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Planning on law: Fair and just in the division of benefits. The case of genetic resources in the high seas (water column)**

Planificación jurídica: equidad y justicia en la división de beneficios. El caso de los recursos genéticos en alta mar (columna de agua)

ABSTRACT

How to define sharing benefits from Marine Genetic Resources in the High Seas (water column) as equitable and just? Supposedly, the United Nations Convention on the Law of the Sea, international custom and the Convention on Biological Diversity do not rule Marine Genetic Resources in the High Seas as far as sharing benefits is concerned. The basic feature of international law and its sub-disciplines (of environment, investment, conflict resolution), subjects, and objects has to do with its content whatever the validity from international law as such or national law and the content based on sense and limits by interpretation and application (internationally and nationally). Interpreting international legal rules is only possible utilizing the elements established by international law, one is the systematically interpretation considering all and certain legal rules as foundations of the international legal system.

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KEYWORDS

Marine genetic resources, equity, justice, benefit sharing, lack of rules, water column.

RESUMEN

¿Cómo definir la división de beneficios de Recursos genéticos marinos en el alta mar (columna de agua) como equitativa y justa? Supuestamente, la Convención de las Naciones Unidas sobre el Derecho del Mar, la costumbre internacional y el Convenio sobre Diversidad Biológica no regulan la división de beneficios de recursos genéticos marinos en alta mar. La característica fundamental del derecho internacional y sus sub disciplinas (de medio ambiente, inversión, resolución de conflictos), sus sujetos y sus objetos tiene que ver con su contenido, cualquiera sea la validez del derecho internacional como tal, o derecho nacional y el contenido fundamental acerca de sentidos y límites por interpretación y aplicación (internacional y nacional). La interpretación de normas legales internacionales es posible tan solo usando los elementos establecidos por el derecho internacional, uno de los cuales es la interpretación sistemática, que considera todas las normas legales que son fundamento del sistema legal internacional.

PALABRAS CLAVE

Recursos genéticos marinos, equidad, justicia, división de beneficios, laguna normativa, columna de agua.

SUMARIO

INTRODUCTION

Have been enacted rules in International Law answering who owns what and gets what and how equitably and just when sharing benefits from Marine Genetic Resources (MGRs) in High Seas (HS): "water column"[1]? No discussions have been held on the possible legal rules related to MGRs above this

1 Others call this zone "twilight zone", "mesopelagic" when they are referring to a zone between 200m to 1000m. This zone is "poorly understood" and it is a key zone due to the carbon cycle and biological resources; cfr. WYSS Institute. *Robotic exploration and sampling of the Midwater Ocean*. Boston: University of Harvard, 2017. Available at: https://wyss.harvard.edu/event/robotic-exploration-and-sampling-of-the-midwater-ocean/ (14.2.2017).

"legal area" or as an "object of regulation". United Nations Convention of the Law of the Sea (UNCLOS) rules "biological resources"; the Convention on Biological Diversity (CBD) rules "genetic resources"[2] and none of them rules "benefits" from utilization of MGRs in HS's "water column". Main point is the ownership of benefits, later the definition on how to share them.

Possible answers: Hypothesis and thesis

Answers should be generated from international rights and obligations derived from international rules of law[3] or interpretation and application of international legal rules (rights and obligations) proposing new rules to be enacted or a change of previous rules of law creating new legal consequences[4]. Rights of States, persons or groups of persons will be protected legally assuring gains from utilizations of these resources[5]. Later, international obligations and rights should be incorporated in accordance to current "legal situation" of international legal community according the forms in which fairness and justice take place (retribution, distribution, procedure) and main limits ("no-nothing" and "not-all": everyone should get something according to certain criteria based on rights but not all unless right over the resource allow this)[6].

Further, certain basic international legal rules have been established in UNCLOS for living resources. MGRs are part of living resources or they have their own legal identity. Therefore, international legal rules on MGRs in HS should include the current international legal situation of these resources: sharing benefits from genetic information based on the knowledge from the research of this genetic information. It is based on the ownership of these

2 *Biological diversity*: "the variability among living organisms of all sources": UNITED NATIONS ORGANIZATION. *Convention on Biological Diversity*. Rio de Janeiro: United Nations Organization, 1992, article 1. "Genetic diversity", a legal concept, has been a concept developed during the 1980s by different biologists and it covers a wide range of living forms (animals, plants, micro-organisms): all varieties of life. Plants, animals and micro-organisms have "functional units of heredity" named *genetic resources* that has been considered in a unique concept *genetic material*, that is "genetic material of actual or potential value": ibid. The International Community has legally protected Genetic Resources in an attempt to safeguard useful components of life (particularly chemical elements of those resources that are the main object of protection). This protection has been developed on all aspects by the Convention on Biological Diversity, one of the outcomes of the United Nations Conference on Environment and Development of 1992.

3 About the rule of law, RAZ, J. El estado de derecho y su virtud. In: RAZ, J. *Autoridad del derecho*. R. Tamayo Salmorán, trad. México, D.F.: UNAM, 1985, 45; RAZ, J. *The authority of law*. Oxford: Oxford University Press, 1979, 40.

4 KELSEN, H. *Teoría pura del derecho*. México, D.F.: UNAM, 1982; GARDNER, J. *Law as a leap of faith*. Oxford: Oxford University Press, 2012.

5 ARISTOTLE. *Nichomaquean Ethics*. Cambridge: Cambridge Texts on History of Philosophy (R. CRISP, ed.), 2004, 81 s.

6 PEÑA NEIRA, S. Equitableness and Justice in sharing benefits. Outcomes from the International Law of Sustainable Development in the CBD (Act locally). Article presented to the Conference Biodiversity, Sustainable Development and the Law, Cambridge, 2015.

resources, article 1 paragraph 2 of the International Covenant on Economic, Social and Cultural Rights (ICESCRs) states this right on natural resources[7].

The focus of this article is on the application and interpretation of a rule of law (in international law "application" means "interpretation" because rules should be incorporated into national legal system and it is necessary interpretation[8] and application) by focusing on the point arises an answer to the question on the nature of Justice as well as Equity, but it does not search for changing behaviour[9]-[10]. Law is not related to changing "a behaviour" or the behaviour of people, solving economic, social or environmental problems[11] but it might help. It is the *last ratio* to solve human problems; the first one are political willingness, political ideas and economic capacity[12] (main focus on sharing benefits is development in environmental areas[13]). Solving legal problems, gaining benefits for environmental and social needs, avoiding social and economic losses under the concept of legal system are important achievements for Law[14]. CBD, Nagoya Protocol (Protocol), ICSECr, various

7 United Nations Organization, *op. cit.*, 1994; United Nations Organization. *International Covenant on Economic Social and Cultural Rights*. New York: United Nations Organization, 1966.

8 Gourgourinis, A. The distinction between interpretation and Application of Norms in international adjudication. *Journal of International Dispute Settlement*. Vol. 2, No. 1 (2011), 31-57.

