The Limits of the Concepts Global Public Good, Common Heritage of Mankind and Commons to Delimit Obligations for Preservation of Marine Resources

Carina Costa de Oliveira*

Sandrine Maljean-Dubois**

Abstract

Global public goods, common heritage and global commons are concepts used to understand the legal and the political regime of marine resources. However, these concepts are limited when it comes to determine the obligations of States and International Organizations regarding marine resources conservation. If, for this reason, their intrinsic purpose can be questioned, these concepts nevertheless dominate, in their abstraction, the debate on marine resources. Their existence, whether scientific or not, can therefore not be denied or ignored. To understand what they can concretely offer to the legal discussions on marine resources, they must be articulated with the more precise legal obligations such as the obligation to cooperate and the duty of due diligence, as applied to marine resources. Accordingly, this article studies how these concepts can be combined to more concrete obligations so as to have a convincing application.

Key words: marine resources preservation, due diligence, cooperation, and obligations.

Introduction

Vague and imprecise concepts hinder progress toward defining and implementing international obligations for the preservation of the marine environment. Concepts such as global public good, common heritage of mankind, and global commons are too often disconnected from any norms that might serve for implementation and enforcement. The debate on the tragedy of the commons¹ is indeed still relevant today, especially in light of statistics revealing increasing overexploitation of marine resources on the high seas² and the unbridled quest to exploit

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^{*} Adjunct Professor at the Law School of the University of Brasilia; PhD in Law from the Université Paris II – Panthéon Assas; coordinator of the Law, Natural Resources and Sustainability Study Group.

^{**} Director of research at CNRS, Centre d'Etudes et de Recherches Internationales et Communautaires (CERIC, UMR 7318 Aix-Marseille University / CNRS). Professor and researcher in international and European environmental law.

¹ For more on this subject, see: OSTROM, E. Governing the commons, the evolution of institutions for collective actions. Cambridge: Cambridge university Press, 1990; HELLER, M. A. "The Tragedy of the Anticommons: Property in the Transition from Marx to Markets". Harvard Law Review, 111, 1998, p. 622 et s; LOGEAT, C. Les biens privés affectés à l'utilité publique, Paris: L'harmattan, 2011; PARANCE, Béatrice; VICTOR, Jacques de Saint Repenser les communs Paris: CNRS éd. 2014

Saint. Repenser les communs Paris: CNRS éd. 2014.

For more on this subject, see, for example, the statistics compiled by the FAO about deep-sea fishing. Available at: http://www.fao.org/fishery/statistics/en. Accessed on: 05 May 2015.

resources in such inhospitable places as the Arctic and Antarctic. ³ It's therefore important to present a brief overview of the concepts related to global public good and their linkage to living and non-living marine resources, and the delimitation of International Organizations' obligations vis-à-vis protection of marine resources.

The terminology for global public goods is still nebulous and far from precise. The term has been used and cited in legal texts in areas ranging from health,⁴ the environment,⁵ commerce,⁶ and information services.⁷ With a term that has been so broadly employed, an analysis of the concept's function and content is in order.

The concept of "global public good" emerged from the work of several economists.⁸ International Organizations have since contributed considerably to the debate about the term,

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For this more subject, the following news articles: Euronews, 13 May 2015. para Shell recebe luzverde prospeção no Ártico. Available at: http://pt.euronews.com/2015/05/13/shell-recebe-luz-verde-para-a-prospecao-no-artico/. Acesso em: 10 mai 2015; The New York Times. 12 Mav 2015. Grabbing paddles Seattle Ward off an OilGiant. Available at: inhttp://www.nytimes.com/2015/05/12/us/grabbing-paddles-in-seattle-to-ward-off-an-oil-giant.html? r=5>. 2015. For analysis statistics for Antartic Accessed 20 of see: https://www.ccamlr.org/en/document/publications/ccamlr-statistical-bulletin-vol-25. Accessed on: 15 June 2015. See also:: REID, Keith. "Conserving Antarctica from the Bottom Up: Implementing UN General Assembly Resolution 61/105 in the Commission for the Conservation of Antarctic Marine Living Resources (CCAMLR)". In: Ocean Y.B., n. 25 (131), 2011; ROSSI, Christopher R. "A particular kind of the grotian tendency and the global commons in a time of high arctic change. In: Int'l L & Int'l Rel, n. 11 (1), 2015.

⁴ See: BOIDIN, Bruno. *La santé, bien public mondial ou bien marchand ?: réflexions à partir des expériences africaines*. Villeneuve d'Ascq: Presses Universitaires du Septentrion, 2014; GARTNER, David. "Global public goods and global health". *Duke J. Comp. & Int'l L.*, n. 22 (303), 2011-2012.

⁵ See: MORGERA, Elisa. "Bilateralism at the Service of Community Interests? Non-judicial Enforcement of Global Public Goods in the Context of Global Environmental Law". *The European Journal of International Law*, Vol. 23 no. 3, 2012, p. 748-753; MEYER, Timothy. "Global public goods, governance risk and international energy". *Duke J. Comp. & Int'l L.*, 22(319), 2011-2012; KRISCH, Nico. "The decay of consent: international law in an age of global public goods". *The American Journal of International Law*, Vol. 108, No. 1, January 2014, p. 16-21.

⁶ STAIGER, R.W. *Report on the International Trade Regime for the International Task Force on Global Public*

^o STAIGER, R.W. Report on the International Trade Regime for the International Task Force on Global Public Goods, 2006. Available at: http://www.regeringen.se/contentassets/4e7cc9afcd2444d38d5b507bb6cf9b49/global-public-goods-international-trade. Accessed on: 10 June 2015; MAVROIDIS, Petros C. "Free Lunches? WTO as Public Good, and the WTO's View of Public Goods". The European Journal of International Law, vol. 23 no. 3, 2012, p.731-742; CAFAGGI, Fabrizio. "Private regulation and the production of global public goods and private 'bads'". The European Journal of International Law, vol. 23 no. 3, 2012, p. 695-718; PETERSMANN, Ernst-Ulrich. "International Economic Law, "Public Reason" and Multilevel Governance of Interdependent Public Goods". Journal of International Economic La, n. 14, 2011, p. 23-76.

⁷ See: DG/99/2/KM, UNESCO, Speech by Koïchiro Matsuura, General Director at the time of the *Sommet mondial des régulateurs sur Internet et les nouveaux services*. UNESCO, 30 nov. 1999.

