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THE INCREASING NECESSITY FOR THE INCLUSION OF PROCESS AND PRODUCTION METHODS (PPMs) INTO THE CURRENT GATT REGIME AS A SAFEGUARD/TOOL FOR ENVIRONMENTAL SUSTAINABILITY

Research dissertation presented for the approval of the Senate in partial fulfilment of the requirements for the degree of Master of Law (commercial law) in approved courses and a minor dissertation/research paper. The other part of the requirement for this qualification was the completion of a programme of courses.

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ABSTRACT

The aim of this thesis is to advocate for the inclusion of PPMs into the current GATT regime for the attainment of environmental sustainability. The issue of PPMs in international trade has been problematic for environmentalists since the first Tuna-Dolphin panel held that distinctions between products based on their production methods were not permissible under GATT. In the first part the thesis assessed and confirms that trade and the environment are two intertwined elements. The thesis then focused on the current legal framework within which environmental interests are said to be appreciated. It is shown that this framework is not efficient in protecting the environment. The thesis then identifies the issue of PPMs and their position in relation to the GATT. This analysis entailed a detailed study of article I, III and XX. It is shown that in many disputes involving PPMs, in most instances PPMs are easily found to be in contravention of the most-favoured nation principle (article I) and the national treatment principle(article III). An evaluation of article III also shows that the like products tests has made it challenging for PPMs to be acceptable in GATT. As for article XX most PPMs readily qualify under (b) and (g) but fail to meet the chapeau's steep requirements. In conclusion focus was on the PPMs debate vis-à-vis the views of developing and developed nations. By showing the rate of environmental degradation in the SADC region as examples, the thesis argues that PPMs offer developing countries a solution for environmental sustainability.

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DEDICATION

To my parents, thank you for your unending support.

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LIST ACRONYMS

AMD	ACIDIC MINE DRAINAGE
D-G	DIRECTOR GENERAL
DSB	DISPUTE SETTLEMENT BODY
CBD	CONVENTION ON BIOLOGICAL DIVERSITY
EC	EUROPEAN COMMUNITIES
ESA	ENDANGERED SPECIES ACT
EU	EUROPEAN UNION
GATT	GENERAL AGREEMENT IN TARIFFS AND TRADE
MEAs	MULTILATERAL ENVIRONMENTAL AGREEMENTS
MFN	MOST FAVOURED NATION
MMPA	MARINE MAMMAL PROTECTION ACT
NEMA	NATIONAL ENVIRONMENTAL MANAGEMENT ACT
NTP	NATIONAL TREATMENT PRINCIPLE
OECD	ORGANISATION FOR ECONOMIC COOPERATION AND DEVELOPMENT
PPMs	PROCESS AND PRODUCTION METHODS
SADC	SOUTHERN AFRICAN DEVELOPMENT COMMUNITY
SADCC	SOUTHERN AFRICAN COORDINATION CONFERENCE
SPS	AGREEMENT ON THE APPLICATION OF SANITARY AND PHYTOSANITARY MEASURES
TBT	TECHNICAL BARRIERS TO TRADE
TED	TURTLE EXCLUDER DEVICES

UNECD	UNITED NATIONS CONFERENCE ON ENVIRONMENT AND DEVELOPMENT
WCED	WORLD COMMISSION ON ENVIRONMENT AND DEVELOPMENT

CHAPTER ONE

INTRODUCTION

Process and production methods (PPMs) refer to the manner in which products are made and natural resources extracted, grown or harvested.[1] Many PPMs can negatively affect the environment[2]and thus bring about gross environmental degradation. Environmental degradation is known as 'the deterioration in environmental quality from ambient concentrations of pollutants and other activities and processes such as improper land use and natural disasters.'[3] Environmental degradation may be found in different forms such as deforestation, desertification, pollution and climate change and it is an issue of increasing concern within the international community.[4]

To date article XX of the General Agreement in Tariffs and Trade (GATT) is the provision that has the responsibility of addressing the tension between trade and other legitimate policy goals listed as exceptions in paragraphs (a) to (j).[5] The GATT offers a wide assortment of exceptions which range from the 'protection of public morals'[6] to the imposition of measures that restrict the 'importations or exportations of gold or silver.'[7] Paragraphs (b) and (g) are namely the most relevant in addressing issues pertaining to trade and the environment.[8]

This paper will argue that the current state of environmental protection that is offered within the context of international trade regulations is not of great efficiency in bringing about environmental sustainable development. This concept of sustainable development which was coined in the 1987 Brundtland Report is defined as 'development that meets the needs of the present without compromising the ability of future generations to meet their own needs.'[9] Thus it is crucial at this point in time for international institutions such as the World Trade

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[1] Nathalie Bernasconi-Osterwalder, Daniel Magraw, Maria Julia Oliva, Marcos Orellana and Elisabeth Tuerk *'Environment and Trade: A Guide to WTO Jurisprudence'* (2006) 203.
[2] Ibid.
[3] Glossary of Statistical Terms 'Environmental Degradation' available at http://stats.oecd.org/glossary/detail.asp?ID=821 , accessed on 17th June 2014.
[4] *'Effects of Environmental Degradation'* available at http://saferenvironment.wordpress.com/2008/08/18/effects-of-environmental-degradation/# , accessed on 17th June 2014.
[5] Bernasconi-Osterwalder et al op cit note 1 at 77.
[6] GATT article XX (a).
[7] Ibid article XX (c).
[8] Ibid.
[9] 'Environmental, economic and social well-being for today and tomorrow' available at http://www.iisd.org/sd/ accessed on 17th June 2014.

Organization (WTO) to do more in making sustainable development a realistic and achievable goal.

The paper will also assess the views of developing countries towards PPMs. From this assessment it will be advocated that PPMs are also a solution for developing countries. Evidence of environmental degradation will be given with examples emanating from SADC developing countries linked to economic trade related activities.

This chapter gives a basic historical background to the debate of trade and the environment and will show how the two elements are connected. The chapter will also give the reader a brief insight on the subject of process and production methods (PPMs) and how they are interrelated to the debates surrounding trade and the environment. The most crucial aspects it will bring forth are the problem statement, the significance of the study, the key research questions and the chapter outline.

1.1 BACKGROUND: Trade and the environment

The debate and linkage between international trade and environmental concerns has been in prevalent existence since the creation of the GATT in 1947.[10] An evaluation of the historical background of trade and the environment clearly shows that both elements have always to some degree been intertwined. Over the decades trade and environmental concerns have evolved into a growing focus of controversy which in its development has also integrated with sustainable development.

It is vital to mention that when the first GATT came into force, there was no such explicit acknowledgement of any broad linkages between trade and the environment. The only mention of the environment came in article XX which contained exceptions to the basic rules of the treaty.[11] Those exceptions allowed countries to impose measures 'necessary to protect human, animal or plant life or health' or 'relating to the conservation of exhaustible natural resources' so

[10] Andrew T. Guzman and Alan O. Sykes '*Research handbook in international economic law*' (2007) 511.
[11] 'Are International Trade and Protection of the Environment Enemies?' available at http://www.globalization101.org/are-international-trade-and-protection-of-the-environment-enemies/ accessed on 17th June 2014.

long as those measures did not amount to unfair discrimination against foreign products or operate as disguised restrictions on trade.[12]

After the creation of the GATT, the next event of significance was the Stockholm Conference of 1972. The Secretariat of the GATT was asked to make a contribution and so it prepared a study under its own responsibility. This particular contribution was entitled 'Industrial Pollution Control and International Trade', and its focus was on the implications of environmental protection policies on international trade.[13] This was the result of the growing international concern regarding the impact of economic growth on social development and the environment.[14]

Between the period of 1971 and 1991, environmental policies began to have an increasing influence on trade.[15] For instance under the auspices of the Tokyo Round of trade negotiations (1973-1979), participants took up the question of the degree to which environmental measures (in the form of technical regulations and standards) could form obstacles to trade. The Tokyo Round Agreement on Technical Barriers to Trade (TBT), also known as the 'Standards Code', was thus negotiated.[16]

