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The rights of nature and the human right to nature: an overview of the European legal system and challenges for the ecological transition

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Introduction: The recognition of the Rights of Nature has been established though several constitutional, legislative, and judicial enactments, which aim to provide legal protection for non-humans' entities and natural systems. Although some countries have made progress in recognizing the rights of nature, the prevailing assumption remains that nature is a resource to be exploited for human benefit. In the context of ecological transition debates, it is important to understand how the European legal system perceives Nature and its rights. Achieving a significant shift in legal and cultural norms that prioritize nature's protection may be challenging.

Methods: This paper reports on research conducted in a sample of 6 countries within the PHOENIX consortium, a European H2020 project that aims to develop participatory methodologies and democratic innovations to facilitate the ecological transition as envisioned by the European Green Deal, whose objective was to find out how these countries embodied the Rights of nature into their legal systems, both at constitutional level and at the level of environmental and related laws and policies.

Results: The results indicate that in legislative terms, concepts of nature are absent, and instead, the term environment or natural resources are used. Furthermore, rights of nature are rarely recognized in all countries, with anthropocentric and in instrumental views prevailing. In contrast, the human right to Nature is widely recognized in all countries, referring to the right of all individuals to access to and live in a healthy environment.

Discussion: Despite the importance of the human right to Nature as a matter of equity and justice, failure to recognise the rights of nature and protect/respect its limits may constitute a potential barrier to ecological transition.

KEYWORDS

rights of nature, Europe, legal system, ecological transition, European green deal

1 Introduction

By the end of March 2023, the Eco Jurisprudence Monitor (Kauffman et al., 2023) documented 468 Rights of Nature (RoN) initiatives-which are efforts to adopt a RoN legal provision-across 29 countries, being more expressive in North America and Latin America, and less in Europe, Asia and Africa. Despite this significant number of initiatives, RoN exists from immemorial times but as an idea rather than a formal legal document, which is a relatively recent reality (Kauffman and Martin, 2021). In fact, the Rights of Nature should have their foundation in Environment Laws, which is based on the idea that the natural world has inherent value and rights that should be recognized and protected. However, their elements have no standing and environmental laws are fragile in the context of dominant systems insofar as they somehow continue to carry the burden of neo-colonial practices and western property relations (Viaene et al., 2023). There is a need, according to Kotzé and Adelman (2022) to undertake a thorough reconsideration of environmental law's ontology, shifting away from its current centered, gendered, and anthropocentric neoliberal sustainable development focus towards a new, radically different ontology that incorporates ecologically sustainable perspectives on perception, existence, knowledge, and compassion. The Rights of Nature go one step further and recognize that non-human elements should be treated as legal entities, with the right to exist, thrive, and regenerate (Kauffman and Martin, 2021).

The right of nature advocates that the recognition of these rights would benefit a more sustainable relationship between humans and the nature/environment and can prevent environmental degradation or destruction. Accordingly, the "Rights of Nature" is a legal and judicial theory according to which the natural elements, and more in general the environment, have inherent rights, comparable to Human Right Theory. In that vision, nature is considered non-human in its entirety: both the inorganic and the organic, both animals and plants, both bacteria and rocks. In general, the Rights of Nature is the idea that the whole biosphere, meant as the place in which life can happen, is endowed with natural rights. This Earth-centred view is anchored in the term proposed by Berry (1999) as "Earth Jurisprudence" whose rationale is rooted in the philosophy of "Deep Ecology" in which all living beings have a moral and ethical claim regardless of their utility to humanity (Devall, 1980). Other authors have proposed other associated ideas, such as the critical zone science in the Anthropocene (Minor et al., 2020), or the "Critical Zones of the Anthropocene" (Seixas et al., 2021), and which aim to give visibility to different facets of the Anthropocene (Epstein, 2022), from the Paradigm of Human Exceptionalism and coloniality over Nature-extractivist (Catton and Dunlap, 1980) to the New Ecological Paradigm (Catton and Dunlap, 1980), and conviviality with Nature-Buen Vivir (Gudynas, 2015). Despite different ideas and concepts, all have in common the need to deal with a new epoch where humans have replaced Nature as the dominant force on the planet. Therefore, the recognition of the Rights of Nature is crucial to deal with the complexity of the socio-ecological crisis and, as Viola and Basso (2016) stated, to lead to international concertation around Nature.