⁸ See the works of P. Samuelson, in the 1950s. See also: HEATHCOTE, S. "Les biens publics mondiaux et le droit international. Quelques réflexions à propos de la gestion de l'intérêt commun". *L'Observateur des Nations Unies*,

particularly in the wake of the United Nations Development Program's (UNPD) publication, Les biens publics à l'échelle mondiale: la coopération internationale au XXIème siècle. 9 The UNDP followed up with further publications on the issue, 10 and other International Organizations such as the World Bank also produced related documents. 11 Meanwhile, several national institutions dedicated themselves to developing the concept as it related to other spheres, such as development aid. 12

The concept has been used to address challenges of global scale, with different specificities for each thematic area.¹³ Some legal articles approach the matter from perspectives that relate to demonstrating general institutional deficiencies in the context of public international law regarding global public goods. These include: (i) the centrality of consensus in negotiations on subjects of international law; 14 the capacity and limitations of bilateral treaties to contribute to the management of global public goods¹⁵ and the need for substantial procedural mechanisms to implement the term's objectives; 16 analysis of how international law can contribute to issues of governance and legitimacy of institutions to organize the management of these goods; ¹⁷ the idea of linking global public goods to *erga omnes* obligations; ¹⁸ and evaluation

n°13, 2002, p. 143; BODANSKY, Daniel. "What's in a Concept? Global Public Goods, International Law, and Legitimacy". The European Journal of International Law, vol. 23 no. 3, 2012, p. 652-654.

⁹ See: KAUL I., GRUNBERG, I., STERN, M. A. International Cooperation in the 21st Century. Oxford University Press, 1999.

¹⁰ See, for example: KAUL, Inge; CONCEIÇÃO Pedro; GOULVEN, Katell Le; MENDOZA Ronald U. Providing Global Public Goods; Managing Globalization. New York: Oxford University Press, 2003.

¹¹ World Bank: Effective Use of Development finance for International Public Goods. Global Development Finance, Washington DC, 2001.

¹² See for example: AGENCIA FRANCESA DE DESENVOLVIMENTO. Biens publics mondiaux et développement : de nouveaux arbitrages pour l'aide ? AFD, Paris, Doc. de travail n°3, sept. 2005.

¹³ See: BODANSKY, Daniel. "What's in a Concept? Global Public Goods, International Law, and Legitimacy". The European Journal of International Law, Vol. 23 no. 3, 2012, p. 651-668.

¹⁴ KRISCH, Nico. "The decay of consent: international law in an age of global public goods". *The American Journal* of International Law, vol. 108, no. 1, January 2014, pp. 1-40.

MORGERA, Elisa. "Bilateralism at the Service of Community Interests? Non-judicial Enforcement of Global Public Goods in the Context of Global Environmental Law". The European Journal of International Law, vol. 23 no. 3, 2012, p. 743-767.

¹⁶ NOLLKAEMPER, André. "International Adjudication of Global Public Goods: The Intersection of Substance and Procedure". The European Journal of International Law, vol. 23 no. 3, 2012, p. p. 769-791.

¹⁷ SHAFFER, Gregory, "International Law and Global Public Goods in a Legal Pluralist World". *The European* Journal of International Law, vol. 23 no. 3, 2012, p. 669-693; BODANSKY, Daniel. "What's in a Concept? Global Public Goods, International Law, and Legitimacy". The European Journal of International Law, vol. 23 no. 3, 2012, p. 653. No mesmo sentido: CAFAGGI Fabrizio, CARON, David D. "Global Public Goods amidst a Plurality of Legal Orders: A Symposium". The European Journal of International Law, vol. 23 no. 3, 2012, p. 645.

¹⁸ BODANSKY, Daniel. "What's in a Concept? Global Public Goods, International Law, and Legitimacy". The European Journal of International Law, Vol. 23 no. 3, 2012, p. 653. Ver ainda: BENZING, Markus. "Community

of specific issues such as energy production management.¹⁹ A perspective that deserves greater attention, and that hasn't yet been the focus of an in-depth study, relates to the articulation of precise obligations specific to the content of global public goods; this article aims to deepen this discussion specifically as regards marine resource management.

That means that there is no rivalry between potential users of the good – everyone may use it without reducing its availability to others. Yet in this light, the term "global public good" does not seem altogether adequate, because, as Salmon's Dictionary of Public International Law explains, ²¹ a good is a "mobile or immobile element susceptible to appropriation," which may seem to contradict the notion of global public good; public generally is *as opposed to* private. For a legal scholar, the adjective evokes public domain, which is characterized by its inalienability.

With its origins in domestic law, the distinction between public and private therefore cannot be transposed to the international arena without significant modifications. The global adjective is, without a doubt, the part of the three-part term that is the least questionable: it denotes the global sphere. Still, global is often just one of several prospective spheres of action for solving different problems. Management of the oceans is multi-scale – it's both local and global, simultaneously. A global public good therefore still requires action at the local, national, and international levels.

The divergences between the terms "public" and "common" may also be questioned. Why do we speak of public goods, rather than common goods, considering that the term "public" has no meaning in international law, while the term "common" is already legally enshrined (common interest of humanity, common heritage of mankind, etc.)? But even if "common" is

Interests in the Procedure of International Courts and Tribunals". *The Law and Practice of International Courts and Tribunals*, n. 5, 369, 2006, p. 374.

¹⁹ MEYER, Timothy. "Global public goods, governance risk and international energy". *Duke J. Comp. & Int'l L.*, 22(319), 2011-2012.

²⁰ BODANSKY, Daniel. "What's in a Concept? Global Public Goods, International Law, and Legitimacy". *The European Journal of International Law*, vol. 23 no. 3, 2012, p. 652.

²¹ SALMON, J. (dir.). *Dictionnaire de droit international public*. Bruxelles: Bruylant, 2001, p. 126 [our translation]. ²² Original text has the following content: *Élément mobilier ou immobilier susceptible d'appropriation*.

already legally enshrined, to which community does it refer? There is no international legal community representing a sociological community, more or less existent.²³

According to the UNPD, the term "public" is justified by the "triangle of publicness" that characterizes these goods. The global public good is "public three times over": it's public in its consumption, with free and non-excludable access to the good; public in the participatory process, with an open and inclusive political process; and public in the distribution of privileges, before which everyone may benefit.²⁴ It appears there are currently very few global public goods that reflect these three characteristics simultaneously. These objectives can only come to pass in the context of an existing international society – still just a project, not a reality. In short, the global public good still lacks its own specific legal regime. It is not legal, despite many references to it in different areas of international law. This finding does not mean that commitments and specific obligations cannot be attributed for the management of so-called global public goods. It is possible, for example, to link them to terminology that is already consolidated in international law, which has some of the characteristics of global public goods.

With respect to living and non-living marine resources, the terminology for global public good is akin to the terminology related to marine resources as common heritage of mankind;²⁵ seabed resources; and in "common goods"²⁶ resources of overlying water. While the term

²³ JOUANNET, E. "L'idée de communauté humaine". In: *Archives de philosophie du droit*. La mondialisation entre illusion et utopia, t. 47, p. 191.

²⁴ UNPD. *Providing Global Public Goods: Managing Globalization* 25 Questions & Answers.* New York: UNDP/ODS, 2002, p. 3-5. Available at: http://web.undp.org/globalpublicgoods/globalization/pdfs/ques-ans.pdf>. Accessed on: 10 May 2015.

