

Review

# The Implementation of Earth Jurisprudence through Substantive Constitutional Rights of Nature

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**Abstract:** To date, international processes associated with sustainable development have not led to an internationally legally binding framework that adequately addresses the challenges we face. Human influence on the planet has led to the adoption, although not universally accepted, of the term Anthropocene to define our new relationship with nature. This paper aims to look at the role and rule of law in the making of society and, more importantly, the arguments for a shift in the paradigm from an Anthropocentric ontology to a more Earth-centered one. We critique the current approach to sustainable development and environmental protection, review arguments on the Rights of Nature and explore the potential for the concept of Earth Jurisprudence building on current literature. In particular, the paper outlines that a constitutional right of nature is needed to address the challenges that we now face globally. To this end, we also examine in detail the case study of the constitution of Ecuador where the rights of nature have been codified. We outline some of the key issues involved in this proposed approach to new legal frameworks and make recommendations for future research.

**Keywords:** Earth Jurisprudence; rights of nature; rule of law; sustainable development

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## 1. Introduction

The final document [1] agreed on at the 2012 United Nations Conference on Sustainable Development did not include any breakthrough agreements [2]. Some headlines even described the solutions put forward as an “epic failure” for the development of a sustainable future [3]. The focus lay in the establishment of a “Green Economy”, which some argue equates to the “financialization of nature” [4]. Critics argue that “The future we want” does not address the root causes, it has no parameters to measure progress and perhaps, most strikingly, it is not legally binding [5]. Additionally, it does little to reshape laws or markets [6].

An important affirmation made is that “environmental protection” and “economic development” should strive to fulfill the same goal: that of “environmental sustainable development”. However, definitions of “sustainable development” remain vague or ambiguous. Sustainable development [7] has been accepted as a “guiding principle”, because of its flexibility so each stakeholder can apply it to their own unique situation. However, this also proves to be its weakness, as it can lead to misinterpretations and compromised implementation [8]. Bosselmann claims that the main problem is that “sustainable development” has lost its core meaning: the fact that our survival depends on our ability to respect and maintain the Earth’s ecological integrity [9].

It could be argued that little has changed to create a more sustainable future during the 25 years since the Brundtland commission report [10]. During this time, a remarkable body of environmental law, protocols and frameworks have been adopted in all developed countries, most developing

countries, and on an international level [11]. However, in many cases, the objectives set by these environmental laws have not been fulfilled. International laws, particularly environmental treaties, are often the outcome of lengthy negotiations that involve substantial compromise and are usually “soft law” and/or quasi-legal, such that enforcement is not always clear. Meanwhile, unprecedented natural disasters appear and myriad and unsustainable practices are still deeply embedded in the fabric of our modern world.

It is clear that the objective of an effective coexistence of humans with nature towards a more sustainable future is far from being realised. A consistent and sustainable management of environmental quality requires a more cross-sector coordination and coherence of policy and law. The question that poses itself is whether it is time to reconsider the foundations on which our social community is based in this new era of environmental crisis.

Remarkably, in discourses about the environmental crisis and behavioural change the “Rule of law” is not always present. Environmentalists often speak of humanity’s “moral and ethical obligations” towards the environment. It is true that environmental ethics [12], along with human values, make for challenging philosophical debates about humanity’s interaction with the environment. It is highly important to keep ethical considerations in mind; hence, it will be the starting point of this paper.

In the case of cultural conflict, and when the occurrence of undesirable behaviour is common, it seems clear that the laws, and the implementations of these laws, are inadequate and reforms informed by ecological realities are needed [13]. Finding nature’s rights acknowledged legally is quite different from claiming such rights on the basis of ethical considerations [14]. Additionally, it can prove problematic when laws do not express the moral values of the majority. In this review paper, we explore legal systems and the rule of law and how these could be expanded to the rights of nature.

The underlying theory of this paper builds on the idea that the philosophy of “Earth Jurisprudence” entails a necessary, complete and radical rethink of “legality” in which an anthropocentric ontology is substituted by a more ecocentric one, whilst abandoning the dominant worldview on nature and social organisation [15]. Therefore, this paper starts from the assumption that our current governance systems as a whole (including laws, institutions, policies and “normative regimes”, such as morality) are not protecting the environment adequately. In other words, our system of laws does not protect the Earth from destruction because that is not its ultimate purpose, and, for this reason, a paradigm shift is needed.

In Section 2, an informed contextual background is given, explaining the ethical dimensions of this debate and why we should go from an anthropocentric legal system towards more ecocentric laws. Backing up this normative claim, some authors have written theories on Earth Jurisprudence and Wild Law. This section will try to shed light on the questions “Should Earth Jurisprudence be part of the broader legal paradigm, which should be employed in the regulatory interventions for the Anthropocene?”. Section 3 then explores the concepts behind a constitutional approach to this change and addresses the question “If we accept that Earth Jurisprudence should be a part of the broader legal paradigm, can Environmental constitutional law, and more specifically, substantive rights of nature, be a suitable tool to make these rights effective?”. In Section 4, Ecuador is put forward as one of the very few examples of the implementation of substantive constitutional rights of nature. In a case study, the Ecuadorian constitutional amendments towards the creation of substantive rights of nature are investigated. Finally, we outline some further thoughts and conclusions.

## 2. Moving from an Anthropocentric to an Ecocentric Ontology

To be able to look at the fundamental principles of our laws, we have to be aware of the ethical dimension of this debate because “how we treat nature” is fundamentally an ethical question [11]. However, there is a definite lack of strong “nature ethics”, and in reality there are still insufficient ethical barriers in our societies against the widespread destruction and degradation of nature, certainly when on balance it profits economic development and human well being in the short term.

