THE ASSESSMENT OF DIFFUSE DAMAGES IN ENVIRONMENTAL TORTS AS A NECESSARY TOOL TO ACHIEVE SUSTAINABLE DEVELOPMENT: A BRAZILIAN PERSPECTIVE

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Abstract

The article focuses on the linkages between sustainable development and environmental torts. The analysis follows the thread of Article 225, chapeau, of the Brazilian Federal Constitution, as well as the environmental legal doctrine and jurisprudence in evolution in Brazil, to consider the right to an ecologically balanced environment as a fundamental right of a diffuse nature. The work also premises that environmental torts represent the antithesis of sustainable development, especially challenging law to provide for the full compensation of all sorts of interests potentially impaired by the environmental wrongdoing. Therefore, a look beyond ordinary tort liability schemes is necessary, in order to build a proper environmental tort law regime, capable of addressing diffuse damages.

1. INTRODUCTION

The world’s attention to the importance of balancing human activities with Nature’s carrying capacity and resilience is a relatively recent concern, at least in a global scale. In fact, only in the last three decades a more articulated set of ideas concerning the relevance of controlling the impacts of human actions...
on the environment has begun to be engendered in a developed fashion. One result of this has been the emergence of sustainable development as the core idea of the proper means to associate economic development and the satisfaction of elemental human necessities with a sound environment. In practical terms, however, applying the notion of sustainable development has not been so easy, as social, economic, and environmental views rarely converge, given to the variety of countervailing interests human society has to cope with.

In spite of that, this work entertains the idea that sustainable development must primarily be seen as environmentally sustainable development, which needs to be assessed according to the likelihood of human actions to interfere with society’s right to a sound and ecologically balanced environment.

On the other hand, borrowing its basic concepts from the Brazilian environmental law regime\(^2\), this work is also based on the premise that the right to an ecologically balanced environment is a fundamental, societal, indivisible and, therefore, diffuse right, which can neither be relinquished by its several (although undetermined) holders, nor disposed by anyone in particular.\(^3\)

2. ENVIRONMENTAL TORTS AND SUSTAINABILITY.

Ensuring that a concern to promote environmentally sustainable development permeates every possible aspect of today’s life is most certainly the major challenge of modern environmental law. Conversely, any environmental tort is comprised of human conduct whose effects law considers as adverse to the environment. With that in mind, it is reasonable to assert that nothing could be less environmentally sustainable than an action that law itself considers harmful to the environment. Rather, such actions should always be deemed as the ultimate antithesis of sustainable development and the way environmental law deals with them as a fundamental aspect in the implementation of strategies for promoting that idea, for it is the latter that sets the limitations for society members on how to carry out their activities of any kind, as well as the consequences of not abiding by such legal environmental guidance. So much so that an incomplete law scheme for environmental torts may well end up working as an incentive for or not enough a compelling factor against offenders, ultimately revealing an absence of legal consequences for not acting in a ways that promotes, or that at least do not hamper, sustainable development in a given society, frustrating sustainable development goals.

That is why securing satisfactory redress to all parties and assets potentially harmed by an environmental tort is so relevant; mainly when it poses particularly complex problems, presenting even more varied and multifaceted challenges than those normally implied in common tort liability. Failure to grasp and address

\(^2\) Art. 225, chapeau, of the Brazilian Federal Constitution, see full text below.

The assessment of diffuse damages in environmental torts as a necessary toll to achieve ... all of the nuances that environmental damage implies will result in insufficient redress for the full spectrum of interests affected thereby. As a result, this will have dire, direct consequences for the environmental law mission towards sustainable development, which is to make sure that the sustainability balance that the environmental wrongdoing disrupted is eventually reestablished. That requires special attention towards the diffuse damage caused to society’s interests, for society, as an environmental right-holder on its own right, is entitled to redress. Otherwise the vicious process of unsustainability will prevail.

3. CURRENT ENVIRONMENTAL LAW SCHEMES FOR TORTS

All in all, a question must be posed: is environmental law currently providing full compensation in environmental tort cases? The answer must be no, as long as environmental law simply applies common torts legal schemes to environmental torts, instead of developing and enforcing its own, complementary, specific system of redress, that considers the peculiarities that environmental damage entails and the particular societal interests involved in environmental torts. Before presenting the rationale behind that answer, it is necessary first to recall the key concepts and ideas that are ordinarily found in tort legal schemes in general, in order to contrast them with those that this paper considers essential to address the specific aspects of environmental torts.

Beginning with the generally accepted elements of liability, it could be asserted that they are as follows: (a) a party’s unlawful action; (b) an actual damage caused to another party’s assets; and (c) a causative link between the one party’s unlawful action and the damages suffered by another party.

In terms of parties involved, ordinary liability schemes acknowledge that damage can be inflicted to (a) an individual; (b) a set of individuals (hereinafter referred to as a collectivity with the damage inflicted thereto as collective damages).