More recently, the Environmental Philosophy or Ethics highlighted the effort of protecting Nature and the Environment,

which is at the base of the actual mainstream Western and Euro-American environmental legal paradigm (Gonçalves and Tárrega, 2018). Under national and international Human Rights Law, humans have the right to have access to natural resources, green spaces, and a clean and healthy environment (Varvastian, 2019). However, the Human Right to Nature is translated into environmental laws that, although aimed at the legal protection and conservation of biodiversity and ecosystems services, continue to perpetuate the modern anthropocentric logic and separation of non-humans/humans in guiding its protection according to the interests and the wellbeing of humans (Benjamim, 2011): to protect Nature for humans' sake. In other words, Nature continues to be seen as something that has resources (precisely, "natural resources") that are meant to benefit human beings, revealing the homo economicus perspective (Eckersley, 1992). In this hegemonic legal system, Nature has an instrumental value and is represented as a commodity. Nature is not seen as a subject with intrinsic value-protecting Nature for Nature's sake-, and agency that acts to and in relation to human beings (Sessions, 1995) and, thus, a subject that has its own rights (Nash, 1989; Gonçalves and Tárrega, 2018).

According to Nash (1989) and following the main addresses of ethical analytical philosophy, two groups of argumentations can lead to the recognition of the Right of Nature: on the one hand, a deontologist approach, according to which human rights originated from the sole human existence, the same should work for the nature rights, that originated by the sole existence of the natural world; by the other hand instead, a consequentialist one, which is more instead oriented toward the environmental outcomes of the Anthropocene. According to а consequentialist point of view, and acknowledging the socioenvironmental crisis, the only way to address it and guarantee the sustainability of life on the planet is to reduce the ecological impact of human life, therefore by recognizing the rights of nonhumans. This is also proposed by Emmenegger and Tschentshcer (1994) since for these authors giving rights to nature itself is the only way to face socio-environmental challenges rather than having human duties towards nature.

However, as more critical authors have found (Bookchin, 1987; Berry, 1999), both deontologists' and consequentialist approaches are rooted in an anthropocentric understanding of the relationship between the human and the non-human. Both approaches rely conceptually on the Cartesian dichotomy between the human sphere and the environmental one (Aldeia and Alves, 2019). This dichotomy, or separation, is embodied in the idea of instrumental (consequentialists) and intrinsic (deontologists) value concerning nature. Accordingly, humans consider themselves as something ontologically different from the environment in which they live (Aldeia and Alves, 2019). Chan et al. (2016) discussed this idea, by proposing "relational values", considering the human as just a part of a more complex ecological system, defined by the relationship between its parts. The concept aims to express the idea that the value of nature is not just based on its instrumental or economic value to humans but also on its intrinsic value as part of a larger system. The author goes further and proposed that the concept to be considered in decision-making processes, particularly in the context of natural resource management.

Question		Guidelines
Rights of Nature	1.In the legislation there are legal norms that protect nature/natural resources for their intrinsic value [Rights of Nature (RoN)], regardless of the interest they have for humans? If yes, give some examples	Indicate the name of laws, official documents, and the transcription (direct quotation) of that norm
Human Right to Nature	2.Are the Human Right to Nature (RtN) recognized and regulated? (ex: access to urban green spaces, a healthy environment, and a balanced climate). If yes, give some examples	
Duties	3.Are duties of legal persons and individual persons towards Nature specified in the above-mentioned regulations? If yes, give some examples	Specify and use a direct quotation from the document
	4.Are duties of public authorities (national, regional, or local scale) towards Nature specified in the above-mentioned regulations? If yes, give some examples	
Representations	5.Please indicate if there is any definition of Nature in the above-mentioned regulations? If yes, give some examples	Use a direct quotation from the document
	6.Please indicate if there is any definition of Environment in the above-mentioned regulations? If yes, give some examples	
Participation	7.Are participation mechanisms foreseen for citizens and organisations during the environmental law-making process?	
	8.Are those participation mechanisms defined as voluntary participation or mandatory participation?	Specify is mechanism are voluntary, mandatory or both
	9.In the case of a mandatory participation, who is required to participate?	Specify who is required to participate
	10.Are there foreseen mechanisms for participation in the implementation of environmental laws? If yes, give some examples	use a direct quotation from the document

TABLE 1 Matrix regarding the rights of nature and the human right to nature.

Following this line, a premise has to be done to clarify the conceptual space into which we are moving. The Western legal system is rooted in an anthropocentric perspective in which nature is considered as a good. In another words, the idea is that natural elements are disposable and commodifiable. Moreover, as it is for goods, nature is subjected to property rights and is exploitable for profit. Even if some positive steps had been made in Europe -European Union has also expressed support for RoN as part of its efforts to promote environmental sustainability (Darpö, 2021) and has set the framework for a Charter of the Fundamental RoN (Carducci et al., 2020) - it is known that the only two legal systems that guarantee the protection of the Rights of nature are the Ecuadorian and the Bolivian ones (Baldin, 2014). Notwithstanding, in scope of the European Green Deal, it is important that Europe starts making their path to recognize RoN, because its implementation, as a key driver, can contribute to the ecological transition by creating legal frameworks that recognizes nature and its elements with rights. But the importance of RoN in the scope of the ecological transition goes far beyond. RoN can inspire new models of governance and decision-making that prioritize the wellbeing of ecosystems and future generations over short-term profit and economic growth (Dryzek, 2000), considering the Web of Relations (Moore, 2016) and the interdependencies and interinfluences among all elements, humans and non-humans, by showing the paths that interpenetrate them in a single living organism. This recognition would necessitate a shift in policy and decision-making from one that prioritizes human interests to one that considers the wellbeing of the ecosystem as a whole. In the context of the ecological transition, this discussion aims to highlight the importance of giving a voice to nature that has, until now, been limited to a national jurisdictional scale, and which may need to be extended to a regional or transnational context in a near future (Harden-Davies et al., 2020).