While trade officials were factoring the environment into international trade agreements, trade measures were being used as a tool to advance global environmental goals.[17] The most relevant event in terms of this research paper was in 1987. The World Commission on Environment and Development (WCED) produced a report entitled Our Common Future (also known as the Brundtland Report), in which the term 'sustainable development' was coined. The report identified poverty as one of the most important causes of environmental degradation, and argued that greater economic growth, fuelled in part by increased international trade, could generate the necessary resources to combat what had become known as the 'pollution of poverty.'[18]Even though the Brundtland report identifies poverty as an element that generates environmental degradation and that trade can also assist in eliminating 'pollution poverty' it should also be

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[12] Ibid.
[13] 'Trade and Environment' available at http://www.wto.org/english/tratop_e/envir_e/envir_e.htm accessed on 17th June 2014.
[14] Ibid.
[15] Young, Oran R (ed.) *'Global Governance, drawing insights from the environmental experience'* (1997) 249-250.
[16] 'Early years: emerging environment debate in GATT/WTO' available at http://www.wto.org/english/tratop_e/envir_e/hist1_e.htm accessed on 17th June 2014.
[17] Adil Njama , Mark Halle and Ricardo Melendez Oritz '*Trade and Environment: A Resource Book'* (2007) 4.
[18] 'Early years: emerging environment debate in GATT/WTO op cit note 16.

noted that in some instances economic activities which generate trade are also guilty of fast tracking the rate of environmental degradation.

The debate surrounding trade and the environment continually developed within separate spheres until their eventual collision in the 1990s. The *United States Import Restrictions of Tuna* (*Tuna-Dolphin I and II)*[19] cases were the first disputes in which trade and environmental interests were in direct contention. In the first Tuna-Dolphin case Mexico and Venezuela challenged a United States law intended to prevent dolphins from being killed in the tuna-fishing process. The case was the first in a series of disputes in the 1990s whose outcome in GATT dispute resolution panel reports seemed to prioritize free trade over the environment and galvanized opposition to free trade among environmentalists.[20] By the close of the 1990s, the field of trade and the environment was receiving much more attention than at its start.[21]

1.2 Process and Production methods (PPMs)

Since the *Tuna-Dolphin* cases in the mid-90s, the treatment of PPMs under the GATT, and subsequently the WTO has remained a high profile concern for advocates of sustainable development.[22] 'Most countries have adopted policies and rules aimed at avoiding or mitigating harmful effects caused by PPMs,'[23] and such types of policy measures are commonly known as PPM-based measures.[24] A PPM based measure revolves on 'the simple assertion that by providing regressive measures towards environmentally harmful products the balance will shift in favour of eco-friendly methods.'[25] The Panel in both *Tuna- Dolphin* disputes dealt with PPM-based measures that had the agenda of protecting the environment, while at the same time had serious restricting implications on trade.

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[19] GATT Panel Report on *United States-Restriction on Imports of Tuna* (1991) DS21/R.
[20] 'Are International Trade and Protection of the Environment Enemies?' Available at http://www.globalization101.org/are-international-trade-and-protection-of-the-environment-enemies/ accessed on 17th June 2014.
[21] Njama et al op cit note 17 at 3.
[22] Jason Potts '*The Legality of PPMs under the GATT: Challenges and Opportunities for Sustainable Development*' (2008) 1.
[23] Ibid.
[24] Ibid.
[25] Deeksha Manchanda & Ankit Kumar Lal 'Developing an International framework for PPM and Like TREMS: arguments and principles for developing regulations' available at http://www.haclr.org/index_archivos/page538.htm accessed on 17th June 2014.

Though the *Tuna- Dolphin* cases lack legal status as they were not adopted, the rulings passed by the Panel had serious effects of undermining environmental interests and sustainable development. Even after the WTO succeeded the GATT in 1995, a number of disputes were presided over by the WTO working Panels and the Appellant Body. A significant amount of them had the same effect as that generated by the *Tuna-Dolphin* cases.

Even though the WTO in essence was not established to be an environmental organization, it is however an undeniable factor that trade and the environment are two inseparable elements and that trade related economic activities are fuelling the rate at which the environment is fast depleting. The inclusion of PPMs into the WTO rules would be an appropriate measure to remedy environmental problems and bring a sense of balance between trade and the existing environmental concerns.

Governments and producers, particularly those in the industrialised countries, are not necessarily opposed to the ethical and political grounds for qualitative regulation on the basis of PPMs.[26] Many developing countries are on the other hand deeply suspicious of proposals for the explicit inclusion of PPMs in the WTO.[27] The reason for this is their fear of the imposition of harmonised environmental, technological and other qualitative standards with high thresholds set by industrialised countries. These would threaten the already precarious market access of developing countries and not take account of their special position in the WTO, which is recognised in Part IV of the GATT 1994.[28] Taking the PPM issue seriously at the multilateral level provides an opportunity for explicit attention to the growing needs of developing countries in meeting such requirements.

1.3 STATEMENT OF THE PROBLEM

Recent scholarship has produced a number of important studies in the trade and environment debate. Most of these studies focus on how the provisions of the GATT were interpreted within the GATT/ WTO working panels in relation to PPM based measures. The purpose of this dissertation is to advocate or to show the need for the inclusion of PPMs into the current GATT regime. Referring to the inclusion of PPMs as being a necessity may seem as though it is a

[26] Nicholas Perdikis and Robert Read '*The WTO And The Regulation of International Trade: Recent Disputes between the European Union and The United States'* (2005) 243.
[27] Ibid.
[28] Ibid.

radical request, but an examination of the rate at which the environment is fast depleting due to economic activities associated to trade is a strong indication for urgent action. Also international trade laws should show that they do not exist within a vacuum and hence it is important for them to absorb other aims and values of the global community.

The study will look into the legal framework within which the WTO evaluates trade and environmental interests[29] and assess whether or not such a set-up has been effectively dealing with both trade and environmental interests. The crux of the study is to show how vital it is for PPMs to be part and parcel of the GATT regime. The research paper will clearly show the underlying tension between developed and developing countries. From this debate it will be shown that though developing countries are not in support of PPMs, environmental degradation is a problem that also exists within their borders. Evidence of environmental degradation caused by trade related economic activities will be presented from a few SADC developing countries.

It is worth noting that environmental concerns have found their way into the collective legal framework of the SADC. The Declaration and Treaty of SADC in article 5 (g) states that:

> *The objectives of SADC shall be to: …*
>
> > *(g) Achieve sustainable utilisation of natural resources and effective protection of the environment; …*

From the reading of article 5(g) it can be noted that environmental protection is an essential aspect to the SADC community of countries. It is understood and acknowledged that most if not all SADC countries have environmental laws in place. This paper will however put across suggestions on the effectiveness of PPMs in attaining sustainable development in the SADC region.

1.4 SIGNIFICANCE OF THE STUDY

Environmental degradation, which comes in many forms, has undeniably become a worldwide problem that has affected many people on a global scale. Human activity, which is mainly linked to trade and economic activities, is one of the main contributors of rapid depletion of the environment. Thus environmental degradation has a multiplicity of social, economic and cultural

[29] Art XX (b) and (g) of GATT 1994.

negative impacts. As such a substantive study on how PPMs can deter the high rate of such environmental depletion needs to be carried out to address the challenges and the opportunities. It is important to take note of the fact that it is the aim of the author to analyse the WTO and its laws, and to call upon the WTO to engage in a more pro-active stance in achieving trade and environmental goals that promote sustainability.

Clearly many of the WTO Member states are signatories to a number of Multilateral Environmental Agreements (MEAs) which have environmental interests at the core. But however trade and the environment are two inter-twined elements. Thus the study will advocate that PPMs be inclusive of the current GATT regime in order to attain a result that is complimentary of both trade and environmental interests. Hence as environmental consciousness becomes more of a reality for the global community, the more likely it is that PPM-based measures are going to increase. Therefore it is the aim of the dissertation to make a viable contribution to the development of the debate surrounding trade and the environment.

Since the establishment of the WTO, there has been an increase in disputes where WTO/GATT rules are in direct contention with PPM based measures. The accumulating volume of such disputes indicates WTO rules need to evolve and be more accommodative of PPMs. The research paper aims to show that the accommodation of PPMs is a workable solution especially for developing countries, to overcome the most detrimental effects associated with environmental degradation.