9 Concepts explain about Law, they might change behavior. Human beings change behavior in accordance to their willingness and possible punishment and States change behavior on the same ground. Contrary to this idea Green explaining Hart, H. *A concept of Law*, 3rd Ed. Oxford: Oxford Clarendon Press, 2012, 15.

10 Cordonier-Segger, M. C. *¿Globalización sustentable? ¿Desafíos para el derecho y la política local?* Santiago de Chile: Universidad de Chile, 2007, 7. In general, Peña-Neira, S. *On the interpretation and application of article 9 of the International Covenant on Economic, Social and Cultural Rights*. Amsterdam: University of Amsterdam, 2001.

11 Rivacoba, M. *Apuntes de Seminario*. Valparaíso: Universidad de Valparaíso, 1997, 3.

12 Law is not based on the effectiveness of its interpretation and application. War is an example of this behavior in which International Law fails and still Law is in force. Validity and applicability is different than behavior change.

13 International Law has developed the International Law of Sustainable Development based on "social interdependence" with "social justice" is at the core, Álvarez, A. *Dissenting opinion on the Anglo Iranian Co. Oil Case (United Kingdom v. Iran)*. Preliminary Objections. The Hague: International Court of Justice, July 22, 1952, 124-125. On the evolution of international law and "social justice" (environment, human rights, trade), Crawford, J. *Brownlie's Principles of International Law*. Oxford: Oxford University Press, 2013, 16-17. On different views on "development" on one hand economic growth (developed countries view point) on the other hand economic growth but social and environmental protection (developing countries view point), Kennedy, D. Law and developments. In: Hatchard, J., and Perry-Kesaris, A. *Law and development: Facing complexity in the 21st Century (Essays in honour of Peter Slinn)*. London: Cavendish, 2002, 17-18, 19-26. Poniatowski, B. (Ed.). *Globalization with a human face: Benefitting all*. Paris: unesco-unu, 2004.

14 As pointed out by Crawford, International Law is a legal system Crawford, *cit.*, 16. This idea of International Law as a legal system and law as a system is in Kelsen, Kelsen, H. *General Theory of Law and the State*. New Brunswick: Transactions Publishers, 2007, 110; Kelsen, *op.*

conventions on cultural rights, the International Treaty on Plant Genetic Resources, the International Treaty on Trade Related Intellectual Property Rights, the Convention on Trade of Endangered Species[15] are some treaties ruling part of the "international legal system" related to equitableness and justice on genetic resources. CBD focus on prohibitions, allowances or orders on one "factual element"[16] or "rational legal element": "equitably and just sharing gains from the commercialization of genes" ("fair and equitable sharing benefits from the utilization") in the form of resources or knowledge. Gains will be shared to support conservation, sustainable use from biological resources or development (economic growth or economic support of the owners of the knowledge). Like any other "legal concept" ("share in a just and equitable way") should be analysed and defined[17].

Subjects of law gain benefits from balance between distribution, negotiations and procedures dividing gains. These gains share equitably achieving certain goals based on CBD[18], particularly article 15 paragraph 7 that reads:

> 7. *Each Contracting Party shall take legislative, administrative or policy measures*, as appropriate, and in accordance with Articles 16 and 19 and, where necessary, through the financial mechanism established by Articles 20 and 21 *with the aim of sharing in a fair and equitable way the results of research and development and the benefits arising from the commercial and other utilization of genetic resources with the Contracting Party providing such resources*. Such sharing shall be upon mutually agreed terms[19].

cit., 1982, 27-28, 39, criticized by HART, H. *A concept of Law*, 2nd Ed. Oxford: Oxford Clarendon Press, 1998, 553. However, Hart has been against the concept of International Law, including the quality of being a system, HART, *op. cit*., 1998, 558; HART, *cit*., 1961, 264.

15 UNITED NATIONS ORGANIZATION, *op. cit*., 1994. UNITED NATIONS ORGANIZATION. *International Treaty on Plant Genetic Resources*. Rome: United Nations Organization, 2001. WORLD TRADE ORGANIZATION. *International Treaty on Trade Related Intellectual Property Rights*, 1996; United Nations. *Convention on Trade Endangered Species of Wild Fauna and Flora*. Geneve: United Nations Organization, 1973.

16 The "factual situation" is the description of the act rule by the legal rule, LARENZ, K. *Metodología de la ciencia del derecho*. 2.ª Ed. Barcelona: Ariel Derecho, 2001, 196. ENGISH, K. *Introducción al pensamiento jurídico*. Madrid: Comares, 2001, 1-5.

17 For example "trial court" e.g. ZANDLER, E. *Cases and materials on the English Legal System*. Cambridge: Cambridge University Press, 2007, 1-46.

18 The relation between the Convention on Biological Diversity and sustainable development has been recognized recently. UNITED NATIONS ORGANIZATION. *General Assembly number A/Res/67/212 of 15 of March 2013*. New York: United Nations Organization, 2013, para. 14. Still criticisms against sharing of benefits due to exiguous amount of gains have been voiced, VOGEL, J. H. From the "tragedy of the commons" to the "tragedy of the commonplace": Analysis and synthesis through the lens of the economic theory. In: MCMANISS, CH. (Ed.). *Biodiversity and the Law (Intellectual Property, Biotechnology and traditional knowledge)*. London: Earthscan, 2007, 122-124, but this subject is important for the legal implications for sustainable development.

19 UNITED NATIONS ORGANIZATION. *Convention on Biological Diversity*. Rio de Janeiro: United Nations Organization, 1992: article 15.7.

The thesis argued here is that a systematic interpretation of international legal rules should be considered for interpretation and application and creation on sharing benefits of MGRs in HS equitably and just.

1. SHARING BENEFITS UNDER SOVEREIGNTY

CBD was adopted in Rio de Janeiro, Brazil in 1992 and opened for signature on June 5, 1992[20] and representatives of the Member States realized about "sustainable development" implicitly included and ruled by law when gains from the utilization of resources should be divided equitably and just. The concept has evolved including rights of human being(s) on the knowledge derived from the use of these resources, the possibility of confrontation between rights from the States or human beings and rights of companies. Main elements to solve the inclusion of new legal subjects in order to develop legal foundations to the division of gains are interpretation and procedure of interpretation and application of these rights[21].

Since international rights and obligations need to be "implemented", some of these discussions have had a direct impact both, in international and national legal systems[22]. Further, the context is based on Sovereignty and relations between States organized in "International Community"[23]: two or more countries being "a social system of continuing interaction and transaction"[24]. In sharing gains from genetics resources (financial or not) is necessary to comply with rights of States having a part in gains based on Sovereignty over them[25].

International rights and obligations ordering an "Equitable Sharing of Benefits" have set reciprocity in the CBD. This treaty includes the right to

20 SECRETARIAT OF THE CONVENTION ON BIOLOGICAL DIVERSITY. *Handbook of the Convention on Biological Diversity*. CBD, UN, UNEP. London: Earthscan, 2001, XVII.