²⁵ On this subject, see: MERCURE, P.-F. "L'échec des modèles de gestion des ressources naturelles selon les caractéristiques du concept de patrimoine commun de l'humanité". Revue de droit d'Ottawa/ Ottawa Law Review, 1996- 1997, vol 28, p. 45; TRÉBULLE, F.-G. "La propriété à l'épreuve du patrimoine commun: le renouveau du domaine universel". In: Études offertes au professeur Malinvaud, Lexis Nexis, 2007; FRANCKX, Erik. "The International Seabed Authority and the Common Heritage of Mankind: The Need for States to Establish the Outer Limits of their Continental Shelf". The International Journal of Marine and Coastal Law, n. 25, 2010, p. 543-567; LODGE, Michael W. "The Common Heritage of Mankind". The International Journal of Marine and Coastal Law, n. 27, 2012, p. 733-742; NOYES, John E. "The common heritage of mankind: past, present, and future". Denv. J. Int'l L. & Pol'y, n. 20, 447, 2011-2012; BASLAR, Kemal. The Concept of the Common Heritage of Mankind in International Law. Hague: Nijhoff Publishers, 1998; SHACKELFORD, Scott J. "The Tragedy of the Common Heritage of Mankind". Stan Envtl LJ, n. 28, 2009; JOYNER, C. "Legal Implications of the Concept of the Common Heritage of Mankind". Int'l & Comp. LQ, n. 35, 1986.

²⁶ PARANCE, Béatrice; VICTOR, Jacques de Saint. Repenser les communs Paris: CNRS éd. 2014; DEBLOCK, Christian, DELAS, Olivier. Le bien commun comme réponse politique à la mondialisation. Bruxelles: Bruylant, 2003; GORDILLO, José Luis. La Protección de los bienes comunes de la humanidad: un desafío para la política y

common heritage of mankind is meant to be applied to spaces or resources, that's not necessarily the case with global public good: The use of global public goods is not connected to the internationalization or appropriation of a good, but rather to effective cooperation for effective and concrete management of the good. From that perspective, the term can complement and broaden the meaning of the terms "common heritage of mankind" and "common good," to correspond more precisely to the idea of cooperation for the preservation of the resource.²⁷ We see this result of cooperation in *res communis* regimes for public goods.

On the other hand, the legal regime for the common heritage of mankind differs from the concept of global public good by virtue of the possibility for exclusive (excludable) use of the seabed in certain circumstances. Still, this possibility for exclusive use – through contracts for seabed exploration, for example – does not preclude the use of analytical tools that could enforce the obligation for cooperation in the management of marine resources under private or collective ownership.²⁸

In short, the practical effect of the term "global public good," in the area of marine resources, consists in articulating those terms already enshrined in public international law, broadening their scope by linking them with obligations related to the preservation of marine resources. Two of the most salient specific obligations consolidated in international law are the obligation to cooperate and obligation of due diligence. Other obligations might include the obligation to act according to the principle of precaution;²⁹ however, we cannot affirm that that

el derecho del siglo XXI. Madrid: Editorial Trotta, 2006; KU, Charlotte. "The Concept of Res Communis in International Law". History of European Ideas, 12:4, 1990.

²⁷ The relevance of the concept of global public good for cooperation has been highlighted by several authors, including: BARRETT, Scott. *Why Cooperate? The Incentive to Supply Global Public Goods*. Oxford: Oxford University Press, 2007; CAFAGGI Fabrizio, CARON, David D. "Global Public Goods amidst a Plurality of Legal Orders: A Symposium". *The European Journal of International Law*, vol. 23 no. 3, 2012, p. 645. On the connection between environmental preservation and cooperation see: MORGERA, Elisa. "Bilateralism at the Service of Community Interests? Non-judicial Enforcement of Global Public Goods in the Context of Global Environmental Law". *The European Journal of International Law*, vol. 23 no. 3, 2012, p. 748-753.

²⁸ On the subject of the theme of individual and collective property in the context of global public goods, see: CAFAGGI, Fabrizio. "Private regulation and the production of global public goods and private 'bads'". *The European Journal of International Law*, vol. 23 no. 3, 2012, p. 703-707. See specifically, p. 796.

²⁹ On this subect, see: MALJEAN-DUBOIS, Sandrine. "The Role of International Law in the Promotion of the Precautionary Principle". Available at http://www.iales-aides.com/uploads/1/3/9/6/13963183/the_role_of_international_law_in_the_promotion_of_the_precautionary_principle_-_sandrine_maljean-dubois.pdf>. Accessed on: 15 June 2015; MARR, Simon. "The Southern Bluefin Tuna Cases: The Precautionary Approach and Conservation and Management of Fish Resources". *European Journal of International Law*, vol. 11, n. 04, 2000, p. 815-831.

obligation is consolidated in international law. The obligations should also have national and international impacts, which is the case for the two obligations cited above. Thus, we will analyze the positioning of the obligation for (1) cooperation and (2) due diligence in the context of preservation of marine resources, considering there are significant limitations to implementation.

1) The limitations on implementation of the obligation to cooperate to preserve the marine environment.

Content related to management of global public goods still does not contribute to the implementation of the obligation to cooperate for the preservation of the marine environment. Considering that the term "global public good" still is not legally operational, other terms whose use is more legally consolidated at the international level might be considered. Commons, for example, possess a clearer legal scope when it comes to the regime applied to deep-sea marine resources. ³⁰ In turn, "common heritage of mankind" has a more limited scope with regard to management of marine resources. Before analyzing the existing content of cooperation for these two terms already consolidated in international law, we will demonstrate that the obligation to cooperate for the preservation of marine resources indeed exists in international law.

The principle of cooperation is a general principle of public international law³¹ and international environmental law, specifically. States' collective action in the name of the

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³⁰ On this subject, see: KAYE, Stuart. "Enforcement Cooperation in Combating Illegal and Unauthorized Fishing: An Assessment of Contemporary Practice". *Berkeley J. Int'l L.*, n. 32, 2014, p. 316-329; TELESETSKY, Anastasia. "Laundering Fish in the Global Undercurrents: Illegal, Unreported, and Unregulated Fishing and Transnational Organized Crime". *Ecology L.Q.*, n. 41, p. 939-998, 2014; MELLO, Celso D. De Albuquerque. *Alto-mar*. Rio de Janeiro: Renovar, 2001. The term "commons" will be used in the contexto of the *res communis* regime.

³¹ See: UN Charter, art. 1°, item 3; 11. Article 1; 1. Article 13 a), b); Declaration 2625 (XXV) on the principles of international law relating to friendly relations and cooperation among States.

common interest can be observed in several environmental treaties, particularly in the preambles that call for cooperation among subjects of international law.³²

Examples of cooperation can be found in the Montreal Protocol on Substances that Deplete the Ozone Layer³³ and the Kyoto Protocol, addressing climate change through sophisticated instruments like financial mechanisms. In other areas, innovative financial mechanisms have also created a financial basis for international cooperation, as with the case of the solidarity tax on airline tickets going toward the goal of contributing to medical purchases (UNITAID)³⁴ or vaccines.³⁵ Still, even if binding or non-binding commitments exist, the effectiveness of these instruments is questionable.