Lastly, the research aims to provide insight to governments, decision and policy makers, academics and interested members of the civil society. The author is keenly interested in the debate surrounding trade and the environment and the controversies linked to PPM based measures.

1.5 KEY RESEARCH QUESTIONS

- How are environmental interests addressed currently under the GATT?
- How effective is the current GATT regime in balancing trade and environmental interests.

- What are PPMs and how have they been addressed in relation to the GATT?
- What makes PPMs a necessity in GATT?
- What is the position of developed and developing countries vis-à-vis the PPMs debate?
- How are trade-related economic activities affecting the environment in the developing countries found in the SADC region?

1.6 CHAPTER OUTLINE

The dissertation will contain 5 chapters that will each focus on a particular aspect. Each chapter will contain an introduction, a discussion of the matters and a conclusion. The summary outline is shown below.

This chapter will give an introduction and/or background to the topic of trade and the environment. This chapter will also give the reader a brief insight on the subject of PPMs and how they are interrelated to trade and the environment debate. The most crucial aspects it will bring forth are the problem statement, the significance of the study and the key research questions.

Chapter 2 will be an analysis of the current legal framework within which environmental interests are said to be appreciated especially the applicability of article XX (b) and (g) of the GATT. The reason for this analysis will be to provide the reader with an appreciation of to what extent the current GATT regime has been able to attain trade related goals that have the ethos of environmental sustainability.

Chapter 3 will address the issue of PPMs and their position in relation to GATT law. In particular it will discuss whether or not PPMs will make sustainable development easier to achieve within the realm of international trade.

Chapter 4 will focus on the PPMs debate as per the views from both the developed (north) and the developing (south) worlds. From this debate the discussion will build into presenting the environmental degradation that is connected to the different trade-related economic activities. The focus of this evidence will be derived from a few sample SADC Member countries. Through the presentation of this information, the chapter will show that though PPMs are viewed in a

negative light by the developing world, their implementation would assist in making sustainable development an attainable goal.

Chapter 5 will give a conclusion and will lay down a number of recommendations. The recommendations and suggestions given aim to attain the goal of making sustainable development an achievable goal within international trade.

CHAPTER TWO

2.1 GATT AND THE ENVIRONMENT

INTRODUCTION

The aim of this chapter is to give an analysis of the current legal framework within which environmental interests are said to be appreciated especially the applicability of article XX (b) and (g) of the GATT 1994. It will delve into some disputes the WTO has dealt with thus far which addressed the tension between trade related interests and environmental concerns. The chapter will then argue that the current GATT legal framework is not efficient enough for environmental protection, because the provisions of article XX (especially the chapeau) set steep requirements for measures to fulfil.

2.2 THE INTERPRETATION OF ARTICLE XX

The drafters of the GATT recognised that although trade is important, governments pursue other policy goals as well.[30] Thus in formulating the rules for world trade, they made sure to preserve the ability of governments to promote other policies.[31] To this end, the drafters included a set of 'General Exceptions' in article XX which makes clear that in limited circumstances, members are permitted to act inconsistently with their GATT obligations in order to pursue certain designated policies.[32]

The WTO's persistent but hesitant effort to construct a trade law framework for resolving contradictions between trade liberalization and environmental protection has focused on the interpretation of article XX of the GATT.[33] Article XX is a pivotal provision that addresses the tension that can arise between trade and other legitimate policy goals listed as exceptions in paragraphs (a) to (j). The relevant text of GATT article XX which is applicable to our discussion reads as follows:

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[30] Simon Lester, Bryan Mercurio and Arwel Davies, 'World trade law: text, material and commentary,' 2 ed (2012) 363.
[31] Ibid.
[32] Ibid.
[33] Sanford Gaines 'The WTO's reading of the GATT Art XX: A disguised restriction on environmental measure' available at https://www.law.upenn.edu/journals/jil/articles/volume22/issue4/Gaines22U.Pa.J.Int%27lEcon.L.739%282001%29.pd accessed on 7th July 2014.

> '*Subject to the requirement that such measures are not applied in a manner which would constitute a means of arbitrary or unjustifiable discrimination between countries where the same conditions prevail, or a disguised restriction on international trade, nothing in this Agreement shall be construed to prevent the adoption or enforcement by any contracting party of measures:…*
>
> *(b) Necessary to protect human, animal or plant life or health; [Or]*
>
> *(g) Relating to the conservation of exhaustible natural resources if such measures are made effective in conjunction with restrictions on domestic production or consumption;*'

Article XX thus offers general exceptions from international trade obligations for unilateral trade measures in pursuit of specified purposes, including 'the conservation of exhaustible natural resources.'[34] Only those measures that satisfy the terms of one of the subparagraphs of the general exceptions (eg 'necessary to protect human, animal or plant life or health'; or relating to the conservation of exhaustible natural resources…') are scrutinized for their consistency with the chapeau.[35]

At this stage of the discussion it is then crucial for one to have an understanding of how exactly article XX operates and is applied. All grounds mentioned in paragraphs (a) to (j) share some essential features and those are:

1) They must all respect the requirements laid down in the chapeau of article XX GATT, they must also be applied in a non-discriminatory manner across goods originating in countries where the same conditions prevail.
2) Since article XX of GATT reflects a list of exceptions, WTO members invoking them carry the burden of proof.[36]

In the case law of the WTO it has clearly been shown that the operation and application of article XX entails a two tier test. The Appellant Body in the *United States-Standards for Reformulated and Conventional Gasoline* (*US-Gasoline*) made this point clearly in its report:

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[34] Ibid.
[35] Ibid.
[36] Petros C. Mavroidis '*The General Agreement On Tariffs and Trade-A Commentary'* (2005)184.

> '*…In order that justifying protection of article XX may be extended to it, the measure at issue must not only come under one or another of the particular exceptions-paragraphs (a) to (j)-listed under article XX; it must also satisfy the requirements imposed by the opening clauses of article XX. The analysis is, in other words, two tiered: first, provisional justification by reason of characterization of the measure under XX (g); second, further appraisal of the same measure under the introductory clauses of article XX.*'[37]

The next question one would want to address is 'why is article XX adjudicated in such a manner?' The Appellate Body in the *United States-Import Restriction of Certain Shrimp Products* (*shrimp-turtle*) provided an answer to the above question:

> '*The sequence of steps indicated above in the analysis of a claim of justification under article XX reflects, not inadvertence or random choice, but rather the fundamental structure and logic of article XX…*'

'*The task of interpreting the chapeau so as to prevent the abuse or misuse of the specific exemptions provided for in article XX is rendered very difficult, if indeed it remains possible at all, where the interpreter has not first identified and examined the specific exception threatened with abuse.*'[38]

The Appellate Body's GATT article XX jurisprudence has done much to reassure members that, at least with respect to a measure falling within the scope of the GATT, there is sufficient regulatory space at the domestic level for states to enact measures that though trade-restrictive, serve pressing public policy goals.[39] With this general aspect of article XX in mind the next appropriate step would then entail dissecting the individual exceptions, which relate to safeguarding the environment and evaluating how they have been applied in the different disputes by the WTO Panels and the Appellate Body.

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[37] Appellate Body Report on *United States Import prohibition of Certain Shrimp and Shrimp Products* (1998) WT/DS58/AB/R (Shrimp-Turtle) para 118.
[38] Ibid at para 119.
[39] Danielle Spiegel Feld & Stephanie Switzer 'Whither Article XX? Regulatory Autonomy Under Non-GATT Agreements After China—Raw Materials' available at http://www.yjil.org/docs/pub/o-38-feld-switzer-whither-article-xx.pdf accessed on 8th July 2014.

2.3 ARTICLE XX (B): HUMAN, ANIMAL OR PLANT LIFE OR HEALTH

The linkages between public health and the environment can readily be seen in areas such as air and water quality, food safety, epidemic disease safety in the workplace, etc.[40] A number of disputes have come before the WTO Dispute Settlement Body (DSB) and it is interesting to observe how this particular provision has been interpreted, as it is clear from the above analogy that article XX (b) sets a steep test.

