REVISTA *ARGUMENTUM*

NATURE'S RIGHTS: WHY THE EUROPEAN UNION NEEDS A PARADIGM SHIFT IN LAW TO ACHIEVE ITS 2050 VISION

Mumta Ito[1]

> *"We are far beyond the limitations of the planet and we have to face the simple fact that the approach that we had before to set up specific environmental legal texts is simply not working. It's not that we don't have the best or the proper regulation in the system but perhaps the problem is with the system itself. Clearly the current decision making structures and the structure of environmental law can manage certain externalities, as mentioned, and some effects of production and consumption - but it's not really challenging the basis of the problem. Forty years ago it was already on the table - do we create an overly complex un-understandable system of environmental law - or do we simply give rights to Nature?"*
>
> *- Benedek Jávor - Member of the European Parliament, Co-Vice Chair of the Environment Committee and Professor of EU Environmental Law. [2]*

WHY IS THE EUROPEAN UNION ENVIRONMENTAL LAW AND POLICY FAILING?

The European Union (EU) has one of the most extensive environmental laws of any international organisation - over 500 Directives, Regulations and Decisions.[3] So why is it that the state of Nature in Europe is worse than ever and still in decline?

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2 (a) "Nature's Rights - the Missing Piece of the Puzzle." Conference in European Parliament co-hosted by the nongovernmental organization Nature's Rights and European Union MEPs on 29th March 2017 - https://youtu.be/OOSjW_02tjo; (b) UN Harmony with Nature Programme, Conference Report, "Nature's Rights: The Missing Piece of the Puzzle."

3 Jordan, A.J. and Adelle, C. (eds.) 2012) *Environmental Policy in the European Union: Contexts, Actors and Policy Dynamics* (3e). Earthscan: London and Sterling, VA.

EU environmental policy is set out in the 7th Environmental Action Programme[4] which describes the following vision, along with certain key objectives and enablers:

> In 2050, we live well, within the planet's ecological limits. Our prosperity and healthy environment stem from an innovative, circular economy where nothing is wasted and where natural resources are managed sustainably, and biodiversity is protected, valued and restored in ways that enhance our society's resilience. Our low-carbon growth has long been decoupled from resource use, setting the pace for a safe and sustainable global society.

A mid-term review of the 7th Environmental Action Programme was carried out and the results were published by the European Environment Agency in the State of the Environment Report 2015[5]. The overall the outlook was very bleak. In particular the study found:

- 60 percent of protected species and 77 percent of habitat types are in unfavourable conservation status and Europe is not on track to meet its overall target of halting biodiversity loss by 2020.
- Climate change impacts are projected to intensify and the underlying drivers of biodiversity loss are expected to persist.
- Loss of soil functions, land degradation and climate change remain major concerns.
- Projected reductions of greenhouse gas emissions are not sufficient to bring the EU onto a pathway towards its 2050 target of reducing emissions by 80–95 percent.
- Air and noise pollution continue to cause serious health impacts, particularly in urban areas.
- Health impacts resulting from climate change are expected to worsen.

According to the report, "the systemic and transboundary nature of many long-term environmental challenges are significant obstacles to achieving the EU's 2050 vision of

4 Decision No 1386/2013/EU of the European Parliament and of the Council of 20 November 2013 on a General Union Environment Action Programme to 2020 'Living well, within the limits of our planet' Text with EEA relevance
https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:32013D1386

5 https://www.eea.europa.eu/soer

living well within the limits of the planet."[6] It went on to acknowledge that "Europe's success in responding to these challenges will depend greatly on how effectively it implements existing environmental policies and takes necessary additional steps to formulate integrated approaches to today's environmental and health challenges."[7] At the 2nd Evaluation Workshop in 2018[8] the European Environment Bureau reiterated concerns about the "major implementation deficit" of EU environmental law resulting in eroding citizens' confidence in the rule of law and in institutions due to "insufficient action" and "policy dissonance". The Summary Report[9] from the event called for the need to take a systemic approach.

Figure 1. European Parliament. Nature's Rights: The Missing Piece of the Puzzle Conference, 2017. Photograph by Kent Olsen.

6 Ibid, p. 3.

7 Ibid, p. 3.

8 http://ec.europa.eu/environment/action-programme/pdf/PPT%20A%20-%20EEB.pdf

9http://ec.europa.eu/environment/action-programme/pdf/7EAP%20-%20Second%20Workshop_Summary_final.pdf

THE NEED FOR A SYSTEMIC APPROACH

The 7th Environmental Action Programme vision is not just an environmental one; it is "inseparable from its broader economic and societal context[10]". Unsustainable production and consumption patterns not only undermine ecosystem resilience but also have "direct and indirect implications for health and living standards"[11] which, in turn, affects our economy and wellbeing. Our economies are approaching the ecological limits within which they are embedded. This is further pressured by the growing population and increasing middle classes estimated to be 9 billion and 5 billion worldwide by 2050 respectively,[12] resulting in increased competition for resources and demand on ecosystems. It is clear from the planetary boundaries discussion[13] that the planet's ecological limits cannot sustain the economic growth upon which our consumption and production patterns rely.

The increasing globalisation of environmental drivers, trends and impacts add an additional layer of complexity when it comes to governance. Better understanding of systemic challenges and their time dimension has, in recent years, led to the framing of global environmental issues in terms of tipping points, limits, and gaps. However overall, societies, economies, finance systems, political ideologies and knowledge systems fail to acknowledge or incorporate seriously the idea of planetary boundaries or limits. A study was done in 2017[14] to examine

10 Ibid, p. 3.

11 Ibid, p. 3.

12 Kharas, H. (2010) The Emerging Middle Class in Developing Countries. OECD Development Centre, Working Paper No 285.

13 Rockström, et. al. 2009. "Planetary boundaries:exploring the safe operating space for humanity." *Ecology and Society* 14(2): 32. [online] URL: http://www.ecologyandsociety.org/vol14/iss2/art32/

14 Hoff, Holger, Häyhä, Tiina, Cornell, Sarah and Lucas, Paul. 2017. *Bringing EU policy into line with the Planetary Boundaries*. SEI, PBL Netherlnds Environmental Assessment Agency and Stockholm Resilience Centre.

whether in planetary boundaries terms the EU is "living well within the limits of the planet". It was found, based on past and current data, that the EU far exceeded its per-capita share of the climate change, nitrogen and phosphorus flows - two of the three critical planetary boundaries that are far above safe limits globally.

Notably, the study did not include biodiversity (which is the third and most critical boundary), as it does "not yet have quantified control variables, making them impossible to measure."[15] The mid-term review of the European Union Biodiversity Strategy to 2020 identified the key threats to biodiversity as "habitat loss (in particular through urban sprawl, agricultural intensification, land abandonment, and intensively managed forests), pollution, over-exploitation (in particular fisheries), invasive alien species and climate change."[16] Of all of the planetary boundaries, biodiversity is in the most precarious position - far more precarious than climate change[17] - and it defies a quantitative and reductionist approach, as the causes of the sixth mass extinction are systemic.