Set against this background, this paper aims to provide an overview of how a sample of 6 European countries have incorporated RoN into their legal systems, including their Constitutions and other environmental laws and policies, while addressing the challenges that arise from the ecological transition pathway.

2 Material and methods

This study was developed in the scope of the PHOENIX consortium, a European H2020 project that aims to develop participatory methodologies and Democratic Innovations that can be used to implement the ecological transition as required by the European Green Deal. The research was conducted in six countries integrating the consortium–Portugal, France, Italy, Hungary, Estonia and Spain - through the conception and application of a matrix (Table 1) regarding the Rights of Nature and the Human Right to Nature to identify how Nature and Environment are represented and described in law and public politics in each country.

This matrix, elaborated by the authors, is structured in five analytical and interrelated dimensions: (i) The first one aims to understand if the legal system recognizes Nature's rights, i.e., the Rights of Nature (RoN), understood as the formal/legal recognition that Nature has rights just like human beings. RoN is about balancing what is good for human beings with what is good for other species, and what is good for the planet as a world. It is the holistic recognition that all land life and all ecosystems on our planet

TABLE 2 Sources consulted to fill the matrix.

Country	Source	
Portugal	- Constitution (Assembleia da República Portuguesa, 2021)	
	- Law Nr. 19/2014, April 14 - Basic Law of Environmental Policy (República Portuguesa, 2014)	
	- Decree-Law n.º 142/2008, July 24, Legal Regime for the Conservation of Nature and Biodiversity (República Portuguesa, 2008)	
	- Penal Code (Código Penal Português, 1995)	
	- Law nr 83/95, August 31, Right to Procedural Participation and Popular Action (República Portuguesa, 1995)	
France	- Environmental Charter (République Française, 2004)	
	- Environmental Code (République Française, 2000)	
Italy	- "Codice dell'Ambiente", enacted with the DL n. 152 of 2006 (Gazzetta Ufficiale della Repubblica Italiana, 2006)	
	- Constitution (Corte Costituzionale Della Repubblica Italiana, 2023)	
Hungary	- Act 1995/LIII On the general rules for the protection of the environment (Nemzeti Jogszabálytár, 1995)	
	- Act 1996/LIII On the protection of nature (Nemzeti Jogszabálytár, 1996)	
Estonia	- Nature Conservation Act (Riigi Teataja, 2004)	
	- Estonian Penal Code (Estonian Penal Code, 2001)	
	- Environmental Code Act (Riigi Teataja, 2011)	
Spain	- Constitution (Agencia Estatal Boletín Oficial del Estado, 1978)	
	- Law nr 42/2007, December 13, Law of Natural Heritage and Biodiversity (Agencia Estatal Boletín Oficial del Estado, 2007)	
	- Law nr 27/2006, July 18, Rights of access to information, public participation and access to justice in environmental matters (Agencia Estatal Boletín Oficial del Estado, 2006)	



are deeply intertwined. Therefore, the ecosystem - trees, oceans, animals, and mountains, among others - is entitled to legal protection; (ii) the second dimension aims to identify if the Human Right to Nature (RtN), understood as a vision of Nature as property to be used for human benefit, is recognized in the legal system. This vision can be translated by the right to live in a healthy environment, access to urban green spaces, and live in a balanced

climate, among others. Legislation and policies have been historically elaborated on a basis of Nature as property to be used for human benefit, rather than as a rights-bearing partner with which humanity has coevolved; (iii) the Duties dimensions were designed to collect information on the existence or not in the European legal system of the clarification of people and public authorities duties towards Nature; (iv) the fourth dimension focus on Nature and Environment representations and how these are defined/represented in the legislation; (v) the last dimension is anchored on the need to identify if the current legal system contemplates participation mechanisms concerning environmental decision-making.

The matrix was shared with specific local partners in each country integrating the consortium and the information was collected by a person holding knowledge of environmental and Nature laws and regulations. After receiving the data, it was possible to identify the sources consulted to fill the matrix (Table 2).