One such dispute of interest is the *European Communities-Measures Affecting Asbestos and Products Containing Asbestos* (*EC-Asbestos*) case. This dispute is one of a very few cases that has managed to fulfil the requirements stipulated in article XX (b). The crux of the dispute was a French law that prohibited 'the manufacture, processing, sale, import, placing on the domestic market and transfer under any title whatsoever of all varieties of asbestos fibres irrespective of whether these substances have been incorporated into materials, products or devices.'[41]

Canada complained against the French Decree and stipulated that it violated article III (because it discriminated against Canadian asbestos in favour of certain French substitute products) and article XI (due to the import ban) of GATT 1994.[42] Canada's complaint was not based on a view that asbestos was safe, but rather that it could be handled safely if proper precautions were established through regulation, and thus a ban was not justified.[43]

The European Communities on the other hand justified the prohibition on the grounds of human health protection arguing that asbestos was hazardous not only to the health of construction workers subject to prolonged exposure, but also to population subject to occasional exposure.[44] The evidence presented by the European Communities also clearly showed that chrysotile

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[40] Bernasconi-Osterwalder et al op cit note 1 at 81.
[41] Appellate Body Report, *European Communities – Measures Affecting Asbestos and Asbestos Containing Products* (2001) WT/DS135/AB/R para 1:The Panel was established to consider claims made by Canada regarding French Decree No. 96-1133 concerning asbestos and products containing asbestos (décret no. 96-1133 relatif à l'interdiction de l'amiante, pris en application du code de travail et du code de la consommation) ("the Decree"), which entered into force on 1 January 1997.
[42] Simon Lester & Bryan Mercurio- *World Trade Law: Text, Materials and Commentary* (2008) 391.
[43] Ibid.
[44] European Communities-Asbestos available at http://www.wto.org/english/tratop_e/envir_e/edis09_e.htm accessed on 27th December 2014.

asbestos was/is responsible for causing human health risks in the form of asbestosis, lung cancer and mesothelioma.[45]

In relation to whether or not the measure fell within the scope of the range of policies designed to protect human, animal or plant life or health the Appellate Body held that handling chrysotile asbestos constitutes a health risk, and therefore the French policy was within the range of policies designed to protect life or health, thus qualifying under the said provision.[46]

In dealing with the necessity aspect, the Appellate Body upheld the French ban and considered it to qualify into the category of being a necessity. In reaching such a conclusion reference was made to the *Thailand – Restrictions on Importation of and Internal Taxes on Cigarettes* (*Thailand-Cigarettes*) dispute where the following assessment was made:

> '*The import restrictions imposed by Thailand could be considered to be "necessary" in terms of article XX (b) only if there were no alternative measures consistent with the General Agreement, or less inconsistent with it, which Thailand could reasonably be expected to employ to achieve its health policy objectives.*'[47]

Incasu the measure France had resorted to was necessary because there was no other alternative measure available. Even though Canada was asserting that France could resort to controlled use which could achieve the same goal. It was held that France could not reasonably be expected to employ any alternative measure if that measure would involve a continuation of the very risk that the Decree seeks to 'halt'.[48] Also in its evaluation of the necessity requirement it is also crucial to mention the interplay of article XX (b) and article XX (d). The Appellate Body endorsed the view that, for the necessity requirement to be satisfied, one should not simply point to another, less restrictive measure which is theoretically available. The less restrictive measure should be reasonably available to the defendant. Hence article XX (d) plays a part in full interpretation of the necessity requirement.

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[45] Ibid.
[46] Appellant Body Report *EC-Asbestos* op cit note 41 paras 157-163.
[47] GATT Panel Report *Thailand-Restrictions on Importation of Internal Taxes on Cigarettes* (1990) BISD 37S/200 at para 75.
[48] Appellant Body Report *EC-Asbestos* op cit note 41 para 174.

2.4 ARTICLE XX (G): RELATING TO THE CONSERVATION OF NATURAL RESOURCES

The legal benchmark for consistency of a measure with article XX (g) is that the measure at hand be in relation to the conservation of exhaustible natural resources.[49] 'A consistent theory on the applicability of article XX (g) was developed by the Appellate Body in the *US-Gasoline* case and the *Shrimp-Turtle* case. Three conditions must be satisfied to determine if the GATT inconsistent measure falls under this exception. The conditions entail that:

1. 'The measure must involve the conservation of "exhaustible natural resources";
2. It must "relate to" the conservation of natural resources; and
3. The measure must be made "effective in conjunction with" the restrictions on domestic production or consumption.'[50]

Though other disputes have contributed to how article XX (g) is interpreted, it is vital to point out that the *Shrimp-Turtle* dispute is the most significant of them all. This is mainly because the WTO Appellate Body incasu took a drastic approach as compared to that of the *Tuna-Dolphin* disputes (first disputes to highlight the tension between trade and the environment)[51] hence advancing the interpretation of article XX (g).[52] Also in this case, the Appellate Body made some very important observations that will have a bearing on future cases.[53] Therefore based on the given views it is only reasonable to mainly give an analogy of article XX (g) based on the S*hrimp-Turtle* dispute.

The epicentre of the dispute in the *shrimp-turtle* revolved around s609 of the *United States Endangered Species Act of 1973* (*ESA*).[54] This precise provision stipulated that among other things, that shrimp harvested with technology that may adversely affect certain sea turtles may not be imported into the United States — unless the harvesting nation was certified to have a

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[49] Mavroidis op cit note 36 at 195.
[50] Sonia Gabiatti 'Trade Related Environmental Measures Under GATT Article XX (b) and (g)' available at http://skemman.is/stream/get/1946/3044/10073/4/Sonia_Gabiatti_%20fixed.pdf accessed on 30th December 2014.
[51] Mitsuo Matsushita, Thomas Schoebaum and Petros C. Mvroidis '*The World Trade Organization: Law, Practice, And Policy'* (2005) 794.
[52] Ibid at 797.
[53] Dr. Pallavi Kishore 'Revisiting the WTO Shrimps Case in the Light of Current Climate Protectionism: A Developing Country Perspective' (2012) Journal of Energy & Environmental Law 79.
[54] India etc versus US '*shrimp-turtle'* available at http://www.wto.org/english/tratop_e/envir_e/edis08_e.htm accessed on 11 July 2014.

regulatory programme and an incidental take-rate comparable to that of the United States, or that the particular fishing environment of the harvesting nation did not pose a threat to sea turtles.[55]

The Act also required that United States shrimp trawlers use 'turtle excluder devices' (TEDs) in their nets when fishing in areas where there is a significant likelihood of encountering sea turtles.[56] This embargo gave cause for India, Malaysia, Pakistan and Thailand to bring a complaint to the WTO. The basis of their complaint especially in the case of Malaysia was based on the fact that the United States measure was inconsistent with article XI and was not justified under article XX of GATT 1994.[57]

The Appellate Body began its analysis of s609 of *ESA* by first trying to evaluate whether it was concerned with the conservation of 'exhaustible natural resources' within the meaning of article XX (g).[58] In order for the Appellate Body to reach a satisfactory conclusion it was necessary to first establish what exactly was meant by the terminology 'exhaustible natural resources.'

In this debate India, Pakistan and Thailand submitted that the phrase 'referred to finite resources such as mineral, rather than biological or renewable resources.'[59] It was their view that 'if all natural resources were considered to be exhaustible, the term exhaustible would be considered to be superfluous.'[60]

Though the submissions made by these nations limited the above term to non-living resources. The Appellate Body however took a generous view of this matter and declared that a 'resource' may be living or non-living, and it need not be rare or endangered to be potentially 'exhaustible.'[61] 'In arriving at this interpretation, the Appellate Body noted that the words included in article XX (g), must be read by a treaty interpreter in the light of contemporary concerns of the community of nations about the protection and conservation of the environment.[62] The Appellate Body resorted to international environmental agreements –such as the Convention on Biological Diversity (CBD) and the opinions of environmental experts, to

[55] Ibid.
[56] Ibid.
[57] Panel Report *United States- Import Prohibition of Certain Shrimp and Shrimp Products* –Recourse to Article 21.5 by Malaysia (1998) WT/DS58/RW para 3.1.
[58] Appellant Body Report *Shrimp-Turtle* op cit note 37 para 127.
[59] Bernasconi-Osterwalder et al op cit note 1 at 79.
[60] Ibid.
[61] Matsushita et al op cit note 51 at 797.
[62] Bernasconi-Osterwalder et al op cit note 1 at 80.

assist in reaching this conclusion.[63] The effect of this ruling ensured that article XX (g) is not limited strictly to conserving mineral and/or non-living natural resources.