The obligation for cooperation on environmental issues is also present in the law of the sea. For example, article 192 of the Montego Bay UN Convention on the Law of the Sea (UNCLOS) lays out a general obligation, affirming, "States have the obligation to protect and preserve the marine environment." Customs also serve as a source of recognition of this

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United Nations Convention to Combat Desertification in Those Countries Experiencing Serious Drought and/or Desertification, Particularly in Africa; International Convention for the Regulation of Whaling, 1946; African Convention on the Conservation of Nature and Natural Resources, 2003; Convention on international trade of species of animals and wildlife animals in danger of extinction (Washington, 3 March 1973); the preamble of the Convention on the conservation of migratory species of wild animals; UN Framework Convention on Climate Change (1992); Rio Declaration on Environment and Development: "States shall cooperate in a spirit of global partnership in the process of conserving, protecting and restoring the health and integrity of the terrestrial ecosystem" (principle 7). The Declaration highlights the application of the principle in science and technology (Principle 9), in trade (principle 12), or with regard to notifying the States of natural disasters and other emergency situations of the same order likely to have transboundary effects (Prince 18), or information and consultation with the States likely to be affected by the activities that may have transboundary effects on the environment (principle 19). The Declaration ends with principle 27: "States and people shall cooperate in good faith and in a spirit of partnership in the fulfillment of the principles embodied in this Declaration and to the progressive development of international law in the field of sustainable development ".

³³ SCHEMEIL, Y. Des types purs de ressources mondiales communes non marchandes? AFSP /Section d'Etudes Internationales — Colloque « Les biens publics mondiaux », Pau, 2001, p. 4. See: "Summary of the Fourteenth Meeting of the Parties to the Montréal Protocol and the Sixth Conference of the Parties to the Vienna Convention, 25-29 novembro 2002". Earth Negociations Bulletin, vol. 19, n°24, p. 16; THEYS, J., FAUCHEUX, S., NOËL, J.-F., "La guerre de l'ozone". In: Futuribles, n° 125, outubro 1988, p. 51-66; FAUCHEUX S., NOËL, J.-F. Les menaces globales sur l'environnement. Paris: Repères La Découverte. 1990.

The contribution on airline tickets to finance the access of poor countries to medications for malaria, tuberculosis and AIDs through an international medications purchases facility (UNITAID) now has the contribution of more than 27 States. UNITAID brings together the funds necessary to purchase medications, and centralizes orders before a large group of buyers. We can therefore place orders in large quantities and get the best prices. On this, see: http://www.unitaid.eu/. Accessed on: 15 June 2015.

³⁵ IFFIM (International Finance Facility for Immunisation) has mobilized millions of dollars annually to deal with this. See reports at: http://www.iffim.org/finance/trustees-reports-and-financial-Statements/. Accessed on: 20 June 2015.

obligation, which can be observed in several rulings related to the sea: "(...) the obligation to cooperate is, by virtue of Part XII of the UNCLOS, and international law overall, a fundamental principle in the prevention of pollution of the marine environment from which laws originate that can be enforced by the Court (...)."³⁶

From the International Court of Justice (ICJ), we may cite the 2010 decision in the *Papeleras* case, which affirmed the existence of a general obligation of cooperation regarding the environment, in the following terms: "(...) That applies to all obligations established by a treaty, including procedural obligations which are essential to co-operation between States". Thus, one of the instruments of cooperation related to environmental protection highlighted by the Court is the environmental impact assessment. Still on the impact assessment, the Court affirmed that "(...) in recent years has gained so much acceptance among States that it may now be considered a requirement under general international law to undertake an environmental impact assessment where there is a risk that the proposed industrial activity may have a significant adverse impact in a transboundary context, in particular, on a shared resource". Based on this decision, we can confirm that the environmental impact assessment has a purpose that goes beyond receiving authorization for a project.

Given this scenario, we will analyze the limitations of preservation of the marine environment through the (a) *res communis* regime and (b) the common heritage of mankind for implementation of the obligation of cooperation in order to preserve marine resources.

a) Limitations of the *res communis* regime

The *res communis* legal regime may not contribute to the implementation of cooperation among subjects of international law for the preservation of marine resources. The overexploitation of these resources, evaluated through reports and rulings, in the scope of the

³⁶ INTERNATIONAL TRIBUNAL FOR THE LAW OF THE SEA, Irlanda v. Reino Unido, The Mox Plant Case, decision of provisional measures on December 3, 2001, paragraph 82.

³⁷ INTERNATIONAL COURT OF JUSTICE. *Papeleras* of Uruguay River case (Argentina v. Uruguai). Ruled on 20 Abril 2010, paragraph 146.

³⁸INTERNATIONAL COURT OF JUSTICE. *Papeleras* of Uruguay River case (Argentina v. Uruguai). Ruled on 20 Abril 2010, paragraph 204.

FAO,³⁹ the ICJ,⁴⁰ and other organizations, reveals a lack of substantial and procedural instruments to enforce cooperation.

The main marine resource that can be analyzed through the lens of this regime is the fisheries resource. Therefore, fishing will be central to the analysis of the implementation of the *res communis* regime for preservation of the marine environment. Considering that the content of the global public good is cooperation, it's pertinent to connect it to the *res communis* regime, and demonstrate the limits of the term public good for the implementation of States' obligation to cooperate in managing marine resources that lie within or outside of their respective national jurisdictions.

Hardin's *Tragedy of Commons* (1968)⁴¹ describes the abuse that arises when a good is public: as the good is public, and access to the good is free and unregulated, there is a high risk for overexploitation. Characterized by free access and non-excludability, the traditional *res communis* regime is incapable of limiting, on its own, the risk of degradation and depletion of the resources.⁴²

Res communis extended from Roman law, and was soon after cultivated by sixteenth-century theologian jurists (Vitoria, Suarez), and later systematized by Grotius' school of natural law. It consists in making an effort to triumph over all through self-centered behavior in competing territorial activities. The high seas provide the best illustration: free use for all, with freedom of navigation for all flags. Here we come across the old doctrinal issue of the seventeenth century: mare clausum (Selden) versus mare liberum (Grotius); the latter triumphed.

³⁹ See FAO statistics on fishing on the high seas, available at : http://www.fao.org/fishery/statistics/en. Accessed on: 05 May 2015.

⁴⁰ See one of the most recente cases ruled by the ICJ, the Australia v. Japan whales case, decision from 31 March 2014. See: OLIVEIRA, Liziane Paixão Silva; MARINHO, Maria Edelvacy. "O caso Austrália c. Japão perante a Corte Internacional de Justiça, Decisão, 31 de março de 2014". In: MONEBHURRUN, Nitish. *Decisões da corte internacional de justiça e do tribunal internacional sobre o direito do mar, RDI*, v. 12, n. 2, 2014, p. 43-49. See also: MALJEAN-DUBOIS, Sandrine; KERBRAT, Yann. "La Cour Internationale de Justice face aux enjeux de protection de l'environnement : réflexions critiques sur l'arrêt du 20 avril 2010, Usines de pâte à papier sur le fleuve Uruguay (Argentine c. Uruguay) ». *RGDIP*, N. 1, 2011, t. CXV, p. 39-75. See also: case ruled by the ITLOS: Southern Bluefin Tuna (New Zealand -Japan , Australia -Japan), Provisional Measure, August 1999.