One of the many illustrations of this moral discrepancy on a judicial level is the case of “State of Hawaii v Kenneth LeVasseur” [16]. In 1980, Mr. LeVasseur was convicted of theft in the first degree because he freed two Atlantic Bottlenose dolphins from a laboratory. LeVasseur, who used to work in the lab as an assistant for Dr. Louis Herman, was teaching the dolphins a computer-generated sonic language and claimed that he wanted to give the animals “the freedom of choice”. Additionally, LeVasseur stated that the poor conditions in the laboratory justified a “choice of evils”. This statutory defense entails that a certain illegal conduct can be justifiable if it is “necessary to avoid an imminent harm or evil to himself or to ‘another’”. He professed that the dolphins are jural persons and that he was saving them from slavery and he believed their captivity was endangering their lives. The court judged that dolphins cannot be seen as “another” as they are solely to be seen as property in matter of law. Mary Midgley said about this legal division of persons and not-persons in this case the following interesting observation:

*“The law seems to rule here. And in doing this the law shows itself to be in a not uncommon difficulty, one that arises when public opinion is changing. Legal standards are not altogether independent of moral standards. They flow from them and crystallize in ways designed to express certain selected moral insights. When those insights change radically enough, the law changes. But there are often jolts and discrepancies here because the pace of change is different. New moral perceptions require the crystals to be broken up and reformed, and this process takes time. Changes of this kind have repeatedly altered the rules surrounding the central crux which concerns us here: the stark division of the world into persons and property.” [17]*

The continuous human-centric view of nature and law has significant repercussions for legal thinking and the role of law in environmental issues [11].

Many geologists have argued that we no longer live in the Holocene. They believe that the human influence on the natural environment has become so significant we have entered a new epoch, that of the “Anthropocene”, which would mark a fundamental change in the relationship between humans and the Earth System [18,19]. Indeed, paleobiologist Bouleter has argued that humanity may be facing extinction given the level of disruption to the Earth System [20]. This pattern of detrimental behaviour is also what Hardin refers to in his “Tragedy of the Commons”, where he concludes that “the inherent logic of the commons remorselessly generates tragedy” [21].

The eventually formalization of the term “Anthropocene” may signify the official acknowledgment that our planet has changed, substantially and irrevocably, through the hands of humanity. It may question whether people are still merely passive observers of Earth’s functioning or not. In ethics and legal philosophy, redefining the relationship between the human and non-human world has been subject of a lot of controversy and, for some, a starting point for bringing about change.

Environmental philosophers state that in order to restore “the natural balance”, or “biospheric stability”, we need to install a new philosophy of nature, a different kind of ethics. This ecocentric philosophy incorporates ecological realities, in juxtaposition to the dominant culture the anthropocentric ontology, which guides current political and legal decisions. Goldsmith talks about “technospheric” ethics, which “equates progress and the moral good with economic expansion and the dominance of humanity over nature”, and claims this is the kind of ethics current political and legal decisions are based upon. According to him, “a new ‘biospheric’ ethic is required: one that places ethical values in their appropriate context: that of mediating human behaviour in its relationship with society, the ecosystem, the biosphere and the Cosmos itself” [22].

Berry [23] strongly believes we need a transformation of human behaviour by redefining the main principles of governance. In his manifesto he calls attention to the fact that many legal and political systems currently legitimize and even strengthen the exploitation of Earth. Therefore he has called for a reformation of our governance systems in which there would be a re-alignment from a Human-centred view to a more Earth-centred view. In order to mitigate climate change and the issues of the depletion of natural resources we should not see nature as a commodity or as a subject

of property rights (e.g., [24]) but as a legal subject with its own rights. The term he proposed for this philosophy of law and governance is “Earth Jurisprudence” [23]. This rationale is also rooted in the philosophy of “Deep Ecology”, a contemporary ecological reformist stream, which advocates that the environment and its living beings have inherent worth, regardless of their utility to human needs [25].

This is also strongly linked to what some environmentalists refer to when they speak of “weak or shallow ecology” *versus* “strong or deep ecology”, or “thin sustainability” *versus* “thick or strong sustainability” [26,27]. Strong sustainability assumes that human capital and natural capital are complementary but not interchangeable nor equal or the possible subject of a balancing act. Weak sustainability assumes the complete substitutability of natural capital (which is the worldview of the developed industrial growth society, and currently still the mainstream one).

In “weak sustainability” the economic relation between people and the Earth is one of unlimited growth without realistic ecological boundaries, entailing a functional separation of humans from the biosphere and exclusively recognised rights for humans and corporations. This worldview inevitably also extends itself to legality, governance and its conceptualisation of the legal relation between humans and the non-human world [15]. Proponents of this concept state that a sustainable economy will be achieved through investment of the profits from the extraction of natural resources [28]. However, the case of the island of Nauru in the South Pacific proved to be a compelling case against the use of weak sustainability [29,30]. During the 1960s and 1970s, income from phosphate mining on the island was used to set up a trust however the value of that trust has shrunk dramatically and Nauru now receives international aid whilst having experienced significant environmental degradation with the loss of several native species. The substitution of natural capital for human-made capital is not reversible and not sustainable in the long term.

It is just not possible to address the ecological crisis within existing current economic, political, and legal systems “without challenging underlying values” [15,31]. Lovelock [32] advocates a “fundamental change in consciousness”, and creation of “social structures that are profoundly deeper, socially more cohesive and holistic in their understanding of the individual and his place in this world”. This would signify the adoption of an entirely different core value system. As such, Lovelock completely rejects the term of “sustainability”.

Strong sustainability, at the other end of the spectrum, is the most ecocentric view and promotes the intrinsic value of nature, which is not measurable in monetary terms. It is understood that some environmental components are unique and that the loss of some environmental processes may be irreversible. This is the stance ecological economists tend to take [28].

The ecocentric ontology of Bosselmann promotes an interesting view of strong sustainability as a foundational principle for the grounding of the rule of law because it is, in his view, ethically strong, historically evidenced, and scientifically sound [5]. Bosselmann has formulated the environmental challenges we are facing in two steps for a reformation of our legal systems [5]:

- (1) We need to recognize the reality of ecological boundaries and bring our laws in touch with ecological realities. This is in line with “strong sustainability”, which accepts the following hierarchy: 1. Environment 2. Humans 3. Economy. The recognition of planetary boundaries should be considered as a non-negotiable bottom-line for all human activities.
- (2) We need to reflect this hierarchal order in the design and interpretation of all laws governing human behaviour.

While strong sustainability does not need to involve a trade-off between development and environmental quality we note that the hierarchy above puts environment first and the economy last.