Once ascertaining what the term 'exhaustible natural resource' encompasses the Appellate Body then went on to address the next essential condition, 'relating to the conservation of [exhaustible natural resources].' It is crucial to shed light on the fact that article XX (g) does not mention how the GATT inconsistent measures must be related to the conservation of exhaustible natural resources.[64]

The Appellate Body in its adjudication firstly stated that:

> '*In making this determination, the treaty interpreter essentially looks into the relationship between the measure at stake and the legitimate policy of conserving exhaustible natural resources.*'[65]

Reference was then made to the *US- Gasoline* case where the phrase 'relating to the conservation' was interpreted to mean primarily aimed at.[66] Essentially the Appellate Body ruled that 'article XX (g) requires a close and real relationship between the measure and the policy objective.'[67] In the view of the Appellate Body it was found that 'the means and end relationship between s609 and the legitimate policy of conserving an exhaustible and in fact endangered species to be a close and real one.'[68]

The final aspect the Appellate Body looked at under article XX (g) was to determine whether or not the restrictions imposed by the ban were also related to shrimp caught by the United States' shrimp trawl vessels.[69] Once again reference was made to the *US-Gasoline* case which had previously held that it is a 'requirement that the measures concerned impose restrictions, not just in respect of imported gasoline but also with respect to domestic gasoline.'[70] In essence the Appellate Body was simply stating that a restrictive trade measure should be emanating a sense

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[63] Ibid.
[64] Panel Report – Canada '*Measures Affecting Exports Of Unprocessed Herring and Salmon'* at para 4.5.
[65] Appellant Body Report *Shrimp-Turtle* op cit note 37 para 135.
[66] Ibid para 136.
[67] Bossche, Peter Van Den '*The Law of World Trade Organization'* (2006) 613.
[68] Appellant Body Report *Shrimp-Turtle* op cit note 37 para 14.1.
[69] Ibid para 14.3.
[70] Ibid.

of balance/or an 'even-handedness on both imported and domestic products.'[71] Failure to follow this criterion would result in such a measure being viewed simply as a 'naked discrimination' for protecting locally produced goods.[72]

Following such an approach the Appellate Body found s 609 to be even-handed and thus consistent with article XX (g) since the restriction in question was applicable to both imported and domestic shrimp.

2.5 THE CHAPEAU

The measures which fall into the scope of one or another of the individual paragraphs from (a) through to (j) in article XX also have to satisfy the requirements in the chapeau so as to be justified under the GATT.[73] The precise language of the chapeau requires that a measure must not be applied in a manner which would constitute a means of 'arbitrary or unjustifiable discrimination between countries where the same conditions prevail' or a 'disguised restriction on international trade.'[74]

Hence the chapeau sets out three forms of requirements. These are namely:

- 'Arbitrary discrimination;
- Unjustifiable discrimination and
- A disguised restriction on international trade.'[75]

The purpose of the chapeau is to ensure that the measure in question does not constitute an abuse or misuse of the provisional justification made available in one of the sub- paragraphs of article XX, that is to say, it is applied in good faith.[76]

In the *Shrimp-Turtle* case the Appellate Body characterized its task in interpreting the chapeau as, 'the delicate one of locating and marking out a line of equilibrium between the right of a

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[71] Ibid.
[72] Appellate Body Report, *United States – Standards for Reformulated and Conventional Gasoline* (1996) WT/DS2/AB/R 20-21.
[73] Kohei Saito 'Yardsticks for "Trade and Environment": Economic Analysis of the WTO Panel and the Appellate Body Reports regarding Environment-oriented Trade Measures' available at http://www.jeanmonnetprogram.org/archive/papers/01/013701.html accessed on 14 July 2014.
[74] Appellant Body Report *Shrimp-Turtle* op cit note 37 para 150.
[75] Ibid.
[76] 'WTO rules and environmental policies: GATT exceptions' available at http://www.wto.org/english/tratop_e/envir_e/envt_rules_exceptions_e.htm accessed on 14 July 2014.

Member to invoke an exception under article XX and the rights of the other Members under varying substantive provisions of the GATT 1994.'[77] In its quest to address the chapeau, the first point of call was to ascertain whether or not s609 was arbitrary or unjustifiable. In determining this factor the Appellate Body resorted to the reference of the above given conditions.[78] Upon looking at how s609 was applied, the Appellate Body found it to be in violation of the requirements as set out by the chapeau. In relation to its arbitrary nature/discrimination, the Appellate Body held that:

> '*s 609, in its application, imposes a single, rigid and unbending requirement that countries applying for certification under s609(b)(2)(A) and (B) adopt a comprehensive regulatory program that is essentially the same as the United States' program, without inquiring into the appropriateness of that program for the conditions prevailing in the exporting countries. Furthermore, there is little or no flexibility in how officials make the determination for certification pursuant to these provisions*.'[79]

The arbitrariness of the measure in question was basically found to be twofold. Firstly s609 equated to arbitrary discrimination because it required a regulatory programme that is essentially the same as the United States programme, without enquiring into the appropriateness of that programme for the conditions, prevailing in the exporting country.[80] Secondly, United States authorities, in their certification process for shrimp imports, did not comply with basic standards of fairness and due process, with regard to notice, the gathering of evidence, and the opportunity to be heard.[81]

The measure in question was also found to be unjustifiable. The Appellate Body based its conclusion upon two pinnacle reasons. To begin with the Appellate Body noted that s609 required a duplication of the United States programme without considering conditions in other countries;[82] and secondly the measure required different phase- in periods for countries similarly situated and impacted by the import ban.[83] As result of failing to meet the given requirements in

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[77] Appellant Body Report *Shrimp-Turtle* op cit note 37 para 159.
[78] Ibid 150.
[79] Ibid 177.
[80] Matsushita et al op cit note 51 at 801.
[81] Ibid.
[82] Ibid at 802.
[83] Ibid.

the chapeau, the Appellate Body found s609 to be inconsistent with article XI of GATT 1994 and not to be justified under article XX of the GATT 1994.

2.6 THE EFFECTIVENESS OF THE GATT IN ENVIRONMENTAL PROTECTION

Indeed the interpretation of the GATT by the WTO DSB has gradually been incorporating environmental concerns. For instance disputes such as the *Shrimp-Turtle* and *EC Asbestos* have shown that generally environmental measures set by Member states do not have a tough time, meeting the set requirements of paragraphs (b) and (g). It is therefore crucial at this stage of the discussion to assess the effectiveness of the GATT framework, especially article XX in its endeavour to protect the environment.

The WTO since its birth in 1994 has dealt with some disputes over the years which entail balancing trade and environmental concerns. Through those disputes a number of problems have arisen in the manner article XX is interpreted to bring about environmental protection and the ethos of environmental sustainable development.

On paper the WTO has bold declarations that give a proclamation of its commitment to protect the environment and promote sustainability. This is mainly through the preamble of the Agreement Establishing the WTO (Marrakesh Agreement) and the Doha Declaration of 2001. This particular provision of the Marrakesh Agreement reads as follows:

> '*Recognizing that their relations in the field of trade and economic endeavour should be conducted with a view to raising standards of living, ensuring full employment and a large and steadily growing volume of real income and effective demand, and expanding the production of trade in goods and services, while allowing for the optimal use of the world's resources in accordance with the objective of sustainable development, seeking both to protect and preserve the environment and to enhance the means for doing so in a manner consistent with their respective needs and concerns at different levels of economic development…*'

This shows that the WTO realizes the importance of balancing economic values which promote sustainable development and environmental protection, which in itself is a positive element. But

however the bold declarations of such commitments do not equate in the same way with the practical manner in which article XX is said to be interpreted.

