The North-South Political Dynamics Undermining the Effectiveness of the Cartagena Protocol on Biosafety to the Convention on Biological Diversity

Nsikan-Abasi Odong
Graduate Studies in Law Office
Faculty of Law
University of Ottawa, Canada

Abstract

The Cartagena Protocol on Biosafety to the Convention on Biological Diversity (the Biosafety Protocol)[1] is an international instrument which aims to protect the environment from the adverse effects of biotechnology. On certain critical issues, however, the Biosafety Protocol comes short, owing to the way some of its Articles were crafted to accommodate the opposing views of the developed (the North) and developing (the South) nations and this has hindered its effectiveness. The paper argues, therefore, that the economic interests of the Northern and Southern Countries had influenced the couching of some of the provisions of the Biosafety Protocol, thereby compromising the effectiveness of the instrument. The paper argues, additionally, that the interest of the North was to advance trade at the detriment of environmental safety while the South desired that environment should trump over trade and the trade-offs over these views ultimately shaped the couching of some of the Biosafety Protocol's Articles. The paper will employ the Law and Economics Methodology to canvass arguments to buttress these points. The paper will specifically employ the "Public Choice Theory" (Rationality Approach) to show that the Biosafety Protocol was deliberately undermined during its negotiation, thereby curtailing its effectiveness. Law and Economics Methodology will allow me to canvass these arguments from the "Rationality" perspective. There is no gainsaying the people living in the Southern hemisphere, are, arguably, most vulnerable to environmental problems and exposures, as such, the essence of the Article is to expose these dynamics in real terms, proffering solutions on how to redeem the situation and offering as it were, tips on how to avoid such pitfalls in the future.

The History of the Biosafety Protocol

It is apposite to start any discussion on the history of a Multilateral Environmental Agreement (MEA), which is the generic family to which the Biosafety Protocol belongs, with the UN Declaration on the Human Environment (the Stockholm Declaration) which was signed in June, 1972 and is reputed to be "the first universal document of importance on environmental matters".[2] The Stockholm Declaration marked a turning point in environmental consciousness because it "helped launch the last [45] years of increasingly intensive treaty-making in the field of international environmental law, as well as much activity within national governments"[3] The instrument declared that there was "an urgent need for intensified action at national and international level to limit and, where possible eliminate the impairment of the human environment"[4] The influence of the Stockholm Declaration can also be seen in its evolutionary nature which elevated the following concepts to the status of customary international law: the interest of present and future generations, renewable versus non-renewable resources, ecosystems, serious or irreversible damage, economic and social development, transfer of financial, capacity building and technological assistance to developing countries.

---

[1] *Multilateral Environmental Agreement Negotiator's Handbook*, 2nd ed (Joensuu: Department of Law, University of Joensuu, a Joint Publication of Environment Canada and the University of Joensuu-UNEP's Course Series 5, 2007) at 1-7, <http://unfccc.int/resource/docs/publications/negotiators_handbook.pdf> accessed on February 4, 2016, [MEA Negotiator's Handbook]

[2] *Ibid* at 1-2

[3] *Ibid*

[4] Margaret Okorodudu-Fubara, "Dynamics of a New World Environmental Legal Order" (1999) 133, Obafemi Awolowo University, Ile-Ife, Nigeria Inaugural Lecture Series, p.t 5

The integration of development and the environment and the need for international cooperation.[5]Its successor - the United Nations' Conference on Environment and Development (Rio Declaration)-does not only serve as a bridge between the Stockholm Declaration and the Biosafety Protocol, the Convention on Bio-Diversity (the CBD) - which is the parent treaty to the Biosafety Protocol, flowed directly from its stable. L. Hens puts all thesesin perspective thus,

> The principles laid down in the Rio Declarations should be seen as the (intermediate) product of an important evolution of the way of thinking about the environment, its problems, and indicated solutions. This evolution might be illustrated by referring to the two main conferences organised by the United Nations, prior to UNCED. The first, 'Conference on the Human Environment', was organised in 1972 in Stockholm, Sweden. The dominant idea was that environmental problems are essentially by-products linked to intense industrialization and use of technology by society, and, therefore, a scientific-technical approach would be able to solve these problems. The second conference was organised in 1982 in Nairobi, Kenya.It was marked by a growing awareness that environmental problems in fact have a much wider reach than their technical-scientific scope. In 1982, socioeconomic factors were already seen to be essential co-determinants of environmental issues. This insight was at the basis of establishing the Brundtland Commission, which published its report entitled 'Our Common Future' in 1987. The Rio Declaration extends this evolution towards more complexities and higher degrees of interdisciplinarity in studying environmental problems. It addresses sustainable development in terms of a set of 27 principles.[6]

The Rio Declaration was signed on June 13, 1992 and its Principle 7 enjoined all states to 'cooperate in a spirit of global partnership to conserve, protect and restore the health and integrity of the Earth's ecosystem'. But the Rio Declaration was not enforceable because itwas a mere declaration, without binding obligations.[7]This inadequacy perhaps influenced Maurice Strong to opine that the Rio Declaration "provides a glimpse of what is Possible".[8]Strong voiced out the frustration about declarations not having legal teeth by stating that" In Rio it also became increasingly clear that we need to find better ways of translating agreements into effective action at local, national and sector[i]al levels".[9]

With the above statement, Strong reignited the soft law-hard law debate on the most effective driver of international law and there are at least three schools of thoughts here: The Positivist, rationalist and constructivist. Gregory Shaffer and Mark Pollack summarize the tenets of these schools thus,

> The existing law and social science literature on hard and soft law can be divided into three camps: legal positivist, rationalist, and constructivist...positivists tend to favor hard law…For them, hard law refers to legal obligations of a formally binding nature, while soft law refers to those that are not formally binding…Rationalists, in contrast, contend that hard and soft law have distinct attributes that states choose for different contexts. They also find that hard and soft law, in light of these different attributes, can build upon each other…Constructivists often favor soft-law instruments for their capacity to generate shared norms and a sense of common purpose and identity, without the constraints raised by concerns over potential litigation.[10]

It must be stated that there are merits in the arguments put forward by each school but each seems to fall short when placed on the scale of effectiveness. For instance, there is merit in the positivist's argument that 'only hard law can create legally binding rights and obligations'.[11]

---

[5] MEA Negotiator's Handbook, *supra* note 1 at 1-2 and 1-3

[6] L. Hens, Area Studies – Africa (Regional Sustainable Development Review) – Vol. 11 – *The Rio Declaration on Environment and Development,* <http://www.eolss.net/sample-chapters/c16/E1-48-43.pdf> accessed on April 9, 2016

[7] Margaret Okorodudu-Fubara, *supra* note 4 at13

[8] MEA Negotiator's Handbook, *supra* note 1 at vi

[9] *Ibid*

[10] Gregory Shaffer and Mark Pollack, "Hard vs. Soft Law: Alternatives, Complements, and Antagonists in International Governance" Research Paper No. 09-23 University of Minnesota Law School Legal Studies Research Paper Series at 707-708, accessed on March 19, 2016, available at file:///C:/Users/USER/Downloads/SSRN-id1426123.pdf

[11] David Boyd, *The Environmental Rights Revolution* (Vancouver: UBC Press, 2012) at 80

On the other hand, because of the consensual nature of international instruments, it may be difficult to persuade states to ratify instruments with binding obligations and in that case, soft law may offer a veritable tool out of a quagmire because it is essentially not-binding. David Boyd, therefore, favours the soft law approach because of its advantages. According to him, "Soft law can be more responsive than hard law and more attractive to states because reaching agreement on such instruments can be easier, and statements or declarations can thus be more detailed and precise; for some states, soft law may enable them to avoid political difficulties associated with the domestic treaty-ratification process; and soft law instruments may be more flexible than formal treaties – easier to amend, supplement, or replace".[12]The argument pushed forward by the rationalists, however, seems the most plausible and is adopted by me -both hard and soft laws should be used complementarily and in context.

Fortunately, it did not take long for the Rio Declaration to be hardened as it became the basis for the coming on stream of at least, four MEAs: the CBD, the Framework Convention on Climate Change 1992, the Montreal Protocol on Substances that Deplete the Ozone Layer 1997 and Agenda 21.[13]It is to the CBD that we now turn to and its three goals are "to promote the conservation of biodiversity, the sustainable use of its components, and the equitable sharing of benefits arising out of the utilization of genetic resources"[14]It also provides for "measures for the conservation of biological diversity; incentives for the conservation and sustainable use of biological diversity; research and training; public awareness and education; assessing the impacts ofprojects upon biological diversity; regulating access to genetic resources; access toand transfer of technology; and the provision of financial resources".[15] From the foregoing, the CBD is thus, arguably, the first global and comprehensive MEA to address all aspects of biological diversity.

Unfortunately the CBD soon ran into brick walls, because it did not, among others, provide for "indigenous and local communities to be compensated for their contributions to the conservation and sustainable use of biodiversity"[16]It also failed to address Biotechnology.[17] To remedy these, the provisions of its Article 19 (3) was exploited which gives parties the liberty to negotiate a Protocol to give vent to the provisions of the CBD.[18] The Article provides that the "Parties shall consider the need for and modalities of a protocol setting out appropriate procedures, including, in particular, advance informed agreement, in the field of the safe transfer, handling and use of any living modified organism resulting from biotechnology that may have adverse effect on the conservation and sustainable use of biological diversity".[19]

Consequently, at the second session of the Conference of Parties (COP) to the CBD held in Jakarta, Indonesia from 6thto17thNovember, 1995, among other decisions taken was the decision to develop the Biosafety Protocol.[20]Delegates to the COP therefore put in place an Ad Hoc Working Group to develop its draft[21]The group met in Aarhus, Denmark, from 22nd – 26th July, 1996[22] and four subsequent meetings in Montréal, Canada, to identify and narrow down the content of the Biosafety Protocol.[23] The sixth session was held from 14th to 22ndFebruary, 1999, in Cartagena de Indias, Colombia where a text of the draft of the Biosafety Protocol was concluded and set out in Appendix I to the group's Report.

---

[12]*Ibid* at 79-80

[13]Okorodudu-Fubara, *supra* note 4 at12

[14]"'*A Brief Introduction to the Convention on Biological Diversity (CBD)'*,< www.iisd.ca/biodiv/cbdintro.html [CBD]> accessed 18 March, 2016

[15]*Handbook on the Convention on Biological Diversity including its Cartagena Protocol on Biosafety*, 3d ed. (Montreal: Secretariat of the Convention on Biological Diversity, 2005) at xxiii, <https://www.cbd.int/doc/handbook/cbd-hb-fore-en.pdf> accessed on March 18, 2016 [Handbook on CBD]

[16]Okorodudu-Fubara, *supra* note 4 at 9

[17] David Hunter, James Salzman&DurwoodZaelke*International Environmental Law and Policy* 2nded (New York: Foundation Press, 2002) at 953 [Hunter]

[18] "Convention on Biological Diversity",<www.cbd.int/doc/legal/cbd-en.pdf> accessed on January 29, 2016

[19]*Handbook on the Convention on Biological Diversity including its Cartagena Protocol on Biosafety*, 3rd ed. (Montreal: Secretariat of the Convention on Biological Diversity, 2005) at 14, <https://www.cbd.int/doc/handbook/cbd-hb-fore-en.pdf> accessed on March 18, 2016, [Handbook on CBD]

[20] CBD, "The CBD Conference of the Parties (COP)", *supra*note 14

[21]*Ibid, "*History"

[22] "Report of the First Meeting of the Open-Ended Working Group on Biosafety", <https://www.cbd.int/doc/default.shtml?mtg=BSWG-01,> accessed on March 18, 2016

[23] "Timeline of the Cartagena Protocol on Biosafety", <bch.cbd.int/protocol/background/> accessed on March 18, 2016,

This draft was submitted to the first Extraordinary Meeting of the COP (ExCOP) to the CBD for adoption as they met from 22nd - 23rd February,1999.[24]Despite 10 days of negotiation, delegates could not take a decision on issues apart from agreeing on what the Protocol will be called.[25]In the onslaught were the various groups with vested interests in how the Biosafety Protocol should be structured. They included the Miami Group (made up of Argentina, Australia, Canada, Chile, Uruguay and the US), the EU, the Central and Eastern European countries block, the Compromise Group (made up of Japan, Mexico, Norway, South Korea and Switzerland) and the Like-minded group (the developing countries).[26]On one side were countries desiring a strong Biosafety Protocol, premised on the 'Precautionary Principles' which stipulates that a lack of full scientific certainty should not be used as an excuse to postpone action when there is a threat of serious or irreversible damage. On the other hand was the Miami Group, who wanted any discussion to be based on 'sound scientific knowledge' in line with the WTO rules.[27]To complicate matters, the Biosafety Protocol has to be agreed by consensus, as stipulated by the CBD. Conscious of this, the Miami Group tried to slow down negotiation so that time will expire without it being finalised.[28] As a way out, the ExCOP decided to suspend the meeting and requested the ExCOP President to decide when and where the session would resume, but not later than the fifth meeting of the COP to allow for further consultations on the areas.[29]Consequently, an Informal Consultative meeting was held in Vienna, Austriafrom September 15 to 19, 1999[30] and it provided ground work for the Resumed Session of the Extraordinary Meeting of the COP (ExCOP) for the Adoption of the Biosafety Protocol which met between January 24 and 28, 2000 in Montréal, Canada.[31] Finally after 9 days of intense negotiations, delegates adopted the Biosafety Protocol on January 29, 2000,[32] as a supplementary agreement to the CBD and it entered into force on September 11, 2003.[33]The Biosafety Protocol has made impact and "has been hailed as a significant step forward in that it provides an international regulatory framework to reconcile the respective needs of trade and environmental protection with respect to a rapidly growing global industry, the biotechnology industry. The Protocol thus creates an enabling environment for the environmentally sound application of biotechnology, making it possible to derive maximum benefit from the potential that biotechnology has to offer, while minimizing the possible risks to the environment and to human health".[34]

Measuring the Effectiveness of the Biosafety Protocol

There are no clear-cut parameters to measure the effectiveness of an international instrument, let alone, the Biosafety Protocol. For Errol Mendes, the "most effective MEAs include both the *stick* of trade restrictions, which deals with the problem of free riders, and the *carrot* of financial assistance. In addition, they should have a mechanism by which the conference of member states may monitor compliance"[35]UNEP agrees with the last point made by Mendes, which explains why its International Environmental Governance process has called for the need to strengthen compliance Mechanism in MEAs. It noted that

> [i]n most MEAs, particularly framework conventions, compliance mechanisms tend to be weak or non-existent, with self-reporting and monitoring as the standard norm. Recent negotiations on the *Kyoto Protocol*, *Basel Convention*, *Biosafety Protocol* and the *Rotterdam Convention* have recognised the need for stronger non-compliance procedures.