Others state that we need to find a middle path between strong and weak sustainability, which would mean “the protection of the environment by commoditizing it, or bringing the externality of the environment and nature into the market” [33]. In this view, ecological realities are held into account, and mainstream economists realise the value of ecological economics in working to understand and value the environment not just in monetary terms. Proponents state that progress could be made

towards a world with both high social equality and deep ecology. The question here is if such a balancing act is possible, and if it is really a reflection of our current ecological reality and the disasters we are facing. It is still important to wonder whether our needs for certain high standards of quality of life are really compatible with ecological balance, and whether this argument is ethically sound.

In 1973, prominent environmental lawyer Christopher D. Stone published his controversial manifesto “Should Trees have Standing?” [34], which launched a worldwide debate on the basic nature of legal rights, a debate that even reached the U.S. Supreme Court. Stone found it inspirational that in the court case *Sierra Club v Morton* in 1971, Justice William O. Douglas had reasoned, in a dissenting opinion, that natural resources ought to have standing of their own and should be able to sue in court making comparisons with other inanimate objects that already have standing, such as ships and corporations. This rhetoric has proved to be groundbreaking in environmental law.

Stone finds evidence in legislation that, gradually, the idea of granting standing to nonhumans is expanding. Emmenegger has pointed out that giving rights to nature itself is a better solution for environmental protection than only having human duties towards the environment [14]. This is because substantive rights and protection of intrinsic value are two sides of the same coin, the one cannot be without the other. In other words, continuing to see nature as an object will result only in the protection of its instrumental value to humans. Opponents have stated that only humans can be moral agents and nature is incapable of claiming rights of its own and should therefore not be a subject of law. Yet, newborns have rights too, even though they cannot distinguish between right or wrong. Just like for corporations, the concept of “rights” is a mere legal and moral instrument of protection. Similar to business law for corporations, declarations of the rights of nature should be developed, with its own dynamic, separate exceptions and specific methodology.

Thirty-five years later, Stone updated his thesis in a second edition of this manifesto, reflecting upon the impact of the ideas the “Nature’s own rights” thesis has had in the last few decades [34]. In the epilogue of this new manifesto he writes that, however progress has been made, today environmental lawyers still reinforce the anthropocentric ontology because they have no other choice. The rationale behind this is that our legal system is still set up in way that leaves no other option. He concludes in a reprint of his thesis that “the prevailing and sanctioned modes of explanation in our society seem not to be quite ready for Earth Jurisprudence” [34] (p. 176).

On “sustainable development”, Stone describes “weak sustainability” as “welfarist”. It is a likeable strategy, because each generation is free to plunder natural resources, as long as it is replaced with enough capital in other forms, as its sole aim is to maintain the floor level of well-being. However, this may lead to absurd consequences: “We have left you an environment that is unlivable, but we’re leaving you better off-wealthier-than we were” [34] (p. 121). On the other hand, “strong sustainability” can be seen as “preservationism”. Stone states that we should not underestimate the costs that are involved in preserving many of nature’s elements. However, other ways of preservation are as much a “matter of political will and imagination as of foregone economic opportunities”.

Cullinan, co-author of the 2010 “Universal Declaration of the Rights of Mother Earth”, wrote “Wild Law: a manifesto for Earth Justice” [13]. His ideas grew to be seminal in the global debate about the recognition of the rights for nature. Cullinan is one of the first lawyers to take the idea of Earth Jurisprudence and translate this into a manifesto of how to apply this philosophy into our legal and governance systems by describing the characteristics of a new governance system, which would redefine the role of humans. He aimed to write a foundation for positive action, which is already starting to show in the emergence of Wild Law on national as on an international level.

The way Cullinan describes the function of “Wild Law” is as follows:

*“Wild laws are laws that regulate humans in a manner that creates the freedom for all members of the Earth Community to play a role in the continuing co-evolution of the planet.” [13]*

His ideas are rather straightforward. We must conform our legal systems with the laws of nature if we wish to continue to exist. He denounces the modern anthropocentric ontology that structures and

facilitates the capitalist economic relations of people over nature and the Earth. He does not believe in current sustainability assessments, as they are based on “flawed premises and a philosophy of exploitation” (current environmental laws only intervene when it is necessary to ensure the continuance of this exploitation). Cullinan believes that the theory of the tragedy of commons is wrong in the sense that Hardin [21] concluded with the fact that “the inherent logic of the commons remorselessly generates tragedy”, as in his view, the tragedy is not the consequence of common ownership, but of unrestricted access to a resource. Hence, the lack of an effective governance system that limits access and off-take of natural resources is the real problem, not the nature of property rights [35].

For this reason, we need to rethink the underlying purpose of governance, as without it, we will be unable to address the current ecological crisis effectively. Other environmentalists agree that the lack of a defined overall objective is the ultimate reason for the fragility of international environmental law [36]. Cullinan states that wild law has to be understood as a certain “approach to human governance, rather than as a branch of law or a collection of laws” [13] (pp. 30–31). In this view, any form of legislation can, and ought to, conform to the principles of Wild Law. Wild Law is a form of expression of Earth Jurisprudence. In other words, Earth Jurisprudence sets out the general norms out of which practical “wild” laws can be deduced. If we accept that humans are not the only affected and interested stakeholders in legal interactions then we should ask ourselves: “Do we have adequate techniques and methodologies for “consulting” and ascertaining the current and future interests of rivers? If not, how can they be developed?” [26].

Critics of “deep ecology” have argued that this approach is “anti-human” [37]. However, anthropocentrism is only rejected when it includes a bias against other forms of life or an emphasis on humans first regardless of the consequences to other beings [38].

In summary, it is clear after consideration of the recent literature about Earth Jurisprudence that these “Wild Law” principles ought to be part of the regulatory interventions in the Anthropocene, as more and more people start to understand the urgency of this change in policy and legislation. The next question is how to take these theories forward and consider the impacts of the concept of wild law. However, Cullinan warns against propositions of “Great Solutions”, which have the pretext of “enabling all human theories of jurisprudence to be transformed instantly into a reflection of the principles behind Earth Jurisprudence” [39]. Moreover, we need to acknowledge diversity, not uniformity in the metamorphosis of our governance systems, much like cultural diversity and human rights also go hand in hand. Nonetheless, we can learn from different ways of approaching the issue, and take this opportunity to have a different kind of discussion about sustainability.