One particular illustration of this is found in how WTO working panels and the Appellate Body interpret the chapeau. In the *Shrimp-Turtle* dispute the Appellate Body found that the United States measure was provisionally justified under article XX (g) as serving a legitimate environmental goal. Its application was however found to constitute arbitrary and unjustifiable discrimination between Members of the WTO under the chapeau.[84]

Looking at the measure in question from a different aspect all that was required by s609 was for shrimp trawlers in areas where there were sea turtles to install TEDs. But due to the steep requirements as set out in the chapeau such a simple requirement was rendered to be unattainable due to the fact that it was not in accordance to the principles it sets out. In this regard the Appellate Body's ruling was incorrect especially considering the fact that TEDs were a very affordable option.[85] In such a scenario one would expect the Appellate Body to have reached a more environmentally friendly conclusion. This was an instance the WTO's DSB was supposed to boldly uphold the declaration to promote sustainable development as per the preamble of the Marrakesh Agreement. An example of such a step would have been to take it upon itself to propose a reasonable phase in time frame for TEDs that was applicable for all Parties to the dispute.

Another reason that shows that the GATT is inefficient in protecting the environment is merely the fact that it was created to accommodate the process of trade liberalization.[86] Any element which then antagonizes those interests of trade liberalization faces a stiff mode of opposition. Article XX has set specific built-in requirements that those measures have to abide by from the individual (a) to (j) paragraphs to the chapeau. As already been demonstrated in the *US-Gasoline* dispute, in order for a measure to qualify under article XX (g) it must be primarily aimed at the conservation of natural resources.[87] The current way in which article XX is interpreted brings out

[84] Bernasconi-Osterwalder et al op cit note 1 at 112.
[85] Mavroidis op cit note 36 at 199.
[86] Stephen J. Turner '*A Substantive Environmental Right- An Examination of the Legal Decision-Makers towards the Environment*' (2009) 186.
[87] Lester & Mercurio op cit note 35 at 401.

a narrow approach,[88] which entails confining the boundaries of an environmental measure. Such an approach is not very effective in tackling the ever growing elements of environmental degradation.

It is an undeniable argument that the *Shrimp-Turtle* dispute brought about a sense of generosity in the interpretation of the term 'exhaustible natural resources.' The term is given a wider meaning which is also inclusive of living natural resources. But however it has been submitted as well that article XX (g) is still silent on the meaning and scope of the term 'exhaustible natural resources.'[89]

'Over the past decades, the WTO and its 'predecessor', GATT, have handled a number of resource-related trade disputes, relying on different WTO agreements and involving different types of resources and in exactly nine disputes, article XX (g) has been invoked.'[90] Despite repeated occurrence of such disputes, neither a uniform definition nor a sufficiently clear scope of the term 'exhaustible natural resources' has been produced.'[91]The difference in interpretation of this terminology in the various disputes over the years certainly creates an element of confusion and uncertainty. This too is a strong indication of the inefficiencies in environmental protection that are attached to the GATT.

The final aspect which shows the inefficiency of the GATT is found in the PPMs debate. It has been noted that the most fundamental problem with article XX is that it makes the legitimacy of environmental regulations turn on what is produced, not how it is produced. 'Specifically, GATT's existing rules focus on the concept of "like products," barring environmental discrimination against imports that are physically similar to domestic products no matter how damaging the production process used to make or obtain the good.'[92] Disputes like the *Shrimp-*

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[88] Chris Wold & Glen *Fullilove* 'Analysis of the WTO AB's Decision in Shrimp-Turtle' available at http://law.lclark.edu/clinics/international_environmental_law_project/our_work/trade_and_environment/turtle_briefing.ph accessed on 18th July 2014.
[89] Chi Manjiao. 'Exhaustible Natural Resource in WTO Law: GATT Article XX (g) Disputes and Their Implications' (2014) 48 JWT 941.
[90] Ibid.
[91] Ibid.
[92] Daniel C. Esty '*Greening The GATT- Trade, Environment, and the Future*' (1994) 49-50.

Turtle case and the *US-Gasoline* case are guilty in this regard for highlighting the inability of a Member to tax or regulate products based on the way the product is produced.[93]

2.7 CONCLUSION

Article XX (b) and (g) are currently the pinnacle provisions which the WTO's DSB interprets in balancing trade and environmental interests. It is important to note that though these two provisions set steep requirements. Disputes such as the *EC-Asbestos* and the *Shrimp-Turtle* have shown that paragraphs (b) and (g) are more flexible in accommodating other policy measures in comparison to the chapeau. The structure of article XX that is its chapeau and its listed exceptions significantly influence the way WTO tribunals interpret and apply this particular provision. Through the disputes the WTO's working panels and the Appellate Body has dealt with, it can be safely concluded that the current GATT regime is not an effective mechanism to adequately protect the environment. One of the main reasons for such a conclusion is derived from the fact that the interpretation of article XX in most instances is conducted in a narrow manner. This alone confines the reach of the GATT in the aspect of environmental protection.

[93] Wold & Fullilove op cit note 88.

CHAPTER THREE

3.1 THE LINKAGE BETWEEN GATT AND PPMs

INTRODUCTION

The main crux of this chapter is to show why this dissertation characterizes PPMs as a necessity within the current GATT regime. In this particular portion of the discussion an in-depth analysis will be given and undertaken to properly explain what exactly is meant by the term Process and Production Methods (PPMs). After a detailed treatment of PPMs, the discussion will then shift to the debate surrounding PPMs and its linkage/relation to the GATT of 1994. This is mainly to show how PPMs are currently treated under the GATT. From this point the research paper will then engage in analysing whether or not PPMs will bring about a more effective sense of sustainable development, if they were considered as viable within the texts of WTO laws. This critical evaluation will also give a set of clearly expressed reasons which show why PPMs are a necessity within the current rules of international trade in goods.

3.2 THE DISTINCTION BETWEEN PRODUCT AND NON-PRODUCT RELATED PPMs

'PPMs in the broadest sense refer to any activity that is undertaken in the process of bringing a good to market. Under this definition, a PPM can refer to activities related to the actual production of a good to the extraction of natural resources for eventual incorporation into goods, to trading practices used to bring goods to market.'[94]

It has been noted that PPMs are not only strictly related to environmental pollution. In their broader sense PPMs also embrace the health and safety aspects of new technologies, resource depletion both renewable and non-renewable and the use of child, forced and slave labour.[95] All these issues relate to the potential generation of negative externalities that come in the form of unforeseen or ignored impacts.[96] For example in the environmental sense, production methods

[94] Potts op cit note 22 at 1.
[95] Perdikis & Read op cit note 26 at 239.
[96] Ibid at 240.

can pollute the air or water, and certain methods of harvesting can lead to resource depletion or harm to endangered species. [97]

Most WTO Members have put in place policies and regulations that have the main goal of avoiding or mitigating the harmful effects caused by PPMs.[98] 'Domestic PPM-related requirements are important policy tools for promoting sustainable development.'[99] The policies and regulations are known as 'PPM-based measures' and they have great influence in their effect upon international trade.[100]

The Organization for Economic Cooperation and Development (OECD) distinguishes PPMs into two different categories, which are namely the product related PPMs and non-product related PPMs.[101] In respect to product related PPMs, these measures are applied to guarantee the quality, safety and functionality of the product. [102] The main purpose of the measure is to protect the consumer or the environment by the damage caused by the product or a substance incorporated into the product. [103] In most instances a product related PPM is detectable in the end product.[104]For example, 'pesticide residue can be detected in fruit cultivated with a specific pesticide.'[105]

Product related PPMs are given a degree of recognition by a few WTO agreements.[106] The Agreement on the Application of Sanitary and Phytosanitary Measures (SPS) stipulates that the Member governments shall allow a reasonable period between the publication of a regulation and its entry into force in order to allow time for producers 'to adapt their products and methods