According to the mid-term review, "It is clear that tomorrow's economic performance will depend on making environmental concerns a fundamental part of our economic and social policies, rather than merely regarding nature protection as an 'add-on.'"[18] Article 3 of the Treaty on European Union envisages such integration, but in practice it has not yet been achieved. Achieving the 7th Environmental Action Programme vision therefore involves "going beyond economic efficiency and optimisation strategies to embracing society-wide changes."[19] This means that the traditional, incremental, approach is not enough; the mobility, agriculture, energy, urban development and other core systems of provision will have to be radically redesigned to operate in a way that maintains the resilience and integrity of the

15 Ibid, p. 23.

16 European Commission. 2015. *The mid-term review of the EU biodiversity strategy to 2020*. COM (2015) 0478 final.

17https://www.stockholmresilience.org/research/planetary-boundaries/planetary-boundaries/about-t he-research/the-nine-planetary-boundaries.html

18 Ibid, p. 3.

19 Ibid, p. 3.

global natural systems that support and constitute the web of life. In order for that to happen, we need a radically different structure of law.

CHALLENGES IN IMPLEMENTATION OF EUROPEAN UNION ENVIRONMENTAL LAW

Law forms the framework for the execution of policy, so the failure of European Union environmental policy must also be seen in the light of the structure of law that is used to implement it. EU environmental law faces severe implementation challenges. For several years running,[20] the Environment policy area has occupied the largest number of infringement proceedings.[21] The European Parliament's mid-term review of the 7th Environmental Action Programme states that the root causes of common implementation problems include "ineffective coordination between authorities in Member States, a lack of administrative capacity and financing, and policy incoherence."[22] However, these are merely effects of a deeper root cause that stems from continuing to apply an outdated paradigm of law developed in the 16th-18th centuries[23] to solve our 21st century problems.

Over the last forty years in Europe, environmental law has evolved through two main opposing phases: the "regulatory phase" and "deregulatory phase."[24] The regulatory phase tried to protect Nature through legislation aimed at managing negative environmental externalities of economic activities. This has resulted in an emergency response approach, lack of medium-long- term vision, and continued support of the unsustainable mainstream economic model

20 European Commission. 2017. *Monitoring the application of European Union law: 2016 Annual Report.* COM (2017) 370 final.

21 European Commission. 2018. *Monitoring the application of Union law: 2017 Annual Report.* COM (2018).

22 European Parliament. 2017. *Report on the implementation of the 7th Environment Action Programme 2017/2030* (INI).

23 Capra, Fritjof and Mattei, Ugo. 2015. *The Ecology of Law: Toward a Legal System in Tune with Nature and Community*. First Edition. Berrett-Koehler Publishers Inc.

24 Montini, Massimiliano. 2017. "The Double Failure of Environmental Regulation and Deregulation and the Need for Ecological Law" (2017) 26 *The Italian Yearbook of International Law Online* 265, p. 283.

(infinite growth on a finite planet). The deregulatory trend tries to revise existing environmental legislation in order to streamline, simplify and reduce it, without questioning the means of managing the negative externalities of "business as usual." It does not address the underlying root causes of environmental degradation. This has led to a decrease in the level of environmental protection and further support of the mainstream economic model.

This is exacerbated by incoherence between European Union environmental law and other policy initiatives, such as the continuation of subsidies in the agricultural, meat/dairy and fossil fuel industries, as well as inconsistency between EU's Sustainable Development Agenda and the 2020 Agenda for Growth and Jobs. This incoherence includes economic objectives and economic concerns as legitimate derogations from fulfilling obligations under the EU's Environmental Directives and Regulations (e.g., Habitats[25], Birds[26] and Water[27] directives). The foregoing aligns with the growing recognition worldwide that environmental laws premised on regulating the use of Nature are, and have been so far, unable to protect it sufficiently - because they arise out of the same paradigm that created the problem in the first place.

Furthermore, access to justice on environmental issues at the European Union level is poor. At present, all decisions affecting the environment and applicable in the Member States are made at an EU level, which means the focus of any challenge is also at an EU level, since national courts cannot declare the acts of EU institutions invalid.[28] A litigant who wishes to challenge the validity of an EU act must either bring a challenge in the Court of Justice of the European Union under article 263 of the Treaty on the Functioning of the European Union ("Treaty")[29], or persuade a national court to refer the matter to the Court of Justice under article 267 of the Treaty.

25 Council Directive 92/43/EEC on the conservation of natural habitats and of wild fauna and flora, OJ1992 L 206.

26 Directive 2009/147/EC of the European Parliament and of the Council on the conservation of wild birds, OJ 2010 L 20.

27 Directive 2000/60/EC of the European Parliament and of the Council establishing a framework for Community action in the field of water policy, OJ 2000 L 327.

28 Foto-Frost v Hauptzollamt Lübeck-Ost (C-314/85) 1987. http://curia.europa.eu/juris/liste.jsf?language=en&jur=C,T,F&num=314/85&td=AL 29 OJ C 326, 26.10.2012, p. 47–390 https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=celex%3A12012E%2FTXT

The European Union is a party to the Aarhus Convention[30] and has adopted Regulation 1376/2006 in order to implement and apply it to the EU institutions. However, there are considerable shortcomings. Over the last few years, the Court of Justice has consolidated its case law in claims brought by non-governmental organizations, clarifying that members of the public have no standing under Article 263 of the Treaty[31] to challenge acts and omissions of EU institutions that are not addressed directly to them. As a result, in 2017 the Aarhus Convention Compliance Committee concluded that the EU is in breach of Article 9(3) and 9(4) of the Convention relating to the provision of access to justice, due to its failure to provide members of the public with access to the EU courts. It recommended amending the Aarhus Regulation or adopting new legislation, in the absence of a change in jurisprudence of the Court of Justice of the European Union.[32] The EU has postponed the decision on this until 2021.

Public participation is needed to keep institutions in check and accountable for mistakes, corruption or passivity, especially where Member States are unwilling to prosecute. Enforceability of substantive laws is a core feature of effective environmental governance[33] and remains a challenge in the European Union.

30 The United Nations Economic Commission for Europe (UNECE) Convention on Access to Information, Public Participation in Decision-Making and Access to Justice in Environmental Matters. http://www.unece.org/env/pp/treatytext.html

31 Consolidated version of the Treaty on the Functioning of the European Union - PART SIX: INSTITUTIONAL AND FINANCIAL PROVISIONS - TITLE I: INSTITUTIONAL
PROVISIONS - Chapter 1: The institutions - Section 5: The Court of Justice of the European Union - Article 263 (ex Article 230 TEC) Official Journal 115 , 09/05/2008 P. 0162 - 0162

32 Findings and recommendations of the Aarhus Convention Compliance Committee concerning compliance by the European Union with the Aarhus Convention (ACCC/C/2008/32(EU)) – 17 March 2017

33 Fulton, Scott and Wolfson, Steve. 2014. "Strengthening national environmental governance to promote sustainable development." in Robert V Percival, Jolene Lin and William Piermattei (eds), *Global Environmental Law at a Crossroads* (Edward Elgar, 2014) 15.