21 BENEVENISTY, E. *Sharing transboundary resources: International Law and optimal resource use*. Cambridge: Cambridge University Press, 2002, 106, in which the basis for the concept is discretion. Justice as a general concept and Equity as the application of this general concept has been established in Greece by Aristotle.

22 International legal obligations are those legal requirements with "which law's subjects" in this case States and by exemptions other subjects, "are bound to conform", UNIVERSITY OF STANFORD. *Stanford Encyclopedia of Philosophy*. Stanford: Stanford University, 2003, "Legal obligation and authority". Available at: http://plato.stanford.edu/entries/legal-obligation/ (2015).

23 PAULUS, A. The Emergence of the International Community and the divide between International and Domestic Law. In: NOLLKAEMPER, A. and NIJMAN, J. E. (Eds.). *New perspectives on the divide between International Law and National Law*. Oxford: Oxford University Press, 2007, 216.

24 FRANCK, T. *Fairness in International Law and Institutions*. Oxford: Oxford University Press, 1997, 10-11. Complementarily, SANDS, PH. *Principles of International Environmental Law*. 2nd Ed. Cambridge University Press, 2003, 35.

25 BROWNLIE, I. *The Rule of Law in International Affairs*. The Hague: Martinus Nijhoff, 1998, 37, 52-53.

define sharing of benefits by States in which genetic resources have been found without requirements that can run against the objectives of the CBD. In other words, rights as well as obligations play a key role in keeping reciprocity among parties of the aforementioned convention[26].

As with any international legal rule, Article 15 of CBD has to obey "General Principles of Law" established for wrongful acts of States in their international relationships[27]. Therefore, violation of international rights and obligations stated in an international legal rule might generate State's responsibility[28] including Article 15 of the CBD. "States do have to obey International Law" is the "line of reasoning" explored by international scholars in the second half of the 20th Century[29]. "State Sovereignty", a key standard of International Environmental Law[30], was presented to avoid responsibility of the State in implementing international obligations on human rights impeding external intervention in internal affairs of a country[31], "State Sovereignty" has changed based on the idea of rights and obligations of the State[32]: the faculty to oblige other States to protect rights from violation impeding sharing benefits equitably to and from genetic resources[33]. "Sovereignty over Genetic Resources" is related, today, to the right to utilize (trading) resources for gains from them providing, protecting rights of other States on their own resources when genetic resources will be brought to their own jurisdiction to get protection from national and legal rules on property[34].

26 Reciprocity of rights and obligations are applicable to every treaty. All of them are legal rules expressing rights and obligations to the Member States (and to the International Community by establishing an international rule of law).

27 United Nations Organization. *Ad hoc Open Ended informal Working Group to study issues relating to the conservation and sustainable use of marine biological diversity beyond areas of national jurisdiction*. New York: United Nations Organization, 2008.

28 Pauwelyn, J. *Conflict of norms in Public International Law: How wto law relates to other rules of International Law*. Cambridge University Press, 2003. Brownlie, I. *Principles of International Law*, 5th Ed. Oxford: Oxford University Press, 1998, 79. Fitzmaurice, M. The identification and character of treaties and treaty obligations between States in international law. *British Yearbook of International Law*. Oxford: Oxford University Press, 2002, 141-185.

29 *E.g*. Brownlie, *op. cit*., 1998.

30 Sands, *op. cit*., 2003.

31 Brownlie, *op. cit*., 1998, 68, 72.

32 Schrijver, N. *Sovereignty over natural resources: balancing rights and duties in an interdependent world*. Groningen: University Library Groningen, 1995, 240-241. Brownlie, *op. cit*., 1998, 289-291.

33 This new view on this subject have been heralded by Patricia Birnie but it is now considered in the International Law as a whole *e.g*. Prost, M. and Torres Camprubi, A. Against fairness? International Environmental Law, Disciplinary Bias, and Pareto Justice. *Leiden Journal of International Law*. Vol. 25, No. 2, June 2012, 381. However, it was pointed out by Allan Pellet in 1999, Pellet, A. *State sovereignty and the protection of fundamental rights: An international law perspective*. Pugwash: Pugwash Ocassional Papers, 2000.

34 United Nations Organization. *International Covenant for Economic, Social and Cultural Rights*. New York: United Nations Organization, 1966, article 1, para. 2; International

The State, subject of rights: protection of them

The State "is a type of legal person recognized by International Law"[35] fulfilling certain conditions, because International Law governs rights and obligations of international subjects with international legal personality[36]: on its territory State exercise sovereign rights from Sovereignty representing rights of people of a country protecting other States' rights in the same territory[37]. The State might be obliged by International Law to sanction violation of rights of other States by nationals or agents of the own State[38]. Further, the State protects resources inside its territory exercising its Sovereignty. Therefore, the territory defines limits but sharing benefits should have no limits[39].

Rights and obligations

Right is "that which a person is entitled to have, or to do, or to receive from others, within the limits prescribed by law" or "a claim or title to or an interest in anything that is enforceable by law"[40]. In these two concepts the subject or "person", according to Gifts, is the State[41]. *Obligation* is the requirement to do what is imposed by International Law or promise[42]. In the Anglo-Saxon

Court of Justice. *Whaling in the Antarctica (Australia versus Japan)*. 31.3.2014. The Hague: United Nations Organization, 2014, para. 107, 108.

35 Brownlie, *op. cit.*,1998, 70.

36 Brownlie, *op. cit.*, 1998, 36.

37 Brownlie, *op. cit.*, 1998, 57, 436-439; Malanczuk, *op. cit.,* 1997, 75.

38 International Court of Justice. *Reparation for injuries suffered in the service of the United Nations*. Advisory Opinion. ICJ Reports 1949. The Hague: United Nations Organization, 1949, Question I, 175, 176, 177, letter "d" (preliminary observations), "As this question assumes an injury suffered in such circumstances as to involve a State's responsibility, it must be supposed, for the purpose of the Opinion, that the damage results from a failure by the State to perform obligations of which the purpose is to protect" in this case, agents of the UN. Specifically, certain international treaties will be applicable, only, internationally: International Court of Justice, *op. cit.*, 179. Further, "[a]s the claim is based on the breach of an international obligation on the part of the Member held responsible": International Court of Justice, *op. cit.*, 180. Expressly the Court recognizes that "the damage suffered involves the responsibility of a State" and it can take different forms: International Court of Justice, *op. cit.*, 185.

39 It is necessary to point out that this situation is different in the case of Law of the Sea, however, it is not the place to discuss on this issue here.

40 An explanation in Barnes, R. *Property Rights and natural resources*. Oxford: Hart. 2009, 11. The possible relationship between "juridical acts" in international law and national law is not new, for example, Kelsen, H. *El contrato y el tratado desde la perspectiva de la teoría pura del derecho*. México, D.F.: Escuela Nacional de Jurisprudencia, 1949, explains the relationship between treaty and contract.