[97]Bernasconi-Osterwalder et al op cit note 1 at 203.
[98] Ibid.
[99] OECD,' *Process and Production Methods (PPMs): conceptual framework and considerations on use of PPM-Based Trade Measures*' OCDE/GD (97) available at http://www.oecd.org/officialdocuments/publicdisplaydocumentpdf/?cote=OCDE/GD%2897%29137&docLanguage=En accessed on 25 July 2014.
[100] Ibid.
[101] Pablo Zapatera 'Made on earth: Environmental externalities of global supply chain' available at http://e-revistas.uc3m.es/index.php/CDT/article/viewFile/1833/861 accessed on 25th July 2013.
[102] Bernasconi-Osterwalder et al op cit note 1 at 204.
[103] Ibid.
[104] Ibid.
[105] Ibid.
[106] Steven Charnovitz '*The law of Environmental 'PPMs' in the WTO: Debunking the myth of illegality*' (2002) 27 YJIL 59.

of production to the requirements of the importing Member.'[107] The TBT Agreement is also equipped with a similar provision.[108]

The on-going heated debate surrounding PPMs in most instances are centred on the second category of PPMs.[109] Hence this research paper will mainly stem its focus on non-product related PPMs. Non-product-related PPMs were derived from the 1979 TBT[110] and they are defined as 'measures that target the production stage of goods; that is before they are placed on the market.'[111]

Non-product-related PPM measures have the main goal to avoid or minimize harm caused by the way in which a product is made or harvested and not by the product itself.[112] Non-product-related PPMs usually have no effect on the particular characteristics of the goods in question[113] and they do not directly affect the user/consumer.[114]

It was noted by the OECD that this second bracket of PPMs specifies the following:

> *i) "How to control the environmental pollution effects of production, such as air, water pollution or soil degradation. This may include emission controls which set maximum pollution levels by plant or region; performance requirements which specify pollutant releases per unit of output from a given plant; technology requirements which determine the technology to be used in the production process (e.g. introduction of cultivation methods that conserve the soil or avoid use or abuse of fertilisers, the regulation of animal husbandry that creates pollution, use of CFCs or certain solvents in the manufacturing process); or*
>
> *ii) The methods to be used to produce goods or the methods of resource management other than the above. Examples include management for forest conservation; methods for*

[107] Ibid.
[108] Ibid.
[109] Bernasconi-Osterwalder et al op cit note 1 at 204.
[110] Erich Vranes '*Trade and the Environment: Fundamental issues in international law, WTO law & legal theory*' (2009) 320
[111] Ibid.
[112] Bernasconi-Osterwalder et al op cit note 1 at 204.
[113] OECD Report op cit note 99.
[114] Bernasconi-Osterwalder et al op cit note 1 at 204.

catching fish or conserving certain species; provisions connected with animal welfare related to raising or slaughtering."[115]

By assessing the above texts it is clearly evident that PPMs come in extensive and very broad formats. Thus making them a complex endeavour for WTO law to adopt and include within its texts.[116] This alone may in itself seem to be a very justifiable reason not to include PPMs within WTO law. But despite its complex nature the WTO panel bodies and Appellate Body have over the years shown that they are more than capable of adjudicating over complex matters and coming up with very reasonable and satisfactory conclusions.

For instance the topic of subsidies is an example of an issue that is attached with complex intricacies within the peripheries of international trade law. But the WTO has put in place regulations (Agreement on Subsidies and Countervailing Measures) and has dealt with disputes such as the *United States Subsidies on Upland Cotton.* This shows that the WTO is taking positive steps in attempting to counter problems attached with the use of subsidies within international trade. Though PPMs and subsidies are not of the same nature, one cannot help but to ask the question that if WTO law and adjudicating bodies are able to deal with other complex matters. Why then can they not be able to deal with PPMs?

3.3 UNDERSTANDING PPMs IN INTERNATIONAL TRADE

For a better understanding of the linkage between the WTO law and non-product related PPMs it has been noted that 'nowhere within the WTO package of agreements is there explicit reference to the legality or illegality of non-product PPMs, and this puts an assertion regarding the legality or illegality of PPM measures on an uncertain and shaky footing.'[117] In relation to the GATT it has been stated that:

'*The four relevant provisions in the context of PPM based measures are: Article I on most-favoured nation treatment (MFN), article III on national treatment, article XI on the elimination of quantitative restrictions, and the general exceptions clause under article XX.*'[118]

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[115] OECD Report op cit note 99.
[116] Perdikis & Read op cit note 26 at 244.
[117] Potts op cit note 22 at 9.
[118] Bernasconi-Osterwalder et al op cit note 1 at 207.

3.4 GATTARTICLE I

The law of PPMs under article I is somewhat unsettled. [119] 'GATT article I provides that with respect to customs duties, taxes, regulations and import rules, any advantage or favour granted by a party to any product shall be accorded immediately to the 'like' product of all other Parties.'[120] The provision basically means that a WTO Member government cannot discriminate by treating the product of one WTO Member country better than the like product of another member country.[121] Even before the WTO was created, the GATT panels addressed the PPM issue in the context of article I. The *Belgian Family Allowances*[122] dispute comes from the early days of the GATT's history, about five years after the organization began operations.[123]

At issue, Norway and Denmark alleged a violation of the most-favoured nation treatment (MFN) which is well encompassed in article I.[124] The main issue in contention was a Belgian tax on imports purchased by local government bodies.[125] The six-percent tax was not a family allowance system, but had the same social objectives and imposed the same financial burdens on employers.[126] Some countries were however exempted from this tax, if they applied a system of family allowances similar to that operating in Belgium.[127]The two plaintiff governments complained that the tax violated article I because an exemption had been given to Sweden but not them even though they had similar allowance programs.[128]

The panel found a violation irrespective of the nature of the various family allowance systems.[129]In the panel's view Belgium was levying a non-product related PPM tax on other countries based on a government standard.[130] To the Panel the 'nature of an exporting country's

[119] Charnovitz op cit note 106 at 85.
[120] Ibid at 83.
[121] Ibid.
[122] GATT Panel Report, *Belgian Family Allowances*, G/32, adopted 7 November 1952, BISD 1S/59.
[123] Robert Howse, *The World Trading System: Critical Perspectives of the World Economy,* (1998) 26.
[124] Bernasconi-Osterwalder et al op cit note 1 at 216.
[125] Charnovitz op cit note 106 at 83.
[126] Howse op cit note 123 at 27.
[127] Bernasconi-Osterwalder et al op cit note 1 at 216.
[128] Charnovitz op cit note 106 at 84.
[129] Bernasconi-Osterwalder et al op cit note 1 at 216.
[130] Charnovitz op cit note 106 at 84.

allowance was "irrelevant" to GATT article I, which does not discriminate dependent on conditions.'[131]

Under the WTO the interpretation of article I in the PPMs context was in two disputes concerning automobiles. In the *Indonesia-Certain Measures Affecting the Automobile Industry* (*Indonesia-Automobile*) Japan, the European Communities and the United States complained that Indonesia applied higher customs duties and sales taxes to imported products when the exporting manufacturer did not utilize a sufficient amount of Indonesian parts or labour. Just as it was stipulated in the *Belgium Family Allowance* dispute, the WTO panel in this regard found that 'article I could not be made conditional on any criteria that is not related to the subsequent product itself.'[132]

The second dispute the WTO dealt with was the *Canada-Certain Measures Affecting the Automotive Industry* (*Canada-Automotive Industry*). In that case Japan and the European Communities brought forward complaints that Canada provided an import duty exemption for eligible corporation conditioned on its having manufacturing presence and value-added in Canada.[133] The Panel found a violation of article I but it is also crucial to highlight that the Panel adopted a slight difference in its interpretation. In its ruling the Panel suggested that origin neutral PPMs might be permitted.[134]

In essence the law of PPMs under article I is unsettled because, 'a producer characteristic standard was held to be a violation in the Indonesia and Canada automobile cases, but in the latter the Panel suggested that PPMs are not per se violations of the MFN principle.