As to the damage inflicted, from the perspective of the assets affected, it is normally encompassed by two categories: material and moral. Material

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4 Although equivalent conceptual structures may be by and large found in legal systems in general, with slight nuances, both of common law and civil law countries, this part of the work is based on the common tort scheme in place in Brazil. For more details on the Brazilian law scheme see CAVALIERI FILHO, Sérgio, Programa de Responsabilidade Civil, Malheiros, 2002. For a more specific environmental approach, see STEIGLEDER, Annelise Monteiro, Responsabilidade Civil Ambiental – As Dimensões do Dano Ambiental no Direito, Livraria do Advogado, 2004.

5 Group, category or class, i.e., a determined collectivity of persons bound to one another and to the adverse party by a standard juridical relationship, as defined by the Brazilian Consumer’s Code, Brazilian Law 8,078/1990, Article 81, II.

6 Affecting concrete, tangible assets (e.g. chattels, real estate, etc.).

7 Affecting immaterial, abstract, intangible, non-tradable assets (e.g. honor, peace of mind, etc.). Although the exact economic expression of such losses may be difficult to appraise, they may be alleviated by significant financial compensation. The assessment of such damage also deters potential, future wrongdoings, in which case they have a punitive character. Moral damages
damages, comprise two types: emergent damages⁸; and ceasing profits⁹.

All of these elements and the perspectives of the general torts scheme have so far provided the basis for assessing liability in environmental torts. However, as will be seen shortly, they fail to include society in the list of potentially aggrieved parties (as the sole holder of the right to an ecologically balanced environment), let alone to provide for proper compensation of the material and moral damage inflicted thereto.

Dealing firstly with the matter of facing society as an autonomous right-holder, environmental liability schemes normally only entertain claims in respect of damage due to environmental harms caused to individuals and collectivities.

Beginning with cases involving an individual’s claim of redress for environmental torts, they have been handled in a reasonably straightforward manner by courts: the individual affected by an environmental wrongdoing must produce evidence of a causative link between the losses caused to his assets and the unlawful conduct of the wrongdoer. The person whose rights may have been affected may be entitled to recover material¹⁰ and moral¹¹ damages.

Following the same thread, there is no difficulty in according public entities the same status as individuals, whenever they must spend money on remediation and recovery in respect of publicly owned natural assets¹² as they are as entitled to recoup such emergent damages just as private parties are. The same is applicable when an environmental tort harms public property even though not over natural resources¹³. However, in order to seek compensation for

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⁸ I.e., economically quantifiable injuries, estimated on the economic value necessary to recover or compensate for assets instantly impaired or destroyed by the wrongdoer’s action. See CAVALIERI FILHO, p. 81.

⁹ I.e., economically quantifiable benefits the aggrieved party may have reasonably expected to earn in the future, had the damage not occurred. Id., ibid.

¹⁰ Both emergent damages and ceasing profits. In the former, e.g., the costs for the recuperation of privately owned natural resources or land, health care costs. See Apelação Cível 257.636-1, 9ª Câmara de Direito Privado do TJSP, Relator Ruiter Oliva - 15.10.96, for a case of illness (resultant from the intoxication by benzene) caused by an industry’s risky activity to its employee. As far as ceasing profits go, e.g., the market price of natural resources or land that belonged to the individuals, which could have been legitimately submitted to an economic use, as well as the money they might have earned for the time they ended up being incapable of carrying out their professional activities, should the tort have not taken place. See Apelação Cível 2002.001.16035, 7ª Câmara Cível do TJRJ, Relator Luiz Roldão, 19.08.2002, on the right of a fisherman to collect from the polluter the monthly income he no longer could earn from fishing in the Guanabara Bay, as a result of an oil spill in 2000. See also Apelação Cível 2002.001.23682, 3ª Câmara Cível do TJRJ, Relator Antonio Eduardo F. Duarte, 25.02.2003, on a similar right acknowledged to a crab catcher for the effects on the crab yield in the Guanabara Bay, caused by the same oil spill. See also, for both nature of damages, RESP 706449, 4ª Turma STJ, Relator Fernando Gonçalves, 26.05.2008, for the possibility of an individual claim to be filed in addition to claims based on diffuse rights.

¹¹ The same cases cited in footnotes 9 and 10 apply. See footnote 7 as to the quantification methods.

¹² For example: public owned forests, natural parks of public property, protected areas owned by the state, public lands in general, etc.

¹³ For example, a non-environmentally protected land or building owed by a public entity that is
The assessment of diffuse damages in environmental torts as a necessary toll to achieve ceasing profits, public entities may have to produce evidence that the land and/or natural resources impaired by the wrongdoing would have been legitimately subjected to an economic use, if the unlawful conduct had not taken place\textsuperscript{14}\textsuperscript{15}. The award of damages in respect of environmental torts and the negative effects of an environmental harm perpetrated against the rights of a collectivity is not problematic in principle either, because the rights of a collectivity will always be the standard rights of its members jointly considered. A few examples may help.

In terms of material damages, for instance, we can consider the economic losses of a fishing community. If the fishermen of a certain area (gathered under a union or association) were dependent on the health standards of the fish they can no longer catch and sell because of contamination by an environmental wrongdoing affecting the body of water where they fish, that general loss of income can be considered as collective material damage. In that case, the fishermen’s collective entity would be able to act on behalf of its members, submitting only one claim encompassing all the members’ rights of redress for their material losses. Based on the same rationale, emotional distress and the impact on the fishermen’s self-esteem, individually and as a group, caused by the suppression (whether temporary or permanent) of their livelihood, are an aspect of moral damage that must be acknowledged and properly redressed collectively.

As far as damages to the environment are concerned, their redress in individual or collective claims is but accidental, to the extent that an asset, to which redress is granted in such cases, may be also relevant to the quality of the environment. In any event, compensation in situations like that will be based not on the goal of ensuring the ecological balance of the environment as a whole, but rather to guarantee that negative impacts on property (be it private or public) are duly addressed.

By and large, this is as far as the ordinary regime goes with respect to environmental torts. This is precisely why such legal scheme does not provide enough protection to the whole spectrum of rights and assets that may be violated by an environmental tort, as we will see ahead, in further detail.

\textsuperscript{14} For example, a farm where a public entity explores a given crop that may be destroyed as a consequence of the environmental tort caused by another party.

\textsuperscript{15} Whether or not a public entity could seek compensation for moral damage, on its own right, is by all means a very interesting point, although this paper will not discuss a possibility that is not relevant for its purposes. For the understanding of the matter in Brazil, see Apelação Cível 2004.023731-6, Segunda Câmara de Direito Público, Relator Luiz Cézar Medeiros, 15.02.2005, granting moral redress to a municipality. For private corporations, though, the moral redress is ordinarily accepted in Brazilian Courts (see RESP 60.033, 4a Turma, STJ, Relator Ruy Rosado de Aguiar, 09.08.1995).
4. THE AUTONOMY OF SOCIETY’S DIFFUSE RIGHTS TO AN ECOLOGICALLY BALANCED ENVIRONMENT AS A BASE OF A NECESSARY SUBJECTIVE APPROACH.

This work is based on a premise that society has an autonomous right to an ecologically balanced environment. In this respect, it seems that the Brazilian Federal Constitution has created a very comprehensive and useful provision aiming at determining the essentials on society’s environmental rights:

Art. 225. All have the right to an ecologically balanced environment, which is an asset of common use and essential to a sound quality of life, and both the Government and the community shall have the duty to defend and preserve it for present and future generations [emphasis added].

This provision of the Brazilian Constitution has many merits, but for the purpose of the present discussion just a few will be addressed. To begin with, the above mentioned provision demonstrates that the ordinary environmental tort liability scheme fails to give protection to society’s autonomous rights respecting the environment. In other words, the bare application of ordinary tort law to environmental torts neglects the right to the environment that society holds as a whole. It is a right that belong to each and every society member, but whose individual proportion cannot and need not be determined. It is also a right that can be invoked by anyone, as long as on behalf of all. That right is indivisible and not subject to private use or appropriation. It binds its holders by means of a factual, legitimate, fundamental interest in an asset which inspires its legal recognition and protection. It is neither individual, nor collective right, but rather one of a trans-individual nature, as it is beyond any possibility of individualization. That is why it is a diffuse right.

The Brazilian constitutional provision also opens up the practical question: does anyone own the environment? Should society’s diffuse right on the environment be interpreted as meaning that society is the rightful “owner of the environment”? In that matter, the constitutional provision under analysis is hugely important to facilitating the following assertion: society’s right is to enjoy an environment ecologically balanced. That means it is not dependent on any discussion about ownership of natural resources or of the lands where they might be located. And that is the way it is because the right society holds is not to property in the environment itself or in the elements thereof. The same societal right is not a right of property of or privilege in the use of natural resources or lands where they might be found either. Society’s right, instead, represents a common prerogative to ensure the ecological balance of the environment so it

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16 Brazilian Consumer’s Code, Brazilian Law 8,078 of September 11, 1990. Article 81, I, define them as trans-individual rights of an indivisible nature, whose holder are undetermined persons linked by factual circumstances. For theoretical reference, see REALE, Miguel, Questões de Direito Público (Public Law Matters), Saraiva, 1997, p. 132, as cited in RE 2131.631-MG, Ministro Ilmar Galvão, Tribunal Pleno do STF, DJU of December 9, p. 35275 69 (1999).
The assessment of diffuse damages in environmental torts as a necessary toll to achieve ... can be enjoyed for its essential purpose, maintaining a sound quality of life.