41 Brownlie, *op. cit.*, 1996, 446.

42 "Conduct proscribed by an international obligation may involve an act or an omission or a combination of acts and omissions; *it may involve the passage of legislation, or specific administrative or other action in a given case,* or even a threat of such action, whether or not the threat is carried out, or a final judicial decision. It may require the provision of facilities, or the

world the most important source of obligations is contracts between private parties whereas in the continental legal system the most important source is Law. International obligations do have a source in contracts, international customs and Principles of International Law, depending on the subject, States might be bound by contracts with private parties[43]. The nature of the obligation is different: obligations between States are based or on Private Law or on Public Law depending on the source of law applied (contracts, treaties) establishing legal obligations. Scholars have interpreted obligations of Article 15 in a Private interpretation (contracts *vis-à-vis* law[44]) while other in a Public interpretation.

Recognition and classifications

International rights and international obligations can be seen from different viewpoints, following one of them[45], *wording* is one main object. In the case of international rights, Article 15 paragraph 1 of the CBD specifies categories included in this international legal rule: what (benefits) and how (equitable and just) to share. One author expresses[46]: *words* help recognizing existence of international obligations: "shall do", a command in a given situation[47] and "may" adds a different view in terms of permission for a State in a given situation. From paragraph 2 to 7 of Article 15 of the CBD include various obligations and paragraph 4 the expression "shall be" states an international obligation regarding to the conclusion of "Mutually Agreed Terms"[48]. Nevertheless, Article 15 uses expressions like "shall endeavour" (paragraphs 2 and 6), "shall be" (paragraphs 4 and 5) and "shall take" (paragraph 7), in which international obligations have been asserted to make States meet the terms of the duties imposed by international rules. Article 15 has included a reference to Equity and Justice including them into the rule as a condition and asking for interpretation.

taking of precautions or the enforcement of a prohibition" (emphasis added): UNITED NATIONS ORGANIZATION, *op. cit.*, 2012, 98.

43 The Private Law "approach" have been based on contracts between the State and private persons whether the Public Law "approach" have been based on the law, this idea is developed in the case studies.

44 An example of this view, RAMMANA-PATHAK, A. Intellectual Property Rights access to genetic resources and Indian shrimp aquaculture: Evolving policy responses to globalization. *The Journal of World Intellectual Property*. Vol. 18, No. 1-2, 41-64, March 2015.

45 PAUWELYN, *op. cit.*, 2003, 3-15. HENNE, G. *Mutually agreed terms: Requirements under Public International Law*. In: Mugabe, J. et al. *Access to genetic resources*. Nairobi: ACTS Press, 1997, 77-78.

46 PAUWELYN, *op. cit.*, 2003, 3-15.

47 This idea is not new, Hobbes has expressed the same under the word "command" to refer to obligations DYZENHAUS, D. Hobbes and the Legitimacy of Law. *Law and Philosophy*. 20: 461-498, 2001, 466, 482-483.

48 This is the source for a Private Law "approach".

– Article 15 of the Convention on Biological Diversity

Article 15 of CBD is *general and abstract* because legal rules order as a whole rather considering specific details and based on general concepts, sometimes difficult to interpret because richness in meaning *e.g.* "Equity"[49]. One of the criticisms about CBD is "ambiguity" of expressions due the drafting of them under the pressure of an international negotiation process in Kenya in 1991[50]: terms shall be "general" and "abstract" to be accepted by all negotiators. Finally, commentators of the CBD have argued that its obligations are extremely "weak" and consider only certain obligations[51]. However, Law should be general and abstract and weaknesses or not of the rules depend on the willingness of their application by the State.

"Sharing of benefits" and "utilization of genetic resources"

Division of gains obtained from those resources, whether in scientific or commercial terms, in a broad sense, is the concept of "Equitable Sharing of Benefits arising from the utilization of Genetic Resources". Equity plays major roles in International Law as a basis for[52]:

1. "[I]ndividualizing" Justice tempering rigor of strict laws.
2. Consideration of Fairness, reasonableness and good faith.
3. Certain specific principles of legal reasoning associated with Fairness and reasonableness: estoppel, unjust enrichment, abuse of rights.
4. Equitable standards for the allocation and sharing of resources and benefits.
5. "Distributive Justice" used to justify demands for economic and social arrangements and redistribution of wealth.

This article considers to the concept on allocation of resources. As well, to understand the contribution of "Equity" and "Justice" it is necessary to point out that international rights and obligations on "Equitable Sharing of Benefits" seem to collide with the international obligations included in rules of the Agreement on Trade Related Intellectual Property Rights (TRIPS) of the

49 STONE, C. Stemming the loss of biological diversity: The institutional and ethical contours. *RECIEL*. Vol. 6, No. 3, 1997, 232-238.

50 MCCONNEL, F. *The Biodiversity Convention: A negotiation history*. Dodrecht: Kluwer Law International, 1996, 25-27, JOHNSTON, S. North South tensions within the Convention on Biological Diversity: A case study. In: BASSE, E. M. *Environmental Law (From International to National Law)*. Copenhagen: Gad Jura, 1997, 35.

51 JOHNSTON, S., BARBER, Ch., and TOBIN, B. *User measures: Options for developing measures in user countries to implement the access and benefit sharing provision of the Convention on Biological Diversity*. Tokyo: United Nations University, Institute of Advanced Studies, 2003, 6.

52 Grinsberger citing Schachter: GRINSBERGER, M. *Biodiversity and the concept of farmer's rights in International Law*. Berne: Peter Lang Verlag, 1999, 188.

World Trade Organization (WTO)[53]. If the latter is applicable no "Equity" or "Justice" will be achievable because any information of genetic resources will be the property of the researcher. Countries around the world have put forth the potential conflict between legal rules[54]. The Doha Declaration of the WTO[55] clearly states importance of the conflict and solutions concerning legal rules. Legal rules enforcing sharing of benefits in an equitable and just form, the Protocol or rules of EU reinforce rights of people and States to receive gains from trade of these resources (based on human rights treaties or international environmental treaties). As well, national legal rules clarify the process of interpretation and application of this article. Clarification will be drawn up from a basic classification between distributive, commutative and procedural Equity.

Equity, the formal view points

"Commutative Equity" is the exchange or interchange that happens between parties in a transaction, contract, on genetic resources. Parties in the negotiation process will achieve one of the form of "Equity" if they are equal in legal and economic powers. "Distributive Equity" is the act of apportionment by a third party of benefits arising from genetic resources. "Procedural Equity" is the process in which a series of steps gives the opportunity to those that hold a right to the benefits to voice and ask for a share arising from genetic resources. Article 15 paragraph 7 establishes juridical acts to the CBD States parties should follow to comply with the obligation in the paragraph:

1. Share benefits in "a fair and equitable way".
2. Sharing should be with States provider of those resources.
3. Object of this sharing are results from research and development, benefits from the utilization (including commercialization).
4. Agreements for sharing benefits should be between States[56].

As put forth by Cassese[57], International Law without interpretation and application in the national legal system has no interest. This is due to a process called "incorporation" in which International Law is included into the national legal system.

At the international level, the process of implementation in a legal sense can be achieved by treaties derived from other treaties like the Protocol as well as other sources of international law. These conventions can be consi-

53 World Trade Organization. *International Treaty on Trade related Intellectual Property Rights*. Geneve: United Nations Organization, 1996, article 27, para. 3 letter *b*.