3.5 GATT ARTICLE III

In dealing with disputes that involve PPM-based measures GATT/WTO working panels and the Appellate Body have conducted an assessment on two main issues surrounding article III.[135] This

[131] Ibid.
[132] Bernasconi-Osterwalder et al op cit note 1 at 217.
[133] Charnovitz op cit note 106 at 84.
[134] Ibid.
[135] Bernasconi-Osterwalder et al op cit note 1 at 208.

examination involves ascertaining the scope of article III in light of the PPM-based measures and establishing the treatment of like products under article III.[136]

In addressing the scope, article III of the GATT mainly encompasses what is known as the national treatment principle (NTP). Basically the requirement of this provision entails that 'Member countries treat "like products" of foreign origin "no less favourably" than those of domestic origin with respect to the design and implementation of internal policies and regulations.'[137] This element of equal treatment (no less favourable) is contained in the chapeau and paragraphs of article III of GATT 1994.[138] Article I and article III effectively apply to all laws regulations and requirements affecting the internal sale, offering for sale, purchase, transportation, distribution or use of like products.[139]

In order for one to acquire a full appreciation of how article III is/has been interpreted when dealing with PPM based-measures, an assessment of GATT/WTO case law (jurisprudence) is an appropriate point of call. The first disputes to bring a great deal of focus upon the debate of PPMs and trade as mentioned earlier were the *US Tuna-Dolphin* I and II cases.[140] In its adjudication of article III the GATT panels each looked at the scope of coverage of this provision and came to the conclusion that non-product PPMs did not fall under the scope of article III.[141] For example in the *US -Tuna Dolphin I* dispute it was additionally noted that even if article III were to apply, the United States ban would not meet the requirements under article III because article III: 4 required that the United States accord Mexican tuna treatment no less favourable to that accorded United States tuna as a product, independent of the incidental dolphin kill rates.[142]

Another GATT/WTO dispute that shows how the interpretation of article III is conducted in light of PPMs is the *US-Gasoline* case. Incasu the regulation that was at the centre of the storm 'involved a producer characteristics PPM regulation for gasoline.'[143] The basis of Brazil and Venezuela's complaint was that the regulation 'which required reduction from a pollution baseline, was discriminatory because it assigned foreign producers a standard baseline while

[136] Ibid.
[137] Potts op cit note 22 at 11.
[138] Perdikis & Read op cit note 26 at 244.
[139] Potts op cit note 22 at 11.
[140] Ibid at 248.
[141] Bernasconi-Osterwalder et al op cit note 1 at 221.
[142] Ibid.
[143] Charnovitz op cit note 106 at 88.

giving domestic refiners an individual baseline.[144]Clearly this regulation treated foreign gasoline in a manner that was different from gasoline emanating from domestic producers.

According to the United States the difference in treatment between imported and domestic gasoline was justifiable because data in relation to the quality of gasoline from foreign producers was unverifiable.[145] In ascertaining the applicability of article III in this instance the panel held that:

'*Article III: 4 of the General Agreement deals with the treatment to be accorded to like products; its wording does not allow less favourable treatment dependent on the characteristics of the producer and the nature of the data held by it.*'[146]

Thus in this instance the WTO panel merely confirmed that regardless of the quality and processes taken to refine gasoline, at the end of the day all gasoline was considered to be the same under the GATT.

It should be acknowledged that an analysis of this manner also reflects the effectiveness of the GATT in upholding the principles it was created to protect. One cannot under-estimate the importance of principles such as the national treatment and how they attempt to eradicate the element of discrimination when dealing with similar goods within international trade. In such circumstances one cannot but arrive at an understanding of why the WTO panels and the Appellate Body strictly guard and uphold one of its cornerstone principles jealously. But in light of PPMs 'the textual ambiguities in article III have been resolved unfavourably to PPMs.[147]

The second part of the examination under article III is to establish the treatment of like products. The concept of like products at the present moment has not been prescribed a precise definition.[148] In the *Japan-Taxes on Alcoholic Beverages (Japan-Alcohol)* dispute the Appellate Body gave the following description of the like product concept:

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[144] Ibid.
[145] Ibid.
[146] Panel Report, *United States – Standards for Reformulated and Conventional Gasoline* (1996) WT/DS2/R para 6.11.
[147] Charnovitz op cit note 106 at 91.
[148] Lester et al op cit note 30 at 269.

> '*The concept of "likeness" is a relative one that evokes the image of an accordion. The accordion of 'likeness' stretches and squeezes in different places as different provisions of the WTO Agreement are applied. The width of the accordion in any one of those places must be determined by the particular provision in which the term like is encountered as well as by the context and the circumstances that prevail in any given case to which that provision may apply.*'[149]

Thus, judging from the above text the application of the like products concept varies based upon the different WTO agreements and their respective provisions.[150]

In article III the concept of like products mainly shines through article III: 2 and III: 4[151] and as was confirmed by the *Japan-Alcohol* case that both provisions have been interpreted in differing manners and/or their meaning of like products does not necessarily have the same scope. [152]In light of the PPMs debate the pinnacle point of this controversy is viewed when attempting to address "whether it is legitimate under WTO rules to deem 'unlike' two products which were produced in a distinct manner?"[153]

The criteria for determining what constitute like products have developed as a result of the evolution of GATT/WTO case law.[154] The *Working Party Report on Border Tax Adjustment* gave the following guidelines to determine like products:

1. *'like products determinations should be made on a case by case basis without relying on steadfast rules, and ;*
2. *That the issues considered under a like product analysis should include:*
   a. *Product end uses,*
   b. *Consumer taste and habit and*
   c. *Physical properties of the product."*[155]

Later on the Panel in *US-Gasoline* added a fourth guideline of *tariff classification* which has also been applied along with the above stated guidelines.[156]

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[149]Appellate Body Report, *Japan – Taxes on Alcoholic Beverages* (1996) WT/DS11/AB/R section H.1.a.
[150]Bernasconi-Osterwalder et al op cit note 1 at 8.
[151]Ibid at 10.
[152] Ibid.
[153] Ibid at 9.
[154]Perdikis & Read op cit note 26 at 244.
[155] Potts op cit note 22 at 13.

It would be of great aid to examine very briefly the above criteria and have some sort of understanding on what each criterion offers in the like product concept.

> '*The criterion of end-uses assesses the extent to which the products in question are capable of performing functions of a same or similar nature. This would involve an examination of the comparative importance of similar as opposed to different or non-overlapping end uses. Therefore, to make a prima facie case of likeness a member state must not only provide evidence of similar end uses, but also adduce evidence to show that such similar use outweighs the different or non-overlapping end uses of the product. The criterion of products' properties, nature and quality requires that the products in question share essentially the same physical characteristics…*
>
> *In assessing the last criterion of tariff classification the Panel/Appellate Body is confined to examining a uniform system of tariff classification, such as the Harmonized System presumably in order to provide an objective basis for the determination of likeness.* '[157]

Though the *Border Tax Adjustment Report* also noted that these set of guidelines were non-exhaustive henceforth emanating a sense of flexibility,[158] GATT/WTO working panels and the Appellate Body have not to a large degree demonstrated that flexibility and have basically stuck to the set guidelines. This to some extent could be viewed as one of the factors that have made it challenging for other considerations such as PPMs to infiltrate the provisions of the GATT.

A strong example in this regard is again found in the *US –Tuna Dolphin* rulings. It was 'noted that even if the *Marine Mammal Protection Act* (MMPA) were eligible for consideration under article III, it would fail to comply with the article due to the MMPA's differential treatment of (physically) identical products.'[159]'Therefore the United States measure regarding dolphins did not fit within the confines of article III because this PPM could not affect tuna as a product.'[160] Though the *US-Tuna Dolphin* rulings were not adopted, this line of reasoning has provided the basis for presumption of illegality with respect to PPMs.[161]

Even in the *Japan-Alcohol* dispute the Appellate Body mainly stuck to the interpretation of like products via the use of the above noted criteria. An assessment of it ruling shows that the

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[156] Ibid at 14.
[157] *'Likeness and the Legality of Non-Product Related Distinctions'* available at http://www.lawteacher.net/european-law/essays/likeness-and-the-legality-of-law-essays.php accessed on 2nd August 2014.
[158] Ibid.
[159] Ibid.
[160] Charnovitz op cit note 106 at 87.
[161] Potts op cit note 22 at 12.

Appellate Body strictly chose to inter-changeably juggle the criteria set out in the *Border Tax Adjustment Report* in arriving at a determination of likeness. The Appellate Body 'in outlining what would be required to find product likeