

# **Role of Green Criminology and Earth Jurisprudence in the Future of Environmental Law**

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## **ABSTRACT**

Two new field of studies; Green Criminology and Earth Jurisprudence have emerged in roughly the same timeframe which are having an impact on environmental laws being legislated the world over. The objective of green criminology is to define a frame work of harm for environmental crimes that goes beyond the classic theories of criminology. The emphasis being that environmental offences are structurally different and so are their ramifications hence they cannot be quantified or punished using the standard parameters of measuring crimes against persons. The emphasis of green criminology is to redefine environmental harms , identify the causes of these types of harms and provide wholistic solutions to the same. Green criminology is a broader umbrella under which academic and scientific researches related to varied disciplines have been undertaken. Green criminology is therefore referred to as a loose perspective and not a consolidated theory. Earth jurisprudence is an earth centered jurisprudential approach to law making that places nature and earth as the focal point with the intention and objective their benefit and not only human beings. This jurisprudential shift calls for the development of jurisprudence that is earth centric, reflections of which can be seen in

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ancient Vedic texts, the Aztec and Mayan culture and to a certain extent in the worship of mother nature. The objective of this paper is to explain the core concepts of green criminology and earth jurisprudence and project how these fields of study have started influence the making , content and implementation of environmental legislations today and may be the beginning of a new environmental jurisprudence.

### **What is green criminology?**

Crimes are social constructs having no ontological reality this means that crime is the behavior that has been illegalized by society or harmful activities that need to be penalized and punished as per the criminal law of the land.<sup>3</sup>These defined crimes include crimes against body , reputation and property of persons which the criminal justice system addresses through punishment to the offender. The main focus of criminology has been street crimes i.e., crimes committed by persons on another person or property of another person.

Michael Lynch coined the term 'green criminology' in 1990<sup>4</sup>as per Matthew Hall three movements that influenced Lynch were ecofeminism, environmental racism and ecological socialism hence the roots of green criminology originate from sociological reasons for stemming environmental harm.<sup>5</sup> At the turn of the millennium the inclusion of a green perspective was the seminal point for the development of the theory of green criminology. <sup>6</sup>Two distinct views were provided to the term 'green' while attempting to define green criminology the first was

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<sup>3</sup>Hulsman, L.H.C, *Critical Criminology and the Concept of Crime*, 10 (1) CONTEMPORARY CRISES 63–83 (1986).

<sup>4</sup>M.J, Lynch, *The Greening of Criminology: A Perspective on the 1990's*, 2(3) THE CRITICAL CRIMINOLOGIST 1–4 and 11–12.(1990)

<sup>5</sup>M Hall, *VICTIMS OF ENVIRONMENTAL HARM* 5-6 (2013).

<sup>6</sup>N. South, *A Green Field for Criminology? A Proposal for a Perspective*, 2(2) THEORETICAL CRIMINOLOGY 211–233 (1998).

environmental justice and the second being that corporate were mainly responsible for environmental crimes hence both harm and crime are central to green criminology.<sup>7</sup>

Green criminology is an offshoot of criminology, though radical and critical in its objective of including green crimes within the field of criminology.<sup>8</sup>It was found that the existing theories of criminology were centered around explaining the rationale behind crimes committed by individuals on persons, hence the main focus of existing theories of criminology was street crime aiming to explain , measure, theorize and understand criminal behavior.<sup>9</sup>The efforts of green criminologists to fit green crimes within the field of classical criminology revealed that the existing theories of criminology could not accommodate environmental harms.

All research work and effort of the school of green criminologists have been to develop a theory applicable to green crimes through which green crimes can be effectively addressed.<sup>10</sup>The vastness of the environment, the interaction of human with the environment, the interrelatedness and dependence of components of an ecosystem, the economic and political model which a country adopts all effect the way environment harm is defined and addressed.<sup>11</sup>

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<sup>7</sup>M.J. Lynch, and, P.B. Stretesky *The Meaning of Green: Towards a Clarification of the Term Green and Its Meaning for the Development of a Green Criminology*, 7(2): THEORETICAL CRIMINOLOGY 299 2003.

<sup>8</sup> M.J. Lynch and P.B. Stretesky, *EXPLORING GREEN CRIMINOLOGY: TOWARD A GREEN CRIMINOLOGICAL REVOLUTION* 2014.

<sup>9</sup>D.R. Cressey, *Criminological Research and the Definition of Crimes*, 56(6) AMERICAN JOURNAL OF SOCIOLOGY 546–551(1951).

<sup>10</sup>A. Brisman, and , N. South *THE GROWTH OF A FIELD: A SHORT HISTORY OF “GREEN” CRIMINOLOGY* (2020a).

<sup>11</sup>A.Brisman, and N. South, ‘Introduction: New Horizons, Ongoing and Emerging Issues and Relationships in Green Criminology,’ in: Brisman, A. and South, N. (eds) (2020a).

The umbrella of green criminology covers research that is situated within the green criminological perspective with a view to explain environmental harms and their impacts.<sup>12</sup>The content of green criminology is therefore populated by researches covering political economic causes of crime, eco-feminism, environmental justice, victimology of environmental harms and science-based research on use of chemicals and their consequences on humans and ecology.<sup>13</sup>Due to the policy of inclusivity followed by green criminology it has been rightly identified as a 'loose perspective' rather than a well-defined theory or model covering green crimes in totality.<sup>14</sup>Various off-shoots within the umbrella of green criminology like: 'atmospheric justice'; 'species justice' and 'Astro-green justice' have sprung into existence which are mini-disciplines by themselves.<sup>15</sup>

The diffuse, inclusive and multi-disciplinary approach of green criminology has been touted as one of its strengths it however makes it difficult to define the boundaries and content of the field. This mixed input of research makes it difficult to formulate a theoretical model that could explain all aspects of environmental harms. For example, two very unrelated studies done on the extinction of species due to poaching at the international level and the components of air pollution emitted by diesel vehicles in India are researches that can be included under the umbrella of green criminology. Deriving common principles from these two diverse researches is quite an impossible task. However, a broader perspective of the range of environmental

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<sup>12</sup>P.B. Stretesky, M.A.Long, and M.J. Lynch, *THE TREADMILL OF CRIME: POLITICAL ECONOMY AND GREEN Criminology*. (2014)

<sup>13</sup>N. South, *Green Criminology: Reflections, Connections, Horizons*, 3(2) INTERNATIONAL JOURNAL FOR CRIME, JUSTICE AND SOCIAL DEMOCRACY 5–20 (2014).

<sup>14</sup>N.South, *A Green Field for Criminology? A Proposal for a Perspective* 2(2) THEORETICAL CRIMINOLOGY 211–233 (1998).