⁴¹ HARDIN, Garrett. "The Tragedy of the Commons". *Science*, 13, Vol. 162, December 1968, p. 1243-1248.

⁴² KISS, A.C. "La notion de patrimoine commun de l'humanité". *RCADI*, t. 175, 1982, p. 243.

Article 87 of UNCLOS provides, "The high seas are open to all States, be they coastal or landlocked"; and art. 89 States, "No State may legitimately purport to subject any part of the high seas to its sovereignty."

The reality is well substantiated, but to what extent can the notion of a global public good avoid this tragedy? It may aid in the interpretation of the term to call for cooperation among subjects of international law in the management of marine resources. Cooperation may be implemented both in the Area, an area beyond national jurisdiction, or in areas under States' jurisdiction -- more precisely, their Exclusive Economic Zones. The vagueness of obligations in this area, particularly with regard to fishing activity, is clear both as regards the ship's flag State and the coastal State. Advisory Opinion 21 by the International Tribunal for the Law of the Sea (ITLOS) highlighted some of these obligations for seven African States.

In the context of the Convention related to determining minimum access and exploration of fishery resources in the interior of maritime zones under the jurisdiction member States of the Sub-Regional Fisheries Commission (CSRP), which was examined by the ITLOS in Advisory Opinion 21, we find gaps related to States' cooperation in addressing illegal fishing. There are more substantial statutes outlining the obligations of coastal States regarding the sustainable management of shared stocks and stocks of common interest -- especially regarding tuna and small deep sea creatures -- than we find for obligations for the ship's State. The coastal State's obligations include: a) cooperate on any measures necessary to assure the conservation and development of stocks; ⁴⁶ b) assure there will not be overexploitation of these resources; c) take measures in line with those of other organizations that address the issue, such as the International Commission for the Conservation of Atlantic Tuna (ICCAT), both in the EEZs of CSRP member States and in States that are members of other organizations with similar missions. Moreover, the State is called upon to verify if the preservation and management of these resources are being

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⁴⁴ See: KAYE, Stuart. "Enforcement Cooperation in Combating Illegal and Unauthorized Fishing: An Assessment of Contemporary Practice". *Berkeley J. Int'l L.*, n. 32, 2014, p. 316-329; TELESETSKY, Anastasia. "Laundering Fish in the Global Undercurrents: Illegal, Unreported, and Unregulated Fishing and Transnational Organized Crime". *Ecology L.Q.*, n. 41, p. 939-998, 2014.

⁴⁵ Cape Verde, Islamic Republic of Mauritania, Senegal, The Gambia, Guinea Republic, Guinea-Bissau of the Republic and the Republic of Sierra Leone.

⁴⁶ ITLOS, paragraph 189. Art. 61.2 of the Montego Bay Convention.

carried out in accordance with the most reliable scientific findings, which are available to all CSRP member States in the terms of art. 2, paragraph 2 of UNCLOS.⁴⁷

The *Virginia G* case had already provided greater clarity regarding coastal States obligations vis-à-vis preservation and management of biological resources in EEZs, listing the following activities:⁴⁸ "(...) adopt laws and regulations that determine the conditions of access for foreign fishing ships in the EEZ (art. 56, paragraph 1, and art. 62, paragraph 4 of the Convention)." In the terms of art. 62, paragraph 4, these laws and regulations must be compatible with the Convention. The ITLOS notes that the measures in question are management-related, and that there is no exhaustive list of what may or may not be done by the coastal State. ⁴⁹ Similarly, advisory opinion 21 indicates that the coastal State may adopt "(...) all measures, including boarding, inspection and seizure, and the necessary legal measures to ensure that the laws and regulations adopted in accordance with the Convention are respected." ⁵⁰

A significant limitation to cooperation in fisheries management stems from the fact that there are no general obligations for all States, but rather only for member States of specific fisheries commissions.⁵¹ Overarching, broad-based obligations would reduce potential damages to the marine environment, considering that the sea has no borders. To be effective, such measures for the management and preservation of fisheries must address species stock in the full zone of distribution and along every migratory path.⁵² States that fish in adjacent sectors must implement the necessary measures to preserve these stocks.⁵³ In this sense, the notion of global public good highlights the need for better management of these resources locally, nationally and internationally.

Limitations on the obligation to cooperate are likewise reflected in Judge Paik's Statement that advisory opinion 21 should have evaluated the boundaries between (i) the obligation to cooperate of a member State of the fisheries commission involved in the opinion

⁴⁷ Art. 61.2 of the Montego Bay Convention.

⁴⁸ See: OLIVEIRA, Carina Costa de; GONÇALVES, Natália da Silva. "Comentários ao caso m/v "Virginia" (Panamá c. Guiné-Bissau), 14 de abril de 2014". In: MONEBHURRUN, Nitish. *Decisões da corte internacional de justiça e do tribunal internacional sobre o direito do mar*, *RDI*, v. 12, n. 2, 2014, p. 55-63.

⁴⁹ ITLOS, Ship "Virginia G", Panama v. Guinée-Bissau, decision from 14 April 2014, paragraphs 212 and 213.

⁵⁰ ITLOS, Advisory Opinion n. 21, paragraph 105.

⁵¹ ITLOS, Advisory Opinion n. 21, paragraph 69.

⁵² ITLOS, Advisory Opinion n. 21, paragraphs 196 e 198.

⁵³ ITLOS, Advisory Opinion n. 21, paragraph 196.

and (ii) the rights of the coastal State to preserve and manage the biological resources in its EEZ.⁵⁴ The opinion also failed to guarantee any greater precision with regard to the obligation to cooperate, which have come from determining that it would be considered a breach of the obligation if a State refused to negotiate or stalled in the presentation of its responses or preservation and management measures.⁵⁵

We observe that advances in the interpretation of the obligation of cooperation are linked to greater precision regarding specific obligations to cooperate for all States at the international level. There have been advances, for example, regarding coastal States' obligations vis-à-vis illegal fishing in areas under the jurisdiction of members of the Commission that solicited Advisory Opinion 21. Still, general obligations for cooperation require greater precision. Other areas, such as freedom of navigation, should also be analyzed more closely from the perspective of the preservation of marine resources. On top of the limitations of the *res communis* regime, it's important to understand the limitations of the regime of the common heritage of mankind when it comes to fomenting international cooperation for the preservation of marine resources.

b) The Limitations of the Common Heritage of Mankind regime

The content of the term "common heritage of mankind" is still very limited when it comes to the preservation of marine resources.⁵⁶ In principle, this classification deals with the theoretically sustainable common management of resources under this regime.⁵⁷ To assess the limitations of this legal regime for the preservation of marine resources, with content of cooperation for management of this good, we must analyze: the concept of "common heritage of

⁵⁴ ITLOS, Judge Paik's opinion, paragraph 31.

⁵⁵ ITLOS, Judge Paik's opinion, paragraph 37.