### 3. Implementation of “Wild Law” through Environmental Constitutionalism

One particular approach to creating a legal framework for the implementation of “Wild Law” is to create a “rule of law for nature”, which could, through a normative process of constitutionalisation, contribute to the paradigm shift that is needed. This can manifest itself on a national level (e.g., the 2008 constitutional reforms in Ecuador) and on an international level (e.g., the Universal Declaration of the Rights of Mother Earth), but there is also a recent development of “Global Environmental Constitutionalism”, which can be seen as a new mindset around international law and governance with the environment as universal concern [9]. Here, we critically analyse this new development of having a constitutional approach to environmental protection in accordance with Earth Jurisprudence and seek to shed light on the question: “Can constitutional law be a suitable tool to make Wild Laws effective?”

The rule of law fundamentally means that nobody is above the law, also historically referred to as “*Lex Rex*” (“The Law is King”). The principle originates from many different traditions and is intertwined with the history and development of law itself. It can be described as a principle of governance, where law is the leading link in the relationship between the authorities and citizens as well as between citizens with conflicting interests [11]. The concept of rule of law is deeply linked to the principle of justice, involving an “ideal of accountability and fairness” in the protection and vindication of individual rights and “the prevention and punishment of wrongs” [40]. It implies

that decision-making should be done in accordance with known principles of law [41]. The UN [40] additionally states that implementation of the rule of law is prerequisite to the achievement of “durable peace” and “sustained economic progress and development”.

Rule of law on a substantial level dictates, amongst other meanings, that legislation should be made in accordance with fundamental human right norms and standards. The rule of law can therefore also be seen as a constitutional principle, and moreover a constitutional value. Kotzé [41] states that it provides us with a standard of constitutionality in terms of which other law and conduct must be measured: an interpretative framework. Furthermore, it does not promote absolute protection for individual rights, but it means that any restraints on personal freedom must be necessary and proportionate in order to protect someone else’s rights or in order to protect important public values and rights. Nevertheless, critiques say that the rule of law could in some cases undermine human rights by limiting personal freedom [42,43].

In any case, some might say the rule of law is an “anthropocentric ideal” [44] because its ultimate aim is the protection of the rights of humans. This means that per definition the rule of law may be little concerned about, or has no relevance for, nature as a subject of legal rules. Therefore, in the viewpoint of Earth law, the rule of law should be more grounded in the value of respect and care for the community of life, and not only refer to the well-being of all humans, in order to be able to mitigate global environmental problems.

However, the rule of law has too often been oblivious to ecological realities. What is more our environmental laws are still failing to provide an adequate protection of nature. Wagner [45] points to the failure of environmental law to produce information on health and the environment, stating that existing environmental law currently fails to counteract any actor’s natural inclinations to remain silent about the harm they are causing to the environment. Others, for example, warn of the lack of adequately developed and the fragmented environmental governance in marine areas beyond jurisdiction (ABNJ), which leads to more damaging human activity without effective environmental impact assessment [46] and call for a more fully realized public trust doctrine [47].

Extending the rule of law to nature would mean that its principles should also apply to nature and natural values. This way it gets the same degree of protection from encroachments, deterioration and destruction as citizens of the state have. Again this is not an absolute protection but requires balancing interests. Consequently this means that in some cases the rights of nature could be in conflict with human rights in the short-term, but in accordance to the ultimate goal of sustainable development in the long term. In each case a careful consideration should be made in accordance to the principle of proportionality.

Eight-hundred years ago, the rule of law was textualised in the Magna Carta for Great Britain, which came to be seen as the Law of Laws, a measure for legality of all other laws [48]. Today, the need is high to draft a new Magna Carta, establishing that no human is above nature. Grounding this rule of law implies the “greening” of the entire system of law and governance as, for example, captured in the notion of the “eco-constitutional state” [26].

In this paper, the concept of a rule of law for nature is interpreted in terms of the more encompassing subject of “Environmental Constitutionalism”, which has the potential for offering a framework to mitigate environmental challenges that have not been able to be solved by other legal constructs. Environmental constitutionalism entails the acknowledgement of the environment as a subject for protection in constitutional texts and for vindication by constitutional courts worldwide [49]. Today approximately three out of four states have some kind of mention of the environment in their Constitution [50], such as the right to a clean environment (see Appendix A in [51] for a full list of national constitutions and environmental protection). Indeed there is some emerging empirical evidence that the inclusion of environmental rights at the constitutional level does impact positively on environmental outcomes [52]. However, in most countries the inclusion of the environment in their constitution means some kind of human right to a clean environment. There are several others which enforce duties on individuals or the state towards environmental protection, recognise environmental

protection as a matter of national policy, procedural rights in environmental cases, establish specific rights concerning sustainability and climate change, or rights to water.

According to May and Daly [49] environmental constitutionalism can have two functions:

- It can have a convergent function: bringing together governmental structures and individual rights modalities in “advancement of an overarching legal-normative framework for directing environmental policy”. This is a solution to the current problem of fragmentation of environmental laws.
- It can have a mitigating function: protecting local concerns, such as access to fresh food, water or air, or global concerns like biodiversity and climate change that share elements of both human rights and environmental protection. Here, environmental constitutionalism can mitigate conflicts between the human and non-human world, where other legal mechanisms might have failed to do so.