54 World Trade Organization. *Article 273b, traditional knowledge, biodiversity*. Geneva: World Trade Organization, 2004.

55 World Trade Organization, *op. cit.*, 2004.

56 United Nations Organization. *Convention on Biological Diversity*, 1992, article 15.7.

57 World Trade Organization, *op. cit.*, 2004, 12.

dered interpretation of abstract terms of an international treaty, for example, Article 15 of CBD. On the other hand, laws rules the legal implementation in the national legal system.

"Equitable Sharing of Benefits" is primarily ruled by Article 15 of CBD[58] and the article establishes certain commands for parties to CBD. Moreover, following Article 26 of VCLT, the performance of "Equitable Sharing of Benefits" is ruled by Article 15[59] in good faith, therefore a new term should be considered. In this sense, any result of the division of gains should consider those involved by protecting their rights[60].

The recognition of sovereignty over genetic resources

International treaties such as the ICSECr recognized sovereign rights over Natural Resources to people[61] but it was not sufficient for the requirements of developing countries. Mexico, for example, defended States' control over Genetic Resources during CBD's negotiations[62]. Nevertheless, its position changed during the last part of the negotiation process of CBD[63], because acknowledgement of sovereign rights over Genetic Resources (the first international legal recognition of rights over genetic resources). Certainly, this principle has been included in the Stockholm Declaration on Environment and Development[64] and in UNCLOS[65]. However, since the inclusion in a treaty ruling genetic resources on land is considered a legal rule. Recognition of Sovereignty makes clear that States do have a right in decisions on genetic resources. However, this has not been the case in the history of these resources.

58 MUGABE, J., BARBER, Ch. V., HENNE, G., GLOWKA, L., and LA VINA, A. Managing access to genetic resources. In: MUGABE et al. *Access to genetic resources*, *cit*., 5-31.

59 HENNE, *op. cit*., 1997, 86, "Article 26. Pacta sunt servanda. Every treaty in force is binding upon the parties to it and must be performed by them in good faith", UNITED NATIONS ORGANIZATION, *Vienna Convention on the Law of Treaties (with annex)*. Concluded at Vienna on 23 May 1969, United Nations Treaty Series. Vol. 1155, I-18232, 1969, article 26.

60 No sharing without right. No right without sharing.

61 SCHRIJVER, *op. cit*., 1995, 32, 227, Article 1. 2. "All peoples may, for their own ends, freely dispose of their natural wealth and resources without prejudice to any obligations arising out of international economic co-operation, based upon the principle of mutual benefit, and international law. In no case may a people be deprived of its own means of subsistence". UNITED NATIONS ORGANIZATION. *International Covenant on Economic Social and Cultural Rights*. Geneva: United Nations Organization, 1966, Article 1.2.

62 MCCONNEL, *op. cit*., 1996, 72.

63 GLOWKA, L., BURHENNE-GUILMIN, F., and SYNGE, H., in collaboration with MCNEELY, J. and GUNDLING, L. *A Guide to the Convention on Biological Diversity*. Environmental Policy and Law Paper, No. 30. Gland: World Conservation Union, 1994, 76.

64 UNITED NATIONS ENVIRONMENTAL PROGRAM. *Stockholm Declaration of Environment and Development*. Stockholm: United Nations Environmental Program, 1972

65 UNITED NATIONS ORGANIZATION. *Convention on the Law of the Sea*. Montego Bay, 1984, particularly, articles 2 and 3. Available at: http://www.un.org/Depts/los/convention_agreements/texts/unclos/closindx.htm (12.6.2015).

Before CBD, a large number of treaties on the Environment ruled biological resources; large animals and plants. None focused on genetic resources[66]. Today, more than 500 international agreements rule the Environment. Largely, these treaties rule conservation without considering micro-organisms and genetic resources. Briefly, CBD solved the problem of ruling genetic resources' sharing of benefits equitably and just (micro-organisms, plants and animals) but under territorial sovereignty.

– Cases studies on interpretation and application

Equity and Justice have been applied at the "International Law level", the Protocol and at the "comparative national law level" Brazil, India and the European Union.

Nagoya Protocol

The Protocol has been enacted to obtain an "Equitable sharing of benefits from the utilization of genetic resources"[67] intrinsically related to CBD[68]. It has included rules on obligations to respect benefits according to international rights and obligations[69] by reference "to the sovereign rights of States" and Article 15[70]. The scope of this Protocol includes sharing "benefits arising from the utilization of such resources"[71]. "[T]raditional knowledge" and the benefits from its utilization have been included as well[72]. The Protocol has been considered sharing benefits between States ("Party") providing or acquiring these resources[73] as well to include genetic resources "held by indigenous people and local communities" in accordance to national legislation regarding rights over these resources[74]. Benefits might be monetary and non-monetary[75] and knowledge over these resources has been included[76]. Therefore, definitions, moments, procedures for subjects of Equitable Sharing Benefits by International Law and later by national legislation as well as

66 SÁNCHEZ, *op. cit.*, 1994, 1-2.

67 UNITED NATIONS ORGANIZATION. *Nagoya Protocol on Access to Genetic Resources and the fair and equitable sharing of benefits arising from their utilization to the Convention on Biological Diversity*. Montreal: Secretariat of the Convention on Biological Diversity, 2011, para. 3, article 1.

68 UNITED NATIONS ORGANIZATION, *op. cit.*, 2011, para. 2.

69 Article 1 mention "all rights": UNITED NATIONS ORGANIZATION, *op. cit.*, 2011, article 1.

70 UNITED NATIONS ORGANIZATION, *op. cit.*, 2011, para. 3, 4.

71 UNITED NATIONS ORGANIZATION, *op. cit.*, 2011, article 3 first line.

72 UNITED NATIONS ORGANIZATION, *op. cit.*, 2011, article 3 second line.

73 UNITED NATIONS ORGANIZATION, *op. cit.*, 2011, article 5 para. 1.

74 UNITED NATIONS ORGANIZATION, *op. cit.*, 2011, article 5 para. 2.

75 UNITED NATIONS ORGANIZATION, *op. cit.*, 2011, article 5 para. 3.

76 UNITED NATIONS ORGANIZATION, *op. cit.*, 1992, article 5 para. 5.

by "common agreed terms" have been considered. Benefits from utilization should be paid to subjects entitled by rights over these resources. The exact amount has to be defined by national legislation but it should not be, under any legal standard, unfair. What is "fair" and "unfair" is not established by the rule. However, when it is included in a legal rule is based on interpretation, in this case, considering different types of equity and amounts or percentage should rule the rights on the idea of earning "no-all" but "no-nothing" to those involve. Benefits should be used for improving quality of life of those entitled by Law or for conservation and sustainable use of the resources.