SYSTEMIC PROBLEMS WITH ENVIRONMENTAL LAW

At the root of the many interconnected ecological, economic and social crises we face today is a legal system based on an obsolete worldview. Traditionally science and law (or jurisprudence) have always developed in parallel influencing each other.[34] However, in the past few decades, science has moved away from seeing the world as a machine best understood by analysing its discrete parts - to seeing the world as a dynamic and fluid interconnected community of life best understood by thinking in terms of patterns and relationships. Science also acknowledges that Nature sustains life through ecological principles that are generative rather than extractive. However, law remains stuck in the mechanistic worldview of the scientific revolution of the 16th-18th centuries, failing to evolve and keep pace with current scientific knowledge, particularly in the field of systems science, complexity science, quantum physics and ecology.

At the root of the implementation challenge is the fundamental mismatch between a fragmented, mechanistic, reductionist, top down, fixed, quantitative and outdated system of law - with the holistic, dynamic, multidimensional and unpredictable nature of complex adaptive systems such as Nature and human societies (which are a sub-system of Nature). If law is to be part of the solution, a radically different whole-systems approach is needed to overcome the following issues:

a) Many environmental problems are invisible . By the time they become visible it may be too late to stop the damage,[35] which is challenging for a reductionist approach to deal with, as we can see clearly from the failure of the endangered species listing system to prevent the mass extinctions we are witnessing today. In the time it takes to do the scientific studies to list a species, it is already too late. Listing individual species also ignores the fact that ecosystems are

[34] Capra, Fritjof and Mattei, Ugo. *The Ecology of Law: Toward a Legal System in Tune with Nature and Community*. First Edition. Berrett-Koehler Publishers Inc.

[35] Beck, Ulrich. 1986. *Risikogesellschaft: Auf dem Weg in eine andere Moderne*, Suhrkamp Verlag, Frankfurt. English edition: *Risk Society. Towards a new modernity*, Sage publications, London 1992 (last ed. 2004).

an integrated whole, where the loss of an unlisted species (e.g. bees[36]) may have huge ramifications for the entire system.[37]

Figure 2. Not a single species of bee is protected in European Union law despite the systemic bee/pesticide crisis. Photograph by DIARTIS.

b) Many environmental problems are complex and marked by uncertainties and controversies about cause and effect relationships. This is exacerbated by a great lack of knowledge about how various organisms, including human beings, react in the short and long term to cumulative ecological stress. Environmental policy and law must often address uncertainties and moving targets, which is difficult to do with a reductionist approach that insists on quantitative rather than qualitative measures.

36 Nieto, Ana and others, "European Red List of Bees" (European Commission 2014), p. 6 <http://bookshop.europa.eu/uri?target=EUB:NOTICE:KH0714078:EN:HTML> accessed 23 September 2018.

37 Ito, Mumta. 2016." Rights of Nature - Why Do We Need It?" *Permaculture Design* Issue 99. Ecological Restoration, 48-51

c) Many environmental problems are long term, and future generations and other species - who do not have a defined legal status - will be the victims. Again, climate change and loss of biodiversity are clear examples. The role of law - as it is today - is to regulate present conflicts between persons (including legal persons) and the interests of today. Law and legal institutions are not designed or equipped to regulate intergenerational conflicts and secure intergenerational justice. This presents a profound challenge for environmental policy and law in its present form.

d) Many environmental problems are the cumulative effect of many actions and decisions that, by themselves, look harmless. Currently most decisions (especially planning decisions) are made on a case by case basis with no overarching requirement to look at cumulative or systemic implications for the whole.

e) Many environmental problems are cross-sectoral both in their causes and their effects. The combination of activities in many different sectors create effects, which may then affect different parts of society. At the same time institutional organisation and legislation are mainly developed along the lines of economic sectors, and are therefore too fragmented and specialised to deal consistently with the problem. Climate change and reduction of biological diversity are clear examples of this, as they need a systemic approach.

f) The most serious environmental problems cross administrative borders: boundaries between local communities, counties and regions, and also between states. The environmental effects of an activity may appear far away from its source. Completely different constituents may, on the one hand, get the benefits and on the other hand, incur the costs of environmental degradation. Environmental issues cannot, therefore, just be dealt with at the local, regional or Member State level. There needs to be a more integrated and holistic approach with greater collaboration.

g) Environmental law is fragmented both vertically and horizontally. Firstly, it is defined narrowly as the body of law that has environmental protection as its main objective, ignoring the fact that most of the main sectors of economic and social activity have environmental impacts.

These sectors are regulated by their own laws and policies that operate in silos isolated from one other. Within each sector decision-making authority is distributed among state, regional and local authorities. Due to this fragmentation, different acts may be aimed at the protection of different elements of the ecosystem, such as the water and the species; or they aim to regulate different activities within that ecosystem, such as shipping, building, aquaculture, and fishing; or they may have an unintended effect on the ecosystem, such as the adverse effects from industry, trade and transport. This is perhaps complicated by the fact that these different legal acts are implemented under different administrative sectors with different interests, tools and traditions, and by the fact that the legal acts contain a degree of discretion or flexibility to aid in administrative
decision-making.

h) The legislation and policies offer the authorities broad discretionary power to balance environmental concerns and other (often conflicting) social goals and considerations, such as the objectives of economic growth, employment, increased production of food, energy and goods, improved transport, and against such principles as cost-effectiveness and local self-rule. This is not just political, but is also a result of how environmental law is construed.[38] Inconsistency and lack of coherence in environmental law (when looking at all laws that affect an ecosystem rather than just laws that have environmental protection as their main objective) allows for diverging value judgments by administrative bodies on different aspects of the same ecosystem. As the legislation and policies are generally formed in an open style, this leaves the executive a broad discretionary power in how the provisions are applied. Broad discretionary power coupled with vertical and horizontal fragmentation makes it very difficult to take a holistic ecosystem approach.

i) Despite the European Union having well-formulated policy objectives, integration of environmental law (in its broadest sense) has not yet happened, because it requires changes in

[38] Bugge, Hans Christian (2010). "Environmental Law's Fragmentation and Discretionary Decision-making. A Critical Reflection on the Case of Norway." in Law and Economics. Cappelen Damm Akademisk. Kapittel 4. s 55-75.

the paradigm, objective and priorities of important sectors and authorities at different levels.[39] Often, environmental issues are perceived as a "problem" that works against the success criteria of a sector authority. However, sector authorities usually know little about environmental objectives and problems, and see them as irrelevant to their primary mission. This narrow, symptomatic thinking and application of law works against achieving systemic solutions.

j) Environmental legislation establishes institutions, systems, and procedural rules, and it lays down certain general objectives and principles to be observed. However, when it comes to the actual protection of the environment, the legal core is neither very precise nor very "hard." This is not just in the European Union; the soft, discretionary character of many international environmental treaties is well known.

k) Developments in international environmental law have been influenced by several principles, such as "sustainable development"[40] and the "precautionary principle,"[41] which could counteract some problems of fragmentation and broad discretionary power, if they are understood and applied consistently by the authorities. Unfortunately, this has not yet happened. Whilst the principle of sustainable development has been incorporated in European Union policy, there is no definition of sustainable development or guidance on implementation in EU law.[42] It is, therefore, no surprise that a 2009 analysis in Norway showed that inclusion of sustainable development or "sustainability" as an objective, in reality does not mean anything very different from "business as usual."[43] Similarly, the precautionary principle has been enshrined in Article 191(2) of the Treaty. However, in practice the principle has been observed to be highly malleable

39 Ibid, p. 33.

40 World Commission on Environment and Development (WCED). 1987. *Our Common Future*, Chapter 2, Para. 1.

41 1992 Rio Declaration on Environment and Development,

42 Krämer, L. 2008. "Sustainable development in EC law," in H.C. Bugge & C. Voigt (eds.), *Sustainable development in international and national law,* 2008, pp. 377-379.