[24] "Decisions Adopted by the Conference of the Parties to the CBD at the First Part Extraordinary Meeting", accessed on March 18, 2016, available at https://www.cbd.int/doc/decisions/excop-01-dec-en.pdf
[25] CBD, "Biosafety Protocol", *supra* note 29
[26] A Brief History of the Biosafety Protocol,<www.iisd.ca/biodiv/bswg6/excop_informals.html> accessed on 18th March, 2016
[27]*Ibid*
[28] "Biosafety Protocol-The outlook for renewed negotiations", <www.ukabc.org/cartagena > accessed on January 20, 2009
[29]*Supra* note 14
[30]*Ibid*
[31]*Ibid*
[32]*Ibid*
[33] "About the Protocol", available at www.cdb.int> accessed on May 6, 2009,
[34]" The Cartagena Protocol on Biosafety to the Convention on Biological Diversity Text and Annexes" at 1, online: accessed on February 4, 2016, <https://bch.cbd.int/protocol
[35] Mendes, Errol P., "Global Governance, Human Rights and International Law" (Routledge, USA, 2014) at 149

> However, MEAs generally do not have effective means of international enforcement, with the possible exception of trade related measures, in the *Montreal Protocol* or CITES. Even the consequences agreed to under the Kyoto Protocol are effectively only additional obligations given to a Party[36]

For others, effectiveness is tied to the implementation process. Accordingly, effectiveness should be measured in terms of the ease and actual penetration of the MEA. Little wonder that "the work in the international environmental field is focused on implementation...to continue to negotiate practical issues and technical rules for implementation of existing agreements"[37] In fact, the Biosafety Guide puts it this way, "to conclude the negotiation of a treaty marks an end, but also a beginning: the beginning of an implementation process which will determine whether the results of the negotiation will, in reality, achieve the objective which originally set the negotiation process in motion"[38]Still for others, effectiveness is a combination of a lot of factors as noted below -

> This fast pace of treaty-making may have obscured the fundamental question about whether environmental agreements are actually effective. In the last decade and a half, there has beenan increasing focus on compliance with treaty obligations, along with methods of improving domestic implementation. In discussions on strengthening international environmental governance, issues of capacity-building, coherence, coordination, compliance and synergies have been recognized as important in the context of the overall effectiveness of environmental agreements.[39]

The good news is that the Biosafety Protocol[40]has incorporated all these views and much more in its 40 Articles and 3 Annexes as it provides for, among others, The establishment of an advance informed agreement procedure for imports of LMOs, incorporation of the precautionary principle and detailed information and documentation requirements, provisions regarding documentation, confidential information and information-sharing, capacity-building, and financial resources, with special attention to the situation of developing countries and those without domestic regulatory systems.[41]

From the above, the following are some of the factors identified as parameters to measure the effectiveness of an MEA, and the Biosafety Protocol has provided for them:

1. Trade Restriction: It should be stated that liability and redress measures are always trade-restrictive. Article 27 of the Biosafety Protocol, therefore, mandates the COP to put in place, measures to deal with liability and redress.
2. Financial Assistance and Capacity-Building: Article 28 (6) of the Biosafety Protocol provides for this. It stipulates that the "developed country Parties may also provide, and the developing country Parties and the Parties with economies in transition avail themselves of, financial and technological resources for the implementation of the provisions of this Protocol through bilateral, regional and multilateral channels".
3. Mechanism to Monitor Compliance: Article 29 (4) of the Biosafety Protocol deals with this and provides that "the Conference of the Parties serving as the meeting of the Parties to this Protocol shall keep under regular review the implementation of this Protocol and shall make, within its mandate, the decisions necessary to promote its effective implementation".
4. Improvement of Domestic Implementation, Coherence, Coordination and Synergy: Article 29 (4) of the Biosafety Protocol provides for these in the following manner -

[36] MEA Negotiator's Handbook, *supra* note 1 at .4-12

[37]*Ibid* at viii

[38]An Explanatory Guide to the Cartagena Protocol on Biosafety (2003), IUCN Environmental Policy and Law Paper No. 46 at page ix, <http://www.unep.org/biosafety/files/IUCNGuide%20on%20the%20CPB.pdf> [IUCN Explanatory Guide] accessed on February 4, 2016 [IUCN Explanatory Guide on Biosafety Protocol]

[39]Note 37 at 1-10

[40] "Cartagena Protocol on Biosafety to the Convention on Biological Diversity Text and Annexes" <https://www.cbd.int/doc/legal/cartagena-protocol-en.pdf>. accessed on March 4, 2016,

[41] "Fact Sheet, Cartagena Protocol on Biosafety", from the U.S. Department of State, Bureau of Oceans $ International Environmental & Scientific Affairs Washington D.C., July 21, 2003, www.usda.gov/wps/portal/usdahome. accessed on June 5, 2009,

> The Conference of the Parties serving as the meeting of the Parties to this Protocol shall keep under regular review the implementation of this Protocol and shall make, within its mandate, the decisions necessary to promote its effective implementation. It shall perform the functions assigned to it by this Protocol and shall:
> (a) Make recommendations on any matters necessary for the implementation of this Protocol;
> (b) Establish such subsidiary bodies as are deemed necessary for the implementation of this Protocol;
> (c) Seek and utilise, where appropriate, the services and cooperation of, and information provided by, competent international organizations and intergovernmental and non-governmental bodies;
> (d) Establish the form and the intervals for transmitting the information to be submitted in accordance with Article 33 of this Protocol and consider such information as well as reports submitted by any subsidiary body;
> (e) Consider and adopt, as required, amendments to this Protocol and its annexes, as well as any additional annexes to this Protocol, that are deemed necessary for the implementation of this Protocol; and
> (f) Exercise such other functions as may be required for the implementation of this Protocol.

Indeed, the Biosafety Protocol's Preamble summarizes its far-reaching aspirations and central theme thus –

> Parties to this Protocol Reaffirming the precautionary approach…, Aware of the rapid expansion of modern biotechnology and the growing public concern over its potential adverse effects on biological diversity, taking also into account risks to human health, Recognizing that modern biotechnology has great potential for human well-being if developed and used with adequate safety measures for the environment and human health, Recognizing also the crucial importance to humankind of centres of origin and centres of genetic diversity, Taking into account the limited capabilities of many countries, particularly developing countries, to cope with the nature and scale of known and potential risks associated with living modified organisms, Recognizing that trade and environment agreements should be mutually supportive with a view to achieving sustainable development...agreed as follows:

I am, however, of the view that the effectiveness of a treaty does not always depend on the inclusion of particular concepts because no matter how strong a treaty is framed or how beautifully worded it seemed, its effectiveness could lie outside its provisions. For instance, how the treaty is perceived and received plays a vital role in whether countries will accept it or not. Also, a treaty might incorporate all these concepts and still come short in effectiveness if it fails to address socio-economic concerns. This socio-economic concerns shaped in the form of the North-South political dynamics is taking a toll on the Biosafety Protocol.

The Making of the Biosafety Protocol: North-South Political Leanings as Key Factor

In terms of effectiveness, the Biosafety Protocol leaves much to be desired because the North-South political dynamics, fueled by cultural underpinnings, among others, had influenced certain key provisions with crippling effects on the Biosafety Protocol's overall target. While Cultural dynamics could be seen as our belief systems which influence our behaviours, the North-South nomenclature is basically a euphemism used to divide countries of the world into two main groups: the developed countries (the North) and the developing countries (the South)[42] and the coinage is mostly used in international trade. Because the Biosafety Protocol has huge international trade implications, the North-South influence shaped discussions during its negotiation and even now.

How did they North-South political dynamics originate? The "origins of these expressions of a North-South dichotomy are complex, they are rooted in colonialism, the post-World War II institutions and the global economic order that have affected the development of the South"[43]These dynamics heavily influenced the negotiation of the Biosafety Protocol.

[42]Cigdem Akın & M. Ayhan, "Changing Nature of North-South Linkages: Stylized Facts and Explanations" (2007) International Monetary Fund WP/07/280 IMF Working Paper Research at 1, https://www.imf.org/external/pubs/ft/wp/2007/wp07280.pdf accessed on February 4, 2016

[43] MEA Negotiator's Handbook, *supra* note 1 at .1-6 and 1-7

Juan Mayr, who chaired the ExCOP that negotiated the Biosafety Protocol stated this much when he said that it "was no secret that these were one of the most difficult and complex negotiations between trade and environment, with numerous interests in play and varying positions of countries"[44]Before the commencement of negotiation, the North almost succeeded in scuttling the birth of the Biosafety Protocol. Again, Mayr is on hand to explain,

> Prior to re-starting the ExCOP, an event of considerable international importance took place at the World Trade Organisation (WTO) Ministerial meeting in Seattle. The agenda of that meeting included a proposal to establish a group on biotechnology under the Committee for Trade and Environment (CTE) and to recommend legal developments within the WTO agreements, which in other words, meant that any discussion about biotechnology would be subordinate to WTO rules. To great surprise, that Ministerial meeting collapsed due to massive protests and the demand for transparency in multilateral negotiations.[45]

After that collapse, attention shifted to the actual negotiation and what the North could not get by its initial scuttling bid, it got on the negotiation table by getting certain key provisions into the Biosafety Protocol, in order to advance trade over environment. The South, not to be undone by the North, also got certain provisions in. The following provisions of the Biosafety Protocol, discussed under the below headings, will reveal the extent of these weakening compromises.

The Trade-offs:

1. **Innovation over the Precautionary Principle.**

According to Stein J. of the Land and Environment Court of New South Wales in the case *of Leatch v National Parks and Wildlife Service and Shoalhaven City Council*, the Precautionary Principle is "a statement of commonsense It is directed towards the prevention of serious or irreversible harm to the environment in situations of scientific uncertainty. Its premise is that where uncertainty or ignorance exists, concerning the nature or scope of environmental harm (whether this follows from policies, decisions or activities), our decision makers should be cautious"[46]The policy was applied by the Supreme Court of Pakistan, in the case of Ms. *Shehla Zia and Ors. vWapda* with the Court handing down its underlying the principle as being to appraise first in any given circumstance, "the welfare and safety of the human beings and the environment and then to pick up a policy and execute the plan which is more suited to obviate the possible danger or make such precautionary measures which may ensure safety. To stick a particular plan on the basis of old studies or inclusive research cannot be said to be a policy of prudence and precaution"[47]The Precautionary Principle, therefore, enjoins erring on the side of caution where there is lack of full scientific knowledge on issues.

Biotechnology is a relatively new area with complexities which are still unfolding. It is only commonsensical to be cautious. Take for instance the process of Horizontal Gene Transfers which involves the combinations of genetic materials; there are inherent hazards that we are yet to come to terms with. Mae-Wan Hopaints the risk associated with this process by saying that "artificial constructs are designed to cross all species barriers and to invade genomes, in the course of which, new viruses and bacteria which cause diseases may be created, and antibiotic resistance genes spread to bacterial pathogens, making infectious diseases untreatable"[48]The objective of the Biosafety Protocol as contained in its Article1 is premised on the Precautionary Principle. It states that

> [i]n accordance with the precautionary approach contained in Principle 15 of the Rio Declaration on Environment and Development, the objective of this Protocol is to contribute to ensuring an adequate level of protection in the field of the safe transfer, handling and use of living modified organisms resulting from modern biotechnology that may have adverse effects on the conservation and sustainable.

---

[44] Juan Mayr "Doing the Impossible: The Final Negotiations of the Cartagena Protocol", CBD Special Edition, Cartagena Protocol on Biosafety: From Negotiation to Implementation at 10, https://www.cbd.int/doc/publications/bs-brochure-02-en.pdf, accessed on February 5, 2016 [Doing the Impossible]

[45]*Ibid*, at 11-12

[46]*Leatch v National Parks and Wildlife Service and Shoalhaven City Council* 81 LGERA at 270, particularly at 324, reported in the Compendium of Judicial Decisions in Matters Related to Environment (1998) Vol.1

[47]*Ibid*

[48] Mae-Wan Ho, *Horizontal Gene Transfer- the Hidden Hazards of Genetic Engineering* (Penang: Third World Network, 2004) at 2

> Use of biological diversity, taking also into account risks to human health, and specifically focusing on transboundary movements.

During the negotiation, the precautionary principle was canvassed by the South and the EU butopposed by the North, with the later desiring that any decision, particularly to stop any advancement, be based on sound scientific knowledge. While it seems that the South had succeeded in getting in the precautionary principle into the Biosafety Protocol, the North got theirs via the provision of Article 10 (6) with its contradictory and neutralizing effect. It provides that "lack of scientific certainty due to insufficient relevant scientific information and knowledge regarding the extent of the potential adverse effects of a LMO on the conservation and sustainable use of biological diversity in the Party of import, taking also into account risks to human health, shall not prevent that Party from importing such LMO, in order to avoid or minimise such potential adverse effect".

Indeed, the Report of the deliberation of the fifth session of the Ad Hoc Working Group meeting on the Biosafety Protocol leaves no one in doubt on the various positions canvassed by the different parties/blocs. For instance,Colombia's representative had "emphasized the precautionary principle and expressed concern over the little-known impacts of LMOs on biodiversity-rich countries, especially when science has focused primarily on their impacts in more homogenous agricultural conditions. She said it would be a misnomer to call this a biosafety protocol if it simply serves as a mechanism for information exchange and if it unfairly burdens importing over exporting countries. She expressed Colombia's commitment to an effective protocol balancing the CBD's objectives and the COP's mandate"[49]NGOs had also weighed in – supporting environmental safety over trade by arguing that "the protocol's primary objective should be safety, not trade, and stressed the precautionary principle …[and] the call for a global moratorium on the transboundary movement of LMOs until the protocol is in place"[50]

But in a very different tone, which to my mind, was in furtherance of the Northern interest, BioteCanada, on behalf of international industrial consortium, and by extension, the North, had, during the deliberations and advised that "energy should be concentrated where scientific research shows the potential for adverse impacts on biodiversity. He also noted industry's support for capacity-building. He said industry looks forward to continuing the dialogue on biosafety and will provide information on product development, technical issues and trade matters"[51]Aaron Cosbey and Stas Burgiel gave insight on how both sides got away with these different positions -

> After establishing that Parties could take a precautionary approach to deciding what restrictions they might put on the import of LMOs, the real negotiations thrashed out how to operationalise the principle of precaution. Some feared that the precautionary principle could be an excuse to restrict trade-in harmless goods, to protect domestic producers. They argued that such restrictions had to be based on sound science and rigorous risk assessment. Others argued that the sound-science argument itself was an excuse to limit theuse of an established principle of international environmental law.[52]

With this, the effectiveness of the Biosafety Protocol is compromised as parties will be at liberty to choose which of the Articles to obey. It will lead to confusion in policy and implementation. For instance, the confusion played out in Brazil with its Biosafety regulating body (the CTNBio) and Ministry of Environment towing different line -

> A ruling …in Brazil has authorised the planting and sale of a strain of cotton that is genetically modified to resist attack by insect pests.The decision, taken by the national technical commission for biosafety (CTNBio), was met with objections from the Ministry of Environment. A statement issued by the ministry…says the decision goes against the precautionary principle, and contravenes Brazilian environmental legislation and the Cartagena Protocol on biosafety - an international agreement that seeks to protect biodiversity from the potential risks of introducing genetically modified organisms. The ministry says CTNBio's decision was based on unpublished studies, adding that the risks of growing GM cotton have not yet been assessed in a Brazilian setting.

---

[49]The Report of the deliberations of the fifth session of the Ad Hoc Working Group meeting on the Biosafety Protocol held between 17th – 28th August, 1998, published by the International Institute for Sustainable Development (1998) Vol. 09(108)online: available at http://enb.iisd.org/download/asc/enb09108e.txt (last visited July 15, 2017)

[50]*Ibid*

[51]*Ibid*

[52] Aaron Cosbey and StasBurgiel, "The Cartagena Protocol on Biosafety: An analysis of results An International Institute for Sustainable Development Briefing Note" at 5,< http://www.iisd.org/pdf/biosafety.pdf> accessed on February 29, 02016[Cosbey]

> CTNBio issued its approval for the US-based Monsanto [C]ompany's GM cotton 'Bollgard' to be planted and sold.[53]

2. Pharmaceuticals over the Scope of the Biosafety Protocol

Article 4 of the Biosafety Protocol contains the scope which extends the sphere of the instrument to include the "transboundary movement, transit, handling and use of all living modified organisms that may have adverse effects on the conservation and sustainable use of biological diversity, taking also into account risks to human health."The scope therefore has wide application and supposedly brings everything under its auspices. But the provisions of Article 5 of the Biosafety Protocol tagged "Pharmaceuticals" is a setback as it excludes from its reach, certain categories of pharmaceuticals by providing that irrespective of the provisions of Article 4 "and without prejudice to any right of a Party to subject all living modified organisms to risk assessment prior to the making of decisions on import, this Protocol shall not apply to the transboundary movement of living modified organisms which are pharmaceuticals for humans that are addressed by other relevant international agreements or organizations"[54] The reality is that Article 5 exempts certain categories of pharmaceuticals from the scope of the Biosafety Protocol. The fact remains that the provision of article 5 was inserted to satisfy the interest of the North. This fact is contained in the Biosafety Protocol Explanation Guide thus -

> Article 5 is the result of intense negotiations in the BSWG meetings and during the Cartagena and Montreal sessions of the ExCOP. During these negotiations, many developing country delegations raised concerns about exempting pharmaceuticals for humans from the scope of application of the Protocol. Some stressed the need for the Protocol to take into account future developments in gene therapy and the use of genetically modified plants and animals to produce pharmaceutical substances, as well as the potential adverse effects of genetically modified pharmaceutical viruses and micro-organisms on human health and the environment. Article 5 clearly applies to pharmaceuticals for humans but not to the use of genetically modified plants and animals to produce them. The cultivation of such plants and the propagation of such animals and their transboundary movement is not exempt under this Article. Article 5 reflects a compromise formulation, in which only transboundary movements of LMOs which are pharmaceuticals for humans and which, as such, are also subject to other international agreements… or organizations (such as the World Health Organization), will be exempt from the scope of application of the Protocol.[55]

At the end, Article5 curtails the Biosafety Protocol's reach and this victory for the economically-developed countries' pharmaceuticals translates into a defeat to the treaty's main purpose - leaving Pharmaceuticals out of the scope of the Biosafety Protocol in whatever guise could lead to the lowering of standard because it will lead to un-standardized and multiple regulations. Nigeria's experience with multiple licensing regimes led to the importation of toxic wastes in form of drugs in the famous Koko incident into the country. The incident was traceable to the power struggle between the National Agency for Food and Drug Administration and Control (NAFDAC) and the defunct Federal Environmental Protection Agency, both of which had the powers to regulate Hazardous chemicals. NAFDAC used to grant the permits through the Pharmacist Registration Board of Nigeria[56]and "it was one of such permits, IMPORT PERMIT No 676 granted Iruekpen Construction Company of 126A Nnebisi Road, Asaba…that was used to import toxic waste into Nigeria in 1988".[57]Perhaps, the facts of the Koko incident may capture the danger here. According to R. Kumar,

> In 1987, Italian businessmen Gianfranco Raffaeli and Renato Pent, of the waste broker firms Ecomar and Jelly Wax respectively, signed an illegal agreement with Nigerian businessman, Sunday Nana, to use his property for storage of 18,000 drums of hazardous waste for approximately $100 a month…They came on a Wednesday…Many, many big lorries.

---

[53]"Brazilian ministry protests approval of GM cotton**",** Brazilian ministry protests GM approval/Lula signs Monsanto Law, http://www.gmwatch.org/news/archive/2005/1831-brazilian-ministry-protests-gm-approvallula-signs-monsanto-law accessed on March 28, 2016,

[54]Cosbey, *supra* note 52 at 5

[55]IUCN Explanatory Guide on Biosafety Protocol, note 38, box 21 at page 25

[56]AdegokeAdegoroye, "The Challenges of Environmental Enforcement in Africa: The Nigerian Experience", a Paper presented to the third International Conference on Environmental Enforcement at 52

[57]Ibid

> They took all day unloading them...This was five years ago…In the last five years, 13 people have died in this village...They have been in pain, terrible pain. We have never seen deaths like that before. Lots of our children are sick.[58]

3. LMOs in Transit/LMOs Destined for Contained Use trumps over Advance Information Agreement Procedure (AIA)

One of the beauties of the Biosafety Protocol is the creation of AIA procedure in Article 7 which mandates the exporter to give to the competent Authority in the importing State in writing, advanced information prior to the Tran boundary movement of LMOs meant for export. This gives the exporter pre-knowledge of what to expect. That way, surprises are not sprung on the exporter. Surprisingly, Article 6 of the Biosafety Protocol suspends the application of the AIA procedure regarding LMOs in transit and LMOs destined for contained use. It states -

> 1. Notwithstanding Article 4 and without prejudice to any right of a Party of transit to regulate the transport of living modified organisms through its territory and make available to the Biosafety Clearing-House, any decision of that Party, subject to Article 2, paragraph 3, regarding the transit through its territory of a specific living modified organism, the provisions of this Protocol with respect to the advance informed agreement procedure shall not apply to living modified organisms in transit.
> 2. Notwithstanding Article 4 and without prejudice to any right of a Party to subject all living modified organisms to risk assessment prior to decisions on import and to set standards for contained use within its jurisdiction, the provisions of this Protocol with respect to the advance informed agreement procedure shall not apply to the transboundary movement of living modified organisms destined for contained use undertaken in accordance with the standards of the Party of import.

The AIA procedure was put in place to help evaluate the risk and monitor movements of LMOs. Deferring to the trading parties may introduce subjectivity and consequently lead to the lowering of standard as most often, parties are concerned more about trade than the environment. But the question is, how did these two contradictory provisions become part of the Biosafety Protocol? Again, Cosbey and Burgiel offer an explanation and lay the blame on the door of North-South underpinnings; according to them,

> The central question here…was whether the Protocol should cover a class of LMOs known as LMO–FFPs—LMOs that are intended for direct use as food or feed, or for processing. In this class fall such widely traded commodities as genetically modified corn, soy, wheat, canola and tomatoes. Those opposed to including commodities in the Protocol had argued that commodities, since they are not intended for introduction into the environment, pose no threat to biodiversity and should not be the subject of a protocol to the CBD. LMOs intended for introduction into the environment, on the other hand—such as seeds and microorganisms—can mutate, migrate and multiply, and therefore may pose unexpected threats to native species. Others argued that it was impossible to ensure that LMO– FFPs would not be introduced to the environment, whatever the intent. They also argued that the Protocol should take into account the human health risks of LMO– FFPs, which the negotiators seem to have understood to mean human health risks from biodiversity impacts and direct contact (allergenic reactions), rather than risks on food safety grounds. It had been agreed by Cartagena that LMO– FFPs would fall under the Protocol's scope. The tough negotiations then concerned whether they would fall under the scope of the Protocol's Advance Informed Agreement (AIA) provisions. Those opposed argued that subjecting such a massive volume of traded goods to an AIA procedure would be unworkable.[59]

This provision may lead to the lowering of standards because what is paramount in those arrangements is trade at the expense of environment. Again, we turn to Brazil where this issue played out with the CTNBio, in total disregard to the opposition from the Ministry of Environment, on grounds of lack of scientific knowledge on risk posed by the GM corns, approved the import of 370,000 tons of GM corn from Argentina, to be used as chicken feed.[60]

---

[58] R. Vivek Kumar, "Tales of Three Villages" blog of Monday, October 29, 2012, <http://village890.blogspot.ca/2012/10/tale-of-three-villages-koko-village.html> accessed on March 20, 2016

[59] Cosbey, *supra* note 52 at 5

[60] "Brazilian ministry protests approval of GM cotton", <https://www.seedquest.com/News/releases/2005/march/11814.htm> accessed on March 29, 2016,

4. The Biosafety Protocol's Relationship with other Treaties, especially WTO regimes

The last 3 paragraphs of the Biosafety Protocol's preamble seem to contradict each other on the status of the Biosafety Protocol vis-à-vis other instruments. They provide respectively thus,

> *Recognizing* that trade and environment agreements should be mutually supportive with a view to achieving sustainable development. *Emphasizing* that this Protocol shall not be interpreted as implying a change in the rights and obligations of a Party under any existing international agreements, and *Understanding* that the above recital is not intended to subordinate this Protocol to other international agreements..

On the surface, it looks like there is no contradiction but the Biosafety Explanatory Guide would not only put these provisions in their proper contexts but also provides the rationale for their inclusions, which was to satisfy the North-South sentiments. It states thus,

> During the negotiations, various delegations were concerned that the Protocol's efforts to regulate the international trade in LMOs could either undermine, or be undermined by, existing WTO rules.
>
> WTO rules regulate the trade in all products between its Members, including trade in LMOs. For example, the WTO requires Members to ensure that trade measures do not unnecessarily discriminate between like products, and that health and safety restrictions on imports have a scientific basis...Concerned about the potential for a similar clash over the regulation of LMOs, different groups of negotiators sought *either* (i) to shield measures taken in accordance with the Protocol from a WTO challenge, *or* (ii) to ensure that, should a conflict arise, the WTO rules would prevail... The result is three paragraphs of preambular text that seek to counterbalance and accommodate the concerns of various delegations, in a manner that is intended overall to avoid conflicts between the Protocol and existing international law.[61]

From the foregoing, what then is the relationship between the Biosafety Protocol and other Treaties because these provisions above just about canceled each other? Is the Biosafety Protocol subservient or higher in status to other international instruments, especially the WTO rules? For parties who favour trade over environment, reliance could be placed on the fact that the Biosafety Protocol does not take away their obligations under other international instruments to promote trade in LMOs in ways that undermine the Biosafety Protocol's mechanism while the reverse may happen with states who prefer the environment over trade who might rely on the environment-friendly provisions of the Biosafety Protocol to reject trade on LMOs on the premise that the Biosafety Protocol is not inferior to other international instruments. Both positions seem correct, depending on who interprets, but that creates a potential landmine which is indicative of the fact that the trade and environment war is not about to abate any time soon. I am not alone in foreseeing the landmine, Cosbey and Burgielare prescient too. According to them, "The final text does not settle the question of how the Protocol relates to the WTO and other international agreements. In fact, it looks like a conflict postponed, rather than a conflict avoided. The Miami Group got what it wanted. The text states that 'this Protocol shall not be interpreted as implying a change in the rights and obligations of a Party under any existing international agreement.' The EU also got what it wanted. The next paragraph of text states that, 'the above recital is not intended to subordinate this Protocol to other international agreements'".

I am, however, of the opinion that the Biosafety Protocol, being a specialised instrument, ought to be a transcendent instrument as regards trade in LMOs; after all, parties are not compelled to ratify it. In fact, even those who have ratified same are at liberty to opt out as provided for in Article 39 of the Biosafety Protocol.

5. The Failure of most Northern Countries to Ratify the Biosafety Protocol

As at July29, 2017, Argentina, Australia, Canada and USA were yet to ratify the Biosafety Protocol[62] Any coincidence that on this list are the biggest players in GMOs trade? In LMO-based agriculture, they control the market according to the report below,

[61]IUCN Explanatory Guide on Biosafety Protocol, *supra*, note 38 at pages 27-28

[62] Cartagena Protocol on Biosafety Ratification List, <https://www.cbd.int/doc/lists/cpb-ratifications.pdf> accessed on February 4, 2016

> The commercial use of genetically modified organisms (GMOs) in agriculture is currently limited almost exclusively to different varieties from four crop species: soybeans, maize (corn), oilseed rape (canola), and cotton. In 2001, 99% of all GMO crop area world-wide was grown in four countries:68% of the crop area planted with GMOs was in the USA, 22% in Argentina, 6% in Canada, and 3% in China. World-wide, 46% of the total area that was sown with soybeans was sown with genetically modified (GM) soybean varieties, and for maize 7% of the total crop area was sown with GM maize varieties.[63]

Even in emerging areas of biotechnology, they are leading the market too. Take for instance GM trees, the US controls 74% of investment as stated below,

> Biotechnology companies have linked up with key players in the industrial forest sector to support research that will increase tree growth rates, modify wood structure, alter trees' reproductive cycles, improve tolerance to certain herbicides and even store more of the gases that are responsible for global warming. While forest-related biotech research is still in its infancy compared with agriculture, field trials of GM trees have proliferated around the world. Recent research shows that, since 1988, there have been 184 GM tree field trials globally. More trials have been conducted with poplar than any other species due to its popularity as a pulp and paper species. The U.S. has released the largest number of GM trees via field trials, with 74% of the world-wide total.[64]

I am of the view that this failure to ratify the instrument by the biggest players in the industry is, perhaps, the biggest onslaught from the North that has undermined the effectiveness of the Biosafety Protocol because it implies that large amounts of LMOs produced from these countries are left unregulated by the Biosafety Protocol's mechanism. The hypocrisy of the situation can be glimpsed from the fact that these countries participated in the negotiation of the instruments.[65]

Why the Division? What fuels the North-South War?

1. Cultural Dynamics

It seems that cultural dynamics often stoke the embers of the North-South war. For instance, during the build-up to the Biosafety Protocol's negotiation, Europe, in response to the outcry from its citizenry who had rejected GMOs and had held various demonstrations, placed a moratorium on GMOs as a precaution. This decision was more in keeping with the European values than anything else because it was not based on any scientific knowledge about the adverse nature of GMOs, rather it was precautionary. In fact, while the rest of the world was kowtowing, Europe had gone ahead and developed its own Biosafety regime along the precautionary lines, to the bewilderment of its northern allies. The US reacted by suing the EU. Interestingly, this became one of the most auspicious moves that led to the resolution of the impasse regarding the Biosafety Protocol's negotiation because the various interest groups had no choice but to close ranks to get the Biosafety Protocol underway.[66] This position by EU strengthened the argument for the eventual inclusion of the precautionary principle in the instrument.

Also, the South has always hold the position that"environmental protection and conservation should not come at the expense of their development. They have expressed the view that much of the pollution and destruction manifested today is a result of the industrial activities of developed countries. If developed countries want developing countries to forego the use of certain polluting technologies, then to avoid thwarting developing country growth, developed countries need to provide the financial and technological support this requires"[67] Consequently, the South usually receives international environmental issues with doubts, often questioning their credibility.

[63]IUCN Explanatory Guide on Biosafety Protocol, *supra,* note 38 at pages at 7
[64]*Ibid* at 9
[65] "Timeline of the Cartagena Protocol on Biosafety", <http://bch.cbd.int/protocol/background/#history> accessed on March 26, 2016.
[66] Doing the Impossible, *supra* note 44
[67] MEA Negotiator's Handbook, *supra* note 1 at 1-6, 1-7

Gupta corroborates by saying that "internationally produced scientific assessments of environmental problems such as climate change or acid rain are very differently received, and often perceived as illegitimate, in developing countries or economies in transition."[68]Voting patterns will always mirror this perception. In India, for instance, issues involving LMOs and by extension the Biosafety Protocol are seen from the prism of colonialism, therefore, India's attitude has been that of suspicion and wariness. It is usually difficult to win such a war. A war fought on the basis of perception. This is an example of cultural dynamics fueling the already charged North-South debacle. Garpa puts it this way,

> The issues that have generated the most impassioned debate in India have less to do with ecological or food safety concerns and more to do with socioeconomic considerations arising from increased reliance on GMOs in agriculture. The socioeconomic concern voiced most often is that reliance on transgenic seeds will exacerbate small farmer dependence upon multinational companies and capital-intensive agriculture. Groups who oppose use of biotechnology in agriculture often cast their arguments in overtly nationalist idioms, with slogans such as 'Monsanto Quit India' and 'bijasatyagrah' (seed-related civil disobedience), evoking images of the anti-colonialist freedom struggle of the early 1900s[69]

It must be stated that the North has not always dealt with the South openly and/or as peers. This has exacerbated the situation. One of the ways to douse the tension is transparency and respect in their relationships. These will change the perception which the South holds about the North. Until this is done, the South may have legitimate reasons to be wary. For instance, there is so much pressure for African countries to receive GMO foods or risk suspension of aids by the developed world. It seems therefore that accepting aids is no longer a matter of choice but that of compulsion, and attitude like this only deepens suspicion among Southern countries. The question that begs for answer is: why do you force me to accept a gift if your intention is clears? According to the Environmental Rights Action/Friends of the Earth,

> Africa is facing today the challenge of the introduction of GM (genetically modified) crops and GM food aid, and the pressure has stepped up in recent years on African Countries, and African leaders are being strongly lobbied to accept the tools of modern biotechnology to purportedly solve poverty, hunger, and malnutrition. Many activities on biosafety and GMOs are taking place in the region, and by reason of the paucity of information, knowledge and capacity on this issue, there is a growing concern that informed policy options and choices may not be properly addressed or made[70]

USAID even declared that one of its objectives is to "integrate biotechnology into local food systems and spread the technology through regions in Africa."[71]In fact, continued aids to African countries are tied to the open embrace of GMO foods. Little wonder that the decision to ban GM food importations by some African countries has been greeted by disapprovals from the World Food Programme (WFP). WFP is reported to have said that this decision by African countries will lead to donor countries, especially the United States, reducing donations to these countries. As such, unsurprisingly, in 2002, some Southern African countries, like Zimbabwe were under enormous pressure by the WFP and the United States to reverse the decisions on the restrictions imposed on GM food aid.[72]

2.UN Groupings during Treaty Negotiations

The UN, in a bid to give the World's regions equal representation on its bodies, usually recognizes 5 groups along regional lines or shared interest with other nations thus- the African group, the Asian group, the Latin American and Caribbean group, the Central and Eastern Europe Group and the Western European and other Group (membership here includes Western European countries, Australia, Canada, New Zealand, the US and lately, Israel- the US has an observer status but is considered a member for election purposes).[73]

---

[68]Aarti Gupta, "Governing Biosafety in India: The Relevance of the Cartagena Protocol" (2000) Global Environmental Assessment Project Environment and Natural Resources Program. at 2-3, <http://www.ksg.harvard.edu/gea/pubs/2000-24.pdf> accessed on February 4, 2016

[69]*Ibid* at 11 -12

[70] Environmental Rights Action (ERA)/Friends of The Earth (FoEN), *Genetically Modified Crops: The African Challenge* (Benin City: ERA/FoEN, 2004) at 7 [ERA/FoEN]

[71]*Ibid* at 8

[72] *Ibid* at 21-22

[73] MEA Negotiator's Handbook, *supra* note 1 at 3-34, 3-35

This unique system helps in narrowing down issues during negotiations as consensus are achieved easily. However, on the flip side, it forges a sense of oneness and solidarity along group divides which opens the old wounds of the North-South leanings. I am therefore of the view that UN should ditch this system and put in place a more inclusive one, that will allow parties to discuss without the added pressure of prying neighbours watching their backs. Parties will be more open to new partnerships in a system where their traditional allies and neighbours are not privy to what transpired during group sessions, thereby diffusing the north-south tension.

Conclusion

The Biosafety Protocol was successfully negotiated and is timely as it seeks to regulate trade in biotechnology with its innovative strategies. It is therefore an important addition in our armament for the battle for the protection of the environment. However, and as discussed above, the North-South undercurrents influenced the inclusion of some of its Articles, which are now draw-backs to the achievement of its overall objectives. Aware that there are limits to what can be done to strengthen the Biosafety Protocol's effectiveness, owing to the peculiar nature of treaties generally, I have, however, made suggestions in my recommendation in that regard.

Additionally, it is hoped that by exposing these undercurrents – The North-South dynamics- we would have armed ourselves with a guide to avoid the pitfalls during future negotiations of MEAs in particular and international instruments in general. Cosbey and Burgiels' appraisal of the Biosafety Protocol is therefore, a befitting assessment and I could not agree less, thus,

> The Cartagena Protocol overall is a mixed package. Some of the tougher issues have been postponed until a later date, and others remain unsettled through ambiguity. But the progressive elements of this agreement—the strong elaboration of the precautionary principle prime among them—make it a strong addition to the body of international environmental law. It is also welcome as a signpost on the road to more enlightened trade policy-making. The failure in Seattle, the denial of fast-track negotiating authority in the U.S., the death of the OECD efforts to conclude an investment agreement, and now the Cartagena Protocol—these are all about making trade and investment policy reflect a better balance between commercial interests and other public policy objectives. But while most of these events were roadblocks against undesirable outcomes, what happened in Montreal was an exercise in road-*building*. Though we have far to go, the Cartagena Protocol may be the closest we have come yet to reconciling trade and environmental objectives.[74]

Recommendation

1. From the above analysis, the Biosafety Protocol's effectiveness is being hampered by the provisions of Articles 10 (6), 5, 6 and the excerpts from the preamble of the Biosafety Protocol. Article 10 (6) places premium on science over the precautionary principle, Article 5 excludes certain pharmaceuticals from the scope of the Biosafety Protocol, Article 6 limits the application of the AIA on certain LMOs and the excerpts from the preamble seems to subordinate the Biosafety Protocol to other treaties – especially, the WTO rules – all these derogate from the effectiveness of the Biosafety Protocol. On making recommendation to deal with these, I am guided by the fact that the Biosafety Protocol is an international instrument which cannot be amended, therefore, I recommend that parties should take benefit of the provisions of Article 2 of the Biosafety Protocol which allow them to take additional measures to safeguard their borders against adverse effects of biotechnology to enact national legislations to render nugatory, the provisions of the Articles mentioned above and give vent to the precautionary Principle, elevate the Biosafety Protocol above other international instruments, expand the scope of the Biosafety Protocol to cover all categories of Pharmaceuticals and ensure the application ofAIA across board. For the avoidance of doubt, Article2of the Biosafety Protocol provides as follows:

> Each Party shall take necessary and appropriate legal, administrative and other measures to implement its obligations under this Protocol. The Parties shall ensure that the development, handling, transport, use, transfer and release of any living modified organisms are undertaken in a manner that prevents or reduces the risks to biological diversity, taking also into account risks to human health. Nothing in this Protocol shall affect in any way the sovereignty of States over their territorial sea established in accordance with international law, and the sovereign rights and the jurisdiction which States have in their exclusive economic zones and their continental shelves in accordance with international law.

[74]Cosbey, *supra* note 52 at 16-17

> The exercise by ships and aircraft of all States of navigational rights and freedoms as provided for in international law and as reflected in relevant international instruments. Nothing in this Protocol shall be interpreted as restricting the right of a Party to take action that is more protective of the conservation and sustainable use of biological diversity than that called for in this Protocol, provided that such action is consistent with the objective and the provisions of this Protocol and is in accordance with that Party's other obligations under international law.

2. Again, on the relationship between the Biosafety Protocol and other international instruments, including the WTO rules, I recommend that if the excerpt from the preamble ever falls for interpretation, the adjudicatory body should give an interpretation that will place the Biosafety Protocol above other instruments. After all, the Biosafety Protocol is a specific instrument. A leaf could be borrowed from the principles of interpretation employed by most national courts which interpret specific provisions above general provisions in enactments.
3. On the Failure of most Northern countries to ratify the Biosafety Protocol, I recommend that the Secretariat should woo and encourage these states to ratify the Biosafety Protocol, especially the key players in the market.
4. To douse the North-South tension, I recommend transparency and respect in the relationships between the countries of the World because I am of the opinion that what could not be achieved through arm-twisting could easily be achieved under the atmosphere of transparency and mutual respect, as parties will be willing to make concessions, when confronted with a grim picture on environmental issues.
5. I also recommend that the UN should devise a more inclusive strategy outside regional lines during treaty negotiations, as this will help in building new blocks, further solidarity and open opportunities for new partnerships among states.

Bibliography

Books

Boyd, David, The Environmental Rights Revolution (Vancouver: UBC Press, 2012)

Environmental Rights Action (ERA)/Friends of The Earth (FoEN), Genetically Modified Crops: The African Challenge (Benin City: ERA/FoEN, 2004)

Ho, Mae-Wan, Horizontal Gene Transfer- the Hidden Hazards of Genetic Engineering (Penang: Third World Network, 2004)

Hunter, David, Salzman, James &Zaelke, Durwood International Environmental Law and Policy 2nded (New York: Foundation Press, 2002)

Mendes, Errol P., "Global Governance, Human Rights and International Law" (Routledge, USA, 2014)

Okorodudu-Fubara, Margaret T., Dynamics of a New World Environmental Legal Order (1999), Obafemi Awolowo University, Ile-Ife, Nigeria Inaugural Lecture Series

Starke, G. J., Introduction to International Law, 9thed (London: Butterworths, 1984)

Case

Leatch v National Parks and Wildlife Service and Shoalhaven City Council 81 LGERA, reported in the Compendium of Judicial Decisions in Matters Related to Environment (1998) Vol.1

Seminar Material

Adegoroye, Adegoke, The Challenges of Environmental Enforcement in Africa: The Nigerian Experience, a Paper presented to the third International Conference on Environmental Enforcement

Internet Resources

Multilateral Environmental Agreement Negotiator's Handbook, 2nded (Joensuu: Department of Law, University of Joensuu, a Joint Publication of Environment Canada and the University of Joensuu-UNEP's Course Series 5, 2007), online: http://unfccc.int/resource/docs/publications/negotiators_handbook.pdf

The Cartagena Protocol on Biosafety to the Convention on Biological Diversity Text and Annexes, online: https://bch.cbd.int/protocol

International Convention for the Regulation of Whaling, online: http://library.arcticportal.org/1863/1/1946%20IC%20for%20the%20Regulation%20of%20Whaling-pdf.pdf

Declaration of the United Nations Conference on the Human Environment, online: http://www.un-documents.net/aconf48-14r1.pdf

The Convention to Regulate International Trade in Endangered Species of Flora and Fauna (CITES), online: https://www.cites.org/eng/disc/what.php

The Convention on Wetlands of International Importance Especially as Waterfowl Habitat, online: http://www.ramsar.org/sites/default/files/documents/library/current_convention_text_e.pdf

Shaffer, Gregory C. and Pollack, Mark A, Hard vs. Soft Law: Alternatives, Complements, and Antagonists in International Governance, Research Paper No. 09-23 University of Minnesota Law School Legal Studies Research Paper Series, online: file:///C:/Users/USER/Downloads/SSRN-id1426123.pdf

A brief introduction to the Convention on Biological Diversity (CBD), online: www.iisd.ca/biodiv/cbdintro.html

Handbook on the Convention on Biological Diversity including its Cartagena Protocol on Biosafety, 3d ed. (Montreal: Secretariat of the Convention on Biological Diversity, 2005), online: https://www.cbd.int/doc/handbook/cbd-hb-fore-en.pdf

Convention on Biological Diversity, online: www.cbd.int/doc/legal/cbd-en.pdf

Report of the First Meeting of the Open-Ended Working Group on Biosafety, online: https://www.cbd.int/doc/default.shtml?mtg=BSWG-01

Timeline of the Cartagena Protocol on Biosafety, online: bch.cbd.int/protocol/background/

Decisions Adopted by the Conference of the Parties to the CBD at the First Part Extraordinary Meeting, online: https://www.cbd.int/doc/decisions/excop-01-dec-en.pdf

The Report of the deliberations of the fifth session of the Ad Hoc Working Group meeting on the Biosafety Protocol held between the 17th – 28th August, 1998, published by the International Institute for Sustainable Development (1998) Vol. 09(108) online: available athttp://enb.iisd.org/download/asc/enb09108e.txt

A Brief History of the Biosafety Protocol, online: www.iisd.ca/biodiv/bswg6/excop_informals.htmlBiosafety Protocol-The outlook for renewed negotiations, online: www.ukabc.org/cartagenaAbout the Protocol, online: www.cdb.int/

Cartagena Protocol on Biosafety to the Convention on Biological Diversity Text and Annexes, online: https://www.cbd.int/doc/legal/cartagena-protocol-en.pdf

Fact Sheet, Cartagena Protocol on Biosafety, from the U.S. Department of State, Bureau of Oceans $ International Environmental & Scientific Affairs Washington D.C., July 21, 2003, online: www.usda.gov/wps/portal/usdahome

Akin, Cigdem&Ayhan, M., Changing Nature of North-South Linkages: Stylized Facts and Explanations (2007) International Monetary Fund WP/07/280 IMF Working Paper Research, online: https://www.imf.org/external/pubs/ft/wp/2007/wp07280.pdf

Mayr, Juan, Doing the Impossible: The Final Negotiations of the Cartagena Protocol, CBD Special Edition, Cartagena Protocol on Biosafety: From Negotiation to Implementation, online: https://www.cbd.int/doc/publications/bs-brochure-02-en.pdf

Cosbey, Aaron &Burgiel, Stas, The Cartagena Protocol on Biosafety: An analysis of results, An International Institute for Sustainable Development Briefing Note, online: http://www.iisd.org/pdf/biosafety.pdf

Brazilian ministry protests GM approval/Lula signs Monsanto Law, online: http://www.gmwatch.org/news/archive/2005/1831-brazilian-ministry-protests-gm-approvallula-signs-monsanto-law

Kumar, Vivek R., Tales of Three Villages blog of Monday, October 29, 2012, online: http://village890.blogspot.ca/2012/10/tale-of-three-villages-koko-village.html

Brazilian ministry protests approval of GM cotton, online: https://www.seedquest.com/News/releases/2005/march/11814.htm

An Explanatory Guide to the Cartagena Protocol on Biosafety (2003), IUCN Environmental Policy and Law Paper No. 46, online: http://www.unep.org/biosafety/files/IUCNGuide%20on%20the%20CPB.pdf

Cartagena Protocol on Biosafety Ratification List, online, https://www.cbd.int/doc/lists/cpb-ratifications.pdf

Timeline of the Cartagena Protocol on Biosafety, online: http://bch.cbd.int/protocol/background/#history

Gupta, Aarti, Governing Biosafety in India: The Relevance of the Cartagena Protocol, (2000) Global Environmental Assessment Project Environment and Natural Resources Program, online: http://www.ksg.harvard.edu/gea/pubs/2000-24.pdf