water, or the commission of other intentional acts that could cause an ecological disaster (ecocide), - shall be punished by ...” Статья 131. Экоцид Умышленное массовое уничтожение растительного или животного мира, либо отравление атмосферного воздуха или водных ресурсов, либо совершение иных умышленных действий, способных вызвать экологическую катастрофу (экоцид), – наказываются ... Penal Code of Belarus 1999 Art 131 | **Kazakhstan 1997** Art 161. Ecocide: “Mass destruction of flora or fauna, poisoning the atmosphere, land or water resources, as well as the commission of other acts which caused or a capable of causation of an ecological catastrophe, - shall be punished by...” Code Kazakhstan 1997 (Amended 2011) Art 161 | **Kyrgyzstan 1997** Art 374. Ecocide: “Massive destruction of the animal or plant kingdoms, contamination of the atmosphere or water resources, and also commission of other actions capable of causing an ecological catastrophe, shall be punishable ...” Penal Code Kyrgyzstan 1997 (Amended 2009) Art 342 | **Republic of Moldova 2002** Art 136. Ecocide: “Deliberate mass destruction of flora and fauna, poisoning the atmosphere or water resources, and the commission of other acts that may cause or caused an ecological disaster shall be punished ...” Penal Code Republic of Moldova 2002 (amended 2009) Art 136 | **Russian Federation 1996** Art 358. Ecocide: “Massive destruction of the animal or plant kingdoms, contamination of the atmosphere or water resources, and also commission of other actions capable of causing an ecological

Eleven nations ²¹¹ now have existing domestic ecocide law. These countries legislation follow closely the ILC Draft articles definition of “[a]n individual who wilfully causes or orders the causing of widespread, long-term and severe damage to the natural environment shall, on conviction thereof, be sentenced [to...].”²¹² Although there are Laws of Ecocide in place, the effectiveness of these laws depends on a number of factors including the enforcement of the law, an independent judiciary and respect for the rule of law.

We will not know the full potential of these domestic laws until we begin to see domestic prosecutions. However, on 1st of January 2016 Spanish African palm Oil Corporation, Empresa Reforestadora de Palma de Petén SA (RESPA) lost their appeal against the first ruling of its kind. Guatemala’s appellate court has upheld the unprecedented charge of ecocide against RESPA, whose industrial activity has polluted La Pasión River, disrupting the lives of tens of thousands of Guatemalans living in the region. Contamination by toxins covering the entire surface of the river suffocated any life therein.²¹³

catastrophe, shall be punishable by ...” Criminal Code Russian Federation 1996 Art 358 **Tajikistan 1998** Art 400. Ecocide: “Mass destruction of flora and fauna, poisoning the atmosphere or water resources, as well as commitment of other actions which may cause ecological disasters is punishable ...” Criminal Code Tajikistan 1998 Art 400 **Uzbekistan 1994** Art 196. Pollution of Natural Environment: “Pollution or damage of land, water, or atmospheric air, resulted in mass disease incidence of people, death of animals, birds, or fish, or other grave consequences – shall be punished ...” Criminal Code of Uzbekistan 1994 Art. 196 **Vietnam 1990** Art 342 Crimes against mankind: “Those who, in peace time or war time, commit acts of ... as well as other acts of genocide or acts of ecocide or destroying the natural environment, shall be sentenced ... Penal Code Vietnam 1990 Art 342.

²¹¹ The 11 nations with Ecocide legislation are: Georgia, Republic of Armenia, Ukraine, Belarus, Kazakstan, Kyrgyzstan, Republic of Moldova, Russian Federation, Tajikistan, Uzbekistan, and Vietnam.

²¹² 1987 Yearbook of the ILC Vol I, p. 56, para 38, A/CN.4/SER.A/1987

²¹³ On 1/1/16; a major win for Indigenous-led environmental movements when an appellate court in Guatemala upheld the unprecedented charge of ecocide against Spanish African palm oil corporation, Empresa Reforestadora de Palma de Petén SA [otherwise known as REPSA]. The company has been accused of criminally negligent activity resulting in massive die-offs of fish and other wildlife in and around the La Pasión River, disrupting the lives of tens of thousands of Guatemalans living in the region. Judge Carla Hernandez, of the Peten Environmental Crimes Court, ordered RESPA to suspend production activity for six months in September 2015 while the charges were fully investigated. Rosalito Barrios, of the San Carlos de Guatemala Chemical Sciences Department, documented that pollution from RESPA’s industrial activity formed a 70-centimeter layer of toxins covering the entire surface of the river, effectively suffocating any life therein. This unfathomable mass killing is foundational to, and demonstrative of, the willful or negligent crime against humanity – and crime against peace – conceived of as ‘ecocide’. To date the author has not been able to locate an English version of the judgement.

Ecocide a *jus cogens* crime

Ecocide law is not a radical expansion of the foundations of western law, and nor does it threaten to undermine these foundations. If anything, it is a natural progression and response to immediate and long-term consequences of harm on a significant scale.

Ecocide, at its simplest is the mass damage and destruction of the environment resulting from human action. However the law as it presently stands is inadequate. There remains a gaping hole in the international criminal protection framework that fails to recognise the essential relationship between humans and their environments.

At an international criminal law level the protection framework fails to acknowledge that there exists an intrinsic reliance upon our environment that is so integral to humans that an intentional destruction of any part, or whole, will inevitably bring about the automatic demise of those populations who depend upon it for their survival.

As the international criminal law evolves to protect humans from significant harm it will be required to broaden its remit to formally recognise that the welfare of the environment is vital to sustain the human population that rely upon it, and to criminalise any act/omission that threatens this interdependency.

By way of illustration, an example of the types of criminal matters that fall between the gaps, in international criminal law framework; is the situation of the Marsh Arabs. The *Genocide Convention* most clearly prohibits acts such as those committed by the Iraqi government against the Marsh Arabs. Specifically, Common Article 3 of the *Geneva Conventions* addresses individual murders and extrajudicial killings of Marsh Arabs, but probably does not address the problem of the destruction of the wetlands as a whole and the concomitant deprivation of a means of subsistence.²¹⁴

If such a law was to be enacted; what type of criminal act/s would it cover? When we talk about Ecocide we essentially mean '*the mass destruction of the flora and fauna and poisoning of the atmosphere or water resources, as well as other acts capable of causing an ecological catastrophe*'. The damage caused to the environment at the end of the Gulf War in 1991 could very well have fallen within this definition, and thus constituted 'ecocide', even though it might not have amounted to 'widespread, long-term and severe damage'.

Despite legal and civil society advocacy for half a century, and the presence of ecocide law in at least ten national jurisdictions, international criminal law has been resistant to the inclusion of ecocide within its canon with the exception of the still to tested provisions in the Rome Statute regarding environmental damage in wartime.

²¹⁴ The *Covenants on Economic and Cultural Rights and Civil and Political Rights* provide human rights protections, and provide that a people may not be deprived of its means of subsistence.

Treaties that address the specific problem of; environmental modification; prohibition of environmental warfare; or the persecution of an ethnic group, most notably the ENMOD and the Rome Statute, could arguably be said exemplify accepted custom and practice of states. It is also arguable that *Additional Protocols I and II* to the Geneva Conventions of 1949, are expressions of customary international law, and may even express *jus cogens* or non-derogable norms. Of these, *Additional Protocol I* addresses environmental harm more directly specifically prohibiting reprisal against the natural environment.²¹⁵

So then, there is an international movement aimed at broadening the remit of international criminal law based upon an ever-growing recognition on the part of the international community that the environment is an 'essential interest' no matter the context (ie war or peace). This logical extension of customary law would not only permit international jurisdiction over significant environmental harms in peacetime but would enable the prosecution of individuals (rather than state bodies) including those engaged in non-state activities such as the actions of transnational corporations.

8.5 Leading Ecocide scholarship

Since the 1990s a whole area of criminological scholarship, termed environmental or 'green' criminology, has emerged that seeks to identify important environmental harms and draw attention to the impact on humans, non-human animals and ecosystems more generally. There has also been a growth of scholarship dedicated to looking at the potential remedial action, including the criminalisation of what would otherwise be; 'legal' harms.²¹⁶ Indeed this discourse which highlights the emergence of the crime of Ecocide is a vital to a contemporary examination and clarification of the legal duty of care towards the environment.

Outside a formal legal definition, ecocide would encompass any extensive damage or destruction of the natural landscape and disruption or loss of ecosystems of a given territory to such an extent that the survival of the inhabitants of that territory are endangered. However the term *ecocide* was first enunciated by a plant biologist and chair of the Department of Botany at Yale University Arthur Galston who first publicly used the term ecocide in 1970. His study of herbicides and the use of Agent Orange in Vietnam was a major research focus.²¹⁷ Also David Zierler's 2011 book *The Invention*

²¹⁵ This is particularly pertinent for the review of new means and methods of warfare, such as the use of depleted uranium, for which no specific treaty regulation yet exists.

²¹⁶ Higgins, P, Short, D and South, N (2013) 'Protecting the Planet: A proposal for a law of ecocide, Crime, Law and Social Change, 59, No1.

²¹⁷ Cook, R.E., Haseltine, W., & Galston, A.W. 1970. What have we done to Vietnam? *New Republic* (Washington) 162(2):18-21. Also in: Weisberg, B. (ed.). 1970. *Ecocide in Indochina: the ecology of war* San Francisco: Canfield Press, 241 pp+11 ph.: pp 89-94. Also in: U.S. Congressional Record (Washington) 116:4111-4112. 1970-1971. Galston, A.W. 1967. Changing the environment: herbicides in Vietnam. *Scientist & Citizen* [now: *Environment*] (now Philadelphia) 9:122-129. Also in: *Yale Scientific Magazine* (New

of Ecocide gives a historical account of how the use of herbicidal warfare in the Vietnam war resulted in a movement of scientists who advocated for ecocide to be an international crime.²¹⁸

Since the Vietnam War, the last fifty years has seen advocacy from influential legal scholars for ecocide to be included as a crime against peace, including the intention for it to be included in the *Rome Statute* until a last minute removal, which occurred without prior discussions.²¹⁹

A number of scholars have drafted a model law including the work of Beret, Higgins, Gray and more recently Neyret.

Haven) 42(7):4-7,29. 1967-1968. Galston, A.W. 1967. Herbicides in Vietnam. *New Republic* (Washington) 157(22):19-21. Galston, A.W. 1968. Military uses of herbicides in Vietnam. *New Scientist* (London) 38:583-584. Galston, A.W. 1968. Defoliants. In: Rose, S. (ed.). 1968. *Chemical and biological warfare: its scope, implications and future development*. London: Harrap, 209 pp: pp 62-75,196-197. Galston, A.W. 1969. Lesser of two evils. *Science* (Washington) 164(3878):373. Galston, A.W. 1970. Herbicides: no margin of safety. *Science* (Washington) 167(3916):237. Galston, A.W. 1970. Plants, people, and politics. *BioScience* (Washington) 20:405-410. Also in: *Plant Science Bulletin* (St Louis) 16(1):1-7. 1970. Galston, A.W. 1970-1971. On the use and misuse of science. *Yale Review* (New Haven) 60:458-463. Also in: *Natural History* (New York) 80(6):16-22. 1971. Galston, A.W. 1971. Some implications of the widespread use of herbicides. *BioScience* (Washington) 21:891-892,889. Galston, A.W. 1971. Warfare with herbicides in Vietnam. In: Harte, J., & Socolow, R.H. (eds). 1971. *Patient earth*. New York: Holt, Rinehart & Winston, 364 pp: pp 136-150. Galston, A.W. 1972. Review of: Neilands, J.B., Orians, G.H., Pfeiffer, E.W., Vennema, A., & Westing, A.H. 1972. *Harvest of death: chemical warfare in Vietnam and Cambodia*. New York: Free Press, 304 pp. *Science* (Washington) 176:154-156. [Cf. *ibid.* 177(4051):745. 1972.] Galston, A.W. 1972. Science and social responsibility: a case history. *Annals of the New York Academy of Sciences* (New York) 196:223-235. Galston, A.W. 1979. Herbicides: a mixed blessing. *BioScience* (Washington) 29(2):85-90. Galston, A.W. 1994. Review of: Lanier-Graham, S.D. 1993. *The ecology of war: environmental impacts of weaponry and warfare*. New York: Walker, 185 pp + 12 pl. *Environment* (now Philadelphia) 36(4):25. Galston, A.W. 2001. Falling leaves and ethical dilemmas: Agent Orange in Vietnam. In: Galston, A.W., & Shurr, E.G. (eds). 2001. *New dimensions in bioethics: science, ethics and the formulation of public policy*. Boston: Kluwer Academic Publishers, 225 pp: pp 109-124. Galston, A.W. 2002. Some practical bioethics for botanists. *Plant Science Bulletin* (St Louis) 48(2):45. Galston, A.W., & Signer, E. 1971. Education and science in North Vietnam. *Science* (Washington) 174:379-385. [Cf. *ibid.* 178(4057):113-114. 1972.] Wald, G., Luria, S., Szent-Györgyi, A., Mendelsohn, E., Edsall, J., Pfeiffer, E.W., Galston, A.[W.], Westing, A.[H.], & Lewontin, R. 1972. We must tell the president. *New York Times* 122(41,978):25. 29 December. **Note:** The above compilation is based to some considerable extent on: Westing, A.H. 1974. *Herbicides as weapons: a bibliography*. Los Angeles: California State University Center for the Study of Armament & Disarmament, Political Issues Series, Vol. 3, No. 1, 36.

²¹⁸ See Zierler, David. *The Invention of Ecocide: Agent Orange, Vietnam and the scientists who changed the way we think about the environment*, The University of Georgia Press, London, 2011.

²¹⁹ This process has been outlined by the University of London's Human Rights Consortium report of 2012. A report by Anja Gauger, Mai Pouye Rabatel-Fernel, Louise Kulbicki, Damien Short and Polly Higgins, 'Ecocide is the missing 5th Crime Against Peace' The Ecocide Project Human Rights Consortium, School of Advanced Study, University of London,

<http://www.sas.ac.uk/hrc/projects/ecocide-project>. Also the 2013 publication of the Science Po report on Ecocide outlines and clarifies the majority of the research and scholarship around legally defining ecocide. M. Garin, B. Glasenhardt, R. Houston, J. Pham, Report on the ecocide project, Law Clinic- Sciences Po Paris, 7 December 2013 : http://www.sciencespo.fr/ecole-dedroit/sites/sciencespo.fr.ecole-dedroit/files/rapport_ecocide_project.pdf

Lynn Berat focuses upon *geocide* as a counterpart to genocide and identifies 'species destruction' as central to her definition. Beret defines geocide as;

intentional destruction, in whole or in part, of any portion of the global ecosystem, via killing members of a species: causing serious bodily or mental harm to members of the species; inflicting on the species conditions of life that bring about its physical destruction in whole or in part: and imposing measures that prevent births within the group or lead to birth defects. ²²⁰

Mark Gray states that three elements need to be met for *Ecocide*:

- 1) serious extensive or long lasting ecological damage
- 2) that has an international dimension and
- 3) is wasteful. ²²¹

Polly Higgins defines *Ecocide* as the;

- 1) extensive damage to, destruction of or loss of ecosystems of a given territory,
- 2) whether by human agency or by other causes,
- 3) to such an extent that peaceful enjoyment by the inhabitants of that territory has been or will be severely diminished.

Higgins proposal includes the wording used in the existing laws contained in the 1977 United Nations *Convention on the Prohibition of Military or any other Hostile Use of Environment Modification Techniques* (ENMOD) which defines the terms 'widespread, long lasting and severe as be extended to peacetime activities.

Higgins argument that the crime of Ecocide should be listed in the Rome Statute under the list of crimes against the peace - is not without its critics. ²²² A former Vice-President of the International Criminal Court (ICC) Judge Tarfusser, '*suggests that a separate, autonomous chamber of the ICC should be constituted to deal with crimes against the environment.*'²²³ Other commentators have proffered a separate legislative regime creating a separate dedicated chamber of the ICC, established through a treaty with the specific function of characterising environmental

²²⁰ Lynn Berat, "Defending the right to a healthy environment: toward a crime of geocide in international law", *Boston university International Law Journal* (1993) (pp.327-348)

²²¹ Gray MA, *The International Crime of Ecocide* Vol 26 Cal W. Int'l L. J. (1995) 215-217

²²² For example Dr. Vesselin Popovski of the U.N. University Institute for Sustainability and Peace fears that naming ecocide as a fifth crime against peace could '*diminish [the importance of] genocide*' and '*dishonour [its] victims*'. See P. Garlick, 'The Supranational Environmental Justice Foundation in Venice – A Not So New Kid on the Block', 4 *New Journal of European Criminal Law* (2013) 506, at 509.

²²³ Garlick,P, 'The Supranational Environmental Justice Foundation in Venice – A Not So New Kid on the Block', 4 *New Journal of European Criminal Law* (2013) 506, at 509.

harm and defining ecocide, as opposed to being established through the Rome Statute alongside the current crimes against peace.²²⁴

In the ENMOD Convention the terms 'widespread,' 'long lasting' and 'severe' are all defined;

- a) **widespread**: encompassing an area on the scale of a several hundred square kilometres.
- b) **long lasting**: lasting for a period of months, or approximately a season.
- c) **severe**: involving serious or significant disruption or harm to human life, natural and economic resources or other assets.

All leading scholars hold individuals with *superior responsibility* to account, as per all international crimes.

Higgins and Gray go further to suggest that the crime of Ecocide should be a *strict liability* crime, removing the need for the mental element of intention. In 2015, Professor Laurent Neyret proposed three elements that underpin the crime of Ecocide is;

- 1) intentional act(s);
- 2) that threaten the security of the planet; and is
- 3) committed as part of a widespread or systematic action;

He goes on to make reference, almost in a mechanical fashion, to a list of specific dangerous activities, which would constitute an environmental crime, provided they meet the test.²²⁵

²²⁴ Drumbl, M 'Waging War Against the World: The Need To Move from War Crimes to Environmental Crimes', 22 *Fordham International Law Journal* (1998) 122, at 147. Professor Drumbl of Washington and Lee University School of Law argues for a separate environmental court on the grounds that it would avoid the danger of environmental crimes being 'lost in the shuffle' (at 145), and allow for specialized scientific knowledge to be used in trials, (at 146).

²²⁵ See L. Neyret dir., *Des écocrimes à l'écocide, le droit penal au secours de l'environnement*, Bruylant, 2015, p. 288 : "Ecocide" means any of the following intentional acts when they threaten the security of the planet and are committed as part of a widespread or systematic action:

- a. the discharge, emission or introduction of a quantity of substances or ionizing radiation into air or the atmosphere, soil, water or aquatic environments;
 - b. the collection, transport, recovery or disposal of waste, including the supervision of such operations, and the after-care of disposal sites, including action taken as a dealer or a broker in any activity in relation to waste management;
 - c. the operation of a plant in which a dangerous activity is carried out or in which dangerous substances or preparations are stored or used;
 - d. the production, processing, handling, use, holding, storage, transport, import, export or elimination of nuclear materials or other hazardous radioactive substances;
 - e. the killing, destruction, possession or taking of specimens of wild fauna or flora species whether protected or not;
 - f. other acts of a similar nature which are committed intentionally and threaten the security of the planet.
2. The acts referred to in paragraph 1 threaten the security of the planet when they cause:
- a. widespread, long-term and severe damage to air or the atmosphere, soil, water, aquatic environments, fauna or flora, or to their ecological functions; or
 - b. death, permanent disabilities or serious, incurable diseases to a population or cause a population to be dispossessed of its lands, territories or resources on a lasting basis.
3. The acts referred to in paragraph 1 must be committed intentionally and in the knowledge of the widespread or systematic character of the action of which they are part.