<sup>15</sup> Jack Lampkin, *UNITING GREEN CRIMINOLOGY AND EARTH JURISPRUDENCE*, 22 (2021).

harms can be identified. In the first case that of specialism and in the second of how the automobile industry is leading to air pollution. Green criminology can therefore be viewed as a space for interested individuals debating and sharing ideas outside critical criminology.<sup>16</sup>

**Rainbow of Colors:**

To overcome the limits that the word ‘green’ connotes the visual approach to green criminology includes all colors of the rainbow. Every research can be placed in any one of the colors for example White classified his study on air pollution to be falling under the color brown. A category of colors is created in this visual approach to green criminology which has the advantage of accommodating all the diversity of this field of study.<sup>17</sup>This spectrum can be explained through a tabular format for ease of understanding. This table is based on the works of leading green criminologists and the color labeling they gave to their work.

| Color                              | Description  |
|------------------------------------|--|
| Green Issues for Green Criminology | The Study of environmental harms and crimes<br><br>Habitat Destruction<br><br>Wildlife Loss<br><br>Deforestation |

<sup>16</sup>A.N. Cao, and, T. Wyatt, *The Conceptual Compatibility Between Green Criminology and Human Security: A Proposed Interdisciplinary Framework for Examinations into Green Victimization*, 24(3) CRITICAL CRIMINOLOGY 413–430 (2016).

<sup>17</sup>R. White, *Environmental Crime in Global Context: Exploring the Theoretical and Empirical Complexities*, 16(3) CURRENT ISSUES IN CRIMINAL JUSTICE 271–285 (2005).

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| Brown Issues for Green Criminology         | Air Pollution<br>Oil Spills<br>Disposal of hazardous wastes  |
| White Issues for Green Criminology         | Genetically modified organisms<br>Environmentally related communicable diseases  |
| Red- Green Issues for Green Criminology    | Relate to the workplace<br>Structural economic oppression , Exploitation of the working class<br>Polluting technologies in the workplace<br>Climate Change |
| Blue -Green Issues for Green Criminology   | Policing and Law enforcement   |
| Grey Issues for Green Criminology          | Household wastewater   |
| Achromatopsic Issues for green Criminology | Climate Change   |

Table 1. The Spectrum of Green Criminological Research<sup>18</sup>

### **Core concepts of green criminology**

Distilling out core concepts of green of green criminology is difficult, here the author endeavors to outline some common threads of this discipline.

**Crime verses Harm juxtaposition:** Criminal law deals primarily with harms that are defined with precision and easy to quantify. Such offences have mandatory components that need to be

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<sup>18</sup> Jack Lampkin, UNITING GREEN CRIMINOLOGY AND EARTH JURISPRUDENCE, 23 (2021).

satisfied before an adjudicating body which decides the gravity of the crime and its accompanying punishment. Green criminology introduces the concept of harms that are not well defined but the legal system needs to address them in order to safeguard ecology, humans and non-humans. <sup>19</sup>Most of green crimes fall in the category of 'dark figure of crime' which are not defined, not known about hence not recognized, reported or recorded.<sup>20</sup> Green criminology moves beyond the notion of defined crime to include 'harm' going beyond the strict boundaries of legally identified crimes. <sup>21</sup>For example, constructing residential housing in areas that were earlier used by chemical industries for dumping their trade effluents the ramifications of such sanctioned urban planning resulted in diseases in children, genetic deformities. <sup>22</sup>Environmental injustice, environmental victimization as well as harms that may manifest as diseases in future generations. <sup>23</sup>

**Environmental Justice and Political Framework** – Green criminology places the 'green approach' within political and economic arguments that the solutions to green crimes were rooted in restructuring political and economic models. <sup>24</sup> To quote Lynch and Stretesky "We argue that being green implies more than holding values favoring environmental protection: it also entails a political stance wherein it is acknowledged that solutions to environmental degradation may

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<sup>19</sup>J.A. Lampkin, 'Green Criminology and Fracking in the UK: An Application of Utilitarian Ethics, , 16(2) PAPERS FROM THE BRITISH SOCIETY OF CRIMINOLOGY CONFERENCE 20–37 (2016) available at [www.britisocrim.org/wpcontent/uploads/2016/12/pbcc\\_2016\\_lampkin.pdf](http://www.britisocrim.org/wpcontent/uploads/2016/12/pbcc_2016_lampkin.pdf) (last visited on 15 April 2021).

<sup>20</sup> S. Walklate, CRIMINOLOGY: THE BASICS, 36(2005).

<sup>21</sup>R. White, GREEN CRIMINOLOGY,' The Sage Dictionary of Criminology, 248(2019).

<sup>22</sup>Brown, Phil, and Richard Clapp, *Looking Back on Love Canal, (1974-)* 117, ( 2) PUBLIC HEALTH REPORTS 95-98 (2002) available at: <http://www.jstor.org/stable/4598727> (last visited on 20 Apr. 2021).

<sup>23</sup>Shaw, et.al *Love Canal Chromosome Study*, 209 4458 SCIENCE 751–56(1980) available at : <http://www.jstor.org/stable/1684623>. (last visited at 23 Apr. 2021).

<sup>24</sup>Heydon, J. (2019) *Sustainable Development as Environmental Harm: Rights, Regulation, and Injustice in the Canadian Oil Sands*. Abingdon: Routledge. Pg 7

*require substantial economic and political reorganization”* <sup>25</sup>The broad theory of treadmill of production (ToP) propounds that with the change in mode of production from agricultural to industrial the emphasis has shifted to maximization of profit and externalization of environmental costs. This means that unless the regulation and penalty for violation of environmental offences is not punitive enough the polluters will choose to violate and cause environmental harms over obeying the rules. Hence the whole objective of the production process needs to be changed to choosing a production method that causes least environmental damage with the costs being internalized. Such a change in the thread mill of production process is resisted by political systems that are dependent on funding on profit making corporations.