The data received and analysed was identified by each local partner as the most relevant. The matrix with the raw data collected is available as supplementary material. The methodological steps are described in Figure 1.

3 Results and discussion

The Rights of Nature/Human Right to Nature matrix aims to analyze the representations of Nature and the Environment in official narratives, namely, in legislation and public policies available in governmental reports. The sample is composed of Portugal, France, Italy, Hungary, Estonia and Spain. For those countries, the data at the disposal regard legal provisions of different legislative levels, from the constitutional ones to the administrative (question 1, question 2, question 3, question 4). Moreover, the analysis will also delve into the conceptual understanding of "nature" and "environment" in the different legal systems, to signify the variety of meanings that the two words have in the different systems (question 5, question 6). Lastly, more than just exploring the different visions, the idea is also to explore the dimension of participation in the elaboration and implementation of environmental policies (question 7, question 8, question 9, question 10).

3.1 Legal protection of nature

The idea that humans have a right to use natural resources to satisfy their needs, interests and personal tastes does not seem to be defendable without corresponding duties of care for the preservation of these same natural resources. This principle finds expression, for example, in the Convention on Biological Diversity (Nations Unies, 1992), whose preamble recognizes the "intrinsic value of biological diversity and of the ecological, genetic, social, economic, scientific, educational, cultural, recreational and aesthetic values of biological diversity and its components", and in which it is stated that the "conservation of biological diversity is a common concern of humankind". Thus, the concern for the protection of nature is not limited only to the natural resources necessary or useful to people, because the conservation of biological diversity is, in itself, a necessity that stems from its recognized value. Accepting this principle we may question whether it is possible to argue that nature, having its own intrinsic value, has rights.

From a strictly normative point of view, we cannot say that nature is an entity endowed with rights, since it is not a subject with legal personality, given that, in particular, it cannot manifest a will of its own, which would render the attribution of rights (it cannot exercise them) and the imposition of obligations (it cannot fulfill them) void. On the other hand, the problem of ownership would also arise, since nature is a concept that encompasses a great diversity of elements, such as water, fauna or flora, these would have to be considered in their individuality; just as it is not humanity that has rights, but each person individually, the same would have to be considered in the relationship between nature and its various constituent components. But does this mean that natural elements are not, in themselves, protected by law? The answer has to be negative because if it is not defensible that the natural elements are holders of rights, this does not mean that they should not be protected from harmful acts performed by people, namely those that exceed what is necessary for the satisfaction of their basic needs. This is recognized, for example, by the Portuguese Constitution (Assembleia da República Portuguesa, 2021), when it establishes as a fundamental task of the State "to protect and enhance the cultural heritage of the Portuguese people, to defend nature and the environment, to preserve natural resources and to ensure proper land use planning" (article 9, e).

For this, for example, geographical protection areas are created that introduce limits on the use of the natural resources that are integrated into them. See, for example, the Estonian Nature Conservation Act (Riigi Teataja, 2004) in which "nature conservation is carried out by means of restricting the use of areas important from the aspect of preservation of the natural environment, by regulating steps involving specimens of species of wild fauna, flora and fungi and specimens of fossils, and by promoting nature education and scientific research" (§2.1). This is also the case with the Portuguese legal regime for the conservation of nature and biodiversity (Decree-Law 142/2008, of July 24), which aims at the "maintenance or recovery of natural values" and the "enhancement and sustainable use of natural resources" (article 3, c); however, and for the purposes of the protection conferred by this normative act, natural resources are understood to be "the natural environmental components that are useful to humans and generate goods and services, including fauna, flora, air, water, minerals and soil." Nevertheless, the Portuguese Constitution determines that the State must create and develop these areas in order to guarantee "[...] nature conservation and the preservation of cultural values of historical or artistic interest" (article 66, no. 2, c) and "promote the rational use of natural resources, safeguarding their capacity for renewal and ecological stability, with respect for the principle of solidarity between generations" (article 66, no. 2, d).

In addition to conservation regimes, it is possible to identify several norms that protect natural resources from uses that are so serious that they qualify as a crime. For example, article 278 of the Portuguese Penal Code (Código Penal Português, 1995) provides for the crime of damage against nature, which is committed by anyone who:

- i. "eliminate, destroy or capture specimens of protected species of wild fauna or flora or eliminate specimens of fauna or flora in considerable numbers" (no. 1, a);
- ii. "destroy or significantly deteriorate protected natural habitat or unprotected natural habitat causing it to lose protected species of wild fauna or flora or to eliminate specimens of wild fauna or flora in considerable numbers" (no. 1, b);

iii. "seriously affect subsoil resources" (no. 1, c).

