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The Environmental Regimes Fragmentation: Towered Legal Taxonomy

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It is widely known that there has been a large expansion in the international environmental law thus making it a unique branch of international law. A few environmental regimes have arose in the sub-fields, each with their own purpose and operating individually such as hazardous waste, air pollutants, biodiversity and many others. Such expansions arose in response to the degradation of the environment, but in spite of international efforts the international environmental regimes have to deal with diverse rules, efforts and applications. Academicians refer to it as fragmentation and as such the focus of this article is on the special types of environmental fragmentation. This article also builds a legal taxonomy that offers a notion that environmental laws are workable in many areas for academicians and environmental law experts are able to identify them.

Key words: *Environmental Law, MEAs, Fragmentation, Taxonomy, approaches.*

Introduction

The majority of legal studies are on the concept of fragmentation as a phenomenon that arose inside the common body of international law (Cohen, 2011)[1] and little scholars dealt the fact that the international environmental law suffers from fragmentation. The international law is fragmented because of the many determined issues that arose in the trade, human rights and criminal laws. However, such a taxonomy is still absent and if it does exists it is especially vague within the body of environmental law. Sahib (2011) asserts that the emergence of the phenomenon of fragmentation particularly resonates with the international environmental law. As such, there is a need to delve deeply into the various categories and elements of the fragmentation of international environmental law. Initially, this article begins with the concept of fragmentation to illustrate the diverse situation so as to differentiate the different types of environmental regimes and come out with a conclusion.

Fragmentation

Although there is no commonly agreed definition, the concept was derived from the international legal community, for instance officially from the International Law Commission (ILC) report of 2006, (International Law Commission, 2006) and Koskenniemi's 2006 article entitled *Fragmentation of International Law*. Regardless of whether the term fragmentation has negative or positive ends, there is a need to treat it impartially so as to allow academicians and international lawyers to adopt it as a legal criterion when they conduct their surveys on environmental issues.

For example, Martineau asserted that it is possible to debate on fragmentation because there is an assumption that there is a general disagreement among people about the tension between unity and diversity (in international law) and how it should be managed (Martineau, 2009). However, others see it as a technical problem that arises from procedural matters. Whereas, Koskenniemi and Simma opined that fragmentation is the various acts of transposing technical know-how from the national to the international context (Koskenniemi, 2007). Lastly, other people view fragmentation as the interaction of conflicting rules with institutional practices that erodes the general international law (Sahib, 2011).
Fragmentation of international environmental law when used in the context of international law is a descriptive term and is commonly a lament. Typified as an appearance of specialised as well as relatively self-sufficient rules or rule complexes, legal organisations and fields of legal practice. Fragmentation highlights the separation and disconnect amongst regimes and institutions. Regardless of its more general significance, the concept of fragmentation has

[1] A survey by Harlan Cohen shows that it is possible to distinguish a broad variety of 'fragmentations. Such as substantive and institutional fragmentation, fragmentation along the lines of issue areas and fragmentation along geographical boundaries, between general international law and specialized regimes, fragmentation of primary and secondary norms.

specific resonance in the field of international environmental law. This phenomenon was presented by Edith Brown when she initially dealt with the concept of fragmentation when expounding the term "treaty congesting".

"*She said that countries that have successfully negotiated many new international environmental agreements have caused the emergence of a significant and potential negative side effect, that is treaty congestion. Its effect is on the international community as a group, especially international organizations and specific governments that intend to negotiate and implement agreements, but they have limited professional resources." (Weiss, 1993)*

Galaz et al (2012) asserted that fragmentation indicates the rapid increase in the number of international regulatory regimes and organisations with overlapping jurisdictions as well as vague boundaries. Others asserted that environmental norms were developed non-systematically and as such it has led to treaty congestions. For instance, Ivanova and Roy (2007) said that the "multiplicity" of environmental issues bluntly demonstrates the complexity and interconnectedness of the modern world. Ivanova further asserts that fragmentation indicates the breaking up of a whole into several parts. With the passage of time it evolves from a minor nuisance (such as the emission produced by factories in the immediate vicinity) into a serious health threat (smog across the industrialised world) and global concerns (such as trans-border air and water pollution, deforestation, reduction of biodiversity and global warming). Whereas, for Van Asselt (2014) fragmentation broadly refers to the enhanced specialisation and diversification within international institutions and it also includes the overlapping of the substantive rules and jurisdictions.

The concept of fragmentation is in need of a theoretical clarification and to a certain extent it can be provided by the sociological differentiate theory. This article will examine the various types of fragmentation in the next sub-section.

Degrees of environmental fragmentation

A growing number of academicians have attempted to find out and determine the basis of the fragmentation of environmental law. It cannot be denied that previous studies have indicated that the typical regimes and international instruments of environmental bodies are scattered and quite inaccurate about the basis and resonance for the grouping of the environmental regimes. In doing so, this article calls for a classification to divide environmental regimes into three approaches, namely regulatory, inter-linkage and clustering.

Degrees by regulation approach

Based on the underlying regulatory approach there are three types of environmental regimes, i.e. collective, mixed and lateralised MEAs.

The first group of environmental regimes is to protect the earth from common global concerns and they are the ozone (Vienna Convention for the Protection of the Ozone Layer, 1985) and climate change regimes (United Nations Framework Convention on Climate Change, 1992) as well as the persistent organic pollutant regime (Stockholm Convention on Persistent Organic Pollutants, 2001). Such regimes established the global standards and as such the core treaty obligations of these regimes are collective in nature. Since the problems being addressed are global they are treated as a "common concern of mankind" the component parties of these multilateral environment agreements (MEAs) have consented to the setting up of a combined direct regulatory measure with economic instruments. Subsequently, the said MEAs set up binding global standards for all the parties and the parties of these regimes truly undertake to comply with the obligations (Rajamani, 2006). For example, in his third report on State Responsibility, Crawford called upon the states to adopt an expressed or implied common legal interest to maintain and implement the international regime[2]

In contrast to the above, a second set of regimes were set up to protect the components of the natural resources-based global ecosystem under the control of the states, for example biodiversity (Convention on Biological Diversity, 1992) and desertification regimes (Convention to Combat Desertification in those Countries Experiencing Serious Drought and/or Desertification, particularly in Africa, 1994) The MEAs envisaged that the measures they implement will improve the application of principles as well as the duties of the general international law that are within the respective scopes of the general nature of the economic instruments. Also, the MEAs within this set of regimes also tackle the global environmental problems that are deemed to be a common concern to mankind. Since they are natural resources-related, they are to a large extent under the jurisdiction of the state, but both developed and developing states have disputed for various reason for the setting up of direct regulation measures (Leary and Pisupati, 2010). In this set of environmental regimes, the MEAs have reinstated the principle of sovereignty when applying their regulations and the prevention principle (*sic utere tuo ut alienum non laedas*).[3] For this reason, these MEAs set up a regular framework for the implementation of the collective obligations that arise from the general international law that is related to the sustainable usage of the concerned natural resources.

[2] Third Report on State Responsibility by Mr James Crawford, Special Rapporteur. UN Doc A/CN.4/507 (2000), para 106.b.

[3] This term denotes to "use your property in such a way that you do not damage others'". A legal maxim related to property ownership laws.

Another group of environmental regimes are concerned about hazardous waste, (Basel Convention on the Transboundary Movement of Hazardous Wastes and their Disposal, 1989) the biosafety (Cartagena Protocol on Biosafety to the Convention on Biological Diversity, 2000) and the pesticides (Rotterdam Convention on the Prior Informed Consent Procedure for Certain Hazardous Chemicals and Pesticides in International Trade, 1998) This third group is concerned about regulating the movement of products that carry the risk of damaging the environment and human health, and coincidentally this group of MEAs also help to protect the global environment. Nevertheless, the regulation of trans-border movements of the said products and the provisions contained in the treaties are multilateral and it creates many bilateral obligations that are reciprocal in nature.

In this setting, the previous classifications may not satisfy most of the MEAs. In the case of the first two groups, it is difficult to clearly distinguish between the MEAs that have or do not have global commons. Therefore, the criterion of national sovereignty asserted by the second group should also be considered by the first group. As for the third group, the risk and movement characteristics do not encompass many MEAs that agreed by states intending to protect the environment from disasters that may exist by the activity of movement, especially military conflicts.

Degree by interlinkage approach

This approach provides a way for classification based on the criterion of the inter-linkage notion. Robert Watson, who from the very beginning had faith in the importance of inter-linkage issues led a group of scientists in a joint project sponsored by the World Bank, United Nation Environment Program (UNEP) and NASA. The project studied the key scientific connections between a variety of key environmental and development issues (Chambers, 2008). Due to the concept of interlinkage, the MEAs exist when the aims agreed by states are linked by both membership and issues. Therefore, for the purpose of determining the specific levels of fragmentation of the international environmental law, it is only appropriate to look into the problem by embracing these elements. The inter-linkage approach sought to distinguish between the three types of fragmentation, i.e. synergistic, cooperative and conflict fragmentation.

In synergistic fragmentation, the condition exists when the main organisation or convention is inclusive of almost every country in the world and it also has an effective and comprehensive general principle for the regulation of the policies in distinct yet considerably integrated institutional and organs arrangements. A good example of this type of fragmentation is the annual report issued by UNEP that links between several MEAs, (United Nations Environment Programme, 2007) namely Vienna Convention of 1985 together with the

Montreal Protocol on Substances that Deplete the Ozone layer of 1987 and its subsequent amendments in London, Copenhagen, Montreal and Beijing in 1990, 1992, 1997 and 1999 respectively. Chambers (2008) opined that the all-encompassing Vienna Convention and the Montreal Protocol regulate all the amendments in virtually every important aspects and serve as a unified umbrella and authority that links all the different amendments and political processes. Also, since any amendment of the protocol adds something new to the regulating system as well as the decision-making procedures, every amendment will need ratification by the respective governments.

When we talk of a situation of cooperative fragmentation, we are referring to an issue that has different institutions and conventions that are not tightly integrated, the relationship between the norms and principles of the different organisations and conventions is vague and/or when the main institution or convention are not supported by all the important countries on the issue in question. Policies concerning the same issue are then outlined, decided and supervised by the different organisations and conventions or core organisations on the one hand and also by individual countries that are not members of the organisations. For example, the link between the United Nation Convention on Climatic Change UNCCC and the Kyoto Protocol (with its detailed provisions) that was initially not ratified by all the major countries and is still not ratified by the United States.

In conflictive fragmentation, there are usually different organisations or conventions that are barely connected to each other and/or they have different and unrelated decision-making procedures. In addition to that, they not only have conflicting sets of principles, rules and norms, but they also have different memberships and/or are propelled by actor coalitions that accept and may even expand the conflicts. One conspicuous example of this the regulation on the access and sharing of the benefit of plant genetic resources. Rosendal (2001) gave an example of such a conflict between two regimes that attempted to regulate this issue and the two regimes are the Convention on Biological Diversity and the Agreement on Trade-Related Aspects of Intellectual Property Rights (TRIPS). The latter sought to enhance and harmonise the systems of intellectual property rights whereas the other sought to reaffirm the sovereign rights of the states over biological resources. Negotiations between these two regimes are usually evidenced by intense disagreements between developing and industrialised countries. As a result, the pertinent rules of the biodiversity convention continue to be somewhat abstract and imprecise.

Degree by Clustering approach

Another criterion, specifically the clustering approach, can be associated with the categories of MEAs. Michael and Faude (2013) asserted that the clustering of MEAs can, albeit arguably, be used by some states to create new agreements that pick and choose the

mechanism that best serve their interest. This has led to the creation of international instruments such as organisations, forum shopping, etc. Therefore, these scattered efforts may give rise to a variety of environmental means by clustering on issues, functions and regions.
Clustering by issue: It refers to the thematic areas where grouping of MEAs have adopted. Sands et al, (2012) proposal is to cluster the MEAs according to the various thematic issues such conservation, extractable resources, the earth's atmosphere, hazardous substances and the marine environment. For example, the UNEP has, within the charter of the inter-governmental procedures on the governance of the international environment, proposed to create four thematic clusters namely: (1) conventions on sustainable development; (2) conventions on biodiversity-related issues; (3) conventions on chemicals and hazardous waste; and (4) conventions on the regional seas and its related agreements (United Nations Environment Programme, Proceedings of the Governing Council at Its Twenty-First Session, UN Doc UNEP/GC.21/9, 2001).