43 Jerkø, Markus. 2009. "Det norske formålet 'bærekraftig utvikling'" (The Norwegian objective of "sustainable development"), Tidsskrift for Rettsvitenskap nr. 3/2009 s. 354-388.

and performs many functions.[44] Accordingly, application of the principle to create systemic change in major policy areas is difficult to identify.

l) One of the biggest issues in environmental law worldwide is legal standing[45] (i.e., the entitlement of a party to demonstrate to a court sufficient connection to support participation in the case), which is a fundamental problem of access to justice. This procedural dimension is often not given sufficient attention, though it leads to failure of the justice system.[46] Standing for judicial review in the European Union has for years remained severely restricted. European courts continue to interpret access to justice criteria so rigidly that it precludes challenges, particularly by non-governmental organizations, against the decisions of EU institutions, agencies and bodies. Courts hold that standing is only available to individuals who are personal affected by a situation, over and above the way that situation may affect anyone else.[47] In an anthropocentric perspective, an injury to Nature is an injury to everyone and therefore an injury to no one - as it does not individually concern any one person, but many people. The concept of individual and direct concern is not only incompatible with the nature of ecological damage but also contradictory to the Aarhus Convention rights.[48] This problem arises because Nature is merely an object of the law - property or fair game - and as such incapable of sustaining any harm itself. If ecosystems and species were subjects of the law with legal personality and rights, this problem of Nature's standing would vanish.

In order to implement European Union environmental policy, fundamental structural changes must be made to the law to bring it into the 21st century. This is even more important

44 Scotford, E. 2017. *Environmental Principles and the Evolution of Environmental Law*. Oxford, Hart.

45 Fulton, Scott and Wolfson, Steve. 2014. "Strengthening national environmental governance to promote sustainable development" in Robert V Percival, Jolene Lin and William Piermattei (eds), *Global Environmental Law at a Crossroads* (Edward Elgar, 2014), p.15

46 European Commission, Access to Justice in Environmental Matters (27 April 2016) .

47 Plaumann v Commission (C-25/62) [1963] ECR, 95.

48 ACCC/C/2008/32 (Part I) concerning compliance by the European Union, adopted on 14 April 2011 ('2011 ACCC Part I Findings and Recommendations').

because the current structure of law is responsible for facilitating the concentration of wealth, power and the extractive economics that are at the root of the interconnected crises.

NEOLIBERALISM, ECONOMIC GROWTH AND STRUCTURE OF LAW THAT WORKS TO SUPPORT IT

Like much of the world today, the European Union pursues a neoliberal economic model, based on an ideal of infinite growth on a finite planet. Environmental law and policy don't tackle this fundamental mismatch in societal objectives. This becomes clearer through an overview of the burgeoning problems, and the historical and philosophical trends that created the dangerous system controlling the European Union's current economy and laws.

GREEN ECONOMY

The 7th Environmental Action Programme relies heavily on creating a "green economy" based on decarbonisation and increasing resource efficiency, as a way to continue growing the economy in terms of Gross Domestic Product, whilst achieving the goal of "living well within the means of the planet." However, according to critics not everything that is "green" and efficient is also environmentally sustainable and socially equitable (such as biogas and genetic engineering). Critics also point out that more growth and consumption are not sustainable through increased use of green technology.[49] Ensuring that the direction of technological development is consistent with environmental objectives (such as renewable energy and organic farming) is better – though still facing limits when applied on a large scale - because these activities need resources, all of which come from Nature, which has physical limits. There is also the "rebound effect," in which greater efficiency leads to lower prices, which leads to increased consumption. Neither strategies of efficiency or consistency will be able to achieve their objectives unless accompanied by the "principle of sufficiency," which is currently absent from all concepts of a green economy.

[49] Unmüßig, Barbara, Sachs, Wolfgang and Fatheuer, Thomas. 2012. *Critique of the Green Economy Toward Social and Environmental Equity*. Volume 22 (English edition), in the Publication Series on Ecology, edited by the Heinrich Böll Foundation.

Introducing a principle of sufficiency into the green economy will require a move away from Gross Domestic Product as the sole measure of well-being and progress. The Gross Domestic Product concept was first introduced in 1934, during the Great Depression, by Simon Kuznets, who cautioned against equating GDP growth with economic or social well-being[50]. Yet is has become the sole measure of progress ever since. The Gross Domestic Product is the combined transactions (private consumption, investment, government consumption and total imports) in a country. Non-market transactions, such as family work, unpaid care, neighbourliness and volunteering are not a part of the calculation. Nor does the Gross Domestic Product measure quality of life or well-being; it does not take into account the risks and financial burdens of overconsumption, such as pollution, environmental damage, social stress, increasing inequalities and public health risk factors. As Nobel Prize winning economist Joseph Stiglitz said, "GDP tells you nothing about sustainability."[51] Yet this outdated measure forms the underlying basis for law and policymaking aiming to improve societal progress.

Most conventional economists and policymakers now endorse the idea that growth of the Gross Domestic Product can be "decoupled" from environmental impacts[52] – that the economy can grow, without using more resources and exacerbating environmental problems. However, critics say that what people are observing (and labelling) as decoupling is only partly due to genuine efficiency gains, but all too often at the cost of biophysical effectiveness and long-term social-environmental sustainability. The rest is a combination of three illusory effects: (a) substitution (replacing one energy source with another, such as replacing fossil fuels with renewables); (b) financialisation (growth through the financial sector, creating "phantom wealth"); and (c) cost-shifting (moving resource-intensive modes of production away from the

50 Kuznets, S. 1962. "Inventive Activity: Problems of Definition and Measurement, The Rate and Direction of Inventive Activity: Economic and Social Factors", in *National Bureau of Economic Research,The Rate and Direction of Inventive Activity: Economic and Social Factors*, Princeton University Press, Princeton, New Jersey, pp. 19-52.

51 Nobel Prize-winning economist Joseph Stiglitz proposes alternatives to Gross Domestic Product as a measurement of national economic success, 2008 (publ. 2010) https://www.youtube.com/watch?v=QUaJMNtW6GA

52 Hatfield-Dodds, Steve, et al. 2015. *Nature* volume 527, pp. 49–53 (5 November 2015).

point of consumption, to other countries which bear the brunt of the impacts).[53] The decoupling illusion props up Gross Domestic Product growth as a measure of well-being, though it is both outdated and limited. Instead, we need to redefine what is meant by "living well" in a 21st century context. This requires the creation of alternative indicators of happiness and wellbeing, which in turn requires a move towards qualitative, rather than purely quantitative, evaluation. Much of what makes human beings happy is the quality of our relationships, including our relationship with the rest of Nature.