Kotzé [43] describes its functionality as follows:

*“Being a part of environmental constitutionalism, the rule of law for nature, among others, provides the opportunity and the means by which to reform environmental governance and laws; it prioritizes environmental care by equating it at the higher constitutional level to fundamental rights, ethics and universal moral values; it provides a legitimate foundation and means for creating and enforcing environmental rights, values and other sources of ecological obligation; it provides the means to dictate the content of laws; and it establishes moral and ethical obligations with respect to the environment and a justificatory basis for, and authority to require proper performance of these obligations.”*

Furthermore, the emerging field of environmental constitutionalism encompasses constitutional law, human rights, environmental law and international law. Therefore, giving constitutional protection to the rights of nature can provide for a more holistic and coalescent approach to environmental protection, as May and Daly [49] formulates it:

*“<Environmental Constitutionalism> can hold government officials accountable and even increase the political pressure on them; it can use procedural rights to give people more access to information and to judicial and political process; it can impose fines and award damages; it can require action or forbearance; it can punish for harm done or prevent threatened harm; it can entrench common law principles, promote values, or establish new rules of engagement. Its legal responses can be structural and systemic or individual and incremental. It thus makes available to individuals and organizations the full range of legal process to ensure governmental responsibility for the protection of the environment.”*

Additionally, a third function of Environmental Constitutionalism could be distinguished (which is not described by May and Daly [49]). It can be used to provide a much stronger degree of protection for the environment, by creating substantive rights “of” nature, and not merely substantive human rights “to” a healthy environment. It is distinct from the mitigating function as it seeks to grant additional environmental protection, even when the protection does not have immediate instrumental value for people. In other words, to vindicate these rights, it is not necessary to refer to human interests or rights, rather the harm is to nature itself.

There are no general rules for vindicating environmental constitutional rights [49]. In many cases, these rights are seen as a hybrid of human rights and environmental protection. These rights can take many different forms: socio-economic rights or civil and political rights, individual or collective rights, implicit or explicit, procedural or substantive, or amendable by judicial review. There are broadly stated four ways of adjudicating environmental constitutionalism [49]:

- (1) Recognition of more and more human rights claims, which touch on environmental phenomena or the expansion of the range of possible beneficiaries (not only property owners, but also, e.g., communities): purely human rights approach, by expanding the scope of already existing human rights.
- (2) A little less anthropocentric: recognition of environmental rights as a human right.
- (3) Even less anthropocentric: establishing a new class of rights, which is a hybrid between a human right and a right of nature.
- (4) Completely ecocentric: Recognition of the rights of nature.

In this paper it is mainly approaches and arguments on type 3 and 4 that are reviewed.

Although environmental constitutionalism, promoting the right of nature from an ecocentric point of view, is emergent and insistent it is still very uncommon. This emerging field is where the philosophy of environmental lawyers such as Stone [34] and Cullinan [39] come together with the legal method of constitutionalism. These rights are not merely moral encouragement, as they empower “each person, community, people, or nationality to exercise public authority to enforce the right, according to normal constitutional processes” [49] (p. 73).

Giving constitutional status to environmental rights can provide a more stable framework for governance. This is because that they are much harder to amend, taking them outside the zone of normal politics [53]. On top of that, they normally are a hierarchically superior form of law, and therefore take precedence in case of conflict with other norms. However, these features are not shared by all constitutions [53], but only applies to constitutions in the thick sense. Kotzé also points out that the worth of constitutionalism should not be overstressed by suggesting that it is some kind of panacea for the issues with environmental law and governance, but it could certainly facilitate the creation of better environmental laws [54].

In the next section we investigate an example of constitutional legislation where eco-constitutionalism has been implemented on a national level as governmental duties of substantive rights of nature. These provisions are quite new and with few examples, and have enjoyed little previous examination. Yet, this upcoming field is certainly worth exploring as it shows the opportunity to rethink the way we think about development, economy and our relationship with nature.

#### 4. The Rights of Nature in Ecuador’s National Constitution

Ecuador has been recognised as the first country in the world to codify the “Rights of Nature” in their Constitution [55] and is therefore chosen as a case study for this paper. In 2007, the Pachamama Alliance invited representatives of the Community Environmental Legal Defense Fund (CELDF) to meet with delegates of the Ecuador Constitutional Assembly [55]. A reshaped and expanded version of a draft Constitution by the CELDF was then approved by referendum. As a part of a reconstruction of the legal frameworks of the country Ecuador adopted the new 2008 Constitution. Article 71 of this Constitution now states:

*“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.”*

As a consequence of this article every person, community, people or nationality can require that public authorities comply with nature rights. The effect of this is that in theory nature itself has a remedy and courts can order repair of unlawful damage to the environment from human activity. It also means that people who are not necessarily owners of the land can bring proceedings for the restoration of damaged nature [56].

The story behind this new Constitution is one of a complicated socio-political nature. Advocates of the rights of nature were able to establish their influence in a time of political change, and to “combine radical Western ecological perspectives, politicized indigenous beliefs, and legal rights discourse to construct a hybrid concept that imagined and codified nature as a subject of constitutional

rights" [57]. A part of the change was due to strong lobbying by indigenous people, and it shows how indigenous politics influenced non-indigenous systems of governance. As such Ecuador was able to set an example of how this legal philosophy of balancing nature with society could find expression in new legal concepts for the present day. However, the implementation of these articles may face legal, political and economic barriers.

#### 4.1. Historical Background of Ecuador

Ecuador could be considered an unlikely country to adopt such a constitution due to its historical past with the oil industry. As Ecuador was in significant debt with US creditors, it was forced to open up its Amazon Rainforest to foreign oil extraction companies [58,59]. In 1964, Chevron Texaco discovered oil in the northern part of the forest (also called "Oriente") [60]. In this part of the Amazon several indigenous people were based, a biodiverse area, largely untouched by modern civilisation. The arrival of Texaco was hailed as the salvation of their (agricultural) economy, pulling the nation out of "chronic poverty and underdevelopment" [61]. The petroleum industry would eventually turn out to be the biggest contributor to Ecuador's economy, with current revenues of oil exports of around forty percent of the annual fiscal income [62,63].

What followed were 30 years of drilling operations which, despite environmental laws, has led to events that are being referred to by environmental experts as the "Rainforest Chernobyl" [64,65]. Indigenous and local people did not enjoy the benefits of oil extraction, and were not involved in political and environmental decisions, which affected them the most [66].

Between the late 1960s and the early 1990s the Oriente suffered serious degradation and deforestation from oil spills and clearing for access roads, exploration, and production activities. Green groups allege that amongst other sources of pollution Texaco deliberately dumped tons of toxic drilling and maintenance wastes in addition to an estimated 19.3 billion gallons of oil field brine (a toxic byproduct) into local waterways, and regularly sprayed roads with crude oil for maintenance and dust control [67]. Texaco sold its operations to the national company Petroecuador in 1992, stating on its website that they cannot held responsible for Petroecuador's "unfulfilled clean-up responsibility" [68].

The story of the oil industry is also set within a turbulent constitutional history and political turmoil. From 1967 until 2008, there have been several *coup d'états* by military groups and consequential constitutional reforms [61]. In many cases, the constitutional reforms have been used as a tool to strengthen the executive power [69].

In 2006, Alfredo Palacio, the seventh President in nine years, called for a popular consultation on the installation of a National Constituent Assembly to amend the 1998 Constitution. A request to the Supreme Electoral Tribunal to approve this initiative failed. It is in this context that a new leftist regime led by Rafael Correa emerged, after more than a decade of political instability, on the platform of establishing a new constitutional framework in 2007 [69]. The constitution of 2008 came after a referendum of the people and is the 20th constitution since Ecuador's independence in 1830. It followed out of the uprising of indigenous communities against worsening economic and environmental conditions and strong lobbying by CONAIE, the largest federation of indigenous movements.

In 2007, CONAIE supported the election of a government whose economic and social strategies would benefit the majority of Ecuador's inhabitants. The new President Correa stressed he wanted a citizen's revolution, and put strong emphasis on individual rights and the idea of a "universal citizen". Indigenous people feared this would once again exclude them from the participatory processes and they wanted collective control over natural resources and land, in order to avoid what had happened in the past. They also strived for acknowledgement of the plurinational character of Ecuador.

All in all, it is clear that advocates of the rights of nature took advantage of a political gap to influence the government. The part played by indigenous movements in "the writing of a new and progressive constitution in Ecuador points to the promises and limitations of social movements realizing their agendas through engagements with governing bodies. As part of a well-organized civil

society, social movements can influence the direction of governmental deliberations, but engaging state structures requires compromises and tradeoffs" [70].

#### 4.2. *The Rights of Nature: Chapter 7 of Ecuadorian Constitution*

Four articles (art. 71–art. 74) of the new constitution in Ecuador are dedicated to ensuring substantive rights of nature. Article 71 says that respect for nature entails four things: respect for its existence, maintenance, integrity and regeneration. With these amendments civil society in Ecuador wanted to establish an alternative model of development to the Western neoliberal status quo, based on their indigenous philosophy. They call it the "Well-being Development Model", or "*Buen Vivir*" ("Sumak Kawsay" in their indigenous language), which means "good living", and is all about putting the individual in the social and environmental context of their community [71]. "Harmony" is the main goal of this model, both amongst humans (family, community, population as a whole) and nonhumans (nature). One of the measurements of "*Buen Vivir*" is the quality of the natural environment, and the philosophy behind it is that human beings should compromise on their goals instead of competing with nature [71]. This alternative model theoretically subjugates the rights of individuals to rights of communities, peoples and nature [72].

However, seeing nature and humans as one homogeneous entity in law can prove problematic, because it neglects the fact that there could be conflicts between these rights. Ensuring the rights of nature does not always ensure the wellbeing of certain people. It is not clear what the hierarchy of rights in practice is, and it could even be that internal constitutional rights conflict. For example, Article 71 outlines the right of nature to exist while Article 57 states that indigenous people have the right to manage community lands and this "management" could include harmful activities to nature.

In addition, seeing human and nature's rights as one homogenous entity has other consequences. For example, there could be a problem of competing ecosystems on different scales. Due to the local character of legislation it is possible that "nature" at a local area will compete with wider environmental claims. If such is the case, which one takes precedence? For example, hydraulic power could replace the need for fossil fuels, but the building of a dam can destroy the local ecosystem. How does one balance these local environmental claims with more broad environmental issues such as greenhouse gas emissions [73]?

This point brings us to the textual issues of this particular legislation: its vagueness and internal inconsistency. The main problem is that there is no definition of "nature". Burdon claims that, "the use of general language is common in constitutional drafting and allows for words to have a broad interpretation and remain relevant over time" [55]. However, this broad interpretation can lead to several strange conflicts, as there are no explicitly stated principles, specific entities it protects, nor the extent of that protection. Everyone could arguably define anything as being "nature" (e.g., bacteria or pests), it is in other words left to judges. Judges can adapt an anthropocentric definition of nature, which can in its turn allow for corporates to justify the destruction of nature in the name of defending other rights of nature.

Lastly, these amendments were measured against the indicators of "Wild Law" by UKELA [74] before their implementation. The three main indicators, developed by Carine Nadal of the Gaia Foundation, are Earth-centered governance, mutually enhancing relations and community ecological governance [75]. These indicators measure to which degree the legislation links to the principles of Earth Jurisprudence. Researchers at UKELA have found that the Ecuadorian Constitution is by far the closest legislation has got to "Wild Law" in practice, although it may not be effective enough for its purpose.

#### 4.3. *The Rights of Nature: Judicial Interpretation*

These constitutional rights of nature are only going to prove valuable if they are actionable in court. The question here is whether or not the national courts are engaged enough to ensure a fair and just implementation of the rights of nature. One of the biggest problems seems to be the lack of

a “standing” doctrine in Ecuador. It is not clear at all who can bring an action for the protection of nature’s right before court, which creates a fundamental uncertainty about the justiciability of the claims under articles 71–74 and also suspicion that no real rights and remedies can be derived from these amendments [76].

Just like in the United States [77] when a plaintiff brings an action before court he or she has to prove to be an “injured or aggrieved person”. In other words, even though the harm that is the basis of the litigation is to nature, a natural object, or a living organism, the plaintiff may not file the lawsuit on behalf of the injured natural asset because the harm must be to the plaintiff [77]. Seeking ecocentric relief for certain injuries to nature is therefore left to the discretion of judges and plaintiffs cannot know what to provide in order to earn standing. Therefore, unless Ecuador sheds some light on standing criteria, litigators will be unable to effectively bring a case of the rights of nature before court. This means that these rights are not self-executing, which makes them less enforceable [49,78], and indicates a need for complementary legislation.