⁵⁶ See: KISS, A. "La notion de patrimoine commun de l'humanité". RCADI, t. 175, 1982, p. 103 e s; LODGE, Michael W. "The Common Heritage of Mankind". The International Journal of Marine and Coastal Law, n. 27, 2012, p. 733-742; NOYES, John E. "The common heritage of mankind: past, present, and future". Denv. J. Int'l L. & Pol'y, n. 20, 447, 2011-2012; BASLAR, Kemal. The Concept of the Common Heritage of Mankind in International Law. Hague: Nijhoff Publishers, 1998; SHACKELFORD, Scott J. "The Tragedy of the Common Heritage of Mankind". Stan Envtl LJ, n. 28, 2009; JOYNER, C. "Legal Implications of the Concept of the Common Heritage of Mankind". Int'l & Comp. LQ, n. 35, 1986; BARDONNET, D. "Le projet de convention de 1912 sur le Spitsberg et le concept de patrimoine commun de l'humanité". In: Humanité et droit international. Mélanges René-Jean Dupuy. Paris: Pedone, 1991, p. 13.

⁵⁷ EDELMAN, B. "Entre personne humaine et matériau humain: le sujet de droit". In: HERMITTE, M.-A., EDELMAN, B.: *L'homme, la nature et le droit.* Paris: Bourgois, 1988, p. 136; KISS, A. "La notion de patrimoine commun de l'humanité". *RCADI*, t. 175, 1982, p. 103 e s.

mankind"; the limitations of its content as regards guaranteeing cooperation in management of marine resources; and the example of its limitations in the classification of the Arctic and the Antarctic.

The concept of common heritage of mankind as applied to the seabed was first addressed by the Ambassador of Malta to the UN General Assembly. ⁵⁸ The UNCLOS (1982) established an international system for the management of funds for the benefit of humanity managed by the Authority for the seabed. However, the 1994 implementation accord drained the content of Part XI of UNCLOS Agreement. This accord was necessary because of several developed States' opposition to ratifying the convention, which finally came into force in 1995. ⁵⁹ It is not known, therefore, how the principles of the Convention are applied.

In turn, through an advisory opinion, the ITLOS took the position that its objective is to provide substantial content to the regime of "common good of mankind." The following paragraphs serve as examples: "The role of the sponsor State, such as it was determined in the convention, is to contribute to the defense of the common interest of all States through the correct application of the "common good for mankind," which requires reliable configuration of the obligations set forth in Part XI." The following passage speaks to this point:

In the context of States' obligation to assist the Authority that acts representing mankind when it determines reasonably appropriate measures, the sponsoring State must objectively take into account the options presented in a manner that's reasonable, timely and favorable to

⁵⁸See: KISS, A. "La notion de patrimoine commun de l'humanité". *RCADI*, t. 175, 1982, p. 103 e s; LODGE, Michael W. "The Common Heritage of Mankind". *The International Journal of Marine and Coastal Law*, n. 27, 2012, p. 733-742; NOYES, John E. "The common heritage of mankind: past, present, and future". *Denv. J. Int'l L. & Pol'y*, n. 20, 447, 2011-2012; BASLAR, Kemal. *The Concept of the Common Heritage of Mankind in International Law*. Hague: Nijhoff Publishers, 1998; SHACKELFORD, Scott J. "The Tragedy of the Common Heritage of Mankind". *Stan Envtl LJ*, n. 28, 2009; JOYNER, C. "Legal Implications of the Concept of the Common Heritage of Mankind". *Int'l & Comp. LQ*, n. 35, 1986; BARDONNET, D. "Le projet de convention de 1912 sur le Spitsberg et le concept de patrimoine commun de l'humanité". In: *Humanité et droit international. Mélanges René-Jean Dupuy*. Paris: Pedone, 1991, p. 13.

⁵⁹ DUPUY, P.-M., KERBRAT, Y.. Droit international public. Paris: Dalloz, 11^{ème} éd., 2012, p. 741.

⁶⁰ ITLOS Chamber for resolution of disputes related to seabed, Advisory Opinion n. 17 from February 1, 2011, "Responsibility and obligations of States sponsoring persons and entities in the context of activities in the area."

⁶¹ ITLOS, Advisory Opinion n. 17, paragraph 76.

all mankind. The State must act in good faith, particularly when their actions may harm the interests of all mankind. ⁶²

Its application was also invoked for Antarctica. However, the signatory States of the Washington Treaty refused to go from the concept of common interest to the concept of common heritage of mankind. The preambles of the Canberra Convention and the Madrid Protocol reaffirmed the "interest of mankind" as a motivation of the parties, but did not make reference to the notion of common heritage; it seems to be difficult to reconcile with the demands for sovereignty of States that feel they hold power over the region. In practice, however, this does not impede States from adopting stricter rules for protection, which resemble those that qualify as "common heritage of mankind."

In the Arctic, it is well known that climate change has created new possibilities for navigation and oil exploration. The issue of control over this area has come back into question. The Declaration of Illulissat, adopted by five coastal States (Canada, Denmark, United States, Norway, and Russia) during a conference on the Arctic Ocean, on May 28, 2008, precludes an appropriation of the Arctic Ocean by these coastal States. At the same time, the Conference shelved the prospect of drawing up a specific international legal regime for the application of common law over the sea of the region.

The "common heritage of mankind" regime is indeed quite limited when it comes to implementing the obligation of cooperation for management of marine resources. Even though this regime was developed before the concept of "global public goods" became well established, it's important to seek to operationalize the term by establishing specific legal obligations linked to the cooperation of subjects of international law.

On top of the obligation to cooperate, the obligation of due diligence requires specific analysis of its limitations as regards the preservation of marine resources.

2) The limitations of the implementation of the obligation of due diligence for the preservation of the marine environment.

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 $^{^{\}rm 62}\,$ ITLOS , Advisory Opinion n. 17, paragraph 230. Also see paragraph 122.

⁶³ GUILLAUME, G. Le statut de l'Antarctique. Refléxions sur quelques problèmes récents. In: Mélanges offert à René-Jean Dupuy, 1991, p. 174.

⁶⁴ This aspect is reflected in the Madrid Protocol.

The obligation of *due diligence*⁶⁵ suggests a greater coordination by subjects of international law for the management of marine resources, but still with several limitations. Due diligence obligations are States' obligations to adopt substantive and procedural instruments related to monitoring activities that are under their management. It's important to examine this concept, its variability and criticisms regarding the difficulty of implementing and enforcing these obligations when it comes to protecting marine resources.

States are obligated to carry out due diligence over several maritime activities, in areas both within and outside their jurisdiction. States and International Organizations are expected to act to avoid any possible harm. This represents a conduct-specific obligation, which has been referred to in decisions and advisory opinions in the ICJ and the ITLOS. In the April 20, 2010, decision in the *Papeleras* case, for example, the ICJ deemed that:

(...) The principle of prevention, as a customary rule, has its origin in the due diligence of the State over its territory. It is an obligation of every State not to use its territory for purposes contrary to the rights of other States (Détroit of Corfu, Royaume-Uni c. Albanie, Decision 1949, p. 22). ⁶⁶ (...) The State shall utilize all means at its disposal to ensure that activities that occur in its territory or in any space under its jurisdiction do not cause damage to another State's environment. The Court ruled that this obligation is part of the body of rules of international law of the environment. ⁶⁷

Due diligence obligations were similarly cited in advisory opinions 17^{68} and 21^{69} of the ITLOS, with the same interpretation as that of the ICJ.

But the concept of due diligence is inconstant.⁷⁰ In the assessment of whether a State has been diligent or not, that State's conditions to carry out its diligence obligations are taken into

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ITLOS, Advisory Opinion n. 17, paragraphs 117 to 120. Available at: https://www.itlos.org/fileadmin/itlos/documents/cases/case_no_17/17_adv_op_010211_en.pdf.

⁶⁶ INTERNATIONAL COURT OF JUSTICE. *Papeleras* of Uruguay River case (Argentina v. Uruguai). Ruled on 20 Abril 2010, paragraph187.

⁶⁷ INTERNATIONAL COURT OF JUSTICE. *Papeleras* of Uruguay River case (Argentina v. Uruguai). Ruled on 20 Abril 2010, paragraphs 101, 197.

⁶⁸ In the Advisory Opinion of the ITLOS on the responsibility and obligations of States in the context of activities undertaken in the Area, the obligation of due diligence has been identified as having a variable content. Voir: ITLOS, Advisory Opinion n. 17, paragraph 117.

⁶⁹ ITLOS, Request for Advisory Opinion made by the Sub-regional Fishery Commission (SRFC). Advisory Opinion no. 21, 2 April 2015, paragraphs 131 to 139. Available at: < https://www.itlos.org/fileadmin/itlos/documents/cases/case_no.21/advisory_opinion/C21_AdvOp_02.04.pdf>.

⁷⁰ ITLOS, Advisory Opinion n. 17, paragraph 117.

account.⁷¹ The problem with this inconstancy lies in identifying a minimum amount of due diligence that could be required of all States as regards protection of marine resources. Faced with these interpretive limitations, it's worth analyzing the limitations on preservation of fisheries resources in areas under the jurisdiction of States, and the limitations of the regime of common heritage of mankind for the preservation of marine resources.

a) Limitations of preservation of fishery resources in areas under the State jurisdiction

Due diligence obligations are insufficient to guarantee the necessary preservation of fishery resources in areas under States' jurisdiction. Advisory Opinion 21 of the ITLOS, which addressed the responsibility of the ship's flag State for the illegal fishing, provides an interesting example, as it is in accordance with applicable treaties and precedents related to the interpretation of States' due diligence obligations. What's more, the decision reveals the limitations of these obligations as regards the preservation of marine resources.

Advisory opinion 21 interpreted the obligations of due diligence related to fishing in areas under States' jurisdiction. The ITLOS, before analyzing the substantive questions, defined what is considered illegal, undeclared and unregulated fishing—⁷² and the meaning of preservation of biological resources in the EEZ of member States of the previously cited Commission.⁷³ Other important definitions were of fishing ship,⁷⁴ shared stocks, ⁷⁵ and common interest stocks.⁷⁶

Fishing ships must obtain authorization from a Commission member State to establish their quota for fishing. To do this, the ship must present declarations of capture, as noted in its fishing log, at the State's port, and must not use illegal materials for its fishing. The ship must

⁷¹ ITLOS, Advisory Opinion n. 17, paragraph 117.

The definitions of illegal fishing, undeclared fishing and unregulated fishing are laid out in art. 2, paragraph 4 of the CMA. The Advisory Opinion reminded that these definitions were inspired in the International plan of action designed to prevent and eliminate this type of fishing, drafted and adopted in 2001 by FAO (Available at: http://www.fao.org/docrep/003/y1224e/y1224e00.htm. Accessed on: 15 May 2015); and in the Accord related to measures taken by the port State aiming to prevent and eliminate illegal fishing, adopted in 2009 (Available at: http://www.fao.org/fishery/topic/166283/en-Paragraph91. Accessed on: 15 May 2015).

⁷³ Cape Verde, Islamic Republic of Mauritania, Senegal, Gambia, Guinea Republic, Guinea-Bissau and the Republic of Sierra Leone. ITLOS, Advisory Opinion n. 21, paragraph 189, 191. The term is used to mean conservation, development. The court says art. 61 of the Convention gives some indication of what would be sustainable management.

⁷⁴ ITLOS, Advisory Opinion n. 21, paragraph 99.

⁷⁵ ITLOS, Advisory Opinion n. 21, paragraph 184.

⁷⁶ ITLOS, Advisory Opinion n. 21, paragraph 185.

notify the coastal State of its entrance and exit from maritime space under the jurisdiction of Commission member States.⁷⁷

According to the ITLOS, the ship's flag State has specific due diligence obligations related to illegal fishing.⁷⁸ They include: a) take all necessary measures to verify that ships are complying with laws and regulations adopted by the CSRP member States related to biological resources in their EEZs;⁷⁹ b) verify that ships do not partake in any activities related to unregulated fishing in CSRP member States' EEZs;⁸⁰ c) take all necessary measures to ensure that fishing ships do not take part in activities that are unfavorable to the preservation of the marine environment and conservation of marine biological resources;⁸¹ d) allow authorities from the coastal State to board the ship to investigate and monitor fishing activities.

As the advisory opinion pointed out, illegal fishing can only be considered the responsibility of the ship's flag State in the case of breaches of the due diligence obligations cited above. The result-based obligation cannot be determined without a previous assessment of the obligation regarding conduct. Et al. 82 If the flag State has taken all the necessary and appropriate measures to comply with obligations for certain conduct, it shall not be liable for any damage caused to the marine environment. This is one of the principal limitations of States' due diligence obligations. In spite of the existence of more precise regulations regarding illegal fishing, we still find limitations when it comes to ensuring that regulations guarantee appropriate management of marine resources, in accordance with conduct- and results-based obligations. Beyond this particular issue, it's necessary to analyze the limitations of the regime of "common heritage of mankind" for preservation of marine resources.

b) Limitations of the regime of "common heritage of mankind" for preservation of marine resources

States' and International Organizations' due diligence obligations are not well defined with regard to the management of marine resources. Using the idea of the global public good as a

⁷⁷ ITLOS, Advisory Opinion n. 21, paragraph113.

⁷⁸ ITLOS, Advisory Opinion n. 21, paragraphs 125-132.

⁷⁹ ITLOS, Advisory Opinion n. 21, paragraph 114.

⁸⁰ ITLOS, Advisory Opinion n. 21, paragraph 114.

⁸¹ ITLOS, Advisory Opinion n. 2, Parágrafos 116, 138.

⁸² ITLOS, Advisory Opinion n. 21, paragraph129.

basis, broadening the content of patrimonialization to include content for management, greater implementation of obligations connected to marine resource preservation would be possible. Thus, we will provide an overview of the current context of exploration and investigation of the seabed, the articulation of obligations of due diligence and preservation of the seabed, and the limitations of these obligations with respect to achieving the desired results.