The green economy also relies heavily on the concept of "natural capital," turning Nature into capital to reconcile capitalist growth with environmental protection. In this way, proponents assert, conservation can be expressed in a language that economists, policy-makers and CEOs understand.[54] However, critics point out that this strategy is not just self-defeating; it is a dangerous illusion that masks the way capitalist growth undermines conservation itself.[55] The Natural capital proposal is based on two flawed assumptions: (a) that Nature can become capital providing services; and (b) that this could be the basis of a sustainable economy.

The move from Nature to natural capital is problematic due to the fundamental mismatch between the homogenous and unlimited quality of monetary units and the finite, complex, qualitative and heterogeneous qualities of complex adaptive systems like Nature.[56] The assumption that human, financial and natural capital can be made equivalent and exchanged is therefore fundamentally flawed, especially when planetary boundaries are imposing physical

53 "The decoupling delusion: rethinking growth and sustainability." March 12, 2017 https://theconversation.com/the-decoupling-delusion-rethinking-growth-and-sustainability-71996 54 "When it Comes to Natural Capital, it's Easy to Forget that We're on the Same Team" 09/16/2016 Huffington Post https://www.huffingtonpost.com/natural-capital-coalition-/when-it-comes-to-natural_b_1204324 4.html?guccounter=1

55 Büscher, Bram and Fletcher, Robert. 2016. Nature is priceless, which is why turning it into 'natural capital' is wrong.The Conversation. https://theconversation.com/nature-is-priceless-which-is-why-turning-it-into-natural-capital-is-w rong-65189

56 Ibid 53.

limitations on how much monetary capital can be exchanged into nature capital without sending us all into oblivion.

The other assumption, that it can form the basis of a sustainable society, is also being proven false. Recent research shows that markets for natural capital and ecosystem services are mostly failing, and that rather than being true markets, they are subsidies in disguise.[57] In contrast, investments in unsustainable economic activities have continued unabated because these are much more profitable, and hence a much better form of capital.

Another disconcerting trend is that programs built on natural capital are usually geared towards offsetting the destruction of Nature, which becomes the main source of the money needed for investing in conservation. In the logic of natural capital, investments in unsustainable economic activities are therefore "compensated" by equal investments in sustainable activities. This practice, which in theory should lead to no net loss of – or better yet, net positive impact on - Nature and biodiversity, leads to a contradiction: that Nature can only be conserved if it is first destroyed.[58]

A further consequence of the natural capital approach is the financialisation of Nature. Here the components and functions of Nature, including biodiversity, are priced according to their utility and assigned an economic value, which forms the basis for the creation of financial instruments that can be traded on the primary and secondary capital markets. The instruments are acquired by corporations to offset their overuse, degradation or pollution of the environment, and they can further profit from trading them. Pollution permits, natural capital bonds, biodiversity banks and offsetting already exist. Essential prerequisites for financializing nature are: pricing Nature, characterising Nature's functions as "ecosystem services," and redefining Nature as "natural capital." This approach has several drawbacks that could seriously accelerate the rate of

57 Dempsey, Jessica and Chiu Suarez, Daniel. 2016. "Nature and Society Arrested Development? The Promises and Paradoxes of 'Selling Nature to Save It.'" Annals of the American Association of Geographers Volume 106, 2016 - Issue 3, pp. 653-671 | Received 01 Jun 2015, Accepted 02 Oct 2015, Published online: 06 Apr 2016.

58 Ibid, p. 51.

ecosystem destruction.[59] This extension of property rights increases the commodification and privatisation of Nature, and leads to further concentration of power into corporate hands.

In all green economy scenarios, political, social, economic and cultural rights are largely left out of the picture. In the absence of political action to prevent it, there is a clear and alarming tendency towards concentration of power.

An example of this is in the agricultural and food industry. Global food production and marketing is controlled by a few large agricultural monopolies[60]. Production of fertilizers, pesticides, seed and genetically modified seed is largely concentrated in the hands of a few conglomerates – the same ones that control the global food market. The powerful seed, fertilizer and pesticide lobby is intent on securing market power in this area for itself. Its representatives exert increasing influence on policy-making everywhere in the world.

Another example of innovation leading to an increasing concentration of power comes with the bio-economy, which is now part of European Union policy.[61] The bio-economy fosters techniques such as synthetic biology and nanotechnology, which transform living 'biomass' into fuels, chemicals and power. However, this seemingly "green" switch from fossil fuels to plant-based production is now threatening biodiversity, fueling land grabs in the global South, where 86 percent of all biomass is located, and enabling new corporate claims on Nature.[62]

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59 Ito, Mumta and Montini, Massimiliano. 2019. "Nature's Rights and Earth Jurisprudence - A New Ecologically Based Paradigm for Environmental Law, Part III" p 231-233 in *The Right to Nature: Social Movements, Environmental Justice and Neoliberal Natures,* Routlege.

60 "Agropoly – A handful of corporations control world food production" 2013 English Edition. Berne Declaration (DB) & EcoNexus. https://www.econexus.info/sites/econexus/files/Agropoly_Econexus_BerneDeclaration.pdf

61 EU 2018: A sustainable bioeconomy for Europe: strengthening the connection between economy, society and the environment. Updated Bioeconomy Strategy .https://ec.europa.eu/research/bioeconomy/pdf/ec_bioeconomy_strategy_2018.pdf#view=fit&pag emode=none

62 Ibid, p. 55.

Underpinning all of this concentration of power is property rights. This is why access to intellectual property rights is part of the repertoire of economic negotiations, and of innumerable bilateral trade agreements between industrialized and developing (i.e., non-industrialized) countries. Small farmers and rural workers rarely have the power to defend their interests and rights against the conditions imposed by global corporations. None of the green economy strategy papers or policies – from the Organisation for Economic Cooperation and Development to the United Nations Environment Programme to the European Union – tackle the issues of power and distribution of resources. In the political sphere, and among the general public, there is little awareness that the problem even exists.

A fundamental failing of environmental law and policy today is its inability to deal with the extraordinarily unequal power relations that exist in today's world, and the interests at play in the operation of this destructive global economic system. Law has progressively facilitated a situation where the capacity of existing political systems to establish regulations and restrictions to the free operation of the markets – even when a large majority of the population call for them – is seriously limited by the political and financial power of the corporations. For example, although the European Commission ("Commission") is tasked with the role of competition watchdog, its track record for enforcing merger rules to date confirms a strong pro-concentration stance. The recent mega-mergers between the agro-chemical giants Bayer and Monsanto, Dow and DuPont, and ChemChina and Syngenta are an example that will lead to unseen economic concentration in the markets for seeds and pesticides and other chemical inputs, which will not only affect the future of biodiversity, wildlife and the conditions under which farmers produce their crops, but also the lives and food choices of billions of people around the world[63]. The Commission has legitimized its pro-concentration stance by referring to synergy effects, such as lower costs and thus lower prices for consumers, product innovation and the displacement of inefficient management structures[64]. However, so far smaller and less competitive companies

63 "Too Big to Control? The politics of mega-mergers and why the EU is not stopping them." June 21, 2017. The power of lobbies.
https://corporateeurope.org/power-lobbies/2017/06/too-big-control

64 Ibid, p. 62

have suffered, whilst the transnationals have profited. The Commission's policy of consolidation of economic power into ever-fewer transnational corporations therefore works against both people and Nature.