In spite of the irrelevance of the ownership discussion for the assertion of its environmental diffuse right, society is nonetheless entitled to demand that the use of property (be it public or private) will not hinder, impair or endanger the common goal of ensuring the ecological balance of the environment. That is something implicitly embedded, for instance, in article 225, of the Brazilian Constitution, which other parts of the same Constitution also make quite clear. In potential conflicts involving the use of property and environmental rights, the case should be assessed on the basis of whether property rights are being exercised according to the social function the Constitution requires from the property, which includes the duty for the property owner to protect (or at least not to negatively interfere with) the ecological balance of the environment. Hence, the only relevant aspect to be addressed involving property of land or natural resources in light of society’s environmental rights shall be exclusively whether the ownership rights are being properly exercised in order to not interfere in the environmental balance. That, of course, absolutely does not imply that property rights would vanish from private or public hands to become an asset submitted to communal management. First, precisely because society needs not to claim, invoke or dispute any sort of property rights to assert or protect its right to an ecologically balanced environment. Second, because no public or private ownership need to be taken in order for that very same balance to be ensured. In addition, it is certainly granted to the propriety rights’ holder the opportunity to request that courts assess the fairness of the weight society’s environmental limitations have on a proprietor’s rights (in addition to the obviously possible claims of the latter based on the reach or validity of a given environmental regulation or limitation itself). For that matter, the regulatory takings doctrine also remains in place, in order for courts to balance whether the burden placed on the property owner is such, for environmental protection sake on behalf of the whole society, that reasonable use of the property may become impracticable. Should that be the case, it might bring as an outcome that the correspondent environmental preservation hardship is shifted to society as a whole, instead of being faced by the land owner alone, with compensation being paid by taxpayers in exchange for the aggrieved property.

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17 See Articles 5, XXIII; combined with articles 182, §2o; and, article 186, I and II; of the Brazilian Constitution, on the social function of property.

18 See also Brazilian Civil Code, Article 1.280, paragraph 1.

19 In Brazil, the so called administrative limitations (including those of environmental nature) to property rights are likely to be upheld by Courts as long as they are equally applicable to all properties in a similar situation (for instance, properties located in a certain area where a certain environmental asset or value must be uniformly protected). See REx 102847, Segunda Turma do STF Relator Aldir Passarinho, 12.03.85. Ad hoc limitations to property may result in regulatory takings when the property rights of the owner are completely eviscerated. See RESP 188.781, Primeira Turma do STJ, Relator Humberto Gomes de Barros, DJU of 29.11.89. General limitations may also theoretically lead to the same understanding by Courts, in favor of the property owner, should they also result in the elimination of all relevant content of property rights. See RESP
On the other hand, society’s diffuse right to the environment is commonly confused with collective rights or even with rights that a public entity may hold as the owner of natural resources and lands where such assets are located. However, collective rights, as already discussed, are akin to a summation of individual rights that can be exercised or claimed by an entity on behalf of a set of individuals, under conditions the law must established, when their rights are affected as a group, class or category. The greater or lesser number of individuals that may hold a right as part of a collectivity, as well as the connection such right may have with an environmental tort, for instance, do not convert them from collective to diffuse. Besides, the fair share of the right collectively asserted belonging to each member will always be determined. At their turn, the rights of the public entity over its properties differ from diffuse rights, as the latter should not be seen as belonging to no one, for they are not subject to any kind of individual appropriation nor to divisibility.

But the fact is that in systems like the Brazilian, a public entity can submit a claim of redress for damages against its own property rights (over natural resources and lands it owns) as well as another claim of redress for injuries to diffuse rights. Nevertheless, that does not mean the public entity is “the holder” of the diffuse right to an ecologically balanced environment. On the contrary, to the limited extent the public entity will be arguing in favor of diffuse rights, as seen before, it will only be speaking on behalf of society, not on its own right as a public entity. Public entity, in that case, purely is the party that law grants local standi to speak in court for diffuse rights’ sake.

Yet, there are different kinds of damage an environmental wrongdoings imply to diffuse right on the environment, as will be seen shortly, that must be redressed on behalf of society. So, if the public entity failed to claim redress for the complete array of damage society can be subjected to by an environmental tort, other persons with standing may be entitled to seek proper compensation for the diffuse rights’ aspects that were disregarded in the diffuse right’s claim submitted by the public entity.

A further situation may raise doubts as to the nature of the rights involved in a claim, for example, that of a property owner who complains of damage caused to his own property by the improper use of a neighbor’s property, i.e. nuisance. Such conduct may also damage the environment. In a number of legal systems, this would raise a cause of action allowing the aggrieved party to sue for an injunction and individual damages. A successful lawsuit in a situation like this would usually stop the wrongdoer’s conduct and might perhaps even remedy the adverse impact on the injured party’s property, but the affected neighbor would never have standing to claim the remediation or recovery, for example, of the wrongdoers’ property, by invoking an alleged right to restore the general

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922.786, Primeira Turma do STJ, Relator Francisco Falcão., DJU of 18.05.2008. In any event, no court has so far upheld that property rights can work as an obstacle to environmental protection claims based on limitations legally established.
The assessment of diffuse damages in environmental torts as a necessary toll to achieve balance of the environment. The aggrieved neighbor would not have standing to sue to protect other affected areas either, for his right is based only in the interest of protecting his own property. In other words, it would never be in any way grounded on a diffuse right to an ecologically balanced environment.