Needless to say definitions are emerging, being refined and ultimately it's the responsibility of member states to do the work of definition. However, this tribunal is being asked to consider whether the acts of the Defendant company are criminal acts, properly constituted by the elements, as contained within crime of Ecocide. This would require the tribunal to accept both that there is general consensus around the underlying rationale for criminalisation and a general agreement as to what sort of acts/omissions that the crime of Ecocide seeks to cover.

An amendment to the Rome Statute has been drawn up by lawyers of the organisation End Ecocide on the Earth, aimed at widening the scope of the International Criminal Court to include ecocide.²²⁶ This Model law has the specific purpose of criminalising the actions of those individuals who cause significant damage, where even now, such actions inhabit an international legal void.

PART IX THE CRIME OF ECOCIDE

9.1 Explaining the model law of Ecocide

The working definition is drawn from the End Ecocide on the Earth Organisation.²²⁷ The experts of End Ecocide on Earth have prepared 17 draft amendments to the Statute of the International Criminal Court (ICC) (annexed to this brief) to add to the list of the most serious international crimes: genocide, crimes against humanity, the crime of aggression and war crimes, and the crime of ecocide.²²⁸

This model law is drafted in line with the modern view, by many commentators that Ecocide law is a *strict liability* offence and that superior responsibility, as per all international crimes, be part of its elements. This model law promulgates general duty of care for ecocide crimes and victims but does not require intent or knowledge on part of crime.

Such acts are also considered intentional when their author knew or should have known that there was a high probability that they would threaten the security of the planet.

²²⁶ See Anexure II to this document

²²⁷ End Ecocide on Earth (EEE) is a grass-roots initiative (citizen movement) aimed to recognize the crime of ecocide in international criminal law, as the fifth crime prosecutable before the International Criminal Court in the same manner as the crime against humanity, genocide crime, war crimes or crime of aggression.

²²⁸ The amendments are in the hands of many States representatives and have been given to Ban Ki Moon, on the 29th November 2015 in Paris the first day of the COP21

This model law set up

- i. a *gravity threshold* which is determined by the ICC in consideration of best available scientific knowledge provided by UNEP and other relevant international agencies.
- ii. establishes *operational principles*: protection of global environment by means of global commons, ecosystem services, and planetary limits
- iii. includes jurisdiction over actions affecting global environment that arise from inside national territories (establishing the *sic utere* principle of customary international law or the cornerstone principle of international environmental law *prohibiting of transboundary environmental harm*).
- iv. implements the *precautionary principle* taking action that is demonstrably necessary for the continuing survival or wellbeing of not only this current but *future generations* of an effected population.
- v. protects against environmental injustices and includes *jurisdiction* over damages to *living and certain non-living entities*.
- vi. includes *liability of juridical persons*; liability of superiors (*respondeat superior*)
- vii. *shares responsibility* for reparations to victims of anthropogenically caused environmental disasters.
- viii. encompasses competence of judges to include *environmental law expertise* and creates *special deputy prosecutor* for ecocide crimes.
- ix. establishes a *restorative justice* process which provides for universal jurisdiction over crime of ecocide and provides this Tribunal with options to make a *declaratory judgment* as a first concrete international step towards transitional justice in ecocide cases.

9. 2 Definition of Ecocide

Elements of the Crime of ecocide

1. For the purpose of this Statute, any person is guilty of ecocide who causes significant and durable damage to:

- (a) any part or system of the global commons, or**
- (b) an ecosystem function relied upon by any human population or sub population.**

9.3 Individual criminal elements applied to Monsanto

9.3.1 Act/omission

The perpetrator's act(s), directive(s), order(s), or the failures to so act, direct, or order caused a violation of the crime of ecocide. It shall be no defence against this element that there existed at the time of the alleged conduct a government or judicial regulation, policy, or permit allocation which authorized the allegedly Ecocidal conduct.

The 'act' referred to is a positive act, affirmative action or material act. In the case of Monsanto a material act might be the release of a chemical into the environment, the production and use of dangerous substances /herbicide, the manipulation and release of genetic material dangerous to the environment, the contamination of a water supply or soil or ecosystem service or any other violation of international treaties covering the global commons.

This definition also states that ecocide can be committed through an omissions or abstention. Conceivably omissions can include 'failure to assist' in certain cases.

It is usual practice for domestic criminal codes to include liability for serious crimes based on omissions²²⁹ however there is also precedent for such liability having been read into the *Rome Statute*. An example of this was the case of *Prosecutor v. Kvočka* a 2001 Judgment of the International Criminal Tribunal for the Former Yugoslavia where liability for omissions was recognised.²³⁰ Note also that liability for omission has been incorporated into the standard for State liability.²³¹

9.3.2 'any person'

The Tribunal shall have jurisdiction over natural and fictional persons pursuant to the model law.

Natural person; additionally, a person may also include:

Any director, partner, majority shareholder, officer, leader, and/or any other person, natural or fictional, within an

²²⁹ Danner A.M., and J. S. Martinez, 'Guilty Associations: Joint Criminal Enterprise, Command Responsibility, and the Development of International Criminal Law', 93 *California Law Review* (2005) 75, at 121.

²³⁰ *Prosecutor v. Kvočka*, Case No. IT-98-30/1-T, Judgement, ¶ 251 (Int'l Crim. Trib. for the Former Yugoslavia Nov. 2, 2001). See full explanation in Danner A.M., and J. S. Martinez, 'Guilty Associations: Joint Criminal Enterprise, Command Responsibility, and the Development of International Criminal Law', 93 *California Law Review* (2005) 75 at 102.

²³¹ See *International Law Commission, Draft Articles on Responsibility of States for Internationally Wrongful Acts, with Commentaries* (2001), available online at http://legal.un.org/ilc/texts/instruments/english/commentaries/9_6_2001.pdf

organisation who is in a position of superior responsibility making that person responsible for offences committed by persons under his or her direct authority.

Any member of government, prime minister or minister who is in a position of superior responsibility making that person responsible for offences committed by persons under his or her direct authority.

If the perpetrator of an Ecocide is a person who is in a position effectively to exercise control over, or to direct the use of any process or equipment, whose deployment resulted in ecocide, that person is *individually criminally* responsible for committing an act of ecocide.

Fictional person; For the purposes of the model law, a 'fictional person' shall include: any company, corporation, partnership, venture, non-governmental organization, business organization, not-for-profit organization, or any government or other legal entity, except that no sovereign nation or its agents shall be considered a person unless the sovereign or its agent is the owner or operator, directly or indirectly, of an instrumentality engaging in the alleged conduct.

For the purposes of this provision the company Monsanto and its directors can be held criminally liable as either fictional or natural persons. The legal effect of recognising both natural and fictional persons is that both corporate and state immunity is removed. In the past, directors of companies relied upon the protection of the corporate veil and States (and state actors), held sovereign immunity from prosecution, however this is no longer the case. Over the last three decades of development of international criminal law these legal protections were stripped back and the falsehoods associated with immunity from prosecution negated. In its place, the notions of individual and command/superior responsibility were developed and refined. As a consequence there is no real shield from criminal prosecution.

This is a recognition in International Criminal Law that it is individuals and not entities that commit criminal acts.

9.3.3 Criminal responsibility

Owing to the scale of environmental harm required for Ecocide the most common perpetrators are States and corporations.

It has already been demonstrated that Corporations can be held legal liable in international law, under the United States' *Alien Tort Statute*.²³² While

²³² A. Clapham, 'Extending International Criminal Law Beyond the Individual to Corporations and Armed Opposition Groups', 6 *Journal of International Criminal Justice* (2008) 899, at 904-906.

that statute is limited to civil liability, it has been used to hold corporations civilly accountable for criminal acts.²³³

Given the impracticality of imprisoning or attach sanctions to a corporate entity a preferable approach is to attach criminal responsibility to individuals within a corporation. Individual criminal responsibility has been the most significant development for international criminal law enforcement over the past decades and has given the international community real traction pursue criminal prosecutions, where previously these action fell outside the laws reach. It is highly likely then that an ICC criminal prosecution for the crime of ecocide would concentrate on the actions of individuals and individual criminal responsibility.²³⁴

However, note that presently, article 25 of the *Rome Statute* limits the Court's competence to natural persons, however the model law of ecocide would extend the definition of a natural person to include (directors, partners, majority shareholders, government officials, prime minister or persons in positions of superior responsibility) and include ICC's jurisdiction to cover fictional persons (which include a company, a corporation, a partnership, a venture, an NGO organization, or any government). This would make 'all such bodies ... responsible and liable for punishment',²³⁵ and allow the ICC to look at the acts of a corporation as a whole entity.

This amendment to the ICC competence extends existing notions of a 'natural person' and thereby demonstrates a willingness to lift the corporate vale on directors of corporations. In addition, the attaching of criminal responsibility to a 'fictional person' broadens the remit of the ICC to include the prosecution of corporations such as Monsanto.

A legal reality, is that the expanded notion of corporate criminal responsibility and the ICC's proposed jurisdiction over fictional persons, is a necessary amendment to the *Rome Statute*, if there is to be any real likelihood of a successful criminal prosecution. This is because without the ability to subpoena individuals or go through legal discovery, there is no way to pin particular corporate decisions to individual managers within Monsanto.

Individual criminal responsibility on the other hand, tends to be limited to managers or other superior officers, for example through the command

²³³ Verrydt, L., 'Corporate Involvement in International Crimes: An Analysis of the Hypothetical Extension of the International Criminal Court's Mandate to Include Legal Persons', in D. Brodowski et al. (eds), *Regulating Corporate Criminal Liability* (2014) 273, at 282.

²³⁴ Zerk, J., *Corporate Liability for Gross Human Rights Abuses: Towards a Fairer and More Effective System of Domestic Law Remedies: A Report Prepared for the Office of the UN High Commissioner for Human Rights* (2013), at 31. 'Currently, article 25 of the Rome Statute limits the Court's competence to natural persons.' See also Verrydt, L. Verrydt, 'Corporate Involvement in International Crimes: An Analysis of the Hypothetical Extension of the International Criminal Court's Mandate to Include Legal Persons', in D. Brodowski et al. (eds) *Regulating Corporate Criminal Liability* (2014) 273 at 281.

²³⁵ This accords with Polly Higgins position see *Eradicating Ecocide, Model Law: Amendments to the Rome Statute of the International Criminal Court on the Crime of Ecocide: Article 8 ter: Crime of Ecocide* (2015), available online at <http://eradicatingecocide.com/the-law/model-law/>

responsibility doctrine of the Rome Statute. Art. 28(b) *Rome Statute* states that in certain circumstances, 'a [non-military] superior shall be criminally responsible for crimes within the jurisdiction of the Court committed by subordinates under his or her effective authority and control, as a result of his or her failure to exercise control properly over such subordinates'. There is considerable precedent in international criminal law for the prosecution of Civilian leaders.²³⁶

Conclusion; Monsanto can be held criminally liable as a corporation or alternatively its individual directors can be held criminally responsible, based on their superior position of control with the organisation.

9.3.4 Superior Responsibility

For the purposes of Article 25 (1)(B)(i) and (B)(ii), a person in a position of superior responsibility shall only be held responsible if he or she fails to take all necessary measures within his or her power to prevent or to stop the commission of the crime of ecocide by persons under his or her direct authority, or to submit the matter to the competent authorities for investigation.

For purposes of model law the Court's jurisdiction over persons may include one, or more than one, natural or fictional persons and any combination of natural and fictional persons. A person who holds the position of director, partner, majority shareholder, officer, leader, is understood to be in a position of superior responsibility, within an organization, making that person responsible for offences committed by persons under his or her direct authority

Where a person of superior responsibility is convicted of an offense by reason of his or her position of superior responsibility, as a consequence of the conviction, the organization to which he or she belongs may be held jointly responsible for the actions of the person with the superior responsibility.

No provision in this Statute relating to individual criminal responsibility shall affect the responsibility of States under international law

²³⁵ *Hadzihasanovic and Kubura* (IT-01-47-T), Trial Chamber, 15 March 2006, *Krnjelac* (IT-97-25-A), Appeals Chamber, 17 September 2003, Judgment, *Delalic and others* (IT-96-21-A), Appeals Chamber, 20 February 2001 Judgment, *Blaskic* (IT-95-14-T), Trial Chamber, 3 March 2000, Judgment *Dokmanovic* (IT-95-13a) See also A. Eser, 'Individual Criminal Responsibility', in A. Cassese, P. Gaeta, and J.R.W.D. Jones (eds), *The Rome Statute of the International Criminal Court: A Commentary*, Vol. I (Oxford: Oxford University Press, 2002), 767-822.

Article 33 of *Rome Statute of International Criminal Court*, titled "Superior orders and prescription of law", states: 1. The fact that a crime within the jurisdiction of the Court has been committed by a person pursuant to an order of a Government or of a superior, whether military or civilian, shall not relieve that person of criminal responsibility unless:

(a) The person was under a legal obligation to obey orders of the Government or the superior in question;
 (b) The person did not know that the order was unlawful; and
 (c) The order was not manifestly unlawful.

2. For the purposes of this article, orders to commit genocide or crimes against humanity are manifestly unlawful.

9.3.5 Complicity

During his mandate as Special Representative of the Secretary-General on the issue of human rights and transnational corporations and other business enterprises, Professor John Ruggie developed a human rights framework and due diligence standards to determine the responsibilities of corporations.²³⁷ While these developments demonstrate concern for the dangers of corporate complicity, these guidelines do not give rise to legally enforceable obligations.²³⁸

In an attempt to achieve legal accountability, concerned parties and organizations are increasingly suing corporations for their role in human Rights violations committed by regimes, such as in the U.S. case of *Khulumani v. Barclay Nat'l Bank Ltd*²³⁹ where the judge determined that a corporation could be liable for mere complicity in governmental violations of international law.

Corporate complicity is established in human rights law. In a Report prepared for the Office of the UN High Commissioner for Human Rights it is stated that:

*'although business enterprises may not be the primary ... abusers, they should nevertheless be held legally responsible ... [if] they assisted or facilitated the abuse in some material way.'*²⁴⁰

On this point the U.N., Guiding Principles on Business and Human Rights states that

²³⁷ U.N. Special Representative of the Secretary General on the Issue of Human Rights and Transnational Corp. and Other Bus. Enters., Guiding Principles on Business and Human Rights: Implementing the United Nations "Protect, Respect and Remedy" Framework, Human Rights Council, A/HRC/17/31 (Mar. 21, 2011) (by John Ruggie). The guiding principles were adopted by the UN Human Rights Council in June 2011

²³⁶ OECD Guidelines for Multinational Enterprises (2008); U.N. Global Compact, The Ten Principles, available at

<http://www.unglobalcompact.org/AboutTheGC/TheTenPrinciples/index.html>; Draft Norms on the Responsibilities of Transnational Corp. and Other Bus. Enters. with Regard to Human Rights, Comm'n on Human Rights, U.N. Doc. E/CN.4/Sub.2/2003/12 (2003). See also Int'l Comm'n of Jurists, Report of the Expert Legal Panel on Corporate Complicity in International Crimes, Vol. 3: Civil Remedies (2008), available at

http://www.icj.org/default.asp?nodeID=349&sessID=&langage=1&myPage=Legal_Documentation&id=22851.

²³⁷ *Khulumani v. Barclay Nat'l Bank Ltd.*, 504 F.3d 254, 281-82 (2d Cir. 2007) more examples Litigation under the Alien Torts Act is increasing in US Courts. See, e.g., *In re "Agent Orange" Product Liability Litigation*, 373 F. Supp. 2d 7 (E.D.N.Y. 2005); *Presbyterian Church of Sudan v. Talisman Energy, Inc.*, 244 F. Supp. 2d 289 (S.D.N.Y. 2003); *Wiwa v. Royal Dutch Petroleum Co.*, No. 96 CIV. 8386 (KMW), 2002 WL 319887 (S.D.N.Y. Feb. 28, 2002); *Doe v. Unocal Corp.*, 395 F.3d 932 (9th Cir. 2002); *Doe v. Unocal Corp.*, 395 F.3d 978 (9th Cir. 2003).

²⁴⁰ Zerk, J., *Corporate Liability for Gross Human Rights Abuses: Towards a Fairer and More Effective System of Domestic Law Remedies: A Report Prepared for the Office of the UN High Commissioner for Human Rights* (2013), at 31.

*'The weight of international criminal law jurisprudence indicates that the relevant standard for aiding and abetting is knowingly providing practical assistance or encouragement that has a substantial effect on the commission of a crime.'*²⁴¹

Liability for such complicity on the part of individuals is already established in international criminal law,²⁴² and can include liability 'even where there is no shared purpose to commit that crime.'²⁴³ Under the *Rome Statute* there is a body of case law that supports the aiding and abetting or otherwise giving practical assistance to the commission of a crime. This is an established principle under international criminal law.

Criminal culpability includes complicity (aiding and abetting) an act of Ecocide.

9.3.5 Superior orders and prescription of law

In cases involving the violation of Article 5(e), it shall not be a defence for any person charged with a violation of the law of ecocide that their infringing acts were, at the time of occurrence, approved, sanctioned, or authorized in any way by an existing governmental law or regulation in either the jurisdiction where the acts occurred or where the effects of the ecocide were manifested.

For the purposes of the model law, orders to commit genocide or crimes against humanity or the crime of ecocide are manifestly unlawful.

9.3.6 mental element or mens rea

There shall be no mental state element for the crime of ecocide pursuant to Article 8 ter (2).

Under model Ecocide law, knowledge and intent are not required for the crime to be constituted but can be referred to for sentencing purposes. The crime of ecocide is a crime of strict liability. However, this does not mean that the Tribunal should not pay regard to the defendant company's state of mind.

Whilst knowledge and intent are not an essential element of the crime of ecocide it is however a relevant matter in sentencing. For determining appropriate sentences or reparations under Articles 75 and 77, the mental states of intentionality, negligence, knowingness, or unknowingness shall be considered as aggravating or mitigating factors. For purposes of sentencing 'negligence' includes the failure to take reasonable steps to

²⁴¹ U.N., Guiding Principles on Business and Human Rights: Implementing the United Nations 'Protect, Respect and Remedy' Framework, UN Doc. HR/PUB/11/04, 16 June 2011, at 19.

²³⁸ Art. 25(3)(c)-(d) Rome Statute . A. Clapham, 'Extending International Criminal Law Beyond the Individual to Corporations and Armed Opposition Groups', 6 *Journal of International Criminal Justice* (2008) 899, at 908.

²⁴³ *Ibid.* 909.

investigate, identify, or prevent the potentially ecocidal consequences of the alleged conduct. This reflects a long legal tradition, certainly in the UK of not requiring *mens rea* for certain types of offences especially pollution offences.

The effectiveness of Ecocide law is that it is free of the restrictions of criminal intent. Conversely the requirement of a mental element has the potential of rendering the legislation ineffective. To date, the civil standard of negligence (knew or ought to have know) has not proved to be effective in environmental cases

Features that highlight why an Ecocide event occurs such as neglect, wilful blindness to risk or indeed intent, do not determine the commission of the offence but play pivotal role in the determination of the sentence.

There are of course proponents of the alternative view who argue that; is important for the effectiveness of the ecocide provision to capture not only the *actus reus* standard of criminal law, but also negligence, reasonable foreseeability, wilful blindness, carelessness and objective certainty standards which animate tort and civil liability.