Even if it is arguable that in the case of protected species and habitats such protected status would reflect their value and interest to humans so that this would be what is being protected and not the value of these species and habitats themselves, the punishment conferred on those who eliminate unprotected specimens, even if conditioned to a "considerable number," makes it possible to maintain that such value is recognized at least for species of fauna and flora.

Also, the Estonian Penal Code (2001) provides for the punishment of various offences directed against natural components, such as, "activities dangerous to flora" (article 353), "damaging or destruction of trees and shrubs" (article 354), "damaging of landscape" (article 359), "damaging of wild fauna" (article 361). In turn, the French Environmental Code (République Française, 2000) also establishes a set of forbidden actions concerning fauna and flora, "when a particular scientific interest or the requirements for the preservation of the biological heritage justify the conservation of non-domestic animal or non-cultivated plant species" (article L411-1.I).

Common to the various countries, and except for Hungary, is the absence of a definition of nature in the legislation consulted, which may be associated with the difficulties of operationalizing such a concept in the context of legal protection, for the reasons mentioned above. Nevertheless, an attempt is made to characterize the natural elements, even if this is done in an almost descriptive way. Thus, for example, in Portugal, the Basic Law of Environmental Policy indicates that environmental policy focuses on natural and human environmental components, the former being defined as "air, water and sea, biodiversity, soil and subsoil, and landscape," and environmental policy aims to recognize and value "the importance of natural resources and ecosystem goods and services" (article 10). In turn, in Estonia, the Nature Conservation Act indicates that its purpose is "to protect the natural environment by promoting the preservation of biodiversity through ensuring the natural habitats and the populations of species of wild fauna, flora and fungi at a favourable conservation status" (§1, 1).

In Spain, the Law of Natural Heritage and Biodiversity (Agencia Estatal Boletín Oficial del Estado, 2007) presents a notion of natural resources, which are "any component of nature, susceptible to being taken advantage of by the human being for the satisfaction of its needs and having a current or potential value, such as the natural landscape, the waters, surface and underground; soil, subsoil and land for their greatest use: agricultural, livestock, forestry, climate and protection; biodiversity; geodiversity; genetic resources; and ecosystems that support life; hydrocarbons; hydro-energy, wind, solar, geothermal and similar; the atmosphere and radio spectrum, minerals, rocks and other renewable and non-renewable geological resources" (article 3, no. 30).

In Italy, until 2022, the legal system did not explicitly provide legal protection with respect to nature and the environment. Since then, the Article 9 of the Italian Constitution provided for "landscape" protection, conceptualizing the term as "the natural environment modified by men" (sentence CC 94/1985, sentence CC 151/1986) (Grassi, 2017). Accordingly, concerning Article 32 of the Italian Constitution, natural protection was considered instrumental

to the right to live in a "healthy environment" (Louvin, 2021). However, after the 2022 Italian Constitutional revision, Article 9 was innovated by inserting the §3, according to which the Italian Republic "protects the environment, the biodiversity, and ecosystems, also in the interests of the future generations". In this new conception, nature itself is endowed with autonomous legal protection.

In the case of Hungary, the Law on the Protection of Nature (Nemzeti Jogszabálytár, 1996) defines a "natural (ecological) system", which is presented as "the dynamic and natural unity of living organisms, their communities, and their inanimate environment" (4\$, k). Furthermore, it presents a relatively complex (or unclear) concept of natural value, which is understood as "the natural resource [4§ c], the living world and its inanimate environment necessary for its survival, as well as other-defined in this law-environmental elements that do not qualify as natural resources [4§, a], including the protected natural value" (4§, a). The latter is defined as "an individual, developmental form, stage, derivative of a living organism declared protected or highly protected by this law or other legislation-benefiting from priority nature protection - as well as the living communities of living organisms, as well as a cave, mineral, mineral association, fossil" (4§, e).

Regarding the concept of environment, the Portuguese Basic Law of Environmental Policy (República Portuguesa, 2014), without presenting a concept, indicates that in environmental policy "natural and human environmental components are inseparable" (article 9). As previously stated, natural environmental components are "air, water and sea, biodiversity, soil and subsoil, landscape" (article 10), while components associated with human behaviors are exemplified by "climate change, waste, noise and chemicals" (article 11). In Hungary, the Law on the General Rules of Environmental Protection (Nemzeti Jogszabálytár, 1995) presents the concept of the environment as "environmental elements, their systems, processes, structure" (4§, 2), indicating that environmental elements are "land, air, water, wildlife, as well as the built (artificial) environment created by man, as well as their components" (4§, 1).