In spite of all arguments presented, the truth is that the legal debate usually overlooks those important distinctions that shall be made in such situations. Ultimately, the acknowledgment of diffuse environmental rights and of society, as the holder of such rights entitled to receive compensation for their violation, must be addressed in order to guarantee that the sustainability balance disrupted by an environmental tort is always properly and entirely remedied. It is by no means just a rhetorical problem, but rather a question of fairness in order to grant complete compensation of the full spectrum of the aggrieved parties in an environmental tort.

As a result, legal regimes that do not establish clear schemes to protect diffuse rights must be deemed incomplete. Such regimes err in leaving society’s interests unprotected in their failure to understand diffuse rights as an autonomous category of rights, independent of any other sort of public entities’ or private rights.

5. ADDRESSING COMPENSATION FOR DIFFUSE RIGHTS VIOLATIONS AS AN INDISPENSABLE OBJECTIVE APPROACH.

If we stop for a moment and reflect about the nature of the interests motivating the parties involved in litigation in this area, it could be argued that damage caused to individual assets and rights is not “environmental” in nature. Indeed, invoking such rights, as seen before, may perhaps indirectly end up contributing to the remediation of the affected environment, but only as an oblique result of measures that in fact targeted the satisfaction of individual interests, which are ordinarily not fully coincident with those of society. Therefore, such indirect a contribution will only take place to the extent the individual interest concurs and overlaps with those of society. That will be the case even when a public entity claims for redress of its assets, as such a claim can only be based on its ownership rights. Individual compensation covers negative impacts on determined persons or their assets, impacts which, at their turn, are only indirect consequences of those negative changes that the environment may have directly suffered. In other words, a tort impacts the environment adversely; and only then the adverse impacts in the environment may affect individuals, in a chain reaction. Thus, the problems regarding the actual quality and the ecological balance of the environment itself need to be addressed under a specific regime applicable to diffuse rights.

Keeping in mind that the participation of a public entity in a lawsuit that claims diffuse rights is solely based on the specific standing law grants to that public entity to act on behalf of society.
Therefore, it seems quite evident that the redress of individuals’ rights violated as a subsequent result of damage to the environment does not actually require that environmental law address them. If the question was solely one of redressing individual losses, the current law of torts would suffice, for it provides for compensation for interferences with rights of a non-diffuse and non-environmental nature.

There are practical benefits, however, in treating as environmental damage individual claims associated with direct impacts to the environment, as such claims may that way benefit from the strict liability or other special approaches that environmental law may deem applicable to environmental torts21. An additional conspicuous advantage is that such a method does combine, in a systematic fashion, the handling of the indirect, adverse effects suffered by individuals with the treatment of those direct, also adverse impacts that a same tort may cause the environment. As a matter of fact, it would be pointless if the struggle for the ecological balance failed to treat the protection of the environment as well as of the individuals that depend on it as equivalent goals.

Nonetheless, genuine environmental tort per se still remains as the product of the direct, adverse impacts on the environment in its own right, affecting the environment’s ecological balance and representing a perfectly discernible violation of society’s autonomous diffuse right thereon (i.e., the right of “all”, as emphasized by the Brazilian Constitution). The effects indirectly triggered by environmental damage on individual rights and that on the environment (hence, to society) may have common ground, but the way that the law deals with them must be differentiated and independent, albeit all that must be involved by a great deal of consistency. Let us consider for example the case where a forest has been felled. In terms of restoring the environment’s ecological balance and satisfying society’s rights it does not matter who owns the trees that were cut or the land where they used to stand. In fact, it could perhaps be the case that the owner of both the trees and the land was actually the perpetrator of the damage. In any event, society’s interest on the balance of the environment remains a totally autonomous diffuse right, completely detached from any possible claims based on ownership of the affected natural resources (in the case, the trees) or land. If this is the case, environmental liability is to be understood not only in terms of the precise right in question (the diffuse right to an ecologically balanced environment) and its holder (society or “all”), but also on the recognition that the violation of such a right entitles its holder to redress like any other party in an environmental tort situation. In this context environmental liability should be founded on two additional pillars: environmental remediation needed to particularly restore the ecological balance that has been lost; and compensating society itself for the particular, identifiable consequences it will bear as a result

21 Of course, this rationale is not applicable in legal systems that do not adopt the strict liability system to environmental torts.
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of the damage. Such consequences are discernible, for instance, in terms of the time that society will be deprived of an ecologically balanced environment, its services and functions, amongst other specific aspects that can only fit in the concept of diffuse rights, which will be seen shortly. In addition, in order to correctly address the compensation component of damage caused to society’s environmental diffuse rights, assuring that such compensation fully happens, one should also acknowledge that damage to diffuse rights can also be material or moral in nature and compensation must address both.

Beginning with the analysis of the material diffuse damages, it should be asked what sort of objects they would encompass. Can we consider, for example, emergent damages resulting from damage to diffuse environmental rights when we know that society is not the owner of the environment? What about ceasing profits? Can the right to profit from Nature be fitted within the limits of the society’s diffuse right to enjoy a balanced environment, in order to grant to the diffuse right’s holder redress for reasonably expected earnings that a tort may have frustrated for the future? What is the role that the absence of societal property rights on the environment should play in assessing possible compensation for material damage on diffuse rights?

Starting with the question on ceasing profits, ordinary legal schemes, as existent and applied, today make quite difficult to envision a way that diffuse rights could imply any sort of notion capable of visualizing profits that society could possibly have earned, should an environmental damage not have occurred. Awarding ceasing profits based on diffuse rights violation would be therefore an apparently juridical impossibility. However, a possibility here, in theory, seems quite challenging: what if a law scheme (whether national or international) came to place, in the future, regulating the payment for ecological services rendered, for example, by whole, large-scale, widespread ecosystems such as the Brazilian portion of the Amazon Forest to other parts of Brazil and/or to the global community? In that case, would not it be reasonable to sustain that such credits could represent a reasonable expectation for profits derived from the environment? But to whom would such credits belong? To the Brazilian states where the Amazon Forest is located? To the municipalities within them? To the international, public, sovereign entity that represents Brazilian society’s interests in the international accords (i.e., to the Brazilian Federal Government)? Or to

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22 The hypothetical situation presented should not be confounded with payments that have been made, in some parts of the world, for individuals to conserve or help preserve private natural resources or land that they own, which are necessary for a specific ecosystems to be able to render its inherent ecological services (like in the USA, the case involving some Catskills Mountains’ property owners and the money they receive to maintain their lands’ aptitude to help the ecosystem such lands are part of preserve New York City’s main source of drinking water - See APPLETON, Albert F., *How New York City Used an Ecosystem Services Strategy Carried out Through an Urban-Rural Partnership to Preserve the Pristine Quality of Its Drinking Water and Save Billions of Dollars*, available at www.forest-trends.org/documents/meetings/tokyo_2002/NYC_H2O_Ecosystem_Services.pdf, accessed last time on November 28, 2008).
the holder of the diffuse right of an ecologically balanced environment (i.e., to the Brazilian society itself)? It is admittedly a quite complex matter to be only briefly entertained in the limited scope of this work, mainly when there is no legal scheme in place to serve as a reference for a concrete analysis of its practical juridical implications. However, the idea that such credits may belong to the environmental diffuse right’s holder does not sound absolutely impracticable, in a first, theoretical glance. Inasmuch that possibility may stand, so may stand the possibility, merely as such (and, again, theoretical) that ceasing profits may be redressed in cases of damage to diffuse rights.

With regard to emergent damages associated to harmed diffuse rights, however, the first issue to be addressed is the lack of ownership of the environment by society. Indeed, the initial impression here would probably be the following: if society does not own the environment or any public (“society” here is not synonymous with whatever legal entity that might have property in a given asset) or private natural resources or lands, how could it ever be entitled to seek compensation for the value of such assets? Let us initially keep in mind that not every natural resource is a commodity or a tradable good (for example, the air we breathe or the water in its gaseous state in the clouds). In addition there are intangible environmental values like air quality, water quality, soil quality, biodiversity and habitats, to consider, which are not subject to any sort of ownership regime. Could that absence of ownership over the environment make the environmental protection in cases of tangible, although not tradable, environmental assets impossible? Could the same reason operate as a hindrance in imposing a duty to fully compensate for interference with such intangible values on a defendant? The answer must be no, to both cases, because the lack of ownership on the environment, the natural resources it comprises or the land where these stand, cannot in any sense mean that the right to its ecological balance is empty or unenforceable. Besides, the very right to an ecologically balanced environment is as intangible and as impossible to be appropriated as are its elements such as air quality, water quality, etc. But none of this makes it less a right, or the quality of its natural elements less a set of immaterial, legally recognizable, legitimately enjoyable assets; or such quality and elements less subject to juridical protection for being able to fulfill an array of purposes.

In light of a likely question on how to manage funds resulting from such sources of income for the diffuse rights’ holder, it seems that the practical solution should be the creation of a specific fund for that purpose, such as happened in the USA for the Superfund (See The Comprehensive Environmental Response, Compensation, and Liability Act – CERCLA) or in Brazil for the Fund for the Defense of the Diffuse Interests (Fundo de Defesa dos Interesses Difusos), established by Article 2(I), of the Federal Executive Order (Decreto) n. 1306/94, based on Article 13, of Federal Law n. 7,347/85. In both examples, the funds are managed by a board of trustees and invested in order to restore the affected environment. It does not look bizarre that an equivalent kind of fund could be managed in a similar fashion aiming to promote measures necessary to preserve or conserve the same environment.
that serve the common goal of assuring a sound quality of life\textsuperscript{24}. Such purposes are varied and are reached by means of the ecological services and functions the environment renders. If the ecosystems are no longer able to provide such services and functions, to what alternative should society resort to? What would be the cost of doing it, if actually doing so could be feasible? What would be the price of not having such ecological services available, even if it was for a certain time span? What if that deprivation lasts forever, as in some cases do happen? If such drawbacks are likely to be brought upon the integrity of the diffuse right to the environment, so must be the legal consequences felt by the wrongdoer that caused them, including the financial costs to help address the whole range of the problem caused. That is why ownership on natural resources or land is irrelevant to address these matters, as it is a discussion on who would “own” the environment, as long as there is a legally protected diffuse right to the ecological balance of that same environment.

A second aspect regarding the material compensation for diffuse rights violations is that one should recall that compensation based on rights other than diffuse rights\textsuperscript{25} can eventually achieve the restoration of certain environmental assets, though this may or may not bring about the complete remediation of the affected ecological balance of the environment. This circumstance alone would create sufficient uncertainty to entail recognition that such claims are always likely to be enough, as far as redress for material damages caused to diffuse rights goes. Moreover, they could never result in full compensation for all aspects of diffuse rights violation, at most providing possible, incidental benefits to the harmed environment. In addition, as already stated, in situations where the environmental damage is perpetrated by the owners of the affected natural resource, they would most certainly not stake claims against themselves in respect of it.

None of this would be problematic if it is recognized that diffuse rights claims never need to be based on any kind of assertion of property in the environment or the natural resources that it comprises. The relevance of the discussion, to the extent compensation for emergent damages related to material diffuse damages is concerned, results from the fact that the part of society’s claim that targets the perpetrator for the necessary costs of remediation does it not for the sake of the market value of the affected resources or land where they stand, but in order to restore the environment’s ecological balance. Material compensation for diffuse rights violations does not however stop in remediation, because such compensation shall be deemed incomplete if society does not receive redress for losses that are quantifiable in economic terms, based on the actual value of environmental functions and services harmed as a consequence

\textsuperscript{24} See Article 225, chapeau, of the Brazilian Federal Constitution, especially when it states that the right to an ecologically balanced environment is an “asset of common use and essential to a sound quality of life”.

\textsuperscript{25} Property rights, public entities’ rights, individuals’ rights.

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of the environmental damage, which also represents a distinct head of emergent damage\textsuperscript{26}. The fact that the current, prevalent view is reluctant to ascribe a market value to environmental services/functions does not mean that such services and functions do not have an economically appraisable value. One of the reasons that environmental services/functions\textsuperscript{27} are subject to little consideration from the market lies in the difficulties encountered by law in grasping the diffuse nature of the rights existent over them and in developing an effective regime for their protection. Law generally makes it problematic for society to assert its rights, making them subservient to other rights held by more organized and easily acknowledgeable groups of interest\textsuperscript{28}. That also helps explain the reason why it is still so hard nowadays to find consensus about how obvious, valuable, essential, environmental services and functions like water and air purification, climate and microclimate control, pollinating, etc., should have a price tag, whereas it is so easy to accept that individuals may profit from the actions that may result in their impairment.

It is important that environmental law evolves to ensure that those who impair such environmental services and functions through wrongdoing pay for the damage caused to society, compensating for emerging damages based on the cost of services and functions at stake, and also taking into account the time that society will be deprived of them. This will be aided by improvements in science and economics on the appraisal of such effects, though while it is unquestionable that damage exists, the issue on how much it represents in dollars is either a matter of technical estimation or of judicial arbitration. What cannot be accepted

\begin{quote}{\textsuperscript{26}It is interesting to point out Section 1006(d)(1)(B) of the 1990 Oil Pollution Act (OPA), 33 USCA §2706 that include “the diminution in value of those natural resources pending restoration” as one measure of the damage caused to natural resources. The Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) has also followed a similar thread, to some extent, when it decided to admit the assessment of damage caused to natural resources. §101(16). The federal regulations applicable to the matter go even further and clearly state the possibility of compensation for the impairment of natural resources services. 43 CFR §11.83(c). Although very precise on the identification of the object the respective kinds of torts caused to the environment, the same statutes seem to fail in addressing the standing to sue issue, for both limit actions to those they assign as the natural resources trustees. CERCLA §107(F)(2)(A) and OPA §1006(b)(2). Even though the citizens’ suit provisions appear as an attempt to enlarge that universe of persons with standing, “most of the [US environmental] statutes specify that if federal or state authorities are diligently prosecuting compliance actions, citizen suits are barred, though citizens are authorized to intervene in federal enforcement actions”. FINDLEY, Roger W. et ali, \emph{Cases and Materials on Environmental Law}, West Group, 1999, pp567-568. Moreover, the need for the plaintiff to demonstrate his standing to sue based “on an injury that is caused by or is fairly traceable to the defendant’s unlawful conduct (i.e., injury which results from the action the plaintiff seeks to have the court adjudicate and which will be redressed by the relief the plaintiff seeks)” (FINDLEY, Roger W. et ali, \emph{Cases and Materials on Environmental Law}, West Group, 1999, p. 573) makes clear that the US scheme is one of those that still mix up the different nature of the \textit{diffuse} environmental damage with damage caused to individuals.}
\end{quote}