Objectives of Green Criminology:

1. As environmental harms are increasing one of the objectives of green criminology is to identify the various types of environmental harms both at national and global levels.
2. Explain the reasons for such environmental offences.
3. Once the reasons and causes are identified to offer solutions.
4. Preventing environmental harms to protect humans, non-humans and ecological systems

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<sup>25</sup>Lynch, M.J. and Stretesky, P.B. (2003) 'The Meaning of Green: Towards a Clarification of the Term Green and Its Meaning for the Development of a Green Criminology,' *Theoretical Criminology*, 7(2): 231



## Limitations of Green Criminology

1. Going beyond Criminology as it includes eco-philosophy as a holistic solution. Eco-philosophy requires a shift in human thinking from a human centered one to one centered around the ecology.
2. Green crimes can fall within the umbrella of criminology.
3. Little interest by main stream criminology
4. Not value free – value positions within the field have stunted the growth of the field as many researchers prefer to be situated in a neutral value space whereas ‘green criminology’ reflects an inherent bias that the research will yield results that implicate the subject of research as guilty of destruction of the environment and critique the legal, political, economic framework which permit such activities.<sup>26</sup>
5. Fails to give holistic solutions which can be practically implemented.
6. It focuses more on the political economic nexus rather than the individual as the perpetrator of environmental harms.
7. Branding Issue – The use of the word ‘green’ has been highly debated within this discipline. Corporations engaging in polluting activities such as oil extraction, thermal power production etc. have been either using green in their trademarks and convincing shareholders and consumers alike that their processes and activities are environmentally friendly.<sup>27</sup>

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<sup>26</sup>G.R. Potter, *‘Justifying ‘Green’ Criminology: Values and ‘Taking Sides’ in an Ecologically Informed Social Science,’* in: Cowburn, M. Duggan, M. Robinson, A. and Senior, P. (eds) *VALUES IN CRIMINOLOGY AND COMMUNITY JUSTICE*, 125 (2013).

<sup>27</sup>M. Halsey, *Conservation Criminology and the “General Accident” of Climate Change,’* in: South, N. and Brisman, A. (eds) *THE ROUTLEDGE INTERNATIONAL HANDBOOK OF GREEN CRIMINOLOGY*, (2013).

8. Placing the genesis of green crimes in the economic and political frame work fails to consider the inter-subjective, inter-generational, inter-exosystemic processes which also play a significant part in producing environmental harm.<sup>28</sup> The market forces then become the predominant players deciding what would be considered an environmental harm. It was put forward by Halsey that the term 'green' be removed as this field was dealing with inter-relationship between power, lawmaking, politics and exosystemic harm.<sup>29</sup>
9. Neutrality is the hallmark of good scientific research; many scientists refrain from being labelled as either pro or anti nature. The association of the word green with criminology reflects that there is an inherent bias which might question the credibility of the research.<sup>30</sup>

### **Core Concepts of Green Criminology and their Relevance to Environmental law**

Environmental law is a nascent branch of law as compared to the law of crimes and civil law, with the intent of covering the new and unnoticeable '*dark figure of environmental harm*'. These core concepts of green criminology are relevant to environmental legislations in a number of ways:

1. Green criminology expands the definition of offence and introduced the concept of graded harms.

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<sup>28</sup>M. Halsey, *Against "Green" Criminology*, 44(6) BRITISH JOURNAL OF CRIMINOLOGY 835 (2004)

<sup>29</sup>*Id*

<sup>30</sup>V. Ruggiero, and N. South, *Green Criminology and Crimes of the Economy: Theory, Research and Praxis*, 21(3) CRITICAL CRIMINOLOGY 363 (2013).

2. The penology that is attached to the harm depends on the extent and intensity of the harm hence green criminology proposes a new model of graded penology in the criminal justice system for environmental offences.<sup>31</sup>
3. By proposing three holistic solutions; change in treadmill of production, eco philosophy and ecocide it intends to cover all environmental harms from national to the global level.
4. Through its various researches it has unearthed hidden environmental offences for which some legislative control has been installed through laws.
5. The proposal for a new system of criminal justice along with a new penology for environmental offences is being debated and many countries have legislated codes for environmental offences.<sup>32</sup>
6. Green criminology has brought to light the diversity of environmental harms and their hidden effects. This has generated awareness amongst the people who have begun to hold the State and governmental authorities accountable for environmental destruction and placing the onus of environmental protection on the State using the doctrine of public trust.<sup>33</sup>
7. The demand for ecocide to be recognized as a crime against humanity has been one of the major achievements. The international community has seriously discussed the

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<sup>31</sup> German Code dealing with environmental crimes provides for punishment as per the extent and intensity of the ecological crime.

<sup>32</sup>Ex- USSR and Germany are two such countries.

<sup>33</sup> National Audubon Society v Superior Court 33 cal 3d 419 1983

definition of ecocide and included in international agreements that prevent use of chemicals in war that cause environmental destruction.<sup>34</sup>

8. Green criminology has designed a framework that has environment as the outer frame work within which smaller frameworks of society and economy are situated. This has inverted the pyramid where man was at the top and nature at the bottom. We can represent this framework in a rectangular frame with the outermost rectangle being environment and nature and smaller interconnected rectangles within. This is a model that gives prominence to protection and preservation of nature and its systems and all other systems have to function in a manner that keeps the outermost rectangle intact.<sup>35</sup>

### **Earth Jurisprudence: An earth centered jurisprudence**

A pertinent question that human kind needs to answer is how do we view nature internally ? The answer to this question will decide the kind of environmental laws that will be legislated. At present the anthropocentric approach that places man at the pinnacle of the pyramid of living beings dictates that nature is for the utility and consumption of man. 'Earth jurisprudence' is a particular approach that privileges the earth -system and all ecological processes, laws made based on earth jurisprudence are known as 'wild law'<sup>36</sup>. A philosophy of law that privileges earth systems within its approach is referred to as 'earth jurisprudence' just like green criminology it is a perspective and approach and not a structured theory. One of the

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<sup>34</sup>P. Higgins, D. Short, and N. South, *Protecting the Planet: A Proposal for a Law of Ecocide*, 59(3) CRIME, LAW AND SOCIAL CHANGE 251–266 (2013).

<sup>35</sup>L. Hosken, *Reflections on an Inter-Cultural Journey into Earth Jurisprudence*, in: Burdon, P.D. (ed) EXPLORING WILD LAW: THE PHILOSOPHY OF EARTH JURISPRUDENCE (2011).

<sup>36</sup>I Mason Mason, *Exploring Wild Law*, in: Burdon, P.D. (ed) EXPLORING WILD LAW: THE PHILOSOPHY OF EARTH JURISPRUDENCE. 41 (2011).

concepts of green criminology is eco-philosophy which includes three approaches: anthropocentrism, biocentrism and eco-centrism. The center of wild law is eco-centrism which means that everything in the universe has the same value and moral standing<sup>37</sup>Hinduism and Jainism gives equal moral standing and value to all living forms and they reflect the concept of 'wholeness' which is similar to what Mason calls the philosophy of earth jurisprudence. <sup>38</sup> Inter connectedness between every living creature is the underpinning concept of earth jurisprudence and requires an approach that is concerned about the earth community as an integrated whole Berry called this the 'great jurisprudence'<sup>39</sup>

Three guiding principles for earth jurisprudence which had been outlined by Berry were given more depth by Koon's <sup>40</sup>these are subjectivity, communion and differentiation.