HOW LAW CREATED THESE CONDITIONS

The progressive evolution of law in Europe - from the holism in ancient Greece to the mechanistic and institutionalised form of modern law that we use today - has played a powerful role in creating and legalising the destruction of Nature, as well as the concentration of power and inequality that are at the heart of our interconnected crises.

Prior to the scientific revolution of the 16th and 17th centuries, philosophers in Europe saw the world as a living organism rather than a machine - an ordered harmonious whole (a macrocosm) whose general properties are reflected in its parts (microcosm). These ideas are also an integral part of systems science today and can be seen in action in examples such as DNA, which is found in each cell but contains the code of life for the whole. The scientific revolution put an end to the concept of systemic holism by introducing the mechanistic worldview. During this time, mathematical regularities observed in Nature got solidified into "laws of nature" that were deemed to be absolute and fixed. Just as the scientists fragmented the universe into an aggregate of separate parts (often described as "independent variables"), legal scientists fragmented the legal order from a holistic system of customary laws adapted to the practical requirements of human relationships into an aggregate of component parts governed by strict natural laws of individual reason.[65]

Private ownership of land became the most important legal concept dividing the whole into parts, governed by what became the sovereign state. This created the intellectual foundation for a dramatic shift away from commons-based folk institutions into legally formalised concentrated private property and eventually into capital. This shift in law provided the legal justification for

[65] Ibid, p. 33.

the (violent) private enclosure of the commons, colonialism, slavery, industrialisation and capitalism - progressively concentrating wealth and power in the hands of the few, and requiring progressive increases in the extraction, accumulation and mobilisation of natural and human resources, later to be understood as "capital."[66]

Ownership and sovereignty became the two organising principles of law that are still with us today. Law developed into a system of relationships among sovereign individuals who could exercise their sovereignty over private property, which was seen as an extension of themselves.[67] If there is any legal limit to this sovereignty, it could only derive from the presence of other subjects who had similar formal legal rights.

During this period, distributive justice was completely eliminated from Western legal and political thought[68]. Absolute property rights, immune from possible redistributive plans and from any concern about the commons, are also the basis of legal support for our current disastrous model of development and concentration of wealth and power.

The rational, scientific way of thinking spread from science into law, and then into economics. Once bound by their duties toward one another, people were now defined instead by their individual property rights. Today the legacy of these ideas is an unexamined faith in a mechanistic, top-down rule of law, which opened the way for the conception of corporations as "legal persons" with limited liability. This has led to widespread expansion and exploitation of Nature, natural "resources" and people worldwide. "Natural law" was used as a justification to acquire private property that was unused as "empty" even if it was under foreign jurisdiction.[69] The Dutch East India Company – a precursor to our present day multinational - was the first example of a private ownership structure that claimed legal advantages even over states. This

66 Marx, Karl. 1867. 1992 Capital: A Critique of Political Economy Volume 1. London. Penguin Classics.

67 Macpherson, C.B. 1962. *The Political Theory of Possessive Individualism: Hobbes to Locke*. Oxford: Clarendon Press.

68 Ibid, p. 33.

69 Ibid, p. 33.

created a very favourable playing field for corporations venturing into transnational activities. Very similar arguments today are the foundation of the World Trade Organisation - no public power can limit the corporate right to roam the globe to acquire control over natural or human resources.[70]

The law operated to allow the commons to be freely transferred into private hands. However, moving resources from private ownership back to the public could only be done under strict judicial scrutiny. This process has produced a constant and irreversible transfer of public resources into a few private hands.

After the collapse of the Soviet Union, philosophies of "legal realism" deemed law a social science rather than a "natural science," which made it subservient to economics. This led to political processes producing law by design to facilitate market efficiency. The predictability of law then paved the way for more efficient business activity, which led to the global capitalism that we see today, where the entire world is governed by essentially the same rules and institutions. These structures are equally unsustainable and extractive, whether in private decision-making by corporations, or short-term decision-making by governments. At the centre of global capitalism is a network of financial channels, which the law allows to develop outside of any ethical framework, supported by free-trade rules designed to support corporate growth. This depletes the earth, and ultimately separates people. Analyses by scholars and community leaders reveal a multitude of interconnected, harmful consequences of the capitalist freedom of extraction generated by property law, including increasing social inequity and social exclusion, a breakdown of democracy, more rapid and extensive deterioration of Nature and increasing poverty and alienation.[71]

70 Hertz, Noreena. 2001. *The Silent Takeover: Global Capitalism and the Death of Democracy*. New York: Harper Business.

71 Picketty, Thomas. 2014. *Capital in the Twenty First Century*. Translated by Arthur Goldhammer. Harvard University Press, Cambridge, MA.

Three centuries of transforming commons into capital have weakened governments and the public interest, allowing dominance by strong corporate actors. Private corporations are not accountable for violations of international human rights, in contrast to legal limits on governments and their officials. Although corporations are the most powerful actors in international law – and capable of determining its content – the lack of an ecological vision of the legal system makes them invisible, and shields them from responsibility. The Western legal tradition developed to protect the private economic agent against government, when government was strong and property owners weak. It has now produced a major imbalance protecting private vested interests against the public. People are more affected today by the decisions of corporations rather than the decisions of governments - yet only governments can be legitimised in democratic terms, whilst corporations are discussed only in terms of economic efficiency, highlighting a need for fundamental systemic change in European Union law and governance.

The notion of law itself as a commons, in Europe and beyond, has been eradicated by its progressive professionalisation and institutionalisation, which took law away from communities - meaning that communities no longer had any control over their legal structures, disempowering people. The only choice available today in law is between the interests of private property and state sovereignty, and the only political choice is between more or less government or more or less property. The law has progressively become a tool to support this constriction of political agency. The current legal structure in Europe (and arguably reflected in many countries around the world), built on the institution of private property, is based on the concentration of power and exclusion[72] as described in the examples of the agro-chemical mergers above[73]. Based on a mechanistic vision of the relationship between humans and the rest of Nature, property law is still perhaps the most powerful institution of exclusion, individualisation and competitive accumulation.

72 Ibid, p. 33.

73 Ibid, p. 62.

The tight structural connection between private property and unsustainable practices of short-term extraction explains the difficulty of exiting the mechanistic trap.[74] Mechanisms of liability embedded in corporate charters force managers to pursue shareholder value and the bottom line. Property law and freedom of contract also protects even the most systemically irrational behaviours such as monoculture for fuel production, and the highly destructive form of mining known as hydraulic fracturing. Any attempt to put public interest over private ownership faces a high burden of proof because scores of economists, jurists and pundits rush to protect the sanctity of private property and the unlimited freedom of an owner. Above all, property law protects corporations.