\begin{quote}{\textsuperscript{27}RANGANATHAN, Janet et ali, \emph{Ecosystem Services, A Guide for Decision Makers}, World Resources Institute, 2008, pp. ii and 38. See also SCHERR, p. 3.}
\end{quote}

\begin{quote}{\textsuperscript{28}See ROBINSON, Nicholas A. (Ed.), \emph{Strategies Toward Sustainable Development: Implementing Agenda 21}, Oceana Publications, 2004, p.3}
\end{quote}
The assessment of diffuse damages in environmental torts as a necessary toll to achieve ... is that the indisputably aggrieved society remains deprived of proper redress because our legal system is incapable of delivering justice.

With a material diffuse damages legal scheme thus delineated, a question remains: is it possible that an environmental tort challenges compensation based on moral diffuse damages? The answer, by all means, shall be affirmative.

Although society’s diffuse rights are not based on the consideration of individuals’ interests, society is but the sum of all individuals and comprised by them. Therefore, if individuals can suffer from emotional distress or loss of self-esteem indirectly resulting from the negative effects caused by wrongful damage to their environment, why then may not the ultimate amalgam of individuals also agglomerate its members’ interests and entitlements in order to seek moral compensation for the violation of diffuse rights on the same basis? For this reason, moral environmental diffuse damages should be assessed, in parallel with those of material nature, aiming to compensate for losses not easily economically quantifiable, but nonetheless actually always resulting from wrongful environmental damage, such as: negative psychological impacts directly caused to society at large by the societal perception of the degradation of the environment; emotional distress resulting from the time that society is deprived of the entirety of the impaired or destroyed environment; emotional distress and the deterioration of life quality during the time that society cannot benefit from environmental services and functions that the same suppressed or degraded environment could otherwise render; consequent negative impacts of that state of affairs on values such as society’s quality of life, self-esteem, psychological integrity, and aesthetic enjoyment.

As far as court precedents go, moral diffuse damages have been admitted in Brazil and other systems should follow suit. In fact this issue should be less controversial in Brazil given that statutory environmental law clearly provides for the right to such moral compensation in cases of damage to the environment, to aesthetic and scenic values, and to “any other collective or diffuse interest”.

6. CONCLUSION.

The acknowledgment of the autonomy of society’s diffuse right to an

29 For moral diffuse damages see STEIGLEDER, pp. 158-176. See also SAMPAIO, Francisco José Marques, Evolução da Responsabilidade Civil e Reparação dos Danos Ambientais, Renovar, 2003, pp. 188-189.
30 For the groundbreaking case on that matter, see Appeal 2001.001.14586, Segunda Câmara Cível do TJRJ, March 6, 2002, Relator Maria Raimunda T. de Azevedo. See also Another ruling was recently issued in the same State Appellate Court, by a different panel, also acknowledging the right to redress under the same terms. See Apelação Cível 2007.001.57524, 13ª Câmara Cível. February 13, 2008, Relator José Azevedo Pinto. For an opinion in the opposite sense, see RESP 598.281, 1a. Turma do STJ, May 2, 2006, Relator Teori Albino Zavascki. For an opinion of the same court, however favorable to the assessment of moral diffuse damages, see RESP 791.653, 1a. Turma do STJ, February 06, 2007, Relator Justice José Delgado.
31 Article 1(I, III, and IV) of Brazilian Federal Law n. 7,347/85.
ecologically balanced environment and the recognition of the legal consequences such autonomy implies are only initial steps that environmental law must take in order to assure that environmental damage is properly addressed. In addition, compensation for both material and moral damages caused to society as a result of the violation of that diffuse right is an imperative to guarantee that the environment and environmental sustainability are effectively protected. In this situation, material and moral diffuse damages should be coupled with individual/collective rights compensation, administrative penalties, and criminal enforcement.

At the same time, acknowledging diffuse rights also requires extending standing to sue patterns, which will facilitate stronger societal control of actions interfering with the environment and environmental sustainability; for robust rights are but ghosts if the citizenry has not the means to enforce them in court32.

The acknowledgement of society’s environmental diffuse rights and its resultant scheme of compensation to society as the sole, legitimate right’s holder is a prerequisite for sustainability.

Finally, a proper legal serves as an essential tool for environmental practitioners and judges to resort to in order to better help environmental law cope with environmental malfeasance and achieve the ultimate goal of sustainable development.