**Subjectivity:** The earth is a self -organizing system that is subject to the laws of the universe such as gravity, laws of thermodynamics the earth therefore is an intrinsic part of the universe and subject to its laws. Humans and non-humans which form the earth community are equally subject to this universal law and hence warrant 'moral consideration'. <sup>41</sup>

**Communion:** This principle establishes the relational responsibility of humanity towards the earth community. The interconnectedness of all matter is established through its common origin -the big bang theory. As all matter was created through the big-bang hence it is connected and has equal moral worth.

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<sup>37</sup>M.Halsey, and R. White, *Crime, Ecophilosophy and Environmental Harm*, 2(3) THEORETICAL CRIMINOLOGY 345-371(1998).

<sup>38</sup>Ibid at 33 pg.36

<sup>39</sup>T. Berry, *THE GREAT WORK: OUR WAY INTO THE FUTURE* (1999).

<sup>40</sup>J.E. Koons, *Key Principles to Transform Law for the Health of the Planet,* in: Burdon, P.D. (ed) *EXPLORING WILD LAW: THE PHILOSOPHY OF EARTH JURISPRUDENCE*, 47(2011).

<sup>41</sup>Id.

**Differentiation:** The current governance and legal systems are mostly by the people, of the people and for the people. This principle of earth jurisprudence proposes the creation of governance and legal systems of the earth community, by the human members of the earth community, and for the earth community. <sup>42</sup>

Cullinan<sup>43</sup> developed the seminal work on earth jurisprudence written by Thomas Berry<sup>44</sup> and encapsulated five principles of earth jurisprudence. Principle 1 states that the universe is the primary law giver and not the human legal systems, principle 2 bestows fundamental rights of existence, habitat and participation in the evolution of the earth community to all members of the earth community and recognizes all members of the earth community as subjects before the law and entitled to the protection of the law. These fundamental rights are bestowed in such a manner that maintains the integrity, balance and health of the existing communities. <sup>45</sup> Human acts and fundamental rights that violate 'great jurisprudence' are illegitimate and unlawful. <sup>46</sup>All systems that humans have created need to be in consonance with this great jurisprudence which means that these systems should not weaken the relationships that constitute the earth community rather they should maintain a dynamic balance between human rights and rights of other members of the earth community. <sup>47</sup>

Earth jurisprudence is a philosophy of law that continuously shifts the focus from a human centered law-making process to an earth centered law-making process. This is similar to the

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<sup>42</sup>Koons, J.E. (2011) 'Key Principles to Transform Law for the Health of the Planet,' in: Burdon, P.D. (ed) *Exploring Wild Law: The Philosophy of Earth Jurisprudence*. Mile End, Australia: Wakefield Press. Koons

<sup>43</sup> C. Cullinan, 'A History of Wild Law,' in: Burdon, P.D. (ed) *EXPLORING WILD LAW: THE PHILOSOPHY OF EARTH JURISPRUDENCE*. (2011a).

<sup>44</sup>T. Berry, *THE GREAT WORK: OUR WAY INTO THE FUTURE*, (1999).

<sup>45</sup>Principle 3 of Earth Jurisprudence

<sup>46</sup>Principle 4 of Earth Jurisprudence

<sup>47</sup>Principle 5 of Earth Jurisprudence

green criminology approach that advocates a shift from the current anthropocentric approach to law making to a bio-centric approach towards law making. The difference between biocentrism and earth centered approach is the role it ascribes to law. Eco-philosophy dictates that the law has the function of regulating the environment whereas earth jurisprudence views law as a tool to regulate human activity for the good of earth community.<sup>48</sup>

The switch from the current jurisprudential approach to earth jurisprudence will be slow as evolution of consciousness will happen over a period of time. Till this switch happens both approaches will continue to co-exist which might at times grow closer when advantageous to each other and distance themselves when its disadvantageous but as the level of environmental consciousness grows so will the shift towards earth jurisprudence and inclusion of green perspective in the legislative process both at the national and international level .<sup>49</sup>

#### Shortfalls of earth jurisprudence

1. Bio-centric eco-philosophy also proposed a similar approach to law making that balances the need of humans with ecological health.<sup>50</sup>
2. Earth jurisprudence does not provide the pathways through which human thinking and current anthropocentric law-making process can be transitioned to adopting great jurisprudence with the objective of good for the earth community. Earth jurisprudence theorists are successful in providing the reasons why this shift in jurisprudence is required but fail to provide the methods through which such radical transformation can

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<sup>48</sup>J.E Koons, *At the Tipping Point: Defining an Earth Jurisprudence for Social and Ecological Justice*, 58: LOYOLA LAW REVIEW 368 (2012).

<sup>49</sup>M. Bell, *Thomas Berry and an Earth Jurisprudence*, 19(1) THE TRUMPETER: JOURNAL OF ECO SOPHY, 90(2003)

<sup>49</sup> Halsey and White 1998; 366

<sup>50</sup> M. Halsey, and R. White, *Crime, Eco philosophy and Environmental Harm*, 2(3) THEORETICAL CRIMINOLOGY 366 (1998).

take place.<sup>51</sup> As Rogers states, “How do we interpret or deconstruct our existing law/laws wildly, such that humanity is not necessarily the primary focus? How do we disregard our own self-interest, our ingrained assumptions and presuppositions as part of the human species, and indeed as part of a particular subset of the human species, to prioritise or at least recognise and respect Earth and its many communities and life forms in the process of wildly rewriting law?”<sup>52</sup>

3. Both green criminology and earth jurisprudence demand a radical change in global political economy that is earth centric and not run by markets, industries and economic profit making at its center. This radical change is utopian and is fraught with obstacles and objections by corporations and government systems that are dependent on corporations for funding and functioning of the economic system.<sup>53</sup>
4. Similar to the misuse of the word “green” by corporations that plagues green criminology similarly one of the gospel principles of earth jurisprudence “sustainability” has also been widely used by governments , political systems and corporations to permit the unrestricted and destructive use of natural resources by classifying such use as sustainable.<sup>54</sup>

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<sup>51</sup>J.A. Lampkin, and T. Wyatt, ‘Utilizing Principles of Earth Jurisprudence to Prevent Environmental Harm: Applying a Case Study of Unconventional Hydraulic Fracturing for Shale Gas in the United Kingdom,’: 10-11. *CRITICAL CRIMINOLOGY* (2019) *available at*: <https://doi.org/10.1007/s10612-018-9426-7> (last visited 01, April 2020).