Regulation 511/2014

The European Union, in accordance to the Protocol and CBD, enacted a Regulation ruling one of the aspects of the gains ensuring that no genetic resources will be utilized without a lawful benefit sharing just and equitable to them[77]. The Regulation recognizes CBD as source of international legal rules on equitable sharing of benefits from genetic resources[78] establishing "rules governing compliance with access and benefit sharing". Implementation of this Regulation in an effective manner will help "conservation of biological diversity and sustainable use of its components"[79]. The main goal of equitableness has been defined in this Regulation: the real possibility to receive gains from utilization of resources sustaining conservation and sustainable use[80] (the "no-nothing" and "no-all").

2. LACK OF REGULATION: SHARING BENEFITS EQUITABLY AND JUST FROM MGR IN HSS

Legally speaking, the High Seas[81] is a "common space" and everything there is under "open access regime" due to the "freedom of the high seas"[82] including

77 EUROPEAN UNION. *Regulation (EU) No. 511/2014 of the European Parliament and of the Council of 16 April 2014 on compliance measures for users from the Nagoya Protocol on Access to Genetic Resources and the fair and equitable sharing of benefits arising from their utilization in the Union*. Brussels: European Union, 2014.

78 EUROPEAN UNION, *op. cit.*, para. 1.

79 EUROPEAN UNION, *op. cit.*, article 1.

80 Here problems related to the application of this Directive *vis-á-vis* the application of the Convention on Biological Diversity will not be addressed.

81 The main rules are the International Customary Law, United Nations Convention on the Law of the Sea, Agreement related to the implementation of Part XI, Agreement related to the Implementation of Provisions of UNCLOS relating to the Conservation and Management of Straddling Fish Stocks and Highly Migratory Fish Stocks, in SALPIN, CH. *Marine genetic resources and the Law of the Sea*. New York: Division of Ocean Affairs and the Law of the Sea, United Nations, 2013, 5. Rightly the author points out the "equitable and efficient utilization" of the resources: SALPIN, *op. cit.*, 6. However, no discussion is on the equitable sharing of benefits

MGRs[83]; International Law protects such possibility under the legal figure of "occupancy"[84]. Once defined as a space in which States do not have jurisdiction, International Law has "moved" to define certain degree of control on the human activities on this part of the Earth[85]: the "flag rule" defining control over activities of vessels in the High Seas[86], the International Court of Justice defining application of international treaties on certain biological resources[87], a proposal towards an international agreement[88] *vis-à-vis* conservation, sustainable use and utilization of biological and genetic resources in this area have been discussed at the United Nations Organization and other international subjects[89]. This discussion is related to recent scientific discoveries[90]

from the utilization of the resources. One thing is the division of utilization among the parties, a different thing is the division of benefits among the parties.

82 Orrego Vicuña, F. *The changing International Law of high seas fisheries*. Cambridge: Cambridge University Press, 2004, 4.

83 Three areas might be developed from Marine Genetic Resources: "new set of tools" (Genomics, bioinformatics and proteomics), "Understanding" ("species physiological responses to the environment, gene environment interactions" determining "biodiversity at multiple scale"), "Biotechnology" ("aquaculture, pharmaceuticals, cosmetics, environmentally friendly technology"). Monteiro-Neto, C. *Marine genetic resources, current and future challenges, social and economics aspects*. United Nations open ended informal consultative process on oceans and the Law of the Sea. 8th Meeting. New York: United Nations Organization, 2007, 4. As well, various organisms in extreme conditions have "potential industrial application": Monteiro-Neto, *op. cit.*, 6. As well Marine microorganisms are "the central catalyst (Gatekeepers) of global element cycling": Glöckner, F. O., *Marine microbial diversity and genomics*. United Nations open ended informal consultative process on oceans and the Law of the Sea. 8th Meeting. New York, 2007, 2.

84 For example, the Chilean Civil code, written by Andrés Bello, considers such possibility limiting the title to international law.

85 Reasons for the needs of international legal rule, the application of the concepts of High Seas or Common Heritage of Mankind, multi competence of various sectors, no coordination between the sectors: Salpin, *op. cit.*, 14.

86 Crawford, *op. cit.*, 311-312.

87 International Court of Justice. *Peru v. Chile*. The Hague: United Nations Organization, 2014.

88 The focus of this article is on benefits sharing and its regulation, for an overview of other approaches cfr. Korn, H., Friedrich, S., and Feit, U. *Deep Sea genetic resources in the context of the Convention on Biological Diversity and the United Nations Convention on the Law of the Sea*. Berlin: Federal Agency for Nature Conservation, 2003. The text, however, focus on the "decisions" of the Conference of the Parties of the Convention on Biological Diversity. It is under discussion the degree of legal binding rules of such "decisions". They might *lege ferenda*. Some of the points of conflict, access, are complementary as far as biological resources but not as genetic resources were concerned.

89 United Nations Organization. *Report of the International Law Commission on the work of its fifty-third session*. New York: United Nations Organization, 2008. European Parliament. *Towards a possible international agreement on marine biodiversity in areas beyond national jurisdiction, Directorate General for Internal Policies, Committee on Environment, Public Health and Food Safety*. Brussels: European Union, 2014.

90 The Royal Swedish Academy of Science. *The Nobel Prize in Chemistry 2008*. Nobelprize.org Nobel Media AB 2014. Web. 29 June 2015. Stockholm: The Royal Swedish Academy of Science, 2015. Available at: http://www.nobelprize.org/nobel_prizes/chemistry/ laureates/2008/

as well as recognition of the degree of degradation of the Seas[91]. For this article the main point is to elaborate on the definition of rights of people, States and other subjects on biological and genetic diversity in the High Seas.

Such a definition might help determining division of gains to be occurred when genetic resources, accessed in this area, would be for development of new drugs or medicaments and new sources of information or development of research.

CBD and UNCLOS have been framed on the equitableness. Both recognized the sovereignty of States but used equity as a source to solve possible future conflicts in the utilization of resources. UNCLOS expressed such recognition to equity in the Preamble, the same for CBD.

Particularly, access to High Seas is unrestricted: There is no legal regime for genetic resources in High Seas unless the application of a different regime ruling biological resources and particular species[92]. However, an "inclusive interpretation" has been put forth[93] as well a mixture of law and governance: institutional cooperation and coordination[94]. Others claim "commodification" and privatization although the gene pool might be "common heritage of mankind"[95] but there will be no sharing benefits from genetic resources. Conservation and sustainable use depending on the legal situation of the resource, is under a combination of two treaties, CBD and UNCLOS. However, utilization is not clearly ruled: Sharing the possible MGRs benefits' in High Seas is beyond these conventions: rule by CBD in TS, not ruled by UNCLOS

press.html/ (2015). It was for the "discovery and development of the green fluorescent protein, GFP" This protein might be observed and synthesized from the jellyfish, Aequoreavictoria and this fish is in the currents off the west coast of North America. As well, Novel Enzymes Deep Vent DNA Polymerasa from thermococcuslitoralis a bacterium, and others, SLATERRY, M. *Marine genetic resources: Experiences in commercialization*. United Nations open ended informal consultative process on oceans and the Law of the Sea. 8th Meeting. New York: United Nations Organizations, 2007, 2-3.