Other legal commentators argue that; central to the definition of Ecocide is the requirement of a *significant harm* event (ie more than a mere violation). It is this threshold that warrants its inclusion in the *Rome Statute*. Some scholars argue that the type of criminal action that gives rise to international criminal responsibility is deliberate action committed with intent (criminal mind). Professor Freeland argues that the requirement of *mens rea*, as an essential element of the crime of Ecocide, follows the normative standards encapsulated in of the *Rome Statute*.²⁴⁴

The Tribunal does not need to deliberate on this legal issue because for the purposes of the model law a mental element has not been proscribed.

9.3.7 “causes”

For the purpose of paragraph 1, “causes” means to be fully or partially responsible, by means of an action or a failure to act, wheresoever such action or failure to act may have occurred and without consideration of the state of mind of the person responsible.

From a comparative criminal law perspective the requirement that an act or omission must *cause* a relevant harm, is universal. *Causality* is also a

²⁴⁴ Freeland, S. (2005) “Crimes against the Environment --- A Role for the International Criminal Court?” in Alberto Costi and Yves---Louis Sage (eds), *Droit de l'Environnement dans le Pacifique: Problématiques et Perspectives Croisées/Environmental Law in the Pacific: International and Comparative Perspectives 2005* New Zealand Association for Comparative Law/Association de Législation Comparée des Pays du Pacifique, RJP Hors Série no V, Wellington, 335 Professor Steven Freeland reminds us, the Rome Statute (in force since 2002) “does not deal with acts that constitute a ‘mere’ violation of the over 200 International Environmental Agreements (IEAs) that exist: nor a breach of the domestic legislation in various jurisdictions that regulate the environment.” Freeland states that an environmental crime potentially giving rise to international criminal responsibility could be regarded as “a deliberate action committed with intent to cause significant harm to the environment, including ecological, biological and natural resource systems, in order to promote a particular military, strategic or other aim, and which does in fact cause such damage”

typical requirement of international criminal law²⁴⁵ and is generally perceived as necessary to justly find liability. This element of causality and typical requirement of criminal law²⁴⁶ needs to be evidenced. That is the Tribunal would need to be satisfied that the acts/omissions, that form the basis of the charge, can be directly linked to the relevant harm.

Although not made explicit, it is possible that the definition extends to also prohibit acts or omissions that ‘may be expected to cause’ harm, introducing a forward-looking causal liability. This might be import through the international law concept of the precautionary principle. It is not without precedent in international law. For example, in the provision of the Rome Statute Art 8 war crime involves ‘[i]ntentionally launching an attack in the knowledge that such attack will cause’ the relevant harm,²⁴⁷ which can be interpreted as a form of future-looking causal liability.

Scholars in International Environmental Law and proponents of ecocide have argued that the precautionary principle, which ‘*provides that, where there are threats of serious or irreversible environmental damage, lack of scientific certainty should not mean the postponing of measures to prevent environmental degradation,*’²⁴⁸ should allow for liability to ‘*arise from knowledge or failure to realize ... that the act or omission ... would produce its immediate effects.*’²⁴⁹

9.3.8 “significant damage”

For the purpose of paragraph 1(a), “significant damage” means the introduction of or the removal of a material substance or a quantity of energy, as defined in paragraph 10.3.1.13 and 10.3.1.14 below, to an extent that exceeds planetary boundaries (see 10.3. 15, or the violation of any international treaty covering the global commons.

For the purpose of paragraph 1(b), “significant damage” means *elimination, obstruction, or reduction to an extent that undermines, or creates an increased risk of undermining, the continuing survival or wellbeing of the population.*

Significant damage then is any interference (removal or introduction of material substance or energy) which or alters any part of the environment in a manner that destroys or depletes natural ecosystems or the biodiversity of ecosystems, (perturbs surface hydrology or groundwater resources, changes natural biogeochemical cycles, including greenhouse gas, nitrogen, or phosphorus balances, or releases chemicals or waste into the environment, including ozone-depleting chemicals and radioactive particles) which exceeds planetary limits and undermines, or creates an

²⁴⁵ Art. 8(2)(b)(x) *Rome Statute*

²⁴⁶ For example, it is found throughout the Rome Statute. E.g., Art. 8(2)(b)(x) *Rome Statute*.

²⁴⁷ Art. 8(2)(b)(iv) *Rome Statute*

²⁴⁸ M. A. Gray, ‘The International Crime of Ecocide’, 26 *California Western International Law Journal* (1996) 215, at 218.

²⁴⁹ *Ibid* 219.

increased risk of undermining, the continuing survival or wellbeing of the population.

9.3.9 “durable damage”

For the purpose of Paragraph 1, “durable damage” means the persistence of the significant damage, or of the consequential environmental effects arising from the significant damage, or of an increased risk of consequential environmental effects arising from the significant damages, on the date one year following the initial introduction or removal as determined by the United Nations Environmental Programme, or other internationally recognized institutions specialising in global environmental monitoring science. This will require co-ordination with a Global Commons Trusteeship Commission within the UNEP, or similar institutions.

A legal qualification of damage for the crime of ecocide is durability. A “durable damage” is defined as;

- a) the persistence of the significant damage, or
- b) the consequential environmental effects arising from the significant damage, or
- c) an increased risk of consequential environmental effects arising from the significant damage.

Key factors here are the persistence of the damage or its apparently continuing ecological consequence.

This Tribunal should have regard to the continuing nature of the harm caused and attempt to estimate the enduring ecological consequences based on existing indicators of damage.

9.3.10 “any part or system of the global commons”

For the purpose of Paragraph 1(a), “any part or system of the global commons” means:

- (a) the oceans and seas that extend beyond national borders or are completely external to national borders, and the marine chemistry within these areas;
- (b) the atmosphere and atmospheric chemistry over non territorial waters and land masses;
- (c) the seabeds beyond territorial waters;
- (d) the Arctic;
- (e) the Antarctic;
- (f) rivers that cross international borders;
- (g) species migrations that cross international borders or cross other geographical areas defined in this Paragraph (6) as being part of the global commons;
- (h) space beyond the Earth’s atmosphere;
- (i) biogeochemical cycles that cross national borders including but not limited to:

- (i) the Nitrogen cycle,
- (ii) the Carbon cycle,
- (iii) the Mercury cycle,
- (iv) the Sulfur cycle,
- (iv) the Chlorine cycle,
- (v) the Oxygen cycle,
- (vii) the Phosphorous cycle,
- (viii) the Potassium cycle,
- (ix) the Hydrogen cycle,
- (x) the Hydrologic cycle;

(j) natural resource reserves that extend beyond national borders or are completely external to national borders;

(k) ecosystem functions provided across national borders or completely beyond national borders;

(l) gene pools of transnational animal and plant species;

(m) biodiversity within any of the geographical areas defined in this Paragraph (6) as being part of the global commons.

Thus international law identifies four global commons namely: the High Seas, the Atmosphere, Antarctica and, Outer Space, these concern goods or services with two characteristics: “no competing ownership; consumption enjoyment of a good by one individual does not preclude its consumption /enjoyment by another individual; no-one is excluded from the enjoyment of this good which is available to all”.²⁵⁰

²⁵⁰ Gabas, J-J and P. Hugon, Les biens publics mondiaux et la coopération internationale , L'économie politique 4/2001 (no. 12), p.19.

9.3.11 “ecosystem function”

- a) What is the legal definition of an Ecosystem?
- b) How do we evaluate its level of functioning?

(a) *What is the legal definition of an Ecosystem?*

An ecosystem is generally described by science as

‘a biological community of interdependent plants animals and microorganisms that occur in a specific place associated with particular soils, temperatures and disturbance patterns and the physical and chemical factors that make up a community’s abiotic, nonliving environment’²⁵¹

The concept of ‘ecosystem’ is a scientific construct that has profoundly shaped international law in relation to biodiversity conservation, and the primary object of protecting humans from immediate and long term health risks associated with loss of ecosystem functioning and services.

Protection for ecosystems in international Environmental law has evolved through treaties and become embedded in our consciousness as a science based ethical imperative.²⁵² It has as its aim the progression of a number of objectives including:

- (1) prevention of health risks from the uncontrolled application of technology across national borders,
- (2) prevention of degradation to global commons,
- (3) protection of natural systems from adverse impacts of human modification
- (4) moderation of the exploitation of our ‘life support system’.

This new awareness of the environment as a living thing fundamentally alters the role of environmental law away from seeing our world as simply a store house of commodities to an interdependent delicately balanced ‘web of life’.²⁵³

²⁵¹ Trarlock D., in D Brodansky, J Brunnee and E Hay (eds) *Oxford Handbook of International Environmental Law* (2005) Oxford Press, p576

²⁵² *Ibid*, p575.o

²⁵³ This is the modern contribution to international environmental law that has revolutionised our conceptual and legal approach to environmental management see RNL Andrews *Managing the Environment, Managing Ourselves; A History of American Environmental Policy* New Haven, Yale University Press (1999) at 202.

Notwithstanding that an ecosystem is an artificial construct it is nevertheless capable of being evaluated.

In 2005 the first *United Nations Millennium Ecosystem Assessment* evaluated 24 ecological services and found that 15 were in decline and 5 more were stable but threatened, and linked this degradation to serious long term effects on human wellbeing.²⁵⁴

As a consequence of ecosystems being understood as an undifferentiated component of a larger terrestrial and aquatic area it is difficult to attach a substantive legal meaning. In addition functional impairment is difficult to fit within conventional legal notions of damage or injury that would normally give rise to state responsibility²⁵⁵ A 'healthy ecosystem has been proposed as a normative standard but this is simply a metaphor which is too imprecise to be of assistance.²⁵⁶

(b) *How do we evaluate its level of functioning?*

For the purpose of paragraphs 1(b), "ecosystem function" means a benefit obtained by humans from the environment, including but not limited to; (a) supporting (b) provisioning c) regulating and (d) cultural functions.

The Millennium Ecosystem Assessment groups these services into a fourfold classification:

- i. **provisioning services:** products obtained from ecosystems (food, fibre, fuel, natural medicines); nutritious food, habitat, raw materials, biodiversity and genetic resources, minerals, water for irrigation, medicinal resources, and energy.
- ii. **regulating services:** benefits obtained from regulation of ecosystems, including: climate regulation; natural hazard regulation: waste decomposition, air and water purification, pest and disease controls.
- iii. **cultural services:** non-material services obtained through spiritual enrichment, artistic inspiration; recreation; cognitive development; psychological repair, recreational experiences, scientific knowledge, and aesthetic pleasure.
- iv. **supporting services:** services that are necessary for the production of other ecosystem functions, such as soil formation, photosynthesis; nutrient and elemental

²⁵⁴ Trarlock D., in D Brodansky, J Brunnee and E Hay (eds) *Oxford Handbook of International Environmental Law* (2005) citing the United Nations Environment Programme (UNEP) 'Living Beyond our Means: Natural Assets and Human Well Being' (2005)

²⁵⁵ This is because subtle functional loss rarely poses immediate threat to human health or life

²⁵⁶ Trarlock D., in D Brodansky, J Brunnee and E Hay (eds) *Oxford Handbook of International Environmental Law* (2005) Oxford Press, p580.

recycling, primary production , clean air; clean water and soil formation.²⁵⁷

Essentially, the environment provides important resources and processes that benefit humankind: these are referred to collectively as ‘ecosystem services’, and there is an increasing focus on them to inform environmental management efforts around the world.²⁵⁸

*Ecology provides insight into the functioning and conditions of an ecosystem. A fine fully functional ecosystem in less perturbed conditions can yield numerous services so critical for mankind these services sustain and enrich human well-being....multiple services derived from ecosystems like freshwater, forest, mountain, cultivated land are integral parts of human well-being.*²⁵⁹

A significant or durable damage that impacts upon an ecosystem function - will of necessity result in an elimination, obstruction, or reduction of the functioning of that ecosystem - to such an extent that it undermines or creates an increased risk of undermining, the continuing survival or welfare of the population that rely upon those services. That is to say, there is no requirement to prove that the ecosystem service has in fact been damaged *per se*, only that the significant or durable damage caused undermined the survival or welfare of the population that rely upon a functioning ecosystem. The focus then is on the anthropocentric victim impact of the alleged offending.

The tribunal’s line of enquiry; is to establish whether substantial or durable destruction of or loss of ecosystem functions of a given territory has occurred, to such an extent that the peaceful enjoyment by inhabitant has, or will be, severely diminished. Through the testimony of witnesses the Tribunal can verify if the multiple services derived from a functioning ecosystem have been diminished. Can the ecosystem provide food/fuel (food, habitat, raw materials, biodiversity and genetic resources, minerals)? Can the ecosystem regulate its functioning (air/water purification, waste decomposition, pest and disease controls)? Can the ecosystem support cultural practices/lifestyle, recreational experiences, scientific knowledge, and aesthetic pleasure? Can the ecosystem support/regenerate itself (soil formation, photosynthesis and nutrient cycling, primary production)?

The resilience, or the ability, of an ecosystem to bounce back to its original position depend upon the degree and intensity of impact. The impact to an ecosystem itself can be difficult to measure especially if its function and condition as changed incrementally. However for the purposes of this element of the charge, we are interested in evaluating the dynamics of

²⁵⁷ Millennium Ecosystem Assessment, Ecosystems and human well-being (Washington DC, 2001).

²⁵⁸ Paul Ferraro, ‘The future of payments for environmental services’, *Conservation Biology* 25: 6, Nov. 2011, pp. 1134–8.

²⁵⁹ Kumar, P. and S Reddy, Ecology and Human Well-being Sage Publications, New Delhi (2007) pxx.

nature and the capacity to continue to function and service human population when ‘perturbed’ by interactions of an exploitative nature.

In order to answer this question the Tribunal will need to explore the thresholds and irreversible nature of diminished ecological functioning from a trans-disciplinary or methodological pluralist standpoint.

All of these services may be damaged or compromised, either temporarily or permanently, with a significant cost to humankind, but this cost is difficult to quantify²⁶⁰

The capacity of an ecosystem to provide habitat and grow nutritious food, to maintain a biologically diverse flora and fauna, retain water for irrigation, purify the air and decompose waste products are all relevant consideration. Even more abstract is the capacity for the ecosystem to perform social, cultural and spiritual service, to sustain in not only the physical sense but in all the socially harmonious ways that are integral to human well-being.

The evaluations that the IMT is required to make go beyond mere ecological resource management and require an assessment of the individual actions/omissions of the Defendant company, in order to decide whether they have brought about, and are therefore criminally culpable, of having significantly and durably and to a great extent and magnitude, damaged or degraded the resilience of the interlinked systems of humans and the ecological functions upon which they rely.

In order to answer this question with any degree of certainty the Tribunal will need to apply a cross disciplinary approach and seek guidance from the scientific community.

The work of Johan Rockström²⁶¹ and colleagues has highlighted nine planetary ‘systems’ integral to the functioning of the global environment and the survival of humanity, and have evaluated the thresholds beyond which the ecosystem systems become dangerously unstable.²⁶²

This tribunal, in order to investigate environmental damage, requires sufficient evidence of environmental impacts. In order to approach this task a framework for quantification of impacts needs to be adopted. Quantification is difficult in ecosystems, which are complex adaptive systems and therefore defy easy explanation and prediction.²⁶³ However in

²⁶⁰ Francis R.A., and K. Krishnamurthy ‘Human Conflict and Ecosystem Services: finding the environmental price of warfare’ *International Affairs*, vol 90 4 (2014) 853 -869 at 855.

²⁶¹ Johan Rockström, Will Steffen, Kevin Noone, Asa Persson, Stuart F. Chapin III, Eric F. Lambin, Timothy M. Lenton, Marten Scheffer, Carl Folke and Hans Joachim Schellnhuber, ‘A safe operating space for humanity’, *Nature* 461: 7263, Sept. 2009, pp. 472–5.

²⁶² Francis R.A., and K. Krishnamurthy ‘Human Conflict and Ecosystem Services: finding the environmental price of warfare’ *International Affairs*, vol 90 4 (2014) 853 -869 at 854. Three systems have already exceeded their thresholds: biodiversity loss, interruption of the nitrogen cycle, and climate change. Two further systems remain to be quantified (atmospheric aerosol loading and chemical pollution), while five systems (phosphorus cycle, stratospheric ozone depletion, ocean acidification, global freshwater use and change in land use) have not yet crossed their thresholds.

²⁶³ Complex adaptive systems are characterized by (1) complex physical and biological structures that are nested over space and time; (2) self-organized patterns and processes; (3) dynamic flows of

recent years there have been an increased interest in quantifying the services provided by ecosystems, nevertheless, assessing the physical, cultural and social factors of ecosystem services loss, remains ‘an art rather than a science’.²⁶⁴

*The environment is nebulous and services provided by ecosystems are rarely understood well enough to be quantified— particularly for those communities that are most vulnerable to the impacts of warfare. This in turn means that it is often exceedingly difficult to quantify how a change in ecosystem condition or function will translate into changes in the ecosystem services that are provided.*²⁶⁵

This is amplified by the fact that the Tribunal will not have a pre – disturbance baseline (ie it will not know what the baseline condition of the eco-system service prior to Monsanto’s acts/omissions). This makes it difficult to apply a ‘*but for*’ test. Even when this date does exist it is at best a mediocre quality²⁶⁶

So to, the attribution of impacts directly to the defendant’s operations and the ability to separate out the effects of other factors, such as the extremes of weather, makes it difficult to attribute culpability proportionately.²⁶⁷ Perhaps the safer course is to decide whether the defendant’s act/omission’s exacerbated the damage to the ecosystem services as opposed to being wholly responsible for the damage that has occurred.

Due to this complexity, uncertainties and controversies inherent in the enterprise, assessment of ecosystem services will inevitably depend on expert opinion.

An appropriate approach to determining impacts and responses is that of *post -normal science* developed by Silvio O. Funtowicz and Jerome R. Ravetz.²⁶⁸

Post-normal science is a method of approaching scientific enquiry that explicitly encourages the integration of a

matter, energy and information; (4) change in system structure/organization/configuration and individual components over time (e.g. due to processes of succession and natural selection); and (5) non-linearity in patterns and processes, including the existence of thresholds and feedbacks.

²⁶⁴ Asit K. Biswas, ‘Scientific assessment of the long-term environmental consequences of war’, in Jay E. Austin Carl E. Bruch, eds, *The environmental consequences of war* (Cambridge: Cambridge University Press, 2010), p. 310.

²⁶⁵ Quote from Francis R.A., and K. Krishnamurthy ‘Human Conflict and Ecosystem Services: finding the environmental price of warfare’ *International Affairs*, vol 90 4 (2014) 853 -869 at 862. See also Unai Pascual, Roldan Muradian, Luis Rodriguez and Anantha Duraippah, ‘Exploring the links between equity and efficiency in payments for environmental services: a conceptual approach’, *Ecological Economics* 69: 6, April 2010, pp. 1237–44.

²⁶⁶ Frame B and Judy Brown, ‘Developing post-normal technologies for sustainability’, *Ecological Economics* 65: 2, April 2008, pp. 225–41; Cf. FAO, ‘Conflict, agriculture and food security’, in *The state of food and agriculture 2000* (Rome, 2001).

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²⁶⁸ Developed by Silvio O. Funtowicz and Jerome R. Ravetz, ‘Science for the post-normal age’, *Futures* 25: 7, Sept. 1993, pp. 739–55.

wide range of stakeholders beyond the traditional remit of the 'scientific expert', as there are several forms of knowledge that may help in addressing large, complex and uncertain issues that need urgent attention and that the usual forms of scientific enquiry may not be able to address in isolation.