However, in some cases plaintiffs are allowed to bring such a case before court even when they are not the injured party. An important example of this is the “Vilcabamba River Case” [79]. In 2011 the first successful case of “rights of nature” in Ecuador was ruled by the Provincial Court of Loja. In this case, the construction of a road resulted in builders dumping material in a river, which caused a negative change in the river and biodiversity. The judges ruled that the river has the right to exist and ruled in favor of nature. As a result the Government was ordered to present its environmental impact studies, develop a rehabilitation and remediation plan, and publicly apologise for beginning the construction of a road without the necessary environmental license. The case has been hailed as a victory for the rights of nature and the plaintiffs, Wheeler and Huddle, were praised. It should be noted that the plaintiffs were in fact American residents with properties downstream of the river. Their website [80] shows that they currently have plans to build a sustainable retreat center in that area. Therefore they clearly had personal interest in this case. Yet, nobody investigated the effects on the surrounding communities in this case, and there was no comparative balancing method applied on conservation *versus* development.

The judges’ opinions in the Vilcabamba case were revolutionary and set an important precedent. The Court clearly stated that the rights of nature take precedence over other constitutional rights, because a “healthy” environment is the most important thing to ensure humans do not “bring about the extinction of other species or destroy the functioning of natural ecosystems” [49] (p. 259). The court held that the rights of nature should be protected by any means, allowed the use of probabilistic evidence of natural harm by plaintiffs, and affirmed that the burden of proof of a lack of natural harm lies with the defendants. Lastly, it made clear that “until it can be shown that there is no probability or danger to the environment of the kind of work that is being done in a specific place, it is the duty of constitutional judges to immediately guard and to give effect to the constitutional right of nature, doing what is necessary to avoid contamination or to remedy it” [49] (pp. 259–260).

However, there is the risk that plaintiffs will use “the rights of nature” for other motives than protecting the intrinsic value of nature. Additionally, there is the chance that more resourceful groups will use actions on behalf of nature to prevent certain high impact developments being executed, only to see the development relocated to more poverty stricken neighbourhoods where people do not have the means to start a lawsuit and where the environmental impact could be equivalent, or even greater.

Only well-developed judicial principles will clarify dubious situations about standing, to ensure appropriate plaintiffs bring the rights of nature before court. For example, Ecuador could adapt an expanded “*actio popularis*” principle. Here, any person can bring an action to defend the rights of nature, as long as that person (1) can sufficiently show an actual or imminent injury to the natural object, and (2) demonstrate that the potential litigant also has a “sufficient interest” in the outcome [77]. By doing so, standing can be limited to environmental organisations with “knowledge of the injured resources or ecosystem, a genuine interest in protecting the resource, and adequate economic means and expertise to adequately represent the interest in litigation” [77] (p. 97). Another option is to allow “nature” to

sue on its own behalf. As nature is an inanimate object, it would have to be represented according to the principles of guardianship. However, concerns have been raised about the practicalities of this solution, for example the problem of deciding who or what could be an appropriate guardian.

Unfortunately, any judicial process can be subject to outside forces, such as corruption. Institutionalized corruption and a lack of individual judicial independence could possibly obstruct any fruitful environmental litigation. For example, in the case of Ecuador a recent report has shown that both on an institutional level, as well as on an individual level, the independence of judges is not guaranteed. Investigation of twelve separate cases has led to the conclusion that the current government systematically penalizes social protest or acts of political dissidence, with the help of partial judges [81].

Apart from a lack of judicial independence, judges may struggle to adapt a more ecocentric perspective because of a lack of understanding [72]. This can be true even where there is precedent—no other court has followed the rulings of the Vilcabamba Case despite this precedent and the constitutional requirements. Judicial courts themselves have indicated that they have no training in judicial issues. Therefore, education and empowerment of lawyers, judges and environmental agencies is important for the implementation of the paradigm shift.

Lastly, recent cases of the rights of nature have caused critics to doubt the effectiveness of the amendments. A striking example is the case of the El Condor Mirador Mining Project, signed off by the government in 2012 under the 2009 new Mining law [28,82]. Civil society filed a lawsuit against the Mirador Project and Open Pit Mining for the extraction of gold and copper as it violated human rights, environmental rights and the collective rights of indigenous groups and locals. The Environmental Impact Assessment of the project showed that several species would go extinct within the mine area and is, as such, a violation of article 73 of the Constitution. The plaintiffs lost the case. Judges reasoned that, as civil society, they were protecting private interests, which is “conservation”, whereas the mining company was protecting a public interest, which is “development”. This reasoning goes clearly against the principles of Earth Jurisprudence [72]. Additionally, the ruling stated that the rights of nature were not violated as the forest next to the mine was not going to be exploited, and only that area can be considered as a “protected area”. This is a very restrictive way of looking at the rights of nature, as it implies that only protected areas should be subject to the rights of nature. However, the environmental impact assessment showed that species outside that area are also going to be affected and water is going to be polluted.

#### *4.4. The Rights of Nature: Implementation and Enforcement*

Apart from textual issues of the constitution and judicial concerns, there are other factors that might cause debate on the practicality of the rights of nature. Even environmental movements are divided about whether or not the new constitution really does provide a sound legal basis for opposing development plans which might infringe on the rights of nature [83].

Firstly, there is the economic factor as Correa’s government has a track record of choosing economic development over environmental protection [76]. The 2008 constitution was accepted in a time of relative economic prosperity, whereas in August 2015 the Government has announced Ecuador is facing a serious economic crisis. In this context the constitution does not fundamentally question the state’s reliance on natural resources as its primary source of income [83] and the extraction of nonrenewable resources is key [28]. In the past, Correa has expressed support for indigenous plaintiffs in actions against Texaco and the intention to have a new post-neoliberal approach to development, yet the question is how the government is going to react in adverse economic conditions, where half of the population is living under the poverty line. It is clear that without a change in the economic situation a fruitful implementation of the rights of nature is not probable [84]. However, internationally empirical evidence, albeit for higher income countries, suggest that it is not possible to generalise on the relationship between pollution and economic growth [85].

Secondly, historical factors also contribute to growing criticism about the executive power's will and ability for implementation. The historical presidential turnover and political climate of frequent constitutional changes do not instill confidence in an effective implementation of the current Constitution [76].

Lastly, there are socio-political factors opposing effective implementation. In September 2015, Correa has proposed a new package of constitutional changes, including an article to abolish the constitutional prohibition for indefinite re-election.