91 SCHWARTE, CH. Environmental concerns in the adjudication of the International Tribunal for the Law of the Sea. *Georgetown International Environmental Law Review*. Spring 2004; 16, 3 Abi/Inform Global, 421.

92 KORN and FEIT, *op. cit.,* 34: "species or particular stocks" rightly the authors explain the different kind of legal objects and the lack of regulation.

93 WOLFRUM, R., and MATZ, N. The Interplay of the United Nations Convention on the Law of the Sea and the Convention on Biological Diversity. In: FROWEIN, J., and WOLFRUM, R. *Max Plank Yearbook of United Nations Law*. Dordrecht: Kluwer Law, 2000, 445-480.

94 VAN ASSELT, H. International Environmental Law: Forests at the intersection of the climate and biodiversity regimes. *International Law and Politics*. Vol. 44, 2012, 1258-1264.

95 THOMPSON, C. International Law of the Sea/Seed: Public domain versus private commodity. *Natural Resources Journal*. Vol. 44, Summer 2004, 843-844. Such a view has been long changed in the Convention on Biological Diversity. Different legal status is for those genetic resources in the Sea Bed. However, not all these resources are in the Sea Bed and no words have been said on the benefits, if they are Common Heritage of Mankind their benefits should be share with the mankind as pointed out by UNCLOS. Articles 136, 150, 155, 311, all related to the Area.

in the High Seas, a first lack of regulation[96]. But, what is a gap, who define the gap and the quality of an act as necessary to be ruled and how in a legal syste,? And as an answer: Which sources will define who gets what from genetic resources equitably?[97].

United Nations Convention on the Law of the Sea[98]

Legal researchers understand UNCLOS[99] ruling on marine richness (legal objects) by ruling renewable natural resources ("species and particular stocks") and non-renewable natural resources. On the first group of "legal objects" none regulation has been defined for genetic resources. Is it possible to define future regulation on MGRs on the High Seas applying certain legal rules from other international treaties? From a legal standpoint is necessary to define who gets what in an area of the World without a subject having rights *per se* or *a priori* in the Kantian way of the expression. Supposedly one rule might shade light on the subject: "Contracting Parties shall implement this Convention with respect to the marine environment consistently with the rights and obligations of States under the Law of the Sea"[100].

Such rule establishes rights and obligations for Coastal States in the Exclusive Economic Zone (EEZ). Beyond 200 Sea Miles no rights neither obligations might be applicable as far as CBD and UNCLOS are concerned because of the regulation of CBD: genetic resources under sovereign rights[101]. As well, main concern has been "practical options for benefits sharing, including options for facilitating access to samples" that should be read "practical" like contracts and "intellectual property aspects"[102] (dimensions of North-South discussion arises: technology's owner against resources' owners: legally no

96 WOLFRUM and MATZ, *op. cit.*, 445-480. About the legal reason for this gap, it is not defined: normative gap or moral gap. This is a problem of any legal system including the international legal system. About this problem: ATRIA, F. Creación y aplicación del derecho: entre el formalismo y el escepticismo. In: ATRIA, F. et al. *Lagunas en el derecho*. Madrid: Marcial Pons, 2005, 67.

97 Other research based on information of patents make the same question but including the topic of access as well as monetary and non-monetary gains, OLDHAM, P., HALL, S., BARNES, C., OLDHAM, C., CUTTER, M., BURNS, N., and KINDNESS, L. *Valuing the deep: Marine genetic resources in areas beyond national jurisdiction*. Defra Contract, MB0128 Final Report Version One. London, Defra: 2014, 12.

98 United Nations has addressed the problem presented here by establishing an "Ad Hoc Open-Ended informal Working Group to study issues relating to the conservation and sustainable use of marine biological diversity beyond areas of national jurisdiction". SALPIN, *op. cit.*, 15.

99 UNITED NATIONS ORGANIZATION, *op. cit.,* 1994.

100 UNITED NATIONS ORGANIZATION, *op. cit.,* 1994, article 22, para. 2.

101 Accurately sovereign right over genetic resources do extend until 12 Sea miles.

102 SALPIN, *op. cit.*, 17, 19. The patent activity on this subject is high, 537 patents claimed by developed countries Arnoud-Hoond cited by SALPIN, *op. cit.*, 20.

ownership might be claim, *prima facie*[103]). However, more important is the place where genetic resources are situated: focus is on High Seas.

Spaces and High Seas

UNCLOS has established three main areas and the State has different rights with different degree of control: Full sovereignty (TS), sovereign rights diminish in extension (CZ), certain State's sovereign rights and certain international legal rights and obligations related to natural resources and with them to the environment (EEZ). TS is defined in article 2 paragraph 1 based. The rule of International Law explains the degree of extension of the rights derived from sovereignty. The extension is not horizontal but vertical too: air space. It is possible to define some specific obligations derived *contrario sensu* from the "right to innocent passage", for example, letters "h" (pollution), "i" (fishing), "j" (research and survey) of Article 19, international obligations for subjects of "the right to innocent passage" and the flag State of the ship. Other treaties have established rights like those related to climate change[104]. As well CZ establishes certain rights to the coastal state: to "punish the infringement of the above laws and regulations" it means on international legal rules stated for TS has an extraterritorial application because the State, due to infringement of these laws, will prosecute ships and people established outside TS. The violations of those international legal rules have been committed in the territory or in TS as stated in Article 33 letter "b". Further, EEZ starts after TS and is subject to certain specific rights as stated in "Part V" of UNCLOS. As far as this research is concerned CS has certain rights like sovereign rights for "the purpose of exploring and exploiting, conserving and managing the natural resources" and "other activities for the economic exploitation and exploration of the zone" for example, production of energy, (letter "a" paragraph 1 of Article 56). UNCLOS recognizes jurisdiction to "marine scientific research" and "protection and conservation of the environment" as established in article 56 paragraph 2 "ii" and "iii". UNCLOS in paragraph 2 of Article 56 considers rights of other States on this area.

The utilization of resources

As pointed out in UNCLOS, utilization of resources has been established for the Coastal State till 200 Sea Miles and no other regulation after this limit[105].

103 About this discussion the excellent article of Sam Johnston, JOHNSTON, *op. cit.*, 1997.

104 KINGDOM OF THE NETHERLANDS. *Urgenda Foundation versus The Kingdom of the Netherlands, The Hague District Court has ruled today that the State must take more action to reduce the greenhouse gas emissions in the Netherlands. The State also has to ensure that the Dutch emissions in the year 2020 will be at least 25% lower than those in 1990*. C/09/4566689/HAZA 13-1396. 24 June 2015. The Hague: Government of the Netherlands, 2015

105 Recently a research on this issue has come to the following conclusions, a growing

The main problem is the utilization of natural resources beside the Area. Although article 59 includes, in case of conflicts, "equity", "the relevant circumstances", "the respective importance of the interest involved to the parties as well as the international community as a whole" the consideration to an interest from a sovereign State and its rights established in an international treaty creates a different juridical framework *vis a vis* the utilization of natural resources in the High Seas: it might be a possible source for new international legal rules considering the possibility of establishing of rules of solution of conflicts derived from the utilization of natural resources. In order to define the concept of "utilization" of natural resources, particularly living resources, by defining "its capacity to harvest the living resources", give access to Third States to the "surplus of the allowable catch", paragraph 2 of article 62. As well article 62 paragraph 3 considers "all relevant factors" among them "significance of the living resources of the area to the economy of the Coastal State", "its other national interest", "provisions of articles 69 to 70", "requirements of developing States in the sub-region or region in harvesting part of the surplus and the need to minimize economic dislocation in States whose nationals have habitually fished in the zone" and the second possibility is on States "which made substantial efforts in research and identification of stocks" something that has been considered by the International Court of Justice[106].