Essentially this approach gather information from multiple sources from an 'extended peer community', with different expertise, knowledge and perceptions relevant to the ecosystem service being assessed. This would involve striking a balance between *external expertise* (offering empirical knowledge of ecological or environmental systems, methods of survey and analysis, and understanding of legislation, policy and restorative action) and *internal expertise* that might come from local ecological knowledge (ie changes to hydrology, soil moisture, agricultural systems)²⁶⁹

Post-normal thinking has been applied to issues such as biological conservation,²⁷⁰ climate change,²⁷¹ and sustainable development.²⁷²

Provided the Tribunal can recognise that there is no single 'right' answer and can arrive at an evidence based determination, the post-normal approach is consequently very suitable for examining impacts on ecological services.

Provided that the 'extended peer community' includes a representative selection of stakeholders the findings of the Tribunal can make a very real contribution to understanding and evaluating the impact of the Defendant's conduct upon an ecosystem services, and the communities that are vulnerable to its alteration.

9.3.12 "relied upon"

For the purpose of paragraph 1(b), "relied upon" means demonstrably necessary for the continuing survival or wellbeing of the current, or future, generations of the said population.

This inclusion of future generations incorporates the principle of intergenerational equity as a constraint upon the exploitation of resources, not to leave the reserves in a worse condition than when the utilization started. This is derived from an obligation to protect resources for future users and implies the operation of the precautionary principle.

²⁶⁹ Francis R.A., and K. Krishnamurthy 'Human Conflict and Ecosystem Services: finding the environmental price of warfare' *International Affairs*, vol 90 4 (2014) 853 -869 at 855.

²⁷⁰ Robert A. Francis and Michael K. Goodman, 'Post-normal science and the art of nature conservation', *Journal for Nature Conservation* 18: 2, May 2010, pp. 89-105.

²⁷¹ Turnpenny, J, Mavis Jones and Irene Lorenzoni, 'Where now for post-normal science? A critical review of its development, definitions, and uses', *Science, Technology and Human Values* 36: 3, May 2011, pp. 287-306.

²⁷² Frame B and Judy Brown, 'Developing post-normal technologies for sustainability', *Ecological Economics* 65: 2, April 2008, pp. 225-41.

For an example of reliance see the effect of Plan Colombia that resulted in the displacement of 75,000 farmers in one year of the aerial spraying. The human displacement was a direct result of the ecological harm caused by aerial spraying of Glyphosate herbicide, and the fact that the effected farmland could no longer support the agricultural activities upon which the farming population relied.²⁷³

9.3.13 “introduction or removal”

For the purpose of paragraph 3, an “introduction or removal” may occur inside or outside any national boundary.

9.3.14 “a material substance or a quantity of energy”

A “material substance or a quantity of energy” means any substance, biomass, life form, genetic material, element, chemical compound, mineral, or amount of energy.

As previously stated, the nature of damage required for the qualification of the crime of ecocide is the one that is a *significant* and *durable*. It is reasonable to conclude that a damage is significant, if it results in the modification of substance, biomass, life form, genetic material, element, chemical compound, mineral, or amount of energy, to the extent that exceeds planetary boundaries.

9.3.15 “exceeds planetary boundaries”

“exceeds planetary boundaries” means to interfere with or alter any part of the environment in a manner that *exceeds the limits* defined pursuant to paragraph 12 per se, or would exceed these defined limits if repeated *en masse* and at the same rate by the rest of humanity, including but not limited to interferences and alterations which could:

- i. Destroy or deplete natural ecosystems or the biodiversity of ecosystems;
- ii. Perturb surface hydrology or groundwater resources;
- iii. Change natural biogeochemical cycles, including greenhouse gas, nitrogen, or phosphorus balances;
- iv. Release chemicals or waste into the environment, including ozone depleting chemicals and radioactive particles;

The first thing to note is that the extent and magnitude of planetary boundaries (ie; a limit or quota which qualifies the crime of Ecocide) shall be determined by UNEP United Nations Environmental Programme, or

²⁷³ Ana-Maria Sanchez-Cuervo and Mitchell Aide, ‘Consequences of the armed conflict, forced human displacement, and land abandonment on forest cover change in Colombia: a multi-scaled analysis’, *Ecosystems* 16: 6, Sept. 2013, pp. 1052–70.

other internationally recognized institutions specializing in global environmental sustainability science.²⁷⁴

The ‘planetary boundaries’ standard is a reference to the global commons. These boundaries are exceeded when the relevant environmental harm (the alleged damage caused) interferes with or alters any part of the environment in a manner that destroys or depletes natural ecosystems or the biodiversity of ecosystems, perturbs surface hydrology or groundwater resources, changes natural biogeochemical cycles, including greenhouse gas, nitrogen, or phosphorus balances, or releases chemicals or waste into the environment, including ozone-depleting chemicals and radioactive particles. Or would exceed these defined limits if repeated *en masse*.

9.3.16 extent and magnitude

For the purpose of paragraph 3, the extent and magnitude of planetary boundaries shall be determined by the United Nations Environmental Programme, or other internationally recognized institutions specializing in global environmental sustainability science.²⁷⁵

This requires coordination with a Global Commons Trusteeship Commission within the UNEP or similar institution.

9.3.17 “increased risk”

For the purpose of paragraphs 4 and 5, “increased risk” shall be evaluated on the basis of both the amount of increase in probability of the consequential environmental effects as well as the severity of the possible consequential environmental effects, and said evaluation may be a factor in determining the applicable reparations and/or penalties imposed on the offender by the Court.²⁷⁶

Two recently enacted international law are crucial to exploring the risk with respect to plant genetic resources, they are (a) the *Cartagena Protocol on Biodiversity* and (b) the *International Treaty on Plant Genetic Resources for Food and Agriculture*.

The protocol came into force on September 11 2003²⁷⁷ and provides for a safe mandate for the safe transfer, handling and use of living modified organisms resulting from modern biotechnology that may have adverse effects on the conservation and sustainable use of biological diversity taking also into account risks to human health and specifically focusing on transboundary movement. (Article 1).

²⁷⁴ Ecocide Model Law Article 8ter (12) see Annexure II.

²⁷⁵ Immediately upon the adoption of this paragraph and quinquennially thereafter, the Assembly of States Parties shall make the necessary arrangements to obtain and make known to the public via all necessary channels the Schedule of Planetary Boundaries, which shall then become a part of this paragraph as if printed herein. Each Schedule shall include as many boundaries as then current scientific knowledge allows.

²⁷⁶ See Rome Statute, Articles 75 and 77.

²⁷⁷ Exactly 90 days after 50 signatories had ratified it.

All product intended for food or feed that are imported into a nation state must require risk assessment and written approval of the receiving country (art 11, 15 and 16), thus preserving state sovereignty, moreover illegal movement of GMO's can attract a financial penalty (Art 27 and 28). Thus we begin to see operational and enforcement mechanism written into international law.

The *Cartagena Protocol to the Convention on Biological Diversity* adopts the precautionary principle 15 of the *Rio Declaration* which provides: '*that where there is threat of significant reduction or loss of biodiversity, lack of full scientific certainty should not be used as a reason for postponing measures to avoid or minimi[z]e such threat*'. At Articles 1, 10 and 11 of the *Cartagena Protocol* States are encouraged to incorporate the precautionary principle into their national framework, thereby creating a sovereign right of States to take precaution when assessing the risks associated with the importation of GMOs.

The *Cartagena Protocol* has been strengthened by the ratification of the *International Treaty on Plant Genetic Resources for Food and Agriculture* that came into force on 29 June 2004. A major objective of this Treaty is to promote the '*conservation and sustainable use of plant genetics resources for food and agriculture*' (article 1) and aims to address acts of bio-piracy or bio-prospecting.²⁷⁸ Both the above laws aim to safeguard the autonomy of biodiversity by providing for mechanisms of risk assessment compliance, liability and penalty. In doing so, it is now illegal to distribute and trade in GM food products without the consent of the receiving State and extensive risk assessment. By implication there is now recognition in international law that there is a right to self-determination over food security of plant genetic resources and by extension biodiversity and that 'risk' is the determining factor.

The 'amount' and 'severity' of the risk of consequential environmental harm must be found to have been increased by the acts of the Defendant. In the case of Monsanto, the Tribunal would need to be satisfied that; whether by introducing

- (a) genetically modified organisms into the territory of a State in an unregulated fashion thereby contaminating and/ or reducing the plant biodiversity or
- (b) the intentional aerial spraying with herbicide defoliating agents of the territory of a state, thereby causing significant harm to the functioning and service of whole ecosystems

the defendant company's actions can be evaluated (ie amount and severity) with respect to the 'increased risk' of probable environmental harm. This

²⁷⁸ In R. White (ed) *Environmental Crime ; A reader* citing the work of Reece Walters chapter 23 'Crime Bio-agriculture and the exploitation of hunger' Willan Publishing 2009 at p.459

evaluation is then a factor in sentencing (ie reparations and penalty) imposed by the court.

9.3.18. Test: Threshold for environmental harm?

For some international scholars the threshold test for environmental impact must be 'widespread, long-term, or severe'.²⁷⁹ This language reflects Article 8(2)(b)(iv) of Rome Statute and is referred to as the triple cumulative standard.²⁸⁰ This standard in reality represents a very high threshold difficult to prove in many cases.

Notwithstanding that these words are used to define environmental damage in wartime, they are less useful in determining the basis of the crime of Ecocide. This is because of their high threshold ('widespread, long-term and severe damage'), these provisions have been of limited importance in practice.

It is therefore unclear as to whether the Tribunal would need to apply a threshold test to ecocide under the proposed law, and uncertain as to whether an environmental harm would need to be widespread, long lasting or severe.²⁸¹ A second uncertainty is; if a threshold test applies, whether the parameters are based on the disjunctive test, as already exists set out under the 1977 United Nations Environmental Modification Convention, which specifies the terms 'widespread', 'long-lasting' or 'severe'; or a proposal to make the test conjunctive, (ie; requiring all three conditions to be met).²⁸²

²⁷⁹ Eradicating Ecocide, *Model Law: Amendments to the Rome Statute of the International Criminal Court on the Crime of Ecocide: Article 8 ter: Crime of Ecocide* (2015), available online at: <http://eradicatingecocide.com/the-law/model-law/> (last visited 27 April 2016).

²⁸⁰ Francis R.A., and K. Krishnamurthy Human conflict and ecosystem service: finding the environmental price of war *International Affairs* 90 (2014) 853-869 at 859.

²⁸¹ This phrase has been adopted from Article 1 of the Convention on the Prohibition of Military or Any Other Hostile Use of Environmental Modification Techniques (ENMOD).

²⁸² Higgins, P, Short, D and South, N (2013) 'Protecting the Planet: A proposal for a law of ecocide, *Crime, Law and Social Change*, 59, No1.

PART X FACTUAL ALLEGATIONS

10.1 The facts

The following outline the facts relating to Monsanto past and present activities' that evidence adverse effects on environment and health. Under the ecocide law, an individual who causes a significant and durable damage to any part or system of the global commons, or to an ecological system relied upon by any human population or sub-population, is guilty of the crime of ecocide.

Presently Monsanto Company is a multinational agrochemical and agricultural biotechnology corporation, and a leading producer of genetically engineered seed and Roundup, a glyphosate based herbicide. Its past activities involved in the manufacture of agent orange, herbicide and defoliant used by the U.S. during the Vietnam war, and the polychlorinated Biphenyls (PCB).

The following facts outline the past and present activities of Monsanto that could be said to constitute an Ecocide, and have resulted in impacts that undermine, or create a risk of undermining the continuing survival or the wellbeing of an effected group or population of humans.

PRESENT ACTIVITIES

- 1) ***Aerial Spraying of Glyphosate via Plan Columbia;*** Monsanto has Aided and Abetted the Commission of Ecocide via the provision of a glyphosate based chemical to the US government for use in their program of aerial coca and poppy eradication in Colombia (Plan Colombia) between 2000-2015.
- 2) ***Genetic modification;*** Monsanto is criminally responsible for committing significant and durable damage to the environment as a direct result of its biotechnology activities. Specifically that Monsanto through its modification, use and or promotion of genetically modified/engineered patented seeds has impacted the health, wellbeing and food security of those populations that rely upon affected territories,
- 3) ***Genetic Contamination;*** Monsanto is criminally responsible for the significant and durable damage (genetic contamination) caused by release and cultivation of their genetically modified agricultural seeds, which has introduced widespread and irreversible risks and loss of biodiversity to effected ecosystems, upon which certain populations rely.
- 4) ***Agrochemical use;*** Monsanto is criminally responsible for the significant and durable effects of industrial scale use of agrochemical

1. PAST ACTIVITIES

2. **Agent Orange;** Monsanto Aided and Abetted the Commission of Ecocide via the provision of a herbicide/defoliant Agent Orange to the US government during the Vietnam War causing significant and durable damage to the transnational territories of Vietnam and Cambodia
3. **PCBs;** Monsanto exclusively manufactured and distributed a persistent organic pollutant PCB, between 1930-77 until it was banned.

10.2 PRESENT ACTIVITIES

10.2.1 Aerial use of Glyphosate - Plan Colombia

1. *Monsanto by its acts or omissions* has from December 2000 until May 2015,²⁸³ aided and abetted the United States and Colombian governments to conduct a program of aerial coca and poppy eradication in Colombia.
2. *Monsanto by its act or omissions* in 2000, aided and abetted the governments of Colombia and the United States to launch Plan Colombia,²⁸⁴ a program designed to destroy coca and poppy crops cultivated to produce cocaine and heroin.
3. *Monsanto by its acts or omissions* provided large quantities of a nonselective glyphosate, the use of which has resulted in indiscriminate destruction of forest and peasant farmlands. Aerial spraying is imprecise and severely damages agricultural crops in addition to its targets, coca and poppies.
4. *Monsanto by its acts or omissions* is complicit in a multimillion-dollar program which has repeated spraying of highly concentrated glyphosate and other toxic chemicals from airplanes.
5. *Monsanto by its acts or omissions* is complicit in the aerial spraying of concentrated Glyphosate that occurred consistently and widely, over one hundred thousand hectares every year from 2001-2015, which totals over

²⁸³ C. Cook and C. Ribando Seelke, *Colombia: Issues for Congress*, CRS Report for Congress (2008), at 20; W. Neuman, 'Defying U.S., Colombia Halts Aerial Spraying of Crops Used to Make Cocaine', *The New York Times* (14 May 2015), available online at: <http://www.nytimes.com/2015/05/15/world/americas/colombia-halts-us-backed-spraying-of-illegal-coca-crops.htm>

²⁸⁴ Plan Colombia, was a controversial 'counter-narcotics,' 'counter-terror' initiative that has been widely criticized for violating human rights and causing widespread environmental damage. The aim was to eradicate drug/cash crops that funded the Revolutionary Armed Forces of Columbia People's Army (Farc) sees J. S. Beittel, Cong. Research Serv., RL32250, *Colombia: Issues for Congress* (2011), available online at <http://fpc.state.gov/documents/organization/161359.pdf> at 24; C. Veillette, Cong. Research Serv., RL32774, *Plan Colombia: A Progress Report* (2005), available online at <https://www.fas.org/sgp/crs/row/RL32774.pdf>; B. March, *Going to Extremes: The U.S.-Funded Aerial Eradication Program in Colombia* (2004), available online at <http://www.lawg.org/storage/documents/going%20to%20extremes.pdf>

- 1.5 million sprayed hectares. A peak of 164,000 hectares were sprayed in 2006.²⁸⁵
6. *Monsanto by its acts and omission* has been complicit in the aerial spraying of an acreage of land that exceeds the definition of a standard of 'significant' damage as 'encompassing an area on the scale of several hundred square kilometres.'
 7. *Monsanto by its acts omission* is liable for aiding and abetting the governments of the United States and Columbia in committing ecocide because it can be linked to the production of at least a large percentage of the glyphosate herbicide used in the program, being the producer of specific commercial formulations namely; 'Roundup Ultra,' 'Roundup SL' and 'Roundup Export.'
 8. *Monsanto by its acts or omissions* provided large quantities of a nonselective glyphosate, (which damages or kills all plant life that it touches) thereby causing severe damage by harming biodiversity, agricultural ecosystems and habitats.
 9. *Monsanto by its act or omission* aided and abetted the governments of the United States and Columbia to indiscriminately²⁸⁶ spray hundreds of thousands of hectares with a glyphosate chemical mixture that harms human health and destroys legal crops in addition to the targeted drug crops.
 10. *Monsanto by its acts or omissions* is complicit in aerial herbicide spraying in Colombia which is an act of ecocide reminiscent of the use of Agent Orange in Vietnam.
 11. *Monsanto by its acts or omissions* is criminally responsible for the direct harm to the health of the populations that were directly spraying with herbicides including the acute symptoms suffered such as 'gastrointestinal disorders (e.g. severe bleeding, nausea, and vomiting), testicular inflammation, high fevers, dizziness, respiratory ailments, skin rashes, and severe eye irritation, and it may also have caused birth defects and miscarriages.'²⁸⁷

²⁸⁵ Office of National Drug Control Policy, *Coca in the Andes*, available online at <https://www.whitehouse.gov/ondcp/targeting-cocaine-at-the-source> see also S Branford and H. O'Shaughnessy, *Chemical Warfare in Colombia: The Costs of Coca Fumigation* (2005), at 3.

²⁸⁶ All farms were effected L. Haugaard, *Blunt Instrument: The United States' Punitive Fumigation Program in Colombia* (2003), available online at <http://www.lawg.org/our-publications/72/95>

²⁸⁷ A recent study of extensive administrative medical data found that 'exposure to [glyphosate] ... increases the number of medical consultations related to dermatological and respiratory-related illnesses and the number of miscarriages.' A. Camacho and D. Mejia, 'The Health Consequences of Aerial Spraying of Illicit Crops: The Case of Colombia', Center for Global Development (2015), available online at; <http://www.cgdev.org/sites/default/files/CGD-Working-Paper-408-Camacho-Mejia-Health-Consequences-Aerial-Spraying-Colombia.pdf> ; see also Earthjustice, *Aerial Herbicide Spraying Violates Human Rights of Peasants and Indigenous Communities in Colombia and Ecuador* (2002), available online at; <http://earthjustice.org/news/press/2002/aerial-herbicide-spraying-violates-human-rights-of-peasants-and-indigenous-communities-in-colombia-and-ecuador> - citing Written Statement of

12. *Monsanto by its acts or omission* is criminally responsible for durable harm placing effected population at risk for long-term health problems.
13. *Monsanto by its acts/omission* is liable for the collateral damage caused to 'vulnerable and irreplaceable' forest and habitat,²⁸⁸ nature reserves (such as regions of the Sierra Nevada de Santa Maria) belong to indigenous peoples,²⁸⁹ damage to crops, fish stocks and pastureland, upon which human populations rely.²⁹⁰
14. *Monsanto by its acts or omission* is complicit in the introduction of the glyphosate chemical mixture into the Columbian environment which harms human health, a loss of peasant farmers' livelihood, loss of essential ecosystem services and the killing of non-human inhabitants and thereby decreases biodiversity.²⁹¹
15. *Monsanto by its acts or omission* has caused the loss of livelihoods of populations effected. 'The spraying destroys a critical source of income for more than a hundred thousand poor Colombian farming families who rely on coca and opium poppy production to meet their basic needs. For a majority of those families, no long-term alternatives or short-term food aid is provided. There is also extensive damage to lawful crops and pastures. Consequently, farmers have been forced to leave their homes as the land they cultivate can no longer support them. Seventy-five thousand people were displaced in 2001 and 2002 alone due to aerial spraying.'²⁹²
16. *Monsanto by it acts and omissions* is complicit in the fall of toxic rain has for many years also fallen on people, animals, forests and water sources.

Earthjustice, Commission on Human Rights, Econ. & Soc. Council, U.N. Doc. E/CN.4/2002/NGO/36 (2002).