<sup>52</sup>N Rogers, *Performance and Pedagogy in the Wild Law Judgment Project*, 27(1): *LEGAL EDUCATION REVIEW* 1–2. (2017)

<sup>53</sup>Lampkin, J.A. and Wyatt, T. (2019) ‘Utilizing Principles of Earth Jurisprudence to Prevent Environmental Harm: Applying a Case Study of Unconventional Hydraulic Fracturing for Shale Gas in the United Kingdom,’ *Critical Criminology*: 10 [Online]. Available at: <https://doi.org/10.1007/s10612-018-9426-7>

<sup>54</sup>J. Heydon, *SUSTAINABLE DEVELOPMENT AS ENVIRONMENTAL HARM: RIGHTS, REGULATION, AND INJUSTICE IN THE CANADIAN OIL SANDS* 15 (2019).



5. As distinct from the human jurisprudence that is man made with the central focus being on human beings' earth jurisprudence is a given and exists in nature to which everything is a subject. Theorists of earth jurisprudence fail to identify how human beings will recognize this existing jurisprudence and fit it within the framework of the existing human jurisprudence framework.<sup>55</sup>
6. As per earth jurisprudence all components of earth have equal moral status but most legal systems have not granted legal personality to non-humans, biodiversity or their components.<sup>56</sup>
7. Creation of rights of the environment does not guarantee their protection or their right to exist in the same condition for the future generations as some aspect of their personhood will be affected by human action which might not be observable.<sup>57</sup>
8. Earth jurisprudence has not been able to develop a unified framework replete with concrete principles which are essential for creating a secure content from which "wild laws" can originate.<sup>58</sup>

### **Similarities and Differences between Earth Jurisprudence and Green Criminology**

Both earth jurisprudence and green criminology have originated from the parent discipline of law and criminology and the reason for their emergence was the failure of law and

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<sup>55</sup>A. Schillmoller, and A. Pelizzon, *Mapping the Terrain of Earth Jurisprudence: Landscape, Thresholds and Horizons*, 3: 24 ENVIRONMENT AND EARTH LAW JOURNAL (2013).

<sup>56</sup>C.D.Stone, Should trees have standing? – Toward legal rights for natural objects in *Environmental Rights* 283-334 (2017).

<sup>57</sup>J. O'Neill, WHO SPEAKS FOR NATURE? HOW NATURE SPEAKS: THE DYNAMICS OF THE HUMAN ECOLOGICAL CONDITION, 261 (2006).

<sup>58</sup>Id at 7-8

criminology to deal effectively with environmental harms and crimes.<sup>59</sup> The theoretical conception of both the fields is different as green criminology is theorized as a perception and not a distinct criminological theory.<sup>60</sup> The broad range of green criminology allows a number of researches that concern environmental harms but belonging to different disciplines are conducted under the umbrella of green criminology. Hence green criminology is not restricted and has grown at a much faster pace than earth jurisprudence. Earth jurisprudence is concerned with the philosophy of law and how to make the existing philosophy more earth centric which will result in “wild laws”.<sup>61</sup> From the practical point of view green criminology emphasizes the use of existing criminal justice systems to resolve environmental harm hence, it is a post harm action-based framework. Whereas earth jurisprudence endeavors to create such laws that will prevent environmental harm. A striking similarity is that both these disciplines share at their core that the current laws and justice systems are not successful and adequate to stop or mitigate environmental harms.

### **Integration of Earth Jurisprudence and Green Criminology in Action:**

The biggest challenge for earth jurisprudence is to move out of the realm of ideas into the real world of positivist law. Some countries have enacted laws granting rights and legal personality to nature and its components. Hindu culture has worshiped trees and animals and protected them, the inscription on Ashokan edicts instructed people to be kind to

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<sup>59</sup>P.D. Burdon, 'Wild Law: The Philosophy of Earth Jurisprudence,' 35(2) ALTERNATIVE LAW JOURNAL 62 (2010)

<sup>60</sup>N. South, 'A Green Field for Criminology? A Proposal for a Perspective,' 2(2) THEORETICAL CRIMINOLOGY 211–233 (1998).

<sup>61</sup>I. Mason, *Exploring Wild Law*, in: Burdon, P.D. (ed) EXPLORING WILD LAW: THE PHILOSOPHY OF EARTH JURISPRUDENCE. 3 (2011).

animals and turn to vegetarianism so that less animals are killed. <sup>62</sup>The importance of plants used for treating ailments and planting trees for the welfare of humans and animals is also highlighted as a good deed done by the emperor.<sup>63</sup>

In recent times some countries have managed to pass laws and even make provisions in their Constitution for the rights of nature and protection of the environment. Some pertinent case studies that have had an impact are discussed below. In the cases discussed below the countries have blended earth jurisprudence to grant rights to nature and applied green criminology to protect these rights by making their violations penal offences.

1. The Whanganui River in New Zealand is sacred to the indigenous Whanganui Iwi who culturally hold that they and the river are one entity. After a century of legal battle, the Whanganui River Deed of Settlement in 2011 and a record of understanding in 2012 recognized Whanganui River as a living being having rights similar to a living entity. <sup>64</sup>In 2019 through The Whanganui River Claims Settlement Act, legal personhood was granted to the river and the Crown is responsible for the well-being of the river.<sup>65</sup> Personhood granted to the river exemplifies all the three principles of earth jurisprudence firstly, the river is entitled to the right to be and exist till eternity and the crown has a duty to prevent it from environmental destruction, this ensures that it

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<sup>62</sup>Edict I of the Ashokan Edicts [https://www.worldhistory.org/Edicts\\_of\\_Ashoka/](https://www.worldhistory.org/Edicts_of_Ashoka/)

<sup>63</sup>Edict II of the Ashokan Edicts

<sup>64</sup>E.C. Hsiao, *Whanganui River Agreement*, 42(6) ENVIRONMENTAL POLICY AND LAW 371(2012)

<sup>65</sup>T. Rowe, *The Fight for Ancestral Rivers: A Study of the Maori and the Legal Personhood Status of the Whanganui River and Whether Maori Strategies Can Be Used to Preserve the Menominee River*, 27(3) MICHIGAN STATE INTERNATIONAL LAW REVIEW 609 (2019).

continues to exist and has its habitat which is the second principle and lastly the sacred role of the river to the indigenous people gains cultural recognition.<sup>66</sup>

2. Ecuador in 2008 codified the rights of Mother Earth into its Constitution these rights are known as “ Pacha Mama “. Article 71 of the Ecuadorian Constitution states that “ *Nature or “Pachamama” , where life is reproduced and exists, has the right to exist, persist, maintain and regenerate its vital cycles, structure, functions and evolutionary processes*”<sup>67</sup> This Article grants nature the right to exist , continuity, to maintain and regenerate its natural cycles, functions and evolve naturally. Man, and his activities should not disturb or destroy any of the natural processes. This is an example of environmental constitutionalism and rights bestowed through the Constitution are not easy to amend or being removed. These also bind the State to adopt an economic system that is supportive of these rights and sets the tone for state – corporate relationship where the corporations cannot violate and destroy nature indiscriminately nor can the State grant earth destructive permissions.<sup>68</sup> The question now that has to be answered is are these rights effective and achieving the objectives with which they were enshrined ?The focus has now shifted to can wild laws be effectively implemented?

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<sup>66</sup>T. Berry, *Rights of the Earth: We Needs a New Legal Framework Which Recognizes the Rights of All Living Beings*, in: Burdon, P. (ed) *EXPLORING WILD LAW: THE PHILOSOPHY OF EARTH JURISPRUDENCE* 229 (2011)

<sup>66</sup> Article 71 of the Ecuadorian Constitution.

<sup>67</sup>Article 71 of the Ecuadorian Constitution

<sup>68</sup>N. Rühs, and A Jones, *The Implementation of Earth Jurisprudence Through Substantive Constitutional Rights of Nature*, 8(2) *SUSTAINABILITY* 179 (2016).

3. In Bolivia statutes such as , Law of the Rights of Mother Earth , 2010 and the Framework Law on Mother Earth and Integral Development for living well, 2012 acknowledge that life should be in harmony with nature.<sup>69</sup>Article 5 guarantees the comprehensive and effective restoration or rehabilitation of the functionality of Mother Earth by the individual, collective or community that causes damage whether accidental or premediated to the components , zones and life systems of Mother Earth. <sup>70</sup> The environmental functions and natural processes of the components and systems of life of Mother Earth are considered as gifts of the sacred Mother Earth and not as merchandise <sup>71</sup> The State and society have been given the obligation to promote actions that guarantee the mitigation, repair and restoration of the magnitude of damage to the components, areas and life systems of Mother Earth. <sup>72</sup>Though these legislations are comprehensive they are however a lighter version of the original proposed draft which got diluted due to corporate lobbying.<sup>73</sup>
  
4. River Ganga was granted personhood by the Uttarakhand High Court and the State and civilians were obligated to keep the river alive and thriving. This judgement called for the setting up of a Ganga Management Board and appointed a number of officials as the

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<sup>69</sup>Article 12 of the Framework Law of Mother Earth and Integral Development for Living Well, 2012

<sup>70</sup>Article 5 of the Framework Law of Mother Earth and Integral Development for Living Well, 2012

<sup>71</sup>Article 2 of the Framework Law of Mother Earth and Integral Development for Living Well, 2012

<sup>72</sup>Article 7 of the Framework Law of Mother Earth and Integral Development for Living Well, 2012

<sup>73</sup>P.V. Calzadilla, and L.J. Kotzé, *Living in Harmony with Nature? A Critical Appraisal of the Rights of Mother Earth in Bolivia*, 7(3) TRANSNATIONAL ENVIRONMENTAL LAW,423 (2018).

parents of the river.<sup>74</sup> This judgement was premised on similar reasoning as the declaration of the Whanganui river as a living person but unlike the structures that had been built for the protection of Whanganui through long negotiations this judgement was more of wishful ordering without any base building.<sup>75</sup> This order of the Uttarakhand High Court was challenged by the Uttarakhand government in the Supreme Court on the grounds that could the victims of floods sue the guardians of the river? This argument is seriously flawed as the central question was the protection of the rivers, glaciers and tributaries against pollution. It was also argued that such an order was unsustainable in law. The High Court's intention was to give the river the right to be , exist, fulfil its role and naturally evolve. The Supreme Court stayed the order and later overruled the decision of the High court. Though this indicates that earth jurisprudence was not accepted by the Supreme Court but the process of its incorporation has begun through judicial incorporation of earth jurisprudence.<sup>76</sup>

These developments reflect that a paradigm shift in environmental legislation has begun at the municipal level similar developments in international law will lead to a collective shift in environmental jurisprudence and efficient redressal of green crimes.

### **Green Crimes and International Law**

Limitations on environmental harm were incorporated first in international humanitarian law and then into international criminal law in 1998. Right from the United Nations Conference on

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<sup>74</sup>The Director of NAMAMI Gange, the Chief Secretary of the State of Uttarakhand and the Advocate General of the State of Uttarakhand were declared persons in loco parentis.

<sup>75</sup> *Lalit Miglani v State of Uttrakhand & others*.

<sup>76</sup> *Orissa Mining Corporation v. Ministry of Forest and Environment* 2013 (V) AD (SC) 289.

Human Environment held in 1972 till the Paris Agreement signed in 2016 environmental issues such as carbon emission, climate change, ozone depletion have occupied centerstage as the main challenges to the continued existence of mankind.<sup>77</sup>Countries have through municipal legislations to a certain extent criminalized environmental offence and are using their criminal justice system to penalize the offenders. International law relating to environmental protection has grown in a fragmented pattern under various conventions that prohibit trade in wildlife and endangered species, prohibit whaling, trans-boundary pollution, non-commercial use of Antarctica, prevention of pollution of the seas, regulation of dumping of nuclear waste in seas, preservation of biodiversity and preventing pollution of space being some prominent areas regulated by conventions.<sup>78</sup>The nature of these conventions is predominantly declaratory, persuasive and focuses on creating obligations on nation-states to legislate and implement the convention through domestic laws or in monistic countries the convention becomes part of the law once ratified. Most of environmental conventions have originated in International Humanitarian law viewing environment as common property of mankind. It is however, left to the discretion of the ratifying country to implement the convention as per its legal system and policy. <sup>79</sup>International environmental law therefore takes the soft law approach whereas International Criminal law takes the hard law approach.

International criminal law is reluctant to attach criminal liability for environmental crimes which has resulted in a weak inter-section between International environmental law and

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<sup>77</sup>L. Flower, *Environmental challenges in the 21st century*. 9(4) ASSUMPTION UNIVERSITY JOURNAL OF TECHNOLOGY 248-252(2006).

<sup>78</sup>O Schachter, *The Emergence of International Environmental law.*, 457-493 JOURNAL OF INTERNATIONAL AFFAIRS 1991

<sup>79</sup>M. Faure & M. Visser, *How to Punish Environmental Pollution? Some Reflections on Various Models of Criminalization of Environmental Harm*, 316 EUR. J. OF CRIME, CRIM. L. & CRIM. JUST. (1995).