The issue-specific clustering seems to be especially suitable to combine the organizational elements of the MEAs, such as having joint meetings that produces the most benefit if the MEAs are thematically closely related. As an example, the potential benefit that can be derived from a meeting between the Convention on Combating Desertification (CCD) and the Basel Convention on trans-border transfer of hazardous waste will be rather limited (Oberthür, 2009). However, the prospective benefit will improve if the MEAs are from the same thematic cluster, such as a meeting between the Convention on Biological Diversity CBD and the Ramsar Convention on Wetlands (Gitay et al., 2011). Mauerhofer (2019) is of the opinion that in such cases it may result in a significant overlap of government representatives, especially if the secretariats are expected to handle similar issues and therefore such clusters will be very useful.

Functional clustering: This usually refers to the integration or amalgamation of the same functions of not less than two MEAs. As such it operates on a different level than that of clustering by issues. When clustering by issue is practiced, the criterion is the MEAs environmental policy area and the MEA is treated as one entity. However, in the clustering of functions it usually refers to the sub-units of the MEAs and which in essence splits up the MEA.

Functional integration may include different groups of MEAs as it is dependent upon the specific function in question. For instance, the common theme for all MEAs are transparency and taking part in the decision-making process and as such the shared rules might have been developed in an integral manner. Such a viewpoint has been cleverly presented by Mauerhofer (2019) when he discussed how far the norms that define the secretariat's functions are different and also ruminated on the actual functions of three MEAs, specifically: (1) the Convention on International Trade in Endangered Species of Wild Fauna

and Flora or CITES (1973); (2) the Convention on Biological Diversity or CBD (1992); and (3) the Convention on Migratory Species or CMS (1979). He also said that such sharing is expected to be more within thematic clusters, but the detection of adequate overlap will need careful analysis and it may only include a smaller number of MEAs than those gathered in the thematic clusters

In conclusion, functional clustering may turn out to be most useful if it is founded on a thorough evaluation of the similarities and dissimilarities of conditions regarding the functions being examined in the various MEAs. Busch (2009) presented the factors that need to be taken into account in such an evaluation and they are legal requirements or obstacles, the exact needs and compositions of each MEA that is involved with regards to the function, the level of similarity of the issues being examined tackled by the functional sub-unit and the overlapping membership of the pertinent MEAs.

Clustering by region: It refers to the integration and grouping of regional MEAs based on the geographical region they are in. Clustering by region also began with the concept of an MEA as a solitary entity, i.e. similar to the clustering by issue and function. The main advantage of clustering by region seems to be the general unity of the members of the various MEAs. As such, the main pre-condition for the successful integration of this type of MEA will most likely be achieved.

In the opinion of Koivurova, (2014) having a large sharing of membership might, in particular expedite the clustering of the organisational elements. For instance, under such circumstances it is easier to arrange the meetings of the convention bodies jointly or sequentially. Likewise, it will also be easier to combine the secretariats (the different convention bodies are less likely to dispute the shared administrative cost). For example, the United Nation's Economic Commission for Europe (UNECE) provides office space for several regional environmental (and also other) conventions and this proves that this kind of arrangements is workable (Koivurova, 2014).

Conclusion

This article focused on the issue of fragmentation which is seen as today's ubiquitous structural characteristic of global environmental governance. It has shown types of fragmentation and also conceptualised the debate by differentiating between the three degrees of environmental fragmentation, i.e. the regulatory, inter-linkage and clustering approach. The common distinction of the approaches is based on different criteria, namely goals or objectives, membership of conventions and the administrative elements with environmental law. The various criteria may, to a certain extent, be similar with others. For example, the distinction criterion of the collective convention under the regulation approach overlaps with the criterion of the clustering approach, especially those conventions that are grouped

according to issues and vice versa. Moreover, there may be overlap between the inter-linkage and clustering approach, and it is more so in the case of clustering by function. This can happen when a convention or organisation establishes certain norms and principles that includes participation in decision-making and meetings.

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