¿Private rights on derivatives of Marine Genetic Resources?[107]

The discussion on benefits has been focus for long time on intellectual property rights and it is a controversial issue not well propose. MGRs have a free

interest in Marine Genetic Resources takes places inside national jurisdictions, Marine organisms from areas beyond national jurisdiction appearing in patents are from areas inside national jurisdiction, marine invertebrates inside the territorial sea are the focus of products, the products in the market from marine genetic resources belong to resources inside national jurisdiction and this discussion is on potential economic values as well this will be anticipatory governance of these resources in OLDHAM et al., *op. cit.*, 12-13. Others, following the idea of regulation on the Seas proposed clarification of the rules governing access and sharing of benefits equitably from genetic resources from the High Seas based on the creation of new international institutions, GREENPEACE. *Black Holes in the deep ocean: Closing the legal voids in the High Seas*. Amsterdam: Greenpeace, 2005, 1, 4.

106 INTERNATIONAL COURT OF JUSTICE. *Peru v. Chile*. The Hague: United Nations Organization, 2014.

107 PEÑA NEIRA, S. *La equidad en la utilización de los recursos genéticos naturales. Defendiendo los derechos de sujetos internacionales: interpretación y aplicación y derecho comparado*. Huelva: Universidad Internacional de Andalucía, 2013, 456. For an explanation on the question related to this subject, HEAFEY, E. Access and benefit sharing from marine genetic resources from areas beyond national jurisdiction: Intellectual Property, Friend not Foe. *Chicago Journal of International Law*. Vol. 14, No. 2, article 5, 508-509.

access[108], clearly sharing of benefits has not been stated in an international legal rule on the subject but the rights over these resources belong to "all people". Therefore, just applying this line of reasoning any other rights on these resources will produce a legal confrontation.

On derivatives, however, the complexity changes. It is clear, under CBD and the Protocol as well as the European regulations that sovereign rights on genetic resources and their derivatives should be protected under national legislation. This is clear for genetic resources under a jurisdiction derived from sovereignty. It is unclear for MGRs. If they belong to "all people", the hypothesis of this article, they have rights over these resources and derivatives. Therefore, a legal collision might be presented.

The conservation and sustainable use of resources

Section II of Part VII rules the Conservation and Management of Living Resources on the High Seas. Fishing living resources[109] is free for all nationals of all States in the High Seas in accordance to article 116. However, the same article includes certain legal limits based on treaties from the State, rights and duties for the State based on certain articles of the Convention and the provisions from Section II. A general rule on conservation of living resources is established in Article 117. Therefore, in case of genetic resources this general rule should be applicable and the only possible exception might be vessels without a State flag and considering such a vessel as a pirate might be possible. A second international obligation of cooperation in the conservation and management of living resources arises from article 118. On the conservation of living resources in High Seas certain measures should be taken, all of them stated in Article 119, like maintaining and restoring populations of living resources, letters "a" and "b" of the aforementioned article.

Recognition of International Law by an international rule of law

The Preamble of UNCLOS expressly includes "a legal order for the Seas and Oceans" considering goals, among others, "the equitable and efficient utilization of their living resources, the conservation of their living resources" and these goals "will contribute to the realization of a just and equitable international economic order" considering interests and needs of mankind as a whole as well as needs of developing countries. As pointed out before, "Sovereignty

108 In certain respect this conclusion follows the current legal situation of biological resources, particularly on fishing, *e.g.*, ORREGO VICUÑA, *op. cit.*, 3. Freedom the utilization of resources, but not exhaustion. Generally speaking, researching on genetic resources will not exhaust them.

109 ORREGO VICUÑA, *op. cit.*, 4.

over Genetic Resources" is related to the right to control these resources in order to conserve, use but particularly utilize or trade resources for gains from them to provide for their people[110]. Therefore, international rights as well as international obligations of the State are the viewpoints heralded by this study, proposing, modestly, that genetic resources in High Seas are under the "rights of the people": benefits should be shared in accordance to this international legal rule. Further, future international regulations on this subject should consider and define who or how will be the division of gains considering interest to conserve genetic resources in the High Seas and need from people to have benefits from products derived from the information of MGRs. In principle, such discussion should not prevail because the gains from the products might be shared in order to help for conservation and further research and to provide for the need of people.

CONCLUSION

In International Law of the Sea no legal rules have been enacted to rule on sharing benefits from MGRs in the water column answering the research questions because such degree of specification has not been achieved and other "spaces" in the sea are under the rule of law. Certainly, rules should be based on minimum impact of costs for research and other activities in the High Seas. Solutions to this problem, lack of legal rules, should considered existing legal rules (actually "in force") in an harmonic and systematic (logical) interpretation and application of these rules as explained in the article. On the subject owning MGRs it is possible to derive legal rules on "ownership" over MGRs based on international conventions, ICSECr particularly, article 1 on the disposition of natural wealth and resources belonging to "all people" (subjects of this right) in the world, might serve as basic rule. High Seas belongs to no one and wealth and resources in these areas belong to "all people" represented by States unless a legal exemption. Therefore, benefits should belong to them but administration might be exercise by the States or an international organization. In defining gains to everyone two rules should be followed, one on investment for creation of benefits and other on ownership over these benefits. Sharing benefits from genetic resources might be possible applying one of current legal "models" or a combination based on rights and principles from International Law and legal theory defining rights and obligations based or on International Customary Law or Principles of International Law or legal reasoning behind international legal rules in UNCLOS

110 UNITED NATIONS ORGANIZATION. *International Covenant for Economic, Social and Cultural Rights*. New York: United Nations Organization, 1966, article 1. para. 2. INTERNATIONAL COURT OF JUSTICE. *Whaling in the Antarctica (Australia versus Japan)*. The Hague: United Nations Organization, 2014, para. 107, 108.

(the 200 miles zone regime) and a process of enactment using analogy of new international legal rules, based on sources. Any kind of rights over benefits should consider the rights over resources. On the question of what to get a possibility is intellectual property rights on a discovery or sovereign rights over natural resources properly but might collide against rights of "all people" owned by States and possibly monetary gains from their commercialization. On justice and equitably the case study as well other elements concludes on defining percentages to be used for conservation of MGRs om HS.

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