3.2 The human right to Nature and Environment

As a rule, national legislation recognizes the existence of a human right to a healthy environment - five of six countries have legal provisions in this sense. This is the case, for example, of the Portuguese Constitution, which states that "everyone has the right to a human living environment, health and ecologically balanced and the duty to defend it" (article 66, no. 1). The Basic Law of Environmental Policy (República Portuguesa, 2014) specified that this "right to the environment consists of the right of defense against any aggression to the constitutionally and internationally protected sphere of each citizen, as well as the power to demand from public and private entities the fulfillment of duties and obligations in environmental matters [...]" (article 5, no. 2). This is concretized, for example, in the right of popular action to "promote the prevention, termination or judicial prosecution of offenses against [...] the preservation of the environment [...]" (Portuguese Constitution—article 52, no. 3, a)).

In the Spanish Constitution, article 45 recognizes that "everyone has the right to enjoy an adequate environment for the development of the person, as well as the duty to preserve it." In France, the Environmental Charter (République Française, 2004), which was given constitutional status by Constitutional Law No 2005-205, March 1st, states in its first article that "everyone has the right to live in a balanced and healthy environment." The Environmental Code (République Française, 2000) provides that "laws and regulations organize everyone's right to a healthy environment and contribute to ensuring a harmonious balance between urban and rural areas" (article L110-2).

In Italy, considering the "anthropocentric" side of environmental protection, i.e., the right to nature, it should be recalled what was said before about the relationship between Article 9 and Article 32 of the Italian Constitution, according to which the environment protection was considered a fundamental precondition for the right to health. Also, Article 41 recalled a further element to be considered: the freedom of economic initiative. Accordingly, such freedom must not create "harm to the health, the environment [...]." In these terms, so, natural protection configures itself in relation to both the freedom of economic initiative and the right to health: it limits the former in an unharmful manner for the environment, which conversely is assessed as a precondition for health protection.

The importance of nature for people's quality of life is expressly stated in Hungary, in the preamble to the General Rules for the Protection of the Environment, when it states that "natural heritage and environmental values are part of the national wealth, the preservation and protection of which, and the improvement of their quality, are a basic condition in terms of the living world, human health and quality of life; without this, the harmony between human activity and nature cannot be maintained, failure to do so endanger the health of present generations, the existence of future generations and the survival of many species". In this piece of legislation, the utilitarian perspective of nature for humans is clearly exemplified by the concept of natural resource, which is understood as "environmental elements or their individual components that can be used to satisfy social needs" (4§, 3). Nevertheless, the Law on the Protection of Nature states that "natural values and areas can only be used and utilized to the extent that the functionality of natural systems and their processes, which are fundamental to their operation, is maintained, and biological diversity is sustainable" (5§, 2).

This same concern is expressed in Estonia in the General Part of the Environmental Code Act (Riigi Teataja, 2011) (RT I, 28.02.2011, 1), recognizing the "right to an environment that meets health and wellbeing needs" (§23), namely, "everyone is entitled to expect that the environment concerning them directly meets the health and wellbeing needs" (1), and each person "can demand that the administrative authority spare the environment and take reasonable measures to ensure the compliance of the environment with the health and wellbeing needs" (5).

3.3 Duties towards the environment

The relationship between the existence of a right and the simultaneous imposition of a duty to contribute to the protection

of the environment is very present in Portuguese legislation, with the Portuguese Constitution (Assembleia da República Portuguesa, 2021), as mentioned above, establishing that "everyone shall possess the right to a healthy and ecologically balanced human living environment and the duty to defend it" (article 66, no. 1). And with the Basic Law of Environmental (República Portuguesa, 2014) this link is even more explicit by providing that "the right to the environment is inseparable from the duty to protect it, preserve it and respect it so that long-term sustainable development is ensured, namely, for future generations" (article 8, no. 1). As indicated above, the Spanish Constitution (Agencia Estatal Boletín Oficial del Estado, 1978) also establishes this link between the right to the environment and the duty to protect it (article 45).

In France, the Environmental Charter (République Française, 2004) stipulates that "everyone has the duty to take part in the preservation and improvement of the environment" (article 2), which should be reflected in the prevention of "the attacks that it is likely to cause harm to the environment or, failing that, to limit the consequences" (article 3) and in "reparation the damage it causes to the environment" (article 4). Similarly, the Environmental Code (République Française, 2000) states that "it is everyone's duty to safeguard and contribute to the protection of the environment", which applies to all public and private persons (article L110-2).

In Hungary, the duty to protect the environment is laid down in the Law on the Protection of Nature (Nemzeti Jogszabálytár, 1996), Article 5(1): "all natural and legal persons, as well as other organizations, have the duty to protect natural values and areas", to "prevent dangerous situations and damage, mitigating damage, eliminating its consequences, and restoring the state before the damage".

The Estonian General Part of the Environmental Code Act (Riigi Teataja, 2011) includes several provisions in Chapter 3, with the indication of different duties, which are preceded by two main du ties, the wording of which seems interesting: a "duty of care," according to which "everyone must, to a reasonable extent, take measures to reduce the environmental nuisance caused by their act or omission" (§14), which seems to suggest a different understanding of the relationship with the environment, assuming that any human action can cause damage, which should be avoided or diminished; and a "duty to acquire knowledge for prevention of environmental threat," which supposes that "before commencing an activity that causes an environmental threat, given the type and scope of the activity, is necessary for preventing the environmental threat" (§15).

These duties imposed on individuals extend to public authorities and, first and foremost, to the State. This is what follows from the Portuguese Constitution (Assembleia da República Portuguesa, 2021) when it states that the State has the fundamental task of "defending nature and the environment, [and] preserving natural resources" (article 9, e). This task is carried out "through the direct actions of its bodies and agents at diverse scales of local, regional, national, European and international decision, as well as through mobilization and coordination of all citizens and social forces, in a participatory process and settled in the full exercise of environmental citizenship" [Article 2, no. 2, of the Basic Law of Environmental Policy (República Portuguesa, 2014)]. To this end, the State must monitor "activities susceptible of a negative impact in the environment following its execution through monitoring, inspection aiming, namely, secure the implementation established in the instruments and environmental normative and prevent environmental illicit" [Article 21 of the Basic Law of Environmental Policy (República Portuguesa, 2014)].

In Hungary, "state bodies, local governments, natural persons and their organizations, management organizations and their interest protection organizations, as well as other institutions are obliged to cooperate in the protection of the environment. The right and obligation to cooperate covers all stages of solving environmental protection tasks" [article 10§ (1)—Law on the General Rules of Environmental Protection (Nemzeti Jogszabálytár, 1995)]. In Chapter III, this law determines how the state and local government must implement environmental protection policy (articles 37§ to 48§). In turn, the Law on the Protection of Nature (Nemzeti Jogszabálytár, 1996) establishes the system for planning and organizing this protection, with the assignment of duties and tasks to the State (articles 56§to 59§), the public prosecutor (article 60§) and local governments (article 61§ to 63§).

In Spain, the Law of Natural Heritage and Biodiversity (Agencia Estatal Boletín Oficial del Estado, 2007) indicates the duties of public authorities, stating that "all public authorities, in their respective fields of competence, shall ensure the conservation and rational use of natural heritage throughout the national territory and in maritime waters under Spanish sovereignty or jurisdiction, including the exclusive economic zone and the continental shelf, irrespective of their ownership or legal status, taking into account, in particular, the threatened habitats and the wild species under special protection" (article 5, no. 1).

3.4 Participation of people and organizations in the legislative process

About this point, some information is available for the Portuguese, French and Hungarian cases. For Estonia, it is known that there are provisions for participation in the environmental law-making process but no further information is available; for Italy those provisions are absent.

The Basic Law of Environmental Policy (República Portuguesa, 2014) adopted the principle of participation in Portugal (article 4.°, e), but in a broader context, that of environmental policy. In this sense, it determines the obligation of the "involvement of citizens in environmental policies", ensuring that "citizens have the full right to intervene in the elaboration and monitoring of the application of environmental policies" (article 4.°, e). However, the Law that regulates the statute of non-governmental environmental organizations establishes that they have "the right to participate in the definition of policy and the main legislative guidelines in matters of the environment" (article 6). In Hungary, environmental associations also have the right to "comment on drafts of state and local government legislation related to the environment" (98§, 2, c)-Law on the General Rules of Environmental Protection (Nemzeti Jogszabálytár, 1995)). Finally, in Estonia, the General Part of the Environmental Code Act (Riigi Teataja, 2011) recognizes the right to participate in the elaboration of instruments that have a "significant impact on the environment", so that "the Government Office and the ministries publish on their websites

relevant information on which draft regulations and acts that have a significant impact on the environment they intend to draft, publishing the intent of drafting, timetable, research to be carried out in the course of drafting, persons responsible, possibilities of participating in drafting, the issues on which public opinions are expected and the results of consultations" (§29, 1).

3.5 Participation of people and organizations in the implementation of laws

In Portugal, individuals and environmental organizations have the constitutionally recognized right of popular action and may use it to "promote the prevention, termination or judicial prosecution of offenses against [...] the preservation of the environment [...]" (article 52, no. 3, a) (Código Penal Português, 1995). This right is regulated by Law 83/95, August 31, which also provides for the right of popular participation, which determines the hearing of interested persons and entities defending interests that may be affected by the "adoption of development plans of the Public Administration's activities, of urbanism plans, of master plans and land use plans, and the decision on the location and the realization of public works or other public investments with relevant impact on the environment" (article 4, no. 1). The right to participate in administrative procedures is also recognized in the Basic Law of Environmental Policy (República Portuguesa, 2014), covering the "adoption of decisions on authorization procedures or concerning activities that may have significant environmental impacts, as well as in the preparation of environmental plans and programs" (article 6, no. 2, a).