The current dominant legal order is designed for extractive rather than generative purposes. To do so it has progressively separated itself from politics and economics - areas where law can serve human needs. Moving from one mechanistic alternative to another is likely to fail. In order to solve our systemic problems we need something that will take us out of the mechanistic trap,[75] whilst providing a powerful counterbalance to property rights.

THE WAY FORWARD

Just as alternative models of economics are being proposed that are more holistic, it is equally important that law evolves to meet the challenges of our time and becomes part of the solution. We have already looked at how the structure of law in the European Union contributes to the problem. It is not so much any individual provision of law, but rather the structural basis upon which these laws are founded, that gave rise to the problem. To move us into a sustainable future, a few key pieces of legislation that start to shift the structural frame - such as that presented in the Draft Directive for the Rights of Nature - are needed. Slavery ended as a mainstream model when slaves got legal personality and rights. Similarly, in order to put an end to the systemic root cause of climate change and the sixth mass extinction, we need Nature's rights within an ecological framework of law.

74 Ibid, p. 33.

75 Ibid, p. 33.

The first step in the journey towards a whole systems approach is for the law to include the interests of all living beings as subjects of the law rather than objects or property. The current legal construction of Nature as an object of the law is the reason why it is legal to have an economy based on infinite growth, an agricultural system that poisons the earth and people and an energy system that depletes Nature faster than she can replenish. It is therefore imperative to redress the imbalance, and ensure that Nature is represented in the European system of law as a stakeholder in its own right, given legal personality and rights in the Treaty along with an implementing framework set out in a Directive. This will act as a powerful counterbalance against corporate and property rights,[76] and start transforming some of the plentiful capital now available back into commons available to Nature itself and people as part of Nature, without having to destroy Nature first.

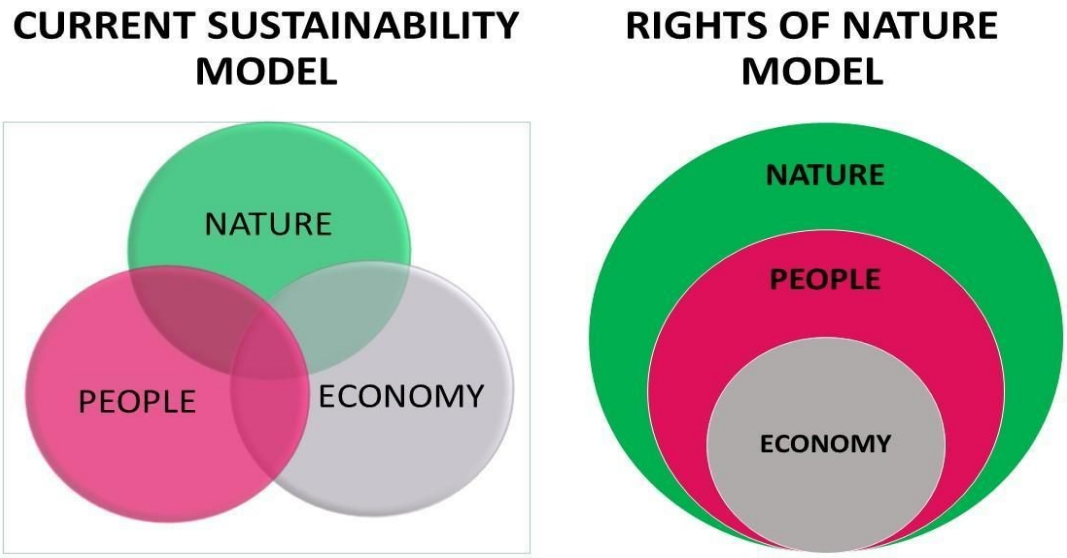


Figure 3. Sustainability Models. Diagram by Mumta Ito.

76 Ito, Mumta. 2017. "Nature's Rights - A New Paradigm for Environmental Protection" https://theecologist.org/2017/may/09/natures-rights-new-paradigm-environmental-protection

It is important to change the mainstream model of sustainability to a more systemic view. The Current Sustainability Model in the diagram, which is the dominant model for sustainability in the European Union and elsewhere, represents a mechanistic worldview where the assumption is that each circle can operate independently of the others. In reality the only circle that can operate independently is Nature, as the others are dependent on Nature for their existence. The Rights of Nature Model (three concentric circles) is therefore more accurate, as it represents a nested natural hierarchy of systems - Nature, Human Society and Economy.

European Union law doesn't expressly recognise a human right to a healthy environment, although there is reason to believe that it is supported in the jurisprudence of the European Court of Human Rights[77]. However, the human right to a healthy environment has not been successful so far in halting the onward destruction of Nature that has accompanied capital accumulation over the centuries - as the mid-term review of the 7th Environment Programme illustrates - because human rights are conceived of in a vacuum. Aligning law with the systems perspective of modern science and ecology would involve a reframing of the notion of rights to reflect the whole system, and the interrelationships between the parts. For this, we need to include the overarching context of our existence on this planet - the fundamental basis from which all other rights emanate: the Rights of Nature, because without Nature we cannot exist.

This is in stark contrast to the situation that we see in the world today (shown on the left in the Hierarchy of Rights diagram) which has led to the domination and concentration of wealth and power in the hands of the few[78]. Interlinked multinational banks and corporations determine economic activity throughout the European market. Their vast lobbying power has an overwhelming influence on the European Commission and Council that remains unregulated by law. Currently, human rights are in the realm of public law aimed at the relationship between

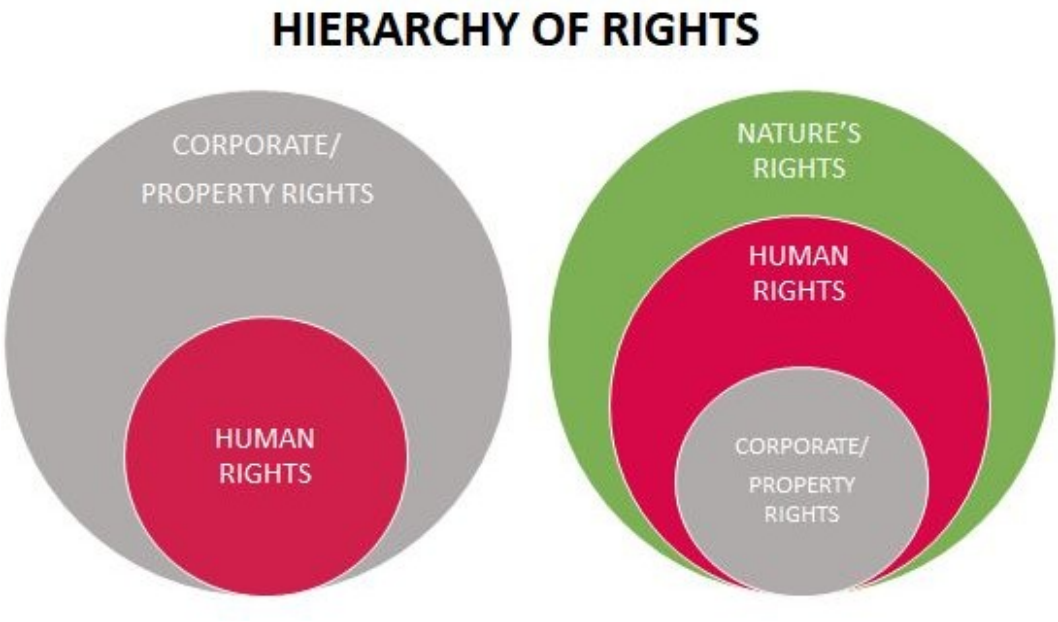
77 Lassalle, Déborah, Maquil, Francis and Raducu Pelin, Iona. DATE. *Mapping Human Rights Obligations Relating to the Enjoyment of a Safe, Clean, Healthy and Sustainable Environment*. Universite de Geneve Global Studies Institute. Individual Report on the European Convention on Human Rights and the European Union. Report No. 14. Prepared for the Independent Expert on the Issue of Human Rights Obligations Relating to the Enjoyment of a Safe, Clean, Healthy, and Sustainable Environment.

78 Ibid, p. 62.

governments and individuals; property and corporate rights are exercised in the realm of private law between individuals. There is no horizontal enforcement of human rights in private law, making corporations effectively immune to human rights abuses, although this is increasingly questioned by legal scholars.[79] By contrast corporations, as legal persons, enjoy the protection of human rights in addition to property and corporate rights, leading to the current state of affairs in which corporations are shielded from the consequences of their destructive extractive activities worldwide.

A natural hierarchy of rights that derives from the natural hierarchy of systems - Nature's rights, Human rights and Economic rights – is shown in the Hierarchy of Rights diagram. In this model, the rights operate in synergy with each other, as competing rights would undermine the wellbeing and integrity of the whole. This model of nested rights brings a unifying overarching framework to the balancing of interests and weighing of divergent values, overcoming the existing fragmentation and imbalance. Economic rights that currently undermine human rights and Nature's rights destabilise the whole system, and would no longer be in the public interest.

79 Friedmann, Dan and Barak-Erez, Daphne. 2002. *Human Rights in Private Law*. Hart Publishing.



[Fig. 4. Hierarchy of Rights. Diagram by Mumta Ito.

To develop this idea further into a workable model, the planetary boundaries and United Nations Sustainable Development Goals (which the European Union has committed to implementing via adoption of the 2030 Agenda for Sustainable Development[80]) can then be mapped onto the 3 concentric circles, identifying a clear and safe operating space for humanity that takes all three layers of rights into account. This is partially depicted in the diagram below, which shows how the biosphere forms the fundamental basis for all of the UN Sustainable Development Goals.

80 https://ec.europa.eu/europeaid/policies/european-development-policy/2030-agenda-sustainable-development_en (accessed February 9, 2019).

Fig. 5. Biosphere Model. Diagram by Azote Images, for Stockholm Resilience Centre.

This establishes the basis for policies integrating Nature's rights, Human rights and Economic rights (corporate and property rights) into a coherent and unified whole within a legal framework that supports that integration. Operationalizing the planetary boundaries and Sustainable Development Goals at Member State levels, and identifying gaps, would form the basis of the implementation of the Nature's rights framework. However, this has to be done within a holistic and ecological legal framework, based on the principles of Earth Jurisprudence. The purpose of this framework is to embed these principles in all aspects of human lives and society. Earth Jurisprudence, which has been endorsed by the United Nations Harmony with Nature Programme[81] as a way of achieving the Sustainable Development Goals, can be distilled into the following key principles:

Wholeness. The Earth is a living being, a single Earth Community webbed together through interdependent relationships. All life is sacred, with inherent value, and the earth has her thresholds and limits. The well-being of each member of the Earth Community is dependent on the well-being of the Earth as a whole.

[81] http://www.harmonywithnatureun.org/

Universal principles. The Earth is part of the universe, which is ordered and operates according to its own principles that govern all life, including human beings. We need to discover these principles and comply with them, for our own wellbeing and for the wellbeing of the whole.

Duty of Care. Earth Jurisprudence is a living law, a way of life, guided by moral responsibilities. We have a duty of care to all present and future members of the Earth Community to contribute to its integrity and well-being. If we create imbalance, then we cause disorder in the Earth's dynamic equilibrium, which we have a duty to restore.

Nature's Rights. The Earth and all of the Earth Community have three inherent rights: the right to exist, the right to habitat, and the right to fulfil their role in the ever-renewing processes of life.

Mutual Enhancement. Relationships within the Earth Community are reciprocal, a cycle of giving and receiving. Our role is to participate and contribute to the health and resilience of the Earth Community. What does not enhance the whole will ultimately not enhance human life either.

Resilience. All healthy living systems have the ability to grow, evolve, and adapt to change and disturbance, without losing inner coherence. By complying with the laws that maintain life's health and vitality, we strengthen Earth Community resilience as well as our own. To learn from Nature and understand its laws, we must become eco-literate and engage other ways of knowing, especially feeling, sensing and intuition.

Practicing this approach to law requires us to make decisions that prioritise the long-term ecological interests of the whole and of future generations, over short-term gain. These principles and ideas form the underlying basis of a Nature's Rights Draft European Union Directive,[82] prepared by the author and reviewed by several networks of legal experts, to form the basis of a Nature's Rights European Citizens Initiative, using participatory democracy to put the Rights of Nature on the EU legislative agenda. The proposal was presented to the

[82] http://www.natures-rights.org/ECI-DraftDirective-Draft.pdf

European Parliament at a conference organised by the Nature's Rights organization[83], and co-hosted by the Vice-Chairs of the Environment Committee of the European Parliament, MEPs Benedek Jávor and Pavel Poc. Keynote speakers included the Executive Director of the European Environment Agency, Professor Hans Bruyninckx and Director of International Union for the Conservation of Nature Europe, Luc Bas. The event was attended by over 120 key stakeholders from key European institutions and civil society, and very well received.[84] Nature's Rights is now working with the European Economic and Social Council and the International Union for the Conservation of Nature to further raise awareness and to propose a Climate Rights Bill based on the Nature's Rights Draft European Union Directive.

If the European Union adopts a Nature's rights legal framework within an ecological legal context, it will herald the start of a new era, bringing law up to date with modern science, healing the societal disconnect from the rest of Nature - and each other. The ramifications will be profound. But if Europe is to achieve the 2050 vision set out in the 7th Environmental Action Programme, the law must make a dramatic shift into the 21st century, so that humanity can flourish in harmony with the rest of Nature for generations to come.

[83] www.natures-rights.org

[84] (a) UN Harmony with Nature Programme, Conference Report, "Nature's Rights: The Missing Piece of the Puzzle", <http://files.harmonywithnatureun.org/uploads/upload52.pdf > (accessed 20 January 2019); (b) Ibid, p. 1.