²⁸⁸ Washington Office on Latin America, *Chemical Reactions: Fumigation: Spreading Coca and Threatening Colombia's Ecological and Cultural Diversity* (2008), available online at <http://www.wola.org/sites/default/files/downloadable/Andes/Colombia/past/WOLA%20Chemical%20Reactions%20February%202008.pdf> '[m]any of the regions classified as vulnerable and irreplaceable are also areas with a strong presence of coca cultivation,' placing them at risk of destruction.

²⁸⁹ Branford and H. O'Shaughnessy, *Chemical Warfare in Colombia: The Costs of Coca Fumigation* (2005), at 71.

²⁹⁰ The Colombian government received over 6,500 complaints of collateral damage in just the first year of the program, and several independent parties verified widespread damage to crops, alternative development projects, fish stocks and pastureland. B. March, *Going to Extremes: The U.S.-Funded Aerial Eradication Program in Colombia* (2004), available online at <http://www.lawg.org/storage/documents/going%20to%20extremes.pdf> p.11-12. For example in La Hormiga, a public health department investigation found that 12,000 hectares of farmland had been sprayed, with over 300,000 animal deaths reported see S Branford and H. O'Shaughnessy, *Chemical Warfare in Colombia: The Costs of Coca Fumigation* (2005), at 88.

²⁹¹ The president of the World Wildlife Fund expressed concern about the '*potentially grave environmental impacts of ongoing aerial fumigation through Plan 'Colombia is among the richest countries for plants and animals on the planet'100 with 'more than 10% of the world's plant and animal species – including more birds (1800 species), more amphibians and more orchids than anywhere else.*' World Wildlife Fund, *Colombia* (2016), available online at http://www.wwf.org.uk/where_we_work/south_america/colombia_forest

²⁹² March, B., *Going to Extremes: The U.S.-Funded Aerial Eradication Program in Colombia* (2004), p 28 available online at <http://www.lawg.org/storage/documents/going%20to%20extremes.pdf> at 28.

17. *Monsanto's acts/omission* continued through 2014 and 2015, notwithstanding that the Colombia's Constitutional Court was presented with two technical reports about the environmental and public-health impacts of aerial spraying with glyphosate. The court was urged to take these impacts into account in final decisions on cases regarding spraying in Chocó and Putumayo.²⁹³
18. *Monsanto's acts/omission* continue to cause durable harm notwithstanding that in April 2015, the World Health Organization²⁹⁴ classified glyphosate as a substance probably carcinogenic to humans.²⁹⁵ On the basis of this decision, Colombia's Ministry of Health recommended suspension of spraying operations to the Ministry of Justice.

10.2.2 Genetic modification

1. *Monsanto by its acts or omissions* is criminally responsible for the promotion of genetically engineered seeds and related impacts on human health.
2. At all material times Monsanto has exercised ownership over the process of engineering seeds for the sole benefit of their biotechnology company.
3. *Monsanto by its acts or omissions* has caused environmental impacts by introducing genetically engineered seeds that have result in the contamination of GM-free genes, a loss of the biodiversity, the pollution of soil and water, and toxicity threat for living organisms.
4. *Monsanto by its acts or omissions* has caused the loss of genetic diversity and the disturbance of natural balance of ecosystem where Monsanto's GMO seeds have been cultivated thereby contravening the *Convention on Biological Diversity (CBD)* which promotes the conservation of genetic resources and the use of their components in a sustainable way.
5. *Monsanto by its acts or omissions* has taken away the rights of farmers to select, save, share and replant seeds.
6. *Monsanto by its acts or omissions* has severely diminished the efforts of indigenous farmers who have promoted seeds improvement over generations and developed an abundant variety of plant genetic resources. Monsanto's industrial farming model and actions in introducing genetically modified and patented seeds have reversed all initiatives of local farmers on plant variety enhancement.²⁹⁶

²⁹³²⁹³ The governor of Putumayo, one of the worst-affected regions of Colombia, claimed in 2001 that 'half of the area sprayed was planted with basic food crops instead of or in addition to coca.'

²⁹⁴ The finding of the WHO was by the International Agency for Research on Cancer

²⁹⁵ Guyton K.Z., et al., 'Carcinogenicity of Tetrachlorvinphos, Parathion, Malathion, Diazinon, and Glyphosate', 16 *Lancet Oncology* (2015) 490, at 491

²⁹⁶ According to Dorothy Du, the planting of GM crops contributes to an industrial farming model that has decreased crop varieties and reduced biodiversity. Dorothy Du, *Rethinking Risks: Should*

7. *Monsanto by its acts or omissions* has caused farmers to become dependent upon the use of pesticides to suppress the insects that GM transgenes are not resistant to thereby compelling farmers to use a broad spectrum of herbicides, such as Monsanto's Roundup, to eliminate all vegetation in the fields besides the herbicide-tolerant GM crops.²⁹⁷
8. *Monsanto by its acts or omissions* has cultivated an agrochemical market based upon an overreliance on biotechnological solutions to respond to problems of their own making.²⁹⁸
9. *Monsanto by its acts or omissions* has accelerated pest resistance and disturbed the natural balance of ecosystem and ecosystem services, promoting a destructive cycle that leads to the need for more pest and weed control, and an increased global market share for the purchase of pesticides and herbicides that they manufacture.²⁹⁹
10. *Monsanto by its acts or omissions* has advanced a model of industrial farming that is characterized by intensive agriculture using a monoculture approach that has caused the impoverishment of soil (in some cases dead soil) and reduction of soil biodiversity.
11. *Monsanto by its acts or omissions* has increased the vulnerability of crops to disease and pests, meaning that a single blight or pest could potentially decimate hundreds of thousands of acres of crops.³⁰⁰
12. *Monsanto by its acts or omissions* and as a direct result of its biotechnological and agrochemical activities, has created the conditions for accumulation of vector DNA in the soil microbiota,³⁰¹ which contaminates other unrelated species in the soil through horizontal transfer³⁰² leading to a cumulative loss of soil biodiversity and ultimately soil infertility especially in nutrient deficient conditions.³⁰³
13. *Monsanto by its acts or omissions* continues to disturb the balance of ecosystems that has led to the durable loss of the genetic and soil biodiversity which carries an enduring risk to present and future generations

Socioeconomic and Ethical Considerations be Incorporated into the Regulation of Genetically Modified Crops?, 26 *Harv. J. Law & Tec* 375, (2012).

²⁹⁷ Miguel A. Altieri, The Myth of Coexistence: Why Transgenic Crops Are Not Compatible with Agro-ecologically Based Systems of Production, 25 *BULL. OF SCI., TECH. & SOC'Y* 361, (2005).

²⁹⁸ glyphosate marketed as Roundup cannot be used on plants that have not been genetically modified to be tolerant to it, this is because it is a broad-spectrum herbicide, and would kill the plant.

²⁹⁹ *Ibid.*

³⁰⁰ Altieri, M.A., The Myth of Coexistence: Why Transgenic Crops Are Not Compatible with Agro-ecologically Based Systems of Production, 25 *Bull. of Science Technology. & Society* 361, 361 (2005).

³⁰¹ Suurkula, J., *Genetically Engineered Crops: A Threat to Soil Fertility*, PSRAST, Dec. 2010

<http://www.psrast.org/soilecolart.htm>,

³⁰² Horizontal gene transfer is the acquisition by an organism of genetic information by transfer from an organism that is not its parent and is typically a member of a different species.

³⁰³ Goodman, A.E., Marshall, K.C. & Hermansson, M., C in simulated and natural aquatic environments, *FEMS Microbiology Ecology*, 1994, Vol. 15, p.55-60)

who are interdependent and reliant upon the natural world, This durable damage is exacerbated over time and each repeated exposure.

14. *Monsanto by its acts or omissions* is directly liable for crops failure that have contributed to the loss of life or starvation in some communities and undermined or created a risk of undermining the continuing survival or wellbeing of affected populations
15. *Monsanto by its acts or omissions* genetically engineered seeds that have almost certainly resulted in the accidental pollution of GM-free gene, loss of the biodiversity, contamination of soil and water, and a toxicity threat for living organisms.

EXAMPLE

A factual example of Monsanto's acts/omissions is the active promotion of transgenic 'Bt' cotton in India which has directly caused environmental harm in India.³⁰⁴

Monsanto's promotion of Bt cotton can be linked with a significant reduction in crop yields³⁰⁵, such that Monsanto can be held to account for promoting an agricultural system that imposes substantial risk of failure for the human agricultural environment and has led to a significant number suicides of subsistence farmers.³⁰⁶

Bt cotton is so named because it expresses endotoxins from the *Bacillus thuringiensis* bacterium, making the plant resistant to certain pests.¹²² However the pests targeted by Bt technology does not pose a threat to Indian crops³⁰⁷

³⁰⁴ Note that Bakino Faso has also had a similar experience with Monsanto inferior cotton. The Inter professional Cotton Association of Burkina Faso has sought 8 million dollars from GM cotton failure.

³⁰⁵ One three-year study found that non-Bt cotton had 30 % higher yields and generated 60 % more profit than Monsanto's Bt cotton. See A. Qayum and K. Sakhari, 'Bt Cotton in Adhra Pradesh: A Three-Year Assessment', *Deccan Development Society* (2006) at 6. Bt cotton seeds are two to ten times more expensive than non-Bt seeds and require more water to achieve similarly high yields.

³⁰⁶ Center for *Human Rights and Global Justice*, *Every Thirty Minutes: Farmer Suicides, Human Rights, and the Agrarian Crisis in India* (2011), available online at <http://chrgj.org/wp-content/uploads/2012/10/Farmer-Suicides.pdf>

³⁰⁷ Gutierrez AP., *et al.*, 'Deconstructing Indian Cotton: Weather, Yields, and Suicides', 27 *Environmental Sciences Europe* (2015) 1, at 1. This 2015 study by scientists at the University of California, Berkeley made a key observation is that the main pest targeted by Bt technology does not naturally pose a threat to a majority of Indian cotton. (at p2)

Over a quarter of a million Indian farmers took their own lives from 1997-2012³⁰⁸ in what has been described as the ‘largest wave of recorded suicides in human history,’³⁰⁹ and acknowledged by Monsanto as ‘unacceptably frequent occurrence of farmer suicides in India’.³¹⁰ Although not the only cause of suicide the failure of Bt cotton crops has been described as a ‘major and proximate cause of farmer suicides in India’.³¹¹

10.2.3 Transgenic contamination

1. *Monsanto by its acts or omissions* is criminally responsible for the genetic contamination of whole ecosystems caused by the cultivation of genetically engineered seeds and related impacts on human health
2. *Monsanto by its acts or omissions* has committed Ecocide by promoting transgenic crops despite strong evidence of the dangers of genetic contamination.
3. *Monsanto by its acts or omissions* has caused harm to ecosystems by introducing widespread and irreversible risks, notably the development of ‘super weeds’ and consequent increases in pesticide use thereby reducing biodiversity, causing economic harm to farmers, and eliminating consumers’ options to maintain transgene-free environments.
4. *Monsanto by its acts or omissions* is responsible for inserting into an organism, a transgene that can spread easily through ecosystems via the natural processes of pollination (within a species), hybridization (between species), or the transport of whole organisms and seeds (e.g. by humans).³¹²

³⁰⁸ K. Nagaraj et al., ‘Farmers’ Suicides in India: Magnitudes, Trends, and Spatial Patterns, 1997-2012’, 4 *Review of Agrarian Studies* (2014) 53, at 55.

³⁰⁹ Center for Human Rights and Global Justice, *Every Thirty Minutes: Farmer Suicides, Human Rights, and the Agrarian Crisis in India* (2011), at p1.

³¹⁰ Monsanto, *Is Bt or GMO Cotton the Reason for Indian Farmer Suicides?* (2016), available online at <http://www.monsanto.com/newsviews/pages/india-farmer-suicides.aspx>

³¹¹ Nagaraj K., et al., ‘Farmers’ Suicides in India: Magnitudes, Trends, and Spatial Patterns, 1997-2012’, 4 *Review of Agrarian Studies* (2014) 53, at 55. According Gutierrez et al. ‘Deconstructing Indian Cotton: Weather, Yields, and Suicides’, 27 *Environmental Sciences Europe* (2015); ‘Suicides decrease with increasing farm size and yield but increase with the area under Bt cotton cultivation ... Farm size and yield are measures of poverty and risk, while the increase in Bt area is a surrogate for high costs of Bt technology adoption and continued use of insecticide.’ (at 11). See the comments of a prominent India environmentalist Vandana Shiva, who has repeatedly said over the past decade that Monsanto “suicide seeds” have triggered a genocide in rural areas of India Also Keith Kloor, “The GMO suicide myth”, 2014;

<https://blogs.discovermagazine.com/collideescape/files/2014/01/GMOsuicidemyth.pdf>,

³¹² Ryffel, G.U. ‘Transgene Flow: Facts, Speculations and Possible Countermeasures’, 5 *GM Crops & Food* (2014) 249, at 249.

5. *Monsanto by its acts or omissions* has caused spread of transgenes, which is irreversible, is a 'virtual certainty'.³¹³
6. *Monsanto by its acts or omissions* is causing harm to agricultural ecosystems through the development of 'super weeds' and the consequent increases in pesticide use. Super weeds proliferation is a 'major biosafety concern'.³¹⁴ Monsanto's Roundup is a non-selective herbicide which can confers significant economic and environmental benefits to large scale farmers. However, through genetic modification designed to increasing agricultural profits/ yields Monsanto has inadvertently altered the balance of nature and a super weeds which undermines the viability of these practices.
7. *Monsanto by its acts or omissions*, has introduced novel technology and exposed ecological environments to transgenic contamination that had imposed a broad set of ecological risks including;
 - i. creating new or more vigorous pests and pathogens;
 - ii. exacerbating the effects of existing pests through hybridization with related transgenic organisms;
 - iii. harm to non-target species
 - iv. disruption of biotic communities
 - v. irreparable loss or changes in species diversity or genetic diversity within species.³¹⁵
8. *Monsanto by its acts or omissions* has directly caused durable and irreparable' harm that will continue to contaminate agriculture and the environment indefinitely'³¹⁶ and cause significant disruption or harm to human life. Because the transgenic contamination caused by Monsanto is both permanent and uncontrollable, it constitutes a durable threat to individual choice and national sovereignty.
9. *Monsanto by its acts or omissions* has caused an indefinite alteration to the environment, which has caused the development of super weeds, and

³¹³ The GM Contamination Register recorded 396 incidents of contamination across 63 countries from 1997 through 2013. For confirmation that transgenic contamination is a 'certainty' see; Marvier and R. C. Van Acker, 'Can Crop Transgenes Be Kept on a Leash?', 3 *Frontiers in Ecology and the Environment* (2005) 93 at 94; see also, *Monsanto Co. v. Geertson Seed Farms*, 561 U.S. 139 (2010) (No. 09-475).

³¹⁴ Samuels, J 'Transgene Flow from Bt Brinjal: A Real Risk?', 31 *Trends in Biotechnology* (2013) 332, at 333-334, cited in B. Price and J. Cotter, 'The GM Contamination Register: A Review of Recorded Contamination Incidents Associated with Genetically Modified Organisms (GMOs), 1997-2013', 1 *International Journal of Food Contamination* (2014) , at 2.

³¹⁵ A. Bauer-Panskus *et al.*, 'Cultivation-Independent Establishment of Genetically Engineered Plants in Natural Populations: Current Evidence and Implications for EU Regulation', 25 *Environmental Sciences Europe* (2013) 1, at 5 (citing A. A. Snow *et al.*, 'ESA Report: Genetically Engineered Organisms and the Environment: Current Status and Recommendations', 15 *Ecological Applications* (2005) 377, at 377).

³¹⁶ The harms caused by Monsanto's transgene contamination were affirmed in the United States Supreme Court case *Monsanto Co. v. Geertson Seed Farms*, the Court's 'first ruling on genetically engineered crops'. In this case the court held that, 'genetic contamination is irreparable environmental harm. The contamination cannot be undone; it will destroy the crops of those farmers who do not sell genetically engineered alfalfa.' *Monsanto Co. v. Geertson Seed Farms*, 561 U.S. 139 (2010) (U.S.A.).

increase in pesticide use, and a decrease in biodiversity, to natural resources.

10. *Monsanto by its acts or omissions* has caused socio-economic harm to farmers by (1) violating the right to a transgene-free environment (2) barring access of farmers to organic and/or GM-free markets (3) by increasing input costs to farmers for additional pesticides.
11. *Monsanto by its acts or omissions* has caused genetic contamination of whole ecological and agricultural systems constituting significant harm to the environment upon which organic farmers rely for their livelihood.³¹⁷
12. *Monsanto's by its acts or omissions* and large-scale promotion of transgenic crops has inevitably imposed increased risks on the global gene pool and ecological environments.
13. *Monsanto's by its acts or omissions* has caused scientific alarm with respect to the ease and irreversibility of gene flow of transgenic contamination and the devastating consequence this continues to have upon genetic diversity.
14. *Monsanto by its acts or omission* has made frequent use of the courts to defend its patents, particularly in the area of agricultural biotechnology. Notwithstanding the ease at which accidental contamination occurs, Monsanto has used its legal might to litigate against individual farmers³¹⁸

EXAMPLE

For example, *Monsanto Canada Inc v Schmeiser* [2004] 1 S.C.R. 902, 2004 SCC 34 is a leading Supreme Court of Canada case on patent rights for biotechnology, between a Canadian canola farmer, Percy Schmeiser, and the agricultural biotechnology company Monsanto.

FACTS; As established in the original Federal Court trial decision, Percy Schmeiser, a canola breeder and grower in Bruno, Saskatchewan, first discovered Roundup-resistant canola in his crops in 1997. He had used Roundup herbicide to clear weeds around power poles and in ditches adjacent to a public road running beside one of his fields, and noticed that some of the canola which had been sprayed had survived. Schmeiser then performed a test by applying Roundup to an additional 3 acres (12,000 m²) to 4 acres (16,000 m²) of the

³¹⁷ Lee, M. et Burell, R. Liability for the Escape of GM Seeds: Pursuing the 'Victim'?, *The Modern Law Review* Limited 2002, Vol. 65:4.

³¹⁸ Monsanto by its own admission on its own website state that they have initiate 147 lawsuits against farmer in the United States since 1997. See <http://www.monsanto.com/newsviews/pages/why-does-monsanto-sue-farmers-who-save-seeds.aspx>

same field. He found that 60% of the canola plants survived. At harvest time, Schmeiser instructed a farmhand to harvest the test field. That seed was stored separately from the rest of the harvest, and used the next year to seed approximately 1,000 acres (4 km²) of canola.

At the time, Roundup Ready canola was in use by several farmers in the area.

Schmeiser claimed that he did not plant the initial Roundup Ready canola in 1997, and that his field of custom-bred canola had been accidentally contaminated. While the origin of the plants on Schmeiser's farm in 1997 remains unclear, the trial judge found that with respect to the 1998 crop, "none of the suggested sources [proposed by Schmeiser] could reasonably explain the concentration or extent of Roundup Ready canola of a commercial quality" ultimately present in Schmeiser's 1998 crop.

The court heard the question of whether Schmeiser's intentionally growing genetically modified plants constituted "use" of Monsanto's patented genetically modified plant cells.

By a 5-4 majority, the court ruled that it did. The court wrote:

Thus a farmer whose field contains seed or plants originating from seed spilled into them, or blown as seed, in swaths from a neighbour's land or even growing from germination by pollen carried into his field from elsewhere by insects, birds, or by the wind, may own the seed or plants on his land even if he did not set about to plant them. He does not, however, own the right to the use of the patented gene, or of the seed or plant containing the patented gene or cell

The case drew worldwide attention and is widely misunderstood to concern what happens when farmers' fields are accidentally contaminated with patented seed.

The Court ruled that Schmeiser deprived Monsanto of its monopoly on the special canola plant by storing and planting the Roundup Ready canola seeds pursuant to his commercial interests. Thus, Schmeiser is considered to have infringed section 42 of the *Patent Act*. The Court, however, disagreed with the damages given by the trial judge as there was no profit directly resulting from the invention itself.

The courts at all three levels noted that the case of accidental contamination beyond the farmer's control was not under consideration but rather that Mr. Schmeiser's action of having identified, isolated and saved the Roundup-resistant

seed placed the case in a different category. However the case is widely cited or referenced by the anti-GM community in the context of a fear of a company claiming ownership of a farmer's crop based on the inadvertent presence of GM pollen grain or seed.³¹⁹

For other examples see also;

Bowman v. Monsanto Co. 569 U.S. (2013)

Monsanto Co. vs. Geertson Seed Farms, 561 U.S. 139

Monsanto Co. v. Rohm and Haas Co. 456 F.2d 592 (3d Cir. 1972)

10.2.4 Use of agrochemicals

1. *Monsanto by its acts or omissions* is criminally responsible for the significant and durable effects of industrial scale use of agrochemicals and the burden that this places upon living ecosystems and related impacts on human health.
2. *Monsanto by its acts or omission* has developed and patented glyphosate (commercial trade name Roundup) which is a broad spectrum systemic herbicide and crop desiccant, designed to kill weeds, especially broadleaf weeds and grasses that compete with crops.³²⁰
3. *Monsanto by its acts or omission* introduced Glyphosate commercially into the Global agricultural market in 1974
4. *Monsanto by its acts or omission* has promoted an industrial model of agriculture dependant on the use of glyphosate herbicide.
5. *Monsanto by its acts or omission* has contributed to intolerable levels of usage of herbicide which places a burden on the global environment. An increased level of usage of Glyphosate is directly related to Monsanto's genetically engineered *Round-up Ready* plant varieties that are tolerant to the chemical herbicide.
6. *Monsanto by its acts or omission* has significantly contributed to the dramatic increase in the total volume of herbicide sprayed annually. Globally, Glyphosate use has risen 15 – fold since the so called Round-up ready genetically engineered glyphosate tolerant crops were introduced into the market in 1996 (with 72 percent of this volume sprayed in the last 10 years).³²¹

³¹⁹ Details of this case have been extracted directly from;

https://en.wikipedia.org/wiki/Monsanto_Canada_Inc_v_Schmeiser

³²⁰ It was discovered by Monsanto's chief chemist John E Franz in 1970.

³²¹ Benbrook CM., Trends in glyphosate herbicide use in the United States and Globally *Environmental Science Europe; Bridging Science and Regulation at the Regional and European Level* 2016 23:3.

7. *Monsanto by its acts or omission* has contributed to a dramatic increase in the total volume of herbicide sprayed in the United States. Two thirds of the total volume of Glyphosate sprayed in the US from 1974 to 2015 have been sprayed in the last 10 years.³²²
8. *Monsanto by its acts or omission* has promoted the herbicide which is now used in 160 countries.
9. *Monsanto by its acts or omissions* has directly contributed to the increased volume of herbicide used, with genetically engineered herbicide tolerant crops now accounting for about 56 percent of Glyphosate used globally.³²³
10. *Monsanto by its acts or omission* has achieved a monopolised position in the US agriculture market, with Glyphosate now the primary herbicide applied to nearly all corn, soy, and cotton grown. No other pesticide has come even remotely close to such intensive and widespread use.³²⁴
11. *Monsanto by its acts or omission* has continued this level of distribution and sales notwithstanding that there is an inadequate amount of evidence to quantify the ecological and human health impacts/risks. Despite its wide spread use, there is insufficient information known about the effects of this herbicide.
12. *Monsanto by its acts or omission* has continued its domination of the agrochemical industry and record levels of commercial distribution, notwithstanding that there is convincing evidence that Glyphosate can cause cancer in laboratory animals. In 2015 glyphosate was reported by the World Health Organization (WHO)'s International Agency for Research on Cancer as probably carcinogenic to human (Group 2A).³²⁵
13. *Monsanto by its acts or omission* are in breach of a duty to take precaution, as required by the precautionary principle in international environmental law.

³²² Ibid.

³²³ Benbrook CM., Trends in glyphosate herbicide use in the United States and Globally *Environmental Science Europe; Bridging Science and Regulation at the Regional and European Level* 2016 23:3.

³²⁴ Ibid.

³²⁵ IARC, Evaluation of Five Organophosphate Insecticides and Herbicides, Monographs Vol.112, March 2015 see;

<https://www.iarc.fr/fr/media-centre/iarcnews/pdf/MonographVolume112.pdf>

In 2015 glyphosate was reported by the World Health Organization (WHO)'s International Agency for Research on Cancer as probably carcinogenic to human (Group 2A).

10.3 PAST ACTIVITIES

10.3.1 Aerial use of Agent Orange – Vietnam

1. *Monsanto by it acts or omission* produced Agent Orange, the defoliant used by the United States military during the Vietnam War which caused disastrous ecological and human health consequences.³²⁶ While this particular activity ceased with the end of the Vietnam War over 40 years ago, the ecological and health impacts remained till this day.
2. *Monsanto by it acts or omission* manufactured and provide the US Department of Defence with a chemical defoliant known as Agent Orange laced with dioxins.
3. *Monsanto by it acts or omission* was complicit in the aerial spraying of Agent Orange used by the United States government in Vietnam war from 1961 -71 as part of Operation Ranch Hand.
4. *Monsanto by it acts or omission* aided and abetted the U.S. military by manufacturing Agent Orange and its chemical components, and selling it to the U.S. Army during the Vietnam War, although it knew the toxic consequences of this product and its intended use.
5. *Monsanto by it acts or omission* aided and abetted the US Airforce by enabling its herbicide programme in Vietnam (codename Operation Ranch Hand) pursuant to an authorisation given in November 1961 by President JF Kennedy.
6. *Monsanto by it acts or omission* was complicit in the contamination of Agent Orange with 2,3,7,8- *Tetrachlorodinezodioxin* (TCDD) and extremely toxic dioxin compound. In some areas TCDD concentrations in soils and water were hundreds of times greater than the level considered safe by the US Environmental Protection Agency.
7. *Monsanto by it acts or omission* was complicit in an estimated 6543 spraying missions that took place in the relevant period.
8. *Monsanto by it acts or omission* is criminally responsible for 12 percent of South Vietnam being aerially sprayed with Agent Orange and dioxins, at an average concentrate of 13 times the US Department of Agriculture recommended rate, by 1971.

³²⁶ See, e.g., T. Fuller, '4 Decades on, U.S. Starts Clean-up of Agent Orange in Vietnam', *New York Times* (9 August 2012), available online at www.nytimes.com/2012/08/10/world/asia/us-moves-to-address-agent-orangecontamination-in-vietnam.html (stating that a 'chemical contaminant in Agent Orange [...] has been linked to cancers, birth defects and other diseases'); See also A. D. Ngo et al., 'Association Between Agent Orange and Birth Defects: Systematic Review and Meta-Analysis', 35 *International Journal of Epidemiology* (2006) 1220, ("concluding that 'parental exposure to Agent Orange appears to be associated with an increased risk of birth defects'");

9. *Monsanto by its acts or omission* is criminally responsible for the aerial spraying of nearly 20 million US gallons (or 75, 700, 000 Litres) of chemical herbicide in Vietnam, as well as transboundary territories of Eastern Laos and Cambodia, during the period 1962 and 1971.
10. *Monsanto by its acts or omission* is criminally responsible for nearly 10 million hectares of agricultural land, 5 million acres of mangrove forest, and millions acres of crops³²⁷ destroyed in South Vietnam alone, amounting to approximately 20 percent of South Vietnam forest sprayed.
11. *Monsanto by its acts or omission* caused nearly all the food crops grown to sustain civilian population destroyed thereby contributing to wide spread famine, leaving civilian peasant populations malnourished and starving.
12. *Monsanto by its acts or omission* aided and abetted the US government in its plan to deforest rural and forested land depriving guerrillas of food and cover and causing forced urbanisation of civilian populations. The program of aerial spraying aimed to destroy the ability of peasants to support themselves forcing them to flee to cities, depriving guerrillas of rural support.
13. *Monsanto by its acts or omission* aided the US government with its aerial spraying campaign that caused transboundary harm to the territory of States that fall outside the war zone, thereby committing a Crime Against Peace.
14. *Monsanto by its acts or omission* is responsible for sovereign territory in both Cambodia and Laos being sprayed with Agent Orange and dioxins.
15. *Monsanto by its acts or omission* continued its participation in the criminal acts notwithstanding that many expert including Arthur Galston (who developed 2,4,5-T and TCDD) opposed its use on the grounds that it was harmful to humans and the environment.
16. *Monsanto by its acts or omission* continued its participation in the aerial spraying campaign notwithstanding that the government of Vietnam estimate that 4 million of its citizens were exposed to Agent Orange and as many as 3 million have suffered illness as a direct consequence.
17. *Monsanto by its acts or omission* continued its participation in the aerial spraying campaign notwithstanding that overwhelming evidence pointed to direct links between the use of Agent Orange and dioxins and human suffering on a monumental scale and unrivalled ecological devastation.
18. *Monsanto by its acts or omission* continued its participation in the aerial spraying campaign notwithstanding that the use of Agent Orange is directly linked to acute intergenerational health conditions in humans including; birth defects, reproductive abnormalities, spina bifida, numerous cancers, respiratory conditions, and Non-Hodgkins Lymphoma to name a few.

³²⁷ In 1965 42 percent of the herbicide used was dedicated for use on food crops.

These health impacts were experienced by effected populations but also US veterans.

19. *Monsanto by it acts or omission* continued its participation in the aerial spraying campaign notwithstanding international condemnation and intense international law making aimed at ensuring the criminal conduct was never repeated in any other war or peacetime context.
20. *Monsanto by it acts or omission* has contributed to durable and long lasting health impacts that persist owing to contaminated water and soil in the effected territories which continue to poison the food chain, causing illness and cancers.
21. *Monsanto by it acts or omission* has enabled the widespread use of Agent Orange which has significantly disrupted the ecological equilibrium caused by irreversible deforestation that has rendered regeneration unlikely.
22. *Monsanto by it acts or omission* has enabled the widespread use of dioxins in the territories of Vietnam, Cambodia and Laos. Owing to the persistent nature of dioxins which settle in the soil and sediment and enter the food chain through animals and fish which feed in contaminated areas, Monsanto has caused a magnified concentration of toxins higher up the animal and human food chain. This contamination of the ecological service upon which human populations rely has led to a '*poisoning [of] their food chain ... causing illness, serious skin diseases and a variety of cancers*'.³²⁸
23. *Monsanto by it acts or omission* is responsible for the enduring human and ecological impacts of aerial spraying of Agent Orange in Vietnam, Cambodia and Laos between 1961 and 1971. The continuing existence of the contaminants is classified as "durable damage" as the persistence of the significant damage.
24. *Monsanto by it acts or omission* has continued to defend legal suits relating to their complicity notwithstanding the significant and durable damaged caused by the aerial spraying of Agent orange which has been well documented (most comprehensively in a series of class action cases; Agent Orange Product Liability cases).³²⁹ The United States government was forced to address the health complaints of returned American veterans who

³²⁸End Ecocide on Earth, History of ecocide, <https://www.endecocide.org/history-of-ecocide/#1> (05-18- 2016)

³²⁹ In 1980 the first US Agent orange class action was filed in Pennsylvania *Agent Orange Product Liability* action which documented the extent of the harm caused to US veterans. This class action resulted in an out of court settlement on 7 May 1984 for an agreed sum of 180 million in compensation (Monsanto had to pay 45 percent of the settlement sum as the primary producer of herbicide and dioxins. There were many other similar cases eg; In Re Agent Orange Product Liability 611 F. Supp. 1267 (E.D.N.Y. 1985), aff'd, 818 F.2d 187 (2d Cir.), petition for cert. filed sub nom. Lombardi v. Dow Chem. Co., 56 U.S.L.W. 3249 (No. 87-436, Dec. 15, 1987). In re "Agent Orange" Product Liability Litigation, 611 F. Supp. 1223 (E.D.N.Y. 1985). In re "Agent Orange" Product Liability Litigation, 506 F. Supp. 762, 787-792 (E.D.N.Y. 1980), modified, 100 F.R.D. 718 (E.D.N.Y. 1983), mandamus denied, 725 F.2d 858 (2d Cir.), cert. denied, 465 U.S. 1067, 104 S. Ct. 1417 (1984). In re "Agent Orange" Product Liability Litigation, 611 F. Supp. 1223 (E.D.N.Y. 1985).

had been exposed to Agent Orange. In April 1970, US Congress held the first of many hearings on the health effects of Agent Orange.³³⁰

25. *Monsanto by its acts or omission* is especially culpable because the criminal conduct was prolonged in duration and durable in the long term effects. As a direct response to the use of Agent Orange in Vietnam, *The Convention on the Prohibition of Military or Any Other Hostile Use of Environmental Modification Techniques* entered into force on 5 October 1978 which, *inter alia*, prohibit the States Parties from engaging in military or any other hostile use of environmental modification techniques having widespread, long-lasting or severe effects as the means of destruction, damage or injury to any other State Party.

10.3.2 Polychlorinated Biphenyls (PCB)

1. *Monsanto by its acts or omissions* produced PCB, a chemical component obtained from the mixture of benzene and chlorine, used in numerous products, including industrial equipment, food packaging and paint.
2. *Monsanto by its acts or omission* was the primary U.S. manufacturer of PCBs from 1930 until 1977.
3. *Monsanto by its acts or omission* is responsible for the health impact of PCBs on humans. PCBs was found to cause cancer, decreased fertility, still births, and birth defects in test animals.³³¹
4. *Monsanto by its acts or omission* is responsible for the 'well-documented human health and environmental hazard of PCB exposure.'³³²
5. *Monsanto by its acts or omission* is responsible for the ecological impact that PCBs' had, and continue to have, on environmental toxicity leading to its subsequent classification as a persistent organic pollutant.
6. *Monsanto by its acts or omission manufactured and released* PCBs into the environment contrary to the Stockholm Convention on Persistent Organic Pollutants 2001. In 1979 the true nature and impact of the chemical component was understood and banned by the United States Congress and by the *Stockholm Convention on Persistent Organic Pollutants* in 2001³³³

³²⁷ U.S. Congress, Senate, Committee on Commerce, Subcommittee on Energy, Natural Resources, and the Environment, *Effects of 2,4,5-T and Related Herbicides on Man and the Environment*, 91st Cong., 2nd sess., April 7, 1970 (Washington: GPO, 1970).

³³¹ See *Environmental Defense Fund v. Environmental Protection Agency*, 636 F.2d 1267, 1270, 205 U.S. App. D.C.139 (D.C. Cir. 1980).

³³² U.S. Environmental Protection Agency (EPA) 40 C.F.R. § 761.20 - PROHIBITIONS AND EXCEPTIONS, (See <https://www.gpo.gov/fdsys/granule/CFR-2011-title40-vol31/CFR-2011-title40-vol31-sec761-20>)

³³³ Porta, M; Zumeta, E, *Implementing the Stockholm Treaty on Persistent Organic Pollutants*, *Occupational and Environmental Medicine*, 2002, 10 (59): 651–2.

7. *Monsanto by its acts or omission* has caused PCBs to remain in the environment and continue to have a significant and durable impact on human health. Because of their longevity, PCBs are still widely found in the environment.
8. *Monsanto by its acts or omission* has contaminated the environment with toxic and persistent organic pollutants which the International Research Agency on Cancer (IRAC), have rendered as definite carcinogens in humans. PCBs share a structural similarity and toxic mode of action with dioxin, such that toxic effects such as endocrine disruption (notably blocking of thyroid system functioning) and neurotoxicity are known and reported.
9. *Monsanto by its acts or omission* has introduced PCBs into the environment which according to the U.S. Environmental Protection Agency (EPA), PCBs cause cancer in animals and are probable human carcinogens.
10. *Monsanto by its acts or omission* has contaminated rivers and buildings including schools, parks, and other sites with PCBs, and there have been reported contaminations of food supplies with the toxins. The maximum allowable contaminant level in drinking water in the United States is set at zero, but because of water treatment technologies, a level of 0.5 parts per billion is the de facto level.
11. *Monsanto by its acts or omission* is responsible for the continuing environmental and health impacts of PCB subsequent to the ban. Populations are still exposed to serious health issues and ecological impacts such as contamination of rivers, contamination of soil, and pollution of the atmosphere. This is because PCBs do not readily break down and can remain in the environment.
12. *Monsanto by its acts or omission* is primarily responsible for at least, an estimate of 1 million tons of PCBs having been produced, 40% of this material is thought to remain in use.³³⁴ Another estimate put the total global production of PCBs in the order of 1.5 million tons. The United States was the single largest producer with over 600,000 tons produced between 1930 and 1977. The European region follows with nearly 450,000 tons through 1984.³³⁵
13. *Monsanto by its acts or omission* knew increasingly more about PCB's harmful effects on humans and the environment (through the 1960'), as per

³³⁴ Rossberg, Manfred; Lendle, Wilhelm; Pfeleiderer, Gerhard; Tögel, Adolf; Dreher, Eberhard-Ludwig; Langer, Ernst; Rassaerts, Heinz; Kleinschmidt, Peter; Strack, Heinz; Cook, Richard; Beck, Uwe; Lipper, Karl-August; Torkelson, Theodore R.; Löser, Eckhard; Beutel, Klaus K.; Mann, Trevor (2006). "Ullmann's Encyclopedia of Industrial Chemistry - Chlorinated Hydrocarbons". See also Erickson, Mitchell D.; Kaley, II, Robert G. "Applications of polychlorinated biphenyls" (pdf). Springer-Verlag. Retrieved 2015-03-03.

³³⁵ Breivik, K; Sweetman, A; Pacyna, J; Jones, K. "Towards a global historical emission inventory for selected PCB congeners — a mass balance approach. Global production and consumption". *The Science of the Total Environment*. (2002) 290 (1–3): 181–98 It is unlikely that a full inventory of global PCB production will ever be accurately tallied, as there were factories in Poland, East Germany, and Austria that produced unknown amounts of PCBs.

internal leaked documents released in 2002, yet PCB manufacture and use continued with few restraints until the 1970s.

14. *Monsanto by it acts or omission* has caused PCB bio-accumulate in the food chain associated with illnesses and cancer in human. Like many lipophilic toxins, PCBs bio-magnify up the food chain. (For instance, ducks can accumulate PCBs from eating fish and other aquatic life from contaminated rivers, and these can cause harm to human health or even death when eaten). As a direct result of bio-magnification PCBs can be transported (eg. birds from aquatic sources onto land via faeces and carcasses).
15. *Monsanto by it acts or omission* is responsible for PCBs entering the environment through both use and disposal. The environmental fate of PCBs is complex and global in scale. PCBs accumulate primarily in the hydrosphere, as the main reservoir. However a small volume of PCBs has been detected throughout the earth's atmosphere. This is because the atmosphere serves as the primary route for global transport of PCBs.
16. *Monsanto by it acts or omission* has continued to defend law suits filed by cities and municipalities notwithstanding it was the only manufacturer of PCBs during the relevant time and unequivocal evidence of that PCBs are a hazard to humans and the environment.³³⁶
17. Cases demonstrating Monsanto liability over the ecological and health impacts of PCB have held Monsanto to account, even though PCBs activities ceased 40 years ago.

³³⁶ Supreme Court of Kentucky. *Monsanto Company v. Reed*; *Monsanto Company, Appellant, v. William Reed, et al., Appellees*. *Westinghouse Electric Corporation, Appellant, v. Monsanto Company, et al., Appellees*. Nos. 95-SC-549-DG, 95-SC-561-DG. April 24, 1997. Supreme Court of Florida. *High v. Westinghouse Elec. Corp.* 610 So.2d 1259 (1992) June 11, 1992. \$700 Million Settlement in Alabama PCB Lawsuit". *The New York Times*. 21 August 2003. Ala. SC makes ruling in cases over \$300M Monsanto settlement". *Legal Newsline*. May 1, 2012. City of San Jose Files Lawsuit Against Monsanto Over PCB Contamination Flowing Into San Francisco Bay, Represented by Environmental Law Firms Baron & Budd and Gomez Trial Attorneys (51 DEN A-8, 3/17/15). The City of San Diego and San Diego Unified Port District want chemical agricultural giant Monsanto to pay for its role in polluting San Diego's bay and tidelands with PCBs (<http://www.sandiegoreader.com/news/2015/mar/16/ticker-monsanto-pay-damaging-san-diego>); see also in recent case, a Saint Louis jury awarded \$17.5 million in damages to three plaintiffs and assessed \$29 million more in punitive damages against Monsanto and three other companies in a suit here alleging negligence in the production of PCBs (<http://www.nbcbayarea.com/news/local/Berkeley-Joins-Others-in-Suing-Monsanto-Over-PCB-Pollution-in-San-Francisco-Bay-364423031.html#ixzz4EC5qHjPq>); Berkeley joined the cities of Oakland, San Jose, San Diego and Spokane, Washington, in filing suits against Monsanto to recover costs of cleaning up PCBs and seek compensatory and punitive damages for the continuing presence/impacts of PCBs; (<http://www.nbcbayarea.com/news/local/Berkeley-Joins-Others-in-Suing-Monsanto-Over-PCB-Pollution-in-San-Francisco-Bay-364423031.html>)

PART XI REMEDY

11.1 Declaratory judgment

Pursuant to any of the procedures described in the model law, the Court may issue a Declaratory Judgment with regard to conduct which has not yet occurred but which is in active development stages.

There shall be no Penalties under Article 77 arising from the Declaratory Judgment proceedings described in this Article, except that Article 77 penalties may be ordered if the same case is converted to, or later refiled as, an Article 77 case.

Declaratory Judgments may be introduced as evidence of the defendant's state of mind in subsequent proceedings before the Court.

11.2 Applicable penalties

Any person convicted of the crime of ecocide, or of aiding and abetting, counselling, or procuring the crime of ecocide, may be subjected to one or more of the following penalties:

- a. imprisonment ³³⁷
- b. forfeiture of proceeds, property, and assets derived directly or indirectly from that crime ³³⁸
- c. reimbursement of attorney's fees and legal costs to prevailing parties
- d. mandatory reparations to victims ³³⁹
- e. for fictional persons - mandatory dissolution.

11.3 Reparations to victims

The Court shall establish principles relating to reparations to, or in respect of, victims, including

- a) restitution,
- b) compensation, and rehabilitation,
- c) transitional justice measures; and
- d) environmental restoration, including reimbursement for consequential losses arising from injury, loss of life, diminution of health or wellbeing, economic losses, ecosystem productivity and functions losses, or losses to cultural life.

On this basis, in its decision the Court may, either upon request or on its own motion in exceptional circumstances, determine the scope and extent of any damage, loss and injury to, or in respect of, victims and the environment and will state the principles on which it is acting.

³³⁷ as defined in subsection 1 of this Article,

³³⁸ as defined in subsection 1(b) of this Article

³³⁹ as set forth in Articles 75 and 79

The Court may make an order directly against a convicted person specifying appropriate reparations to, or in respect of, victims, including restitution, compensation, and rehabilitation, and environmental restoration.

11.4 Mandatory Dissolution”

“Mandatory Dissolution” of a fictional person shall mean the legal dissolution of the entity such that neither the entity, nor any substantially similar successor entity, continues to exist under the laws of any State or Non State Party.

11.5 Cessation of Operations Order

A Cessation of Operations Order shall order the discontinuation and permanent cessation of certain operations and/or practices that are directly related to the Ecocidal infractions before the Court.

11.6 A blend of civil and criminal penalty

The IMT is not the appropriate adjudicating forum empowered to decide on both criminal and civil matters.

Usually, the entry point for international criminal law is imprisonment. If Ecocide Law is a strict liability crime this lowers the entry point thereby allowing alternative sentencing to be included. This could be enacted within the criminal arena to reflect the principles of common but differentiated responsibilities, which is expanding within international law. This would be consistent with the liberal notion that criminal punishment should be a last resort, and that criminalising harm to the environment could incorporate alternate, non-penal means, as has been proposed by many ecocide law commentators such as Higgins.³⁴⁰

Environmental abatement, clean-up of contaminated areas and disgorgement of profits would normally follow such a legal recognition of civil liability for the environmental harm caused and set out in this claim.

It has been proposed that the remedies for Ecocide, with other environmental challenges such as climate change, shall also be based upon restorative justice and criminal compensatory elements (criminal compensation to victims). This restorative emphasis is a departure from the ICC usual penal remedies. Blending criminal and civil penalties (such as a restitution, injunctive powers, the ability to determine civil liability or to clean up the harm) would dictate a new type of expertise.

This supports the argument for a separate international convention for Ecocide with its own secretariat, enforced by its own court. Whether Ecocide is addressed within the current purview of the *Rome Statute* (by the appointment of a separate prosecutor) or administered by a separate

³⁴⁰ See Higgins, Polly, *Eradicating Ecocide*, London, Sheppard- Walwyn Ltd, 2010.

UN body is a question to be decided. There are also proposals for a separate United Nations Trusteeship to administer environmental assistance to affected communities and territories.

PART XII PRAYERS TO THE TRIBUNAL

The Plaintiffs calls upon the Tribunal to speak on behalf of all humanity. Civil society, jurists, scientists, United Nations agencies, individual citizens and nation states cognisant of the environmental degradation of their territories combine to express a groundswell of support for the urgent creation of a normative threshold regarding environmental violence.

In this context;

The Plaintiffs seeks: A statement that confirms the emerging environmental legal norms relating to the legal protection of the Environment. This will entail the enunciation of new laws in addition to clarifying existing law.

The Plaintiffs seeks: A statement that existing customary international law, as provided for in treaties, state practices, decided case law, have risen to such an extent as to recognise Ecocide as a *jus cogens* crime.

The Plaintiff seeks: A positive statement with regard to the inclusion of the crime of Ecocide into the *Rome Statute* and a recognition that it is now a *jus cogens* crime.

The plaintiffs seeks: A declaration that recognises the need for restorative justice and equitable remedies for victims that have suffered harm associated with and/or directly caused by the Defendant Monsanto's conduct including, but not limited to;

- (a) Manufacture, provision and prolonged exposure to, the aerial spraying of Agent Orange defoliant laced with dioxins used by the US Government in military operations in the territories of Vietnam, Cambodia and Laos.
- (b) Manufacture and supply and aerial application of concentrated mixes of glyphosate herbicide used by the US and Colombian Government in the war on drugs via Plan Colombia
- (c) industrial scale use of agrochemicals in agriculture and associated environmental and human health risks
- (d) engineering and introduction and release of transgenic crops and associated environmental and human health risks

- (e) contamination of genetic plant diversity and associated environmental and human health risks
- (f) introduction of a persistent organic pollutant PCB into the environment and associated environmental and human health risks

The plaintiffs seeks: A positive finding that Monsanto committed Ecocide by aiding and abetting the US and Colombian governments in implementing Plan Colombia, which caused significant and durable harm to the ecosystem/s (or ecosystem services) of areas effected by aerial spraying, thereby undermining, or creating an increased risk of undermining, the continuing survival or wellbeing of the populations so effected.

The plaintiffs seeks: A positive finding that Monsanto committed Ecocide by aiding and abetting the US military in implementing a prolonged aerial spraying campaign of the territories of South Vietnam, Cambodia and Laos with a chemical defoliant known as Agent Orange laced with dioxins, during the Vietnam war (1961-71) which caused significant and durable harm to the ecosystem/s (or ecosystem services) of areas directly and indirectly effected by aerial spraying , thereby undermining, or creating an increased risk of undermining, the continuing survival or wellbeing of the population/s so effected.

The plaintiffs seeks: A positive finding that Monsanto committed Ecocide by engineering, introducing and releasing genetically modified seeds that have resulted in the contamination of GM-free genes and a loss of ecosystem biodiversity, thereby causing significant and durable harm to the ecosystem/s (or ecosystem services) undermining, or creating an increased risk of undermining, the continuing survival or wellbeing of the population/s reliant upon

The plaintiffs seeks: A positive finding that Monsanto has committed, and continues to commit, an act of Ecocide by promoting an industrial model of agriculture that necessitates the pervasive use of the herbicide Glyphosate with uncertain ecological and human health impact, in direct violation of its international obligation to take precaution.

The plaintiffs seeks: A positive finding that Monsanto committed Ecocide by causing the manufacture, introduction and release of a persistent organic pollutant PCB which caused, and continues to cause, significant and durable harm to the ecosystem/s (or ecosystem services) of areas directly or indirectly effected by the pollutant, thereby undermining, or creating an increased risk of undermining, the continuing survival or wellbeing of the population/s so effected.

The Plaintiff also seeks: A statement calling for the need to clarify, disseminate, implement, and enforce international law, as it relates to the protection of the global commons and earth resources of common interest and concern vital to the survival of human populations.

The Plaintiff seeks: A statement with regard to the need for international cooperation on the issue of; recognising, defining and including the crime of Ecocide and providing for international enforcement machinery under the existing international criminal law framework.³⁴¹

Plaintiff also seeks: A statement recognising the need for an international mechanism for monitoring, lending support for the UNEP recommendation that '[a] permanent UN body to monitor violations and address compensation for environmental damage [...] be considered'.³⁴²

Plaintiff also seeks: A statement recognising the novel form of criminal liability that attached to natural and fictitious persons under international law.

The Plaintiff seeks: A statement recognising the need to address the accountability and governance gaps in current international environment law and the need for a separate international convention for Ecocide with its own secretariat, enforced either under the Rome Statute and its existing framework or by its own court.

The Plaintiff seeks: A statement recognising the merits of broadening the application and utilisation of the Common Heritage of Mankind principle to protect ecosystems and ecosystem services relied upon for human well-being and survival.

Plaintiff seeks: An endorsement of the work of lead environmental organisations such as the International Law Commission (ILC), UNEP, and End Ecocide on Earth Campaign (EEE).³⁴³

³⁴¹ In this regard, the 1997 Convention on the Prohibition of the Use, Stockpiling, Production and Transfer of Anti-Personnel Mines and on their Destruction ('Anti-Personnel Mine Ban Convention') and the 2008 Convention on Cluster Munitions may serve as models. Both instruments specifically provide for international cooperation and assistance in the implementation of their obligations. The 2008 Convention on Cluster Munitions, for example, grants each state party 'the right to seek and receive assistance' in fulfilling its obligations under the Convention and envisages, as far as possible, the provision of 'technical, material and financial assistance to State Parties'. The spirit of these provisions fits well with the needs encountered in areas that have suffered significant environmental damage during armed conflict.

³⁴² According to UNEP, this body could then be given a mandate to:

1. investigate and decide on alleged violations of international law during international and non international armed conflicts;
2. handle and process compensation claims related to environmental damage and loss of economic opportunities as well as remediation activities; and
3. develop norms and mechanisms on victim assistance, international assistance, and cooperation to assess and redress the environmental consequences of armed conflict.

Note that; the existence of such a body with comprehensive authority would have far-reaching consequences—not only with regard to monitoring, but also for international cooperation, victim assistance, and compensation. The ICRC has also called for new mechanisms and procedures in this respect.

³⁴³ At its sixty-fifth session, in 2013, the International Law Commission decided to include the topic 'Protection of the environment in relation to armed conflicts' in its programme of work, on the basis

PART XIII CONCLUSION

Under the ecocide law, an individual who causes a significant and durable damage to any part or system of the global commons, or to an ecological system relied upon by any human population or sub-population, is guilty of the crime of ecocide. The question to be answered is therefore whether the past or present activities of Monsanto are likely to meet the elements of the crime of ecocide as defined above?

It is our submission that the International Monsanto Tribunal must recognise the crime of Ecocide and hold Monsanto criminally accountable. Monsanto can be held liable for ecocide under the definition provided for in the EEE model law (appended to this brief) for its actions of aiding and abetting governments in perpetrating aerial spraying campaigns in Vietnam and Colombia. It can be held liable for the modification and promotion of transgenic crops and the resultant contamination and loss of biodiversity that has been caused. Monsanto can be held to account for its industrial model of agricultural production that is reliant upon excessively high volume of Glyphosate, with associated ecological and human health risks. Finally, Monsanto can be held to account for the exclusive manufacture of the persistent organic pollutant PCBs and the associated ecological and human health risks.

Undoubtedly, the utility of the concept of Ecocide has much to recommend it, as evidenced by this claim against Monsanto. This case also highlights the utility of imposing a novel form of criminal liability that attached to natural and fictitious persons under international law. In deed the work of this Tribunal amply demonstrate that if the crime of Ecocide were to exist, it would be readily capable of being prosecuted.

While domestic implementation of environmental protections are important, a concerted international legal effort is necessary to curtail the greatest harms. Additionally, while there are important roles for non-criminal forms of law and environmental regulation—it is essential that the international community recognise the contribution that criminal law can make towards addressing the worst examples of ecological destruction.

Over the last few decades, international law has been widened and deepened to protect the natural environment. This can, no doubt, be attributed to the increased awareness of the dangers that degrading the natural environment poses to humankind, as a whole.

of the recommendation of the Working Group on the long-term programme of work. The Commission decided to appoint Marie Jacobsson as Special Rapporteur for the topic. The outcome of the ILC work in this area remains to be seen but it may contribute to further clarification and strengthening of the legal protection of the environment in time of armed conflict.

However, the development of international environmental law seems less capable of tailoring specific protection for collective resources (ecosystem services, bio-diversity, genetic material), in circumstances where they fall within an indeterminate territory that does not correspond with state boundaries. As a result, the applicability of existing environmental treaties is often uncertain and gaps in international law and institutions continue to exist.

With regard to preventing criminal violations, such as that perpetrated by Monsanto, there are no existing legal mechanisms. For the sake of the natural environment and the human populations that depend on it for their livelihood and well-being, it is imperative that the international community address the issues identified.

The *Oslo Principles* state that avoiding severe global catastrophe is both a moral and a legal imperative. Like all new laws, codifying or legally defining ecocide might involve international input and will all most certainly experience resistance from vested interests. But lest not forget that genocide, which is today a crime, was once a moral crime without precedent or legal articulation but now is defined as an international crime in the *Convention on the Prevention and Punishment of the Crime of Genocide (CPPCG)*.

International Criminal Law is a rapidly evolving jurisdiction which finally crystallised with the entry into force of the *Rome Statute* a triumph of monumental proportion in light of the fact that 161 nation states reached a consensus on a treaty to establish a permanent supranational court. By twist of fate, the crime of Ecocide fell off the negotiating table, to the detriment of all humankind. Today we request that it be reinstated.

As a compliment we request that Tribunal recognising that private actors can perpetrate or be complicit in the commission of international crimes.

No longer should indigenous leaders and environmental victims of ecological disasters need to personally advocate for the right to peaceful enjoyment of their land. No longer can we afford to allow transnational companies to frustrate and undermine the international justice process using their economic and political clout in civil suits that make a mockery of domestic legal system.

The answer lies in transferring the subject matter from the civil to the criminal arena, with allows for international enforcement mechanisms to prosecute perpetrators of environmental harms. The resulting shift would take the emphasis away from compensation for loss - to the acknowledgement of responsibility and liability for criminal wrongs.

The actions and omissions by Monsanto, such as those outlined in victim statements and contained in submissions before this Tribunal, cause real immediate and trans-generational harm. In this regard Monsanto is an obvious choice of defendant. Due to the ubiquitous nature of environmental

harm, the success of those who advocate for the emerging environmental crime of ecocide will inevitably rest with the selection of the most serious examples of harm, and the most obvious instances of environmental crimes.

Ecological devastation is perhaps the greatest threat to humanity at this historic juncture, a reality most strongly expressed in science. Yet failure on behalf of the international community to effectively respond, may result in the collapse of law as a norm bearing and protective instrument.

Humans are the only species capable of both harm and good. This places us in a position of trustee or guardian of the planet. If we are truly in the anthropocentric epoch, as Paul Crutzen³⁴⁴ suggests, then human inhabit a geologic time period in history where our activities have a significant impact on the Earth's atmospheric, geologic, hydrologic, biospheric systems and ecology.

As *Anthropocene's* we have the opportunity to define the Earth's most recent geologic time period. Our world is now human-influenced, as illustrated by the overwhelming global evidence that our global commons (ecological services) are now altered by humans. Whether we allow multinationals, such as Monsanto, continue their destructive ways or establish a new paradigm in which humans really understand their duty as guardians to protect our fragile planet, the choice is up to us. If there was ever a worthy rationale to support the establishment of the international crime of Ecocide it would be to advance this end.

At this juncture, the answer lies in re-conceptualising the law's role in shaping reordering relationships. Whilst the aims implicit in Lovelock's³⁴⁵ ideal of perfect homeostasis³⁴⁶ is unrealistic perhaps we could borrow from an indigenous peoples perspective aiming for; *[a] law that transcends all things, guiding us in the tradition of living a good life, that is, a life that is sustainable and one which enables our grandchildren yet to be born to also experience a good life on earth.*³⁴⁷

There is an inextricable link between the law and the world. Law shapes the world we want to live in. It does not transform by itself. Until now, industrial societies have been allowed to articulate the horizon of possibilities through an anthropocentric view point establishing legal and normative structures that permit our physical environment to be changed, altered, and harnessed.

³⁴⁴ *Anthropocene* has become an environmental buzzword ever since the atmospheric chemist and Nobel laureate Paul Crutzen popularized it in 2000.

³⁴⁵ James Ephraim Lovelock CH CBE FRS (born 26 July 1919) is an independent scientist, environmentalist and futurist who lives in Devon, England. He is best known for proposing the Gaia hypothesis, which postulates that the Earth functions as a self-regulating system.

³⁴⁶ In Lovelock's 2006 book, *The Revenge of Gaia*, he argues that the lack of respect humans have had for Gaia, through the damage done to rainforests and the reduction in planetary biodiversity, is testing Gaia's capacity to minimize the effects of the addition of greenhouse gases in the atmosphere. This increases the likelihood of homeostatic positive feedback potential associated with runaway global warming.

³⁴⁷ Watson, Irene Indigenous Peoples Law-ways: Survival against the Colonial State *Australian Feminist Law Journal* 8 (1997) p39.

Swimme and Tucker call this the paradox of unintended consequences

Modern industrial humans... Did not seek to commune with nature ... They sought to transform the world. ... The paradox of unintended consequences is now becoming evident... We have crossed over into an Earth whose very atmosphere and biosphere are being shaped by human decisions... We live on a planet now, where not biology but symbolic consciousness is the determining factor in evolution. Cultural selection has overwhelmed natural selection. That is, the survival of species and entire ecosystems now depends primarily on human activity. We are [thus] faced with a challenge no previous human has ever contemplated: How are we to make decisions that will benefit an entire planet for the next several millennia?³⁴⁸

In the knowledge that we are all part of an interconnected and interdependent global system, then the well-being of each member is connected to the well-being of the whole. In this dynamic, safeguarding the welfare of the system as whole, takes priority over the individual welfare of a single member. This paradigm shift is characterised by;

'... A philosophy of law and human governance that is based on the idea...that the welfare of each member of a community is dependent on the welfare of the Earth as a whole. From this perspective human societies will only be viable and flourish if they regulate themselves as part of the wider Earth Community.'³⁴⁹

International environmental law is evolving to reflect a better accommodation of humans with the natural world. This is reflected in a body of treaty law that attempts to steer humanity from our current nihilistic path and re-evaluate the future.

Some authors have talked about a 'creative uncertainty' acknowledging the fact that the development of practice and theory of International Environmental Law occupies an 'indeterminate terrain.'³⁵⁰ This is where international Criminal Law enters the debate. Because the evolution of environmental principles are too slow to keep pace with a rapid and catastrophic speed at which humanity is depleting our natural shared wealth. The codification of a crime entered into force on the day it is enacted, is the first step. It will then be for courts, beyond the scope of this Tribunal, to interpret the finer points of law.

³⁴⁸ Swimme B and Tucker ME *Journey of the Universe* (2011) p99-102

³⁴⁹ Cormac Cullinan A History of Wild Law in Peter Burdon (ed) Law Kent Town Wakefield Press 2011.

³⁵⁰ Schillmoller A and A Pelizzon Mapping the terrain of earth jurisprudence: Landscapes, thresholds and horizons *Environmental and Earth Law Journal* 3(1) 2003

While it may take time for the jurisprudence on Ecocide, and more broadly environmental harm to develop more nuanced coherent language, the recognition of the crime of Ecocide brings to the table the legal prohibition. A metaphorical line in the sand. There can be no issue of more pressing concern to international law than to protect the life of every human being from unwarranted deprivation. If international law is unable to fulfil this basic task then for what does it exist?³⁵¹

³⁵¹ Ramcharan, *The Right To Life in International Law* (Martinus Nijhoff, 1985), at 8.

ANNEXURE I

ECOCIDE AMENDMENTS PROPOSAL

PREAMBLE

The Proposing State(s), Conscious that all peoples have the right to a healthy, safe and livable environment, and that a wholesome environment is necessary for the survival of humanity,

Conscious that parts and systems of the environment, referred to herein as the global commons, cannot be said to belong to any nation(s) nor to any generation(s) of human beings,

Conscious that the safety of the planet is the responsibility of the international community as a whole;

Conscious that the global commons may be negatively affected by actions occurring both inside and outside national boundaries,

Conscious that disparities of national legislation, as well as of national capacity or willingness to pursue environmental crimes, tend to enable, perpetuate, and magnify such crimes worldwide,

Conscious that serious crimes against the environment, whether in peacetime or wartime, threaten the peace, international security, and safety of the planet,

Concerned that significant and durable harms to the environment pose a direct threat to the Human Rights of current and future human populations, including the rights of indigenous people to pursue their customary livelihoods,

Concerned that deprivations of ecosystem functions can threaten the wellbeing and survival of misinformed or uninformed human populations,

Considering that numerous prohibitions against environmentally harmful activity exist under customary and treaty made international law,

Considering that the protection of the global commons is most effectively addressed by a comprehensive and transnational system and that the International Criminal Court offers an appropriate framework for the enforcement of such an important system of enforcement,

Decides to propose the amendment to Article 5 of the Rome Statute of the International Criminal Court contained in Annex II (p. 3) to the present document, which is subject to Article 121, paragraph 5, of the Statute,

Decides to propose amendments to Articles 8 ter, 9 (with Elements), 15, 17, 20, 21 bis, 25, 33, 36, 42, 43, 53, 65, 75, 77, and 121 to the Rome Statute of the International Criminal Court contained in Annex II (p. 4).

ANNEXURE II

Ecocide Model law

(In the following proposed text, additions to the existing ICC Statute are indicated by underlining, excisions from the existing ICC Statute are indicated by strikethrough.)

Article 5

Crimes within the jurisdiction of the Court

1. The jurisdiction of the Court shall be limited to the most serious crimes of concern to the international community as a whole. The Court has jurisdiction in accordance with this Statute with respect to the following crimes:

- (a) The crime of genocide;
- (b) Crimes against humanity;
- (c) War crimes;
- (d) The crime of aggression;
- (e) The crime of ecocide.

[Editors' Comment: Currently 5(e) is the next available ordination in ICC Statute.]

Article 8 ter

[Editor's Comment: Currently 8 ter is the next available ordination in ICC Statute]

Crime of ecocide

1. For the purpose of this Statute, any person is guilty of ecocide who causes significant and durable damage to:
 - (a) any part or system of the global commons, or
 - (b) an ecosystem function relied upon by any human population or subpopulation.
1. For the purpose of paragraph 1, "causes" means to be fully or partially responsible, by means of an action or a failure to act, wheresoever such action or failure to act may have occurred, and without consideration of the state of mind of the person responsible.
2. For the purpose of paragraph 1(a), "significant damage" means the introduction of or the removal of a material substance or a quantity of energy, as defined in paragraph 10 below, to an extent that exceeds planetary boundaries, or the violation of any international treaty covering the global commons.
3. For the purpose of paragraph 1(b), "significant damage" means elimination, obstruction, or reduction to an extent that undermines, or creates an increased risk of undermining, the continuing survival or well being of the population.

4. For the purpose of Paragraph 1, “durable damage” means the persistence of the significant damage, or of the consequential environmental effects arising from the significant damage, or of an increased risk of consequential environmental effects arising from the significant damage, on the date one year following the initial introduction or removal as determined by the United Nations Environmental Programme, or other internationally recognized institution specializing in global environmental monitoring science.

[Editors’ Comment: Requires coordination with a Global Commons Trusteeship Commission within the UNEP, or similar institutions]

6. For the purpose of Paragraph 1(a), “any part or system of the global commons” means:

(a) the oceans and seas that extend beyond national borders or are completely external to national borders, and the marine chemistry within these areas;

(b) the atmosphere and atmospheric chemistry over non territorial waters and land masses;

(c) the seabeds beyond territorial waters;

(d) the Arctic;

(e) the Antarctic;

(f) rivers that cross international borders;

(g) species migrations that cross international borders or cross other geographical areas defined in this Paragraph (6) as being part of the global commons;

(h) space beyond the Earth’s atmosphere;

(i) biogeochemical cycles that cross national borders including but not limited to:

(vi) the Nitrogen cycle,

(vii) the Carbon cycle,

(viii) the Mercury cycle,

(iv) the Sulfur cycle,

(ix) the Chlorine cycle,

(x) the Oxygen cycle,

(vii) the Phosphorous cycle,

(viii) the Potassium cycle,

(ix) the Hydrogen cycle,

(xi) the Hydrologic cycle;

(j) natural resource reserves that extend beyond national borders or are completely external to national borders;

(k) ecosystem functions provided across national borders or completely beyond national borders;

(l) gene pools of transnational animal and plant species;

(m) Biodiversity within any of the geographical areas defined in this Paragraph (6) as being part of the global commons.

7. For the purpose of paragraphs 1(b) and 6(K), “ecosystem function” means a benefit obtained by humans from the environment, including but not limited to :

- (a) Supporting functions such as nutrient and elemental recycling, primary production, clean air, clean water, and soil formation,
- (b) Provisioning functions such as nutritious food, habitat, raw materials, Bio-diversity and genetic resources, minerals, water for irrigation, medicinal resources, and energy,
- (c) Regulating functions such as waste decomposition, air and water purification, pest and disease controls,
- (d) Cultural functions such as spiritual enrichment, cognitive development and psychological repair, recreational experiences, scientific knowledge, and aesthetic pleasure.

8. For the purpose of paragraph 1(b), “relied upon” means demonstrably necessary for the continuing survival or wellbeing of the current, or future, generations of the said population.

9. For the purpose of paragraph 3, an “introduction or removal” may occur inside or outside any national boundary.

10. For the purpose of paragraph 3, “a material substance or a quantity of energy” means any substance, biomass, life form, genetic material, element, chemical compound, mineral, or amount of energy.

11. For the purpose of paragraph 3, “exceeds planetary boundaries” means to interfere with or alter any part of the environment in a manner that exceeds the limits defined pursuant to paragraph 12 per se, or would exceed these defined limits if repeated en masse and at the same rate by the rest of humanity, including but not limited to interferences and alterations which could:

- (a) Destroy or deplete natural ecosystems or the biodiversity of ecosystems;
- (b) Perturb surface hydrology or groundwater resources;
- (c) Change natural biogeochemical cycles, including greenhouse gas, nitrogen, or phosphorus balances;
- (d) Release chemicals or waste into the environment, including ozone depleting chemicals and radioactive particles;

12. For the purpose of paragraph 3, the extent and magnitude of planetary boundaries shall be determined by the United Nations Environmental

Programme, or other internationally recognized institutions specializing in global environmental sustainability science.

Immediately upon the adoption of this paragraph and quinquennially thereafter, the Assembly of States Parties shall make the necessary arrangements to obtain and make known to the public via all necessary channels the Schedule of Planetary Boundaries, which shall then become a part of this paragraph as if printed herein.

Each Schedule shall include as many boundaries as then current scientific knowledge allows.

[Editors' Comment: Requires coordination with a Global Commons Trusteeship Commission within the UNEP or similar institution]

13. For the purpose of paragraphs 4 and 5, "increased risk" shall be evaluated on the basis of both the amount of increase in probability of the consequential environmental effects as well as the severity of the possible consequential environmental effects, and said evaluation may be a factor in determining the applicable reparations and/or penalties imposed on the offender by the Court pursuant to Articles 75 and 77.

Article 9

Elements of Crimes

Elements of Crimes shall assist the Court in the interpretation and application of articles 6, 7, 8, and 8 bis, and 8 ter.

They shall be adopted by a two-thirds majority of the members of the Assembly of States Parties.

[Editors' Comment: Currently 8 ter is the next available ordination in ICC Statute]

Elements

1. The perpetrator's act(s), directive(s), order(s), or the failures to so act, direct, or order caused a violation of the crime of ecocide. It shall be no defence against this element that there existed at the time of the alleged conduct a government or judicial regulation, policy, or permit allocation which authorized the allegedly ecocidal conduct.
2. The perpetrator was a person, as defined in Article 25(1)(AD), in a position effectively to exercise control over or to direct the use of any process or equipment whose deployment resulted in ecocide, or to exercise control over or to direct any other person that committed an act of ecocide.
3. There shall be no mental state element for the crime of ecocide pursuant to Article 8 ter (2). For determining appropriate sentences or reparations under Articles 75 and 77, the mental states of intentionality, negligence, knowingness, or unknowingness shall be considered as aggravating or mitigating factors. For purposes of this paragraph, negligence includes the

failure to take reasonable steps to investigate, identify, or prevent the potentially ecocidal consequences of the alleged conduct.

[Editors' Comment: The Elements section appears in a separate document to the ICC Statute and is incorporated by reference of Article 9]

Article 15
Prosecutor

1. The Prosecutor may initiate investigations proprio motu on the basis of information presented by any person on crimes within the jurisdiction of the Court.

Article 17
Issues of admissibility

1. Having regard to paragraph 10 of the Preamble and article 1, the Court shall determine that a case is inadmissible where:

...

9

(d) The case is not of sufficient gravity to justify further action by the Court. In cases brought under Article 5(e), the Court should consult with the United Nations Environmental Programme, or other internationally recognized agency specializing in environmental sustainability science, to make the determination of sufficient gravity.

[Editors' Comment: Requires cooperation with a Global Commons Trusteeship Commission within the UNEP, or similar institution]

Article 20
Ne bis in idem

...

3. No person who has been tried by another court for conduct also proscribed under article 6, 7, 8, 8 bis or 8 *bis ter* shall be tried by the Court with respect to the same conduct unless the proceedings in the other court: ...

[Editors' Comment: Currently 8 ter is the next available ordination in current ICC Statute]

Article 21 bis
Declaratory judgment

1. In cases brought under Article 5(e), and pursuant to any of the procedures described in Article 13, the Court may issue a Declaratory Judgment with regard to conduct which has not yet occurred but which is in active development stages.

2. The Court's rules of Procedure and Evidence shall apply to Declaratory Judgment proceedings. In addition, the Court may make provisional Rules applicable to Declaratory Judgment proceedings pursuant to Article 51(3).
3. There shall be no Penalties under Article 77 arising from the Declaratory Judgment proceedings described in this Article, except that Article 77 penalties may be ordered if the same case is converted to, or later refiled as, an Article 77 case. The Court may also impose an order of attorney's fees and legal costs upon any party to a Declaratory Judgment proceeding upon a determination by the Court that the said party's claims, defences, or other filings are frivolous, fraudulent, or dilatory.
4. Declaratory Judgments may be introduced as evidence of the defendant's state of mind in subsequent proceedings before the Court.

Article 25

Criminal responsibility

1. The Court shall have jurisdiction over natural and fictional persons pursuant to this Statute.
 - (a) For the purposes of this Article 25 (1), fictional persons shall include: any company, corporation, partnership, venture, nongovernmental organization, business organization, not-for-profit organization, or any government or other legal entity, except that no sovereign nation or its agents shall be considered a person unless the sovereign or its agent is the owner or operator, directly or indirectly, of an instrumentality engaging in the alleged conduct.
 - (b) For the purposes of this Article 25 (1), a person may also include:
 - i. Any director, partner, majority shareholder, officer, leader, and/or any other person natural or fictional, within an organization who is in a position of superior responsibility making that person responsible for offences committed by persons under his or her direct authority,
 - ii. Any member of government, prime minister or minister who is in a position of superior responsibility making that person responsible for offences committed by persons under his or her direct authority,
 - (c) For the purposes of Article 25 (1)(B)(i) and (B)(ii), a person in a position of superior responsibility shall only be held responsible if he or she fails to take all necessary measures within his or her power to prevent or to stop the commission of the crime of ecocide by persons under his or her direct authority, or to submit the matter to the competent authorities for investigation.
 - (d) For purposes of this Article 25 (1), the Court's jurisdiction over persons may include one, or more than one, natural or fictional persons and any combination of natural and fictional persons.

(e) For purposes of this Article 25 (1), where a person of superior responsibility is convicted of an offense by reason of his or her position of superior responsibility, as a consequence of the conviction, the organization to which he or she belongs may be held jointly responsible for the actions of the person with the superior responsibility.

...

4. No provision in this Statute relating to individual criminal responsibility shall affect the responsibility of States under international law, except as provided in Article 25(1)(AD).

Article 33

Superior orders and prescription of law

...

1 (d) In cases involving the violation of Article 5(e), it shall not be a defence for any person charged with a violation of the law of ecocide that their infringing acts were, at the time of occurrence, approved, sanctioned, or authorized in any way by an existing governmental law or regulation in either the jurisdiction where the acts occurred or where the effects of the ecocide were manifested.

2. For the purposes of this article, orders to commit genocide or crimes against humanity or the crime of ecocide are manifestly unlawful.

Article 36

Qualifications, nomination and election of judges

3. (b) Every candidate for election to the Court shall:

...

(iii) Have, in consideration of article 5(e), preferably established competence in relevant areas of environmental law such as international environmental law and the law of environmental protection, and extensive experience in a professional legal capacity, which is of relevance to the judicial work of the Court;

Article 42

The Office of the Prosecutor

2. The Office shall be headed by the Prosecutor. The Prosecutor shall have full authority over the management and administration of the Office, including the staff, facilities and other resources thereof. The Prosecutor shall be assisted by one or more Deputy Prosecutors Special Deputy Prosecutors, who shall be entitled to carry out any of the acts required of the Prosecutor under this Statute. In cases involving violations of Article 5(e), the Prosecutor shall be assisted by one or more Special Deputy Prosecutors, who may be qualified as experts in the prosecution of environmental crimes. The Prosecutor and the Deputy or Special Deputy Prosecutors shall be of different nationalities. They shall serve on a fulltime basis.

Article 43

The Registry

6. The Registrar shall set up a Victims and Witnesses Unit within the Registry. This Unit shall provide, in consultation with the Office of the Prosecutor, protective measures and security arrangements, counselling and other appropriate assistance for witnesses, victims who appear before the Court, and others who are at risk on account of testimony given by such witnesses. The Unit shall include staff with expertise in trauma, including trauma related to crimes of sexual violence and crimes of ecocide.

Article 53

Initiation of an investigation

2. ...

(c) ...under Article 13, paragraph (b) or any person presenting information under Article 15, paragraph 1, of his or her conclusion...

3. (a) ... under Article 13, paragraph (b) or any person presenting information under Article 15, paragraph 1, the Pre Trial Chamber...

Article 65

Proceedings on an admission of guilt

5. Any discussions between the Prosecutor and the defence regarding modification of the charges, the admission of guilt or the penalty to be imposed shall not be binding on the Court, except:

(a) In cases brought under Article 5(e), the Prosecutor may submit to the Court a written plea bargain agreement whereby the accused agrees to make an admission of guilt in exchange for the imposition of a specified penalty as defined in Articles 77(3)(B) and/or 77(3)(C). If the Court approves the plea bargain agreement then the terms of such agreement shall be binding upon the Court and shall be so ordered as the Court's disposition of the case.

Article 75

Reparations to victims

1. The Court shall establish principles relating to reparations to, or in respect of, victims, including restitution, compensation, and rehabilitation, transitional justice measures, and environmental restoration, including reimbursement for consequential losses arising from injury, loss of life, diminution of health or wellbeing, economic losses, ecosystem productivity and functions losses, or losses to cultural life. On this basis, in its decision the Court may, either upon request or on its own motion in exceptional circumstances, determine the scope and extent of any damage, loss and injury to, or in respect of, victims and the environment and will state the principles on which it is acting.
2. The Court may make an order directly against a convicted person specifying appropriate reparations to, or in respect of, victims, including restitution, compensation, and rehabilitation, and environmental restoration.

Article 77

Applicable penalties

3. In cases brought under Article 5(e), any person convicted of the crime of ecocide, or of aiding and abetting, counselling, or procuring the crime of ecocide, may be subjected to one or more of the following penalties:

- (a) Imprisonment as defined in subsection 1 of this Article,
- (b) Forfeiture of proceeds, property, and assets derived directly or indirectly from that crime as defined in subsection 1(b) of this Article
- (c) Reimbursement of attorney's fees and legal costs to prevailing parties,
- (d) Mandatory reparations to victims as set forth in Articles 75 and 79,
- (e) For fictional persons, Mandatory Dissolution,
- (f) Cessation of Operations Orders.

4. For purposes of this Statute:

- (a) "Mandatory Dissolution" of a fictional person shall mean the legal dissolution of the entity such that neither the entity, nor any substantially similar successor entity, continues to exist under the laws of any State or Non State Party;
- b) a "Cessation of Operations Order" shall order the discontinuation and permanent cessation of certain operations and/or practices that are directly related to the Ecocidal infractions before the Court.

Article 121

Amendments

...

5. Any amendment to articles 5, 6, 7 and 8 of this Statute shall enter into force for those States Parties, which have accepted the amendment one year after the deposit of their instruments of ratification or acceptance.

In respect of a State Party which has not accepted the amendment, the Court shall not exercise its jurisdiction regarding a crime covered by the amendment when committed by that State Party's nationals or on its territory except the court may exercise its jurisdiction over the crime of ecocide when committed by nationals of any State or Non State Party one year after the instruments of ratification or acceptance of amendments a) Article 5(e), b) 8t er, and c) Elements of the Crime of Ecocide have been deposited with the Secretary General of the United Nations by seven-eighths of the State Parties.

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