The French Environmental Code (République Française, 2000) recognizes the right to participate when there are projects that may have a significant impact on the environment so that the "public debate can be organized on the objectives and the main characteristics of the projects, during the phase of their elaboration" (article L121-1). Environmental associations are recognized with the right to "action against any administrative decision having a direct relationship with its object and its statutory activities and producing harmful effects for the environment on all or part of the territory for which it benefits from approval" (article L142- 1).

In Estonia, the General Part of the Environmental Code Act (Riigi Teataja, 2011) determines that "everyone has the right to participate in the proceedings of granting authorization for an activity of a significant environmental impact and in planning an activity of a significant environmental impact" (§28). In addition, environmental associations can challenge administrative decisions in court, assuming "that its interest is reasoned or that its rights have been violated where the contested administrative decision or step is related to the environmental protection goals or the current environmental protection activities of the organization" (§30, 2).

In Hungary, people and organizations "are entitled to participate in the non-official procedure related to the environment" [article 97\$, 1—Law on the General Rules of Environmental Protection (Nemzeti Jogszabálytár, 1995)], as well as, "has the right to draw the attention of the environmental user and the authorities to environmental hazards, environmental damage or environmental pollution" (article 97\$, 2). In addition, various participation rights are recognized for environmental associations, either through participation in administrative processes or through the use of judicial means [article 98% to 100% - Law on the General Rules of Environmental Protection; article 65%—Law on the Protection of Nature (Nemzeti Jogszabálytár, 1996)].

Law 27/2006, July 18, regulates the right of public participation in environmental matters in Spain, seeking to ensure the right "to participate effectively and genuinely in the preparation, modification and revision of those plans, programs and provisions of a general nature related to the environment" (article 3, no. 2, a) (Agencia Estatal Boletín Oficial del Estado, 2006). In this context, "allegations and observations when all the options are still open and before the decision is adopted" (article 3, no. 2, c), as well as "participate in an effective and real way [...] in the administrative procedures processed for the granting of the authorizations regulated in the legislation on integrated pollution prevention and control, for the granting of administrative titles regulated in the legislation on genetically modified regulations, and for the issuance of environmental impact statements regulated in the legislation on environmental impact assessment, as well as in the planning processes provided for in the water legislation and the legislation on evaluating the effects of plans and programs on the environment" (article 3, no. 2, e).

4 Conclusion

The analysis of how Nature and the Environment are represented and described in law and public politics through the Matrix of Rights to/of Nature revealed a clear trend: the nature concept definition is absent in law and politics being substituted by the concept of environment or natural resources. Added to this is the fact that across all six countries the rights of nature are recognized or mentioned in a limited way, prevailing in an anthropocentric and instrumental viewpoint.

Contrary to the Rights of Nature, the human right to Nature is widely recognized across the pilots, referring to the right of all to have access to and live in a healthy environment. Despite its importance as a matter of equity and justice, the unrecognition of nature's rights and limits appears as a possible barrier to the ecological transition. A transition implies a paradigm shift, which is the substitution of the current one that no longer fits the need to contribute to the livability of all species and that has guided us to the socio-ecological challenges that we are all facing. It is necessary the involvement and participation of all sectors of society and social groups, independent of their background, in the co-creation of joint solutions that result from different perspectives and the plurality of knowledge. This effort, which may benefit by the framework of the ecological transition, could involve incorporating the concept of nature into legal and political frameworks by recognizing its intrinsic value. It requires, first of all, a top-down approach to challenge the current anthropocentric and instrumental viewpoint and replace it with an ecological worldview that acknowledges the interconnectedness of all living beings and the importance of preserving ecosystems.

Data availability statement

The original contributions presented in the study are included in the article/Supplementary Material, further inquiries can be directed to the corresponding author.

Author contributions

The authors order reflects the level of contribution to this paper. FA contributed to conception and design of the study, defined the matrix and the methodological approach, contributed to the writing of sections of the paper, participated in the critical review of the manuscript. PC contributed to the matrix discussion, analyzed and discussed the results, did a complementary research of legislation and contributed to the manuscript writing. LN contributed to the data analysis and the manuscript writing. DV contributed to the definition of the methodological approach, contributed to the matrix discussion, organized the database and contributed to the manuscript writing. All authors contributed to the article and approved the submitted version.

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Conflict of interest

The authors declare that the research was conducted in the absence of any commercial or financial relationships that could be construed as a potential conflict of interest.

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Supplementary material

The Supplementary Material for this article can be found online at: https://www.frontiersin.org/articles/10.3389/fenvs.2023.1175143/ full#supplementary-material

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