International criminal law.<sup>80</sup> Certain Articles of the Rome Statute through a liberal interpretation can include environmental crimes. Environmental crimes can be brought to the International Criminal Court (ICC) using Article 6(c) of the Rome Statute which prevents deliberate acts that can alter conditions of life which can bring about the physical destruction of a group of people or of a part<sup>81</sup> Deliberate deprivation of resources indispensable for survival is a part of “Elements of Crime”<sup>82</sup> that can cause genocide. Environmental challenges such as climate change, excessive exploitation of natural resources and change of land use can cause deprivation of resources and result in genocide. The Genocide Convention was the precursor to the Rome statute and the Whitaker Report had suggested the inclusion of environmental destruction which included irreparable damage to the environment within the ambit of genocide and this proposal was rejected.<sup>83</sup> Even if this suggestion had been accepted it was fraught with the difficulty of attributing genocidal intent (*mens rea*) to development activities of the State.<sup>84</sup>

According to the Whitaker report environmental destruction was a better fit as a crime against humanity than a sub-species of genocide as crimes against humanity demand a lesser *mens rea*

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<sup>80</sup>Frederic Megret, *The problem of an International Criminal Law of the Environment*, 36 COLUM. J. ENVTL. L. 195, 201 (2011).

<sup>81</sup>Rome Statute of the International Criminal Court, 2187 UNTS 90, 17 July 1998, entered into force 1 July 2002, art 6 (‘ICC Statute’).

<sup>82</sup>International Criminal Court, Elements of Crimes, U.N. Doc. PCNICC/2000/1/Add.2 (2000).

<sup>83</sup>B Whitaker (Special Rapporteur) *Revised and Updated Report on the Question of the Prevention and Punishment of the Crime of Genocide*, UN ESCOR, Human Rights Sub-Commission on the Prevention of Discrimination and Protection of Minorities, 38th Sess., UN Doc. E/CN.4/Sub.2/1985/6 (1985) (‘Whitaker Report’)

<sup>84</sup>International Criminal Court, Elements of Crimes, U.N. Doc. PCNICC/2000/1/Add.2 (2000)



in the form of knowledge rather than intent as required in genocide.<sup>85</sup> Article 7 of the Rome Statute of 1998 enumerated prohibitions on extermination<sup>86</sup>, forcible transfer of population<sup>87</sup>, persecution<sup>88</sup> and other inhuman acts<sup>89</sup> which are committed as part of a widespread or systemic knowledgeable attacks against any civilian population.<sup>90</sup> Post the Vietnam war an addition to Protocol I to the Geneva Convention was made that prohibited “*methods and means of warfare which were intended ,or may be expected , to cause widespread, long-term and severe damage to the natural environment*” during international armed conflict but no such provision was added to Protocol II which applies to non-international armed conflicts that means that internal war within a nation state was a permitted space for green crimes. <sup>91</sup>

Many acts of environmental destruction clearly fall within the ambit of Article 7 of the Rome Statute of 1998 and attaches criminal liability to the accused. “Environmental destruction” as a specific war crime was included in Article 8(2)(b)(iv) of the Rome Statute which criminalizes environmental crimes during war but such environmental destruction should not be a military necessity.<sup>92</sup> Article 8(2)(b)(iv) remains underutilized as no tribunal post the Nuremberg Trials has prosecuted individuals under this amended Article.<sup>93</sup>

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<sup>85</sup>Whitaker Report (n.10), para 33

<sup>86</sup>ICC Statute, art 7(1)(b).

<sup>87</sup>ICC Statute, art 7(1)(d).

<sup>88</sup>ICC Statute, art 7(1)(h).

<sup>89</sup>ICC Statute, art 7(1)(k)

<sup>90</sup>ICC Statute, art 7.

<sup>91</sup>Protocol Additional to the Geneva Conventions of 12 August 1949, and relating to the Protection of Victims of International Armed Conflicts (Protocol I) 1125 UNTS 3, 8 June 1977, entered into force 7 December 1979, arts 35(3) and 55

<sup>92</sup>In Polish Forestry Case No. 7150, the United Nations War Crimes Commission determined that German Administrators could be considered war criminals for cutting down polish Timber.

<sup>93</sup>Tara Weinstein, ‘Prosecuting Attacks that Destroy the Environment: Environmental Crimes or Humanitarian Atrocities?’ (2004-2005) 17 Georgetown International Environmental Law Review 697, 704

Since the adoption of the Rome Statute in 1998 provisions punishing environmental destruction have been finding their way in the statutes establishing *ad-hoc* tribunals.<sup>94</sup> The absence of prosecution for ecological destruction during warfare requires the destruction be immense, intense, intentional and disproportionate to the military gains. With such high thresholds it is impossible to attach criminal liability for acts of environmental destruction during international warfare. For this Article to be effective in stemming green crimes during international warfare these thresholds need to be clarified and defined with precision.<sup>95</sup> It is predicted that future global wars will be over natural resources but unfortunately international criminal law does not prohibit and prosecute such green aggression and green wars.<sup>96</sup>

For international criminal law to develop a strong framework for green crimes during warfare the threshold for environmental destruction that would amount to a war crime should be lowered. The existing crimes against humanity can be interpreted through the green perspective to include environmental destruction as one of their components.<sup>97</sup> An amendment to the Statute of the Criminal Court to include specific green crimes has also been recommended and a call for the creation of Fifth Geneva Convention<sup>98</sup> and setting up a specialized International Court for

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<sup>94</sup>United Nations Transitional Administration in East Timor, on the Establishment of Panels with Exclusive Jurisdiction over Serious Criminal Offences' UNTAET Reg. 2000/15, 6 June 2000, s. 6(1)(b)(iv). & Statute of the Iraqi Special Tribunal for Crimes Against Humanity (10 December 2003) art 13(b)(5).

<sup>95</sup>K Hulme, *War Torn Environment: Interpreting the Legal Threshold* (Martinus Nijhoff Publishers, Leiden 2004) 92. See also MN Schmitt, 'War and the Environment: Fault Lines in the Prescriptive Landscape' in JE Austin and CE Bruch (eds) *The Environmental Consequences of War: Legal, Scientific and Economic Perspectives* (CUP, Cambridge 2000) 87, 109.

<sup>96</sup>M.L. Ross, How do natural resources influence civil war? Evidence from thirteen cases. , 58 (1) INTERNATIONAL ORGANIZATION 35-67 (2004).

<sup>97</sup>T. Smith, CREATING A FRAMEWORK FOR THE PROSECUTION OF ENVIRONMENTAL CRIMES IN INTERNATIONAL CRIMINAL LAW, 58 ( 2016).

<sup>98</sup>See generally H-P Gasser, 'For Better Protection of the Natural Environment in Armed Conflict: A Proposal for Action' (1995) 89(3) AJIL 637-44. See also United Nations Environment Programme, 'Protecting the Environment During Armed Conflict: An Inventory and Analysis of International Law' (UNEP Post-Conflict and Disaster Management Branch, Nairobi November 2009) 51.