The current context of seabed activities is that while there still aren't exploitation contracts, there are several exploration contracts⁸³ for polymetallic sulfides.⁸⁴ Despite the still undetermined potential damages of this area of research, and the lack of concrete cases ruling on these activities, there are already signs of direct obligations of States under the Authority of the seabed⁸⁵ and of the criteria for the obligation of due diligence that States must observe. The implementation of due diligence obligations in the context of the seabed falls to the "sponsor" State in the monitoring and regulation of public and private operators that explore and investigate the seabed.

ITLOS Advisory Opinion 17 clarified some aspects related to the responsibility of the sponsor State in these situations. The Court deemed that the State had the obligation to create norms and regulations to guarantee that the contracting company followed a minimum set of environmental norms. Among the preventative measures that should be included in this minimum normative set are (i) the requirement for environment impact assessments⁸⁶ and (ii)

⁸³ For commercial research & prospecting.

⁸⁴ Authority of the Seabed. Status of contracts for exploration in the Area. Twenty-First Session Official Documents. ISBA/21/C/8. Kingston, Jamaica, 2 June 2015. Available at: https://www.isa.org.jm/sites/default/files/files/documents/isba-21c-8 1.pdf>. Acesso em: 20 junho 2015.

⁸⁵ Direct obligations of States include obligations set out in the Regulations drawn up by the Seabed Authority and obligations under UNCLOS; the 2010 Polymetallic Nodules regulation and Polymetallic Sulphide of Regulation 2010. On this, see: INTERNATIONAL SEABED AUTHORITY. Decision of the Assembly of the International Seabed Authority relating to regulations on prospecting and exploration for polymetallic sulphides in the Area. ISBA/16/A/12/Rev.1. Sixteenth Season Official Documents. Kingston, Jamaica. 15 November 2010. Available at: http://www.isa.org.jm/files/documents/EN/16Sess/Assembly/ISBA-16A-12Rev1.pdf. Accessed on: 10 June 2015. On top of that, another frequently cited regulation is: INTERNATIONAL SEABED AUTHORITY. Decision of the Council of the International Seabed Authority relating to amendments to the Regulations on Prospecting and Exploration for Polymetallic Nodules in the Area and related matters. ISBA/19/C/17. Nineteenth Season Official Documents. Jamaica, July Available Kingston, 22 2013. https://www.isa.org.jm/sites/default/files/files/documents/isba-19c-17 0.pdf>. Also see: ITLOS, Advisory Opinion n. 17, paragraphs 121 to 140. Available at: https://www.itlos.org/fileadmin/itlos/documents/cases/ case no 17/17 adv op 010211 en.pdf>. Accessed on: 10 June 2015.

⁸⁶ See paragraph 148 of the Advisory Opinion, which indicates that the Environmental Impact Assessment should not be understood as a custom in international environmental law. The EIA should be required at the time of consultations and notifications pursuant to art. 142 of the Montego Bay Convention. This obligation relates,

laws that guarantee the payment of reparations for any damage caused by failure to comply.⁸⁷ It is not enough to create a contract for exploration with a public or private company; there must be a normative framework in place to hold public and private companies accountable for any damages occurring as a result of exploration. If the company is from another country, the State of origin must also sign the work plan, binding itself to be held accountable for any damages.

The advisory opinion held that the sponsor State could not be held responsible for the acts of its companies as long as it is taking the measures that might be reasonably demanded of it and has proceeded with due diligence. ⁸⁸ We see here that one of the greatest challenges is actually holding a State responsible for failure to carry out the obligation of due diligence. These obligations are not as specific as they should be, and leave room for an improper assessment of the minimum amount necessary to demonstrate compliance. And if the State demonstrates that it performed due diligence, it will not be held liable for any damages caused by the sponsored company, according to the advisory opinion. ⁸⁹ This represents a dramatic limitation for environmental preservation, because not only obligations of conduct must be considered to hold the State liable, but also results-based obligations. There are considerable hurdles to be overcome for the content of global public goods management to stipulate that a State can be held liable for failure to protect the marine environment.

CONCLUSION

While the term "global public good" is neither legal nor operative, through it, we see the lack of precision surrounding the specific obligations of subjects of international law regarding the conservation of marine resources. Global issues require international and national responses, but few international obligations require States to provide and implement these responses. We should ask whether the categories or instruments of international law, consolidated in the law of

therefore, to the domestic law of States. See: Case note: "Responsibilities and obligations of States sponsoring persons and entities with respect to activities in the area: the international tribunal of the law of the sea's recent contribution to international environmental law". RECIEL 20 (2) 2011, p. 211.

⁸⁷ See: LIMA, Gabriela Garcia B. "Caso do Parecer consultivo do Tribunal Internacional de Direito do Mar de 1º de fevereiro de 2011". In: MONEBHURRUN, Nitish. *Decisões da corte internacional de justiça e do tribunal internacional sobre o direito do mar*, *RDI*, v. 12, n. 2, 2014, p. 20-26.

ITLOS, Opinion n. 17, paragraphs 213 to 217. Available at: https://www.itlos.org/fileadmin/itlos/documents/cases/ case_no_17/17_adv_op_010211_en.pdf. Accessed on: 15 June 2015.

⁸⁹ ITLOS, Advisory Opinion no. 17, paragraph 204.

the sea, are capable of ensuring the proper preservation of marine resources. Some aspects are clear in this analysis: (i) the interpretive value of the global public good; (ii) the limited content of the *res communis* and common heritage of mankind regimes for the preservation of marine resources; and (iii) the need for greater accuracy in the content of obligations to cooperate and obligations of due diligence as applied both nationally and internationally.

The global public good concept currently has no legal teeth, and there is no evidence that it will soon. One of the possible contributions of the term for the preservation of marine resources is of interpretative nature, contributing to the assessment of legal institutions already established in international law. The cooperation-related content of the global public good is the central aspect that should guide the management of these resources. The nearest legal categories are the common good and the common heritage of mankind; however, both institutions are more closely connected to the internationalization and patrimonialization than to management, which distances them from the implementation of the obligation to cooperate and abide by the principle of prevention in international law.

Both the obligation to cooperate and the obligation of due diligence, while consolidated in international law, have imprecise content as regards the preservation of marine resources. As living and non-living resources are present in areas under national and international jurisdiction, States' obligations in both spheres must be more precise and detailed to make them actionable and enforceable before national and international courts.

The challenge therefore lies in using existing legal regimes, such as *res communis* or common heritage of mankind, with a more precise and more closely connected to obligations related to the preservation of marine resources content. If it is not possible to broaden its interpretation, the concept of global public good could be useful to guide States in the implementation of specific measures to preserve marine resources under their jurisdiction, as in the EEZ. The activity where we find a more precise and clear framework in relation to these obligations for cooperation and due diligence is fishing, which has already been interpreted by the ITLOS. Other activities, including navigation and exploration of seabed resources, still require greater precision in specific obligations regarding the preservation of marine resources.

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