## 5. Discussion and Conclusions

In order to examine the practicality of substantive constitutional rights of nature in this paper we looked at new constitution of Ecuador, as it is the first country that has implemented the Rights of Nature to such an extent. This case study included a background study of the environmental, political, economic and social situation in Ecuador, and the successes and failures of this new legislation. We conclude that there are several barriers preventing a successful implementation of the Rights of Nature in this particular case:

- Textual issues:
  - Anthropomorphisation of nature and seeing nature and humans as one big homogeneous entity
  - Vagueness of the text and inconsistencies within the constitution
- Judicial problems:
  - The lack of a "standing" doctrine
  - Corruption within the institutional judicial power and a lack of individual independence of judges
  - Lack of education of judges in environmental matters
- Problems of enforcement and implementation
  - Economic factor: the extraction based economy
  - Historical factors: frequent constitutional reforms and presidential turnover
  - Social-political factors.

It is clear that the implementation of the rights of nature in Ecuador is far from perfect. The environmental provisions have underperformed because they have to yield to massive foreign debt and a reliance on the extraction of natural resources. Hence, political, social and economic challenges stand in the way of the enforcement of these rights. Nevertheless, we argue a substantive constitutional Rights of Nature is key if we are to really address the fundamental challenges that we now face in the Anthropocene. To be effective it is important that the paradigm shift happens in all aspects of society.

The point of departure presented in this paper is one of ethics and legal philosophy. It suggests that environmental constitutionalism, in accordance with these ethics, is worth considering as a viable route to a more sustainable future. It is a normative claim, although a limited one. As May and Daly point out, there is still insufficient evidence that environmental constitutionalism *ipso facto* enhances the environment [49]. Regardless, this paper seeks to explore this point in more depth and attempts to demonstrate the value of environmental constitutionalism and, more specifically investigated in this paper, the rights of nature, with a view on a slow but steady entrenchment of environmental values across the globe.

Given that the first recognized codification of the Rights of Nature into a constitution was in a developing country it is interesting to consider whether the implementation of Earth Jurisprudence is easier to achieve at different stages of economic development or not. The challenges seen in Ecuador in this context will be different in developing and developed countries and further research is required

to explore whether it is easier to agree constitutional reform within the developing country context but better enforcement follows in the developed country context (for example, there is some evidence that as income increases, more respect for the rule of law is acquired and *vice versa* [85]). Nevertheless, the adoption of the rights of nature in Ecuador gave the international community the opportunity to reflect on society, law and the environment. It created a platform where people are forced to rethink their relationship with nature, by seeing it as a subject of law.

A caveat has to be made with regard to the purpose of this paper. First of all, this paper aims to investigate the pillars upon which our society is built. By no means does it claim to identify a panacea to all the environmental (and other) issues we are facing today. It puts forward the suggestion of having a legal system as defined by Earth Jurisprudence. It does not consider environmental law to operate in a legal vacuum and rather considers our systems of governance as a whole and implores a much wider perspective. As Lorenzetti, Chief Justice of Argentina, who describes environmental law as a transformative force, illustrates it: “Environmental law is a party to which all other branches of law are invited, but those branches are now told to wear new clothes” [86].

The exploitation of Earth is currently maintained by environmental laws. As morals are changing, so should our legislation. In particular, as both short and long term impacts of climate change become more evident our approach to agreeing policy should build from “Earth Jurisprudence” and not be subject to national disagreements over legal commitments through terms such as “should” and “shall” as they were in the recent Paris Agreement [87] of the United Nations Framework Convention on Climate Change. Whether or not all national legislations should accept constitutional “Rights of Nature”, such as in Ecuador, is a question that needs further inspection.

Just like human rights came to be accepted as a uniform constitutionalist principle in global legislation, there is an argument to do so for rights of nature. Authors, such as Kotzé [43,44,54], Bosselmann [5,9] and Bodansky [53], have investigated whether or not we already have an “international environmental constitution”. The answer seems to be “no”, international environmental law appears to constitute merely the commitments by states, rather than a constitutional order [50]. An interesting idea put forward is the creation of a Global Environmental Constitution, which should “aim for shifting the environment from the periphery to the centre of constitutions—a shift that could be termed ‘eco-constitutionalism’” [9].

Recently, there has been a development of global resolutions that aim to protect “the global commons” (oceans, atmosphere, biosphere). The most encompassing documents to do so are “The Earth Charter”, and more recently and more ecocentric, the Universal Declaration of the Rights of Mother Earth.

All in all, the emerging culture of earth rights and eco-constitutionalism has the potential to become a potent force in protecting the rights of nature against the destruction of modern society by recognising and expressing human responsibilities towards the environment. To date, only small pockets of constitutional rights for/of nature exist, and the challenge is how we can build a framework for the implementation of Earth Jurisprudence. We can draw hope from the progress of the rights of humanity over the last decades, as perhaps the rights of nature will follow a similar course, with the rights of the individual being originally limited, but today expanded to universal human rights. Perhaps in time, if we have enough time, the rights of nature will similarly be developed into a universal global rights of nature alongside that of men. However, a lot more research needs to be done to show if and how (global) eco-constitutionalism can be effective in current systems.

This paper started by highlighting that the current paradigm of anthropocentric laws and governance are far from achieving the goal of effectively mitigating the global ecological crisis and are thusly in need of urgent reforms and new principles. We then went on to review literature, arguments and the practical implementation of laws that are considerate of this paradigm shift, called “Wild Laws”. We examined how we can establish a legal system, complying with the principles of Earth Jurisprudence, by adopting a rule of law for nature, and more specifically investigated, substantive constitutional “rights of nature”. Eventually, we established that giving constitutional

status to environmental protection legislation can prove to be useful in defending the natural world from ever-expanding human influences. We argue that we need to realign our experiential knowledge with our rational scientific knowledge, and as such redefine our relationship with the non-human world. Just like the Copernican revolution, where humanity discovered that the sun does not move around the Earth, this paradigm shift does not happen gradually, but in a radical understanding of ecological realities. However, aligning our governance systems with this paradigm shift might prove to be a slow judicious process.

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