Environmental offences has also been advanced.<sup>99</sup> There have been proposals to include the crime of 'ecocide' as an independent international crime. Ecocide as a crime has been included in criminal codes of Armenia<sup>100</sup> and Belarus<sup>101</sup> the international community has till now negated the demand for inclusion of crime of ecocide in international law.<sup>102</sup> Most of the green crimes occur within a nation-state and with the sanction of the nation-state such crimes at times are transnational but not as a result of international armed conflict international law needs to incorporate such green crimes. International criminal law as it exists at present is handicapped and ill-equipped to stop environmental destruction which has state approval and not suited to try environmental crimes.<sup>103</sup>

### **Conclusion: The future of environmental law**

**Increasing Diversity:** A number of laws are being legislated for protection of various aspects of the environment. An environmental legislation is usually put in the statute book post some amount of damage and is mostly to prevent further harm. For example, now that the outer space is full of satellites that have run out of life we are facing the problem of space debris. Internationally environmental law is taking steps to prevent the situation from worsening.

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<sup>99</sup>See S Hockman, *An International Court for the Environment* 11 ENVIRONMENTAL L REV, 1–4(2009). See also A Abrami, 'Proposal of Two Historical Reforms: An International Environmental Criminal Court (IECC) A European Environmental Criminal Court (EECC)' (International Academy of Environmental Sciences, Venice 2010).

<sup>100</sup>Art 394 of the Armenian Criminal Code defines ecocide as '[m]ass 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 with imprisonment for the term of 10 to 15 years.'

<sup>101</sup>Art 131 of the Belarusian Criminal Code prohibits ecocide as such: 'Intentional mass destruction of flora or fauna, or poisoning of the atmosphere or water, or committing other intentional acts that could cause an environmental catastrophe (ecocide) – shall be punishable with imprisonment for a term of ten to fifteen years.'

<sup>102</sup>LA Teclaff, 'Beyond Restoration – The Case of Ecocide' 34 *Natural Resources Journal* 933(1994); AH Westing, 'Arms Control and the Environment: Proscription of Ecocide' 30(1) *Bulletin of the Atomic Scientists* 24–27(1974).

<sup>103</sup>David A. Barker, *Environmental Crimes, Prosecutorial Discretion, and the Civil/Criminal Line*, 88 VIRGINIA LAW REVIEW 1387, 1429 (2002), available at <https://doi.org/10.2307/1073986>. (last visited on 23 April 2021).

Similarly, use of plastic micro-beads and heavy metals in cosmetics has been regulated in Europe but the same has not happened in India. The areas in which environmental legislations are being drafted is increasing as it is being realized that man-made change are affecting nearly all aspects of environment and nature.

**Change in Conceptual Framework:** The framework for law making that is used at present is the where the human frame work subsumes all other frameworks like the society, economy and environment. Herman Daly in 1998 created a model of environmental thinking where the environmental framework was the outermost ring within which the human and economic frame work was inner rings.<sup>104</sup>The advantage of such a framework is that it does not think of environmental harms as after thoughts rather as forethought.

**Increase in Technical Input:** With development in science and technology as well as rapid research techniques the standards that are being incorporated in environmental changes are changing rapidly. For example, the automobile industry has to keep to regulations mandating of adopting engine technology that causes lesser air pollution.<sup>105</sup>The rapid rate at which environmental research is updating data will require environmental regulations to be revised as per the new data at regular intervals. This has to be done by delegating rule making and amending powers to the implementing agencies. Highly technical environmental laws will need

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<sup>104</sup>H.E. Daly, *BEYOND GROWTH: THE ECONOMICS OF SUSTAINABLE DEVELOPMENT* (1998).

<sup>105</sup>Vega, Gina, *Volkswagen: Business as Usual* 36 (3) *BUSINESS & PROFESSIONAL ETHICS JOURNAL* 285–96. (2017) available at <https://www.jstor.org/stable/48561394>. (last visited on 24 April 2021).

technical experts to interpret them hence the future holds that more scientists will be needed as support to bodies dealing with environmental harms and protection. <sup>106</sup>

### **Shift in Jurisprudence**

How humans view and think about environmental harms during the age of industrial development is changing since the 1960's, which saw green movements in Europe followed by scientists highlighting the environmental fallouts of use of chemicals in pesticides and insecticides. <sup>107</sup>The current jurisprudence that underlines environmental legislations is focused on sustainable development that permits harm to the environment provided the harm is less than the benefit that is derived from such use. <sup>108</sup>Giving rights to nature and its elements will shift the jurisprudence to protection of the rights given to the environment. <sup>109</sup>For example, the laws regulating waste segregation in Maharashtra have placed the onus of segregation of waste on the generator of the waste and the violation of this can result in the Municipality refusing to collect the waste generated by the building. <sup>110</sup>The punishment imposed is on the community making the civil society realize the importance of obeying segregation laws.

### **Strengthening the International Framework for Green Crimes :**

International environmental law can be credited for being the birthing womb for environmental rights but has been reluctant to criminalize environmental harms. It is possible that in future, as

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<sup>106</sup>Carter, Jacob, and Gretchen Goldman, *Strengthening Scientific Integrity at the Environmental Protection Agency*, Union of Concerned Scientists, 2020. available at: <http://www.jstor.org/stable/resrep26327> (last visited on 27 April 2021).

<sup>107</sup>Rachel Carlson, *the silent spring*

<sup>108</sup>Gagnon, S.C. Thompson, and M.A. Burton, *Eco centric and Anthropocentric Attitudes Toward the Environment*, 14(2) JOURNAL OF ENVIRONMENTAL PSYCHOLOGY, 149–157 (1994).

<sup>109</sup>J.E. Koons, *Key Principles to Transform Law for the Health of the Planet,* in: Burdon, P.D. (ed) *EXPLORING WILD LAW: THE PHILOSOPHY OF EARTH JURISPRUDENCE* 45 (2011).

<sup>110</sup>Rule 4 of the Solid Waste Management Rules, 2016.

the world recognizes the need for standardization of environmental standards and the trans-boundary interdependence of environmental problems a stronger criminal framework for enforcing international environmental crimes might come into existence. As of now international environmental law is anthropocentric and has to a limited extent criminalized green crimes but is devoid of earth jurisprudence as the main aim still remains welfare of humans by preventing environmental destruction.

The silver lining in the clouds is that the world is realizing that environmental crimes are shared challenges that mankind has to face as a united front and for once the anthropocentrism of human actions and laws is being questioned and hopefully the answers lie in assimilating the inclusiveness advocated by green criminology and earth jurisprudence in human actions and laws at the national and international platform. Green criminology can help in raising the seriousness of harms against nature and increased deterrence but little penal flexibility. The inclusion of earth jurisprudence will inculcate a duty-oriented jurisprudence towards what constitutes earth and all life on earth this philosophy has the strength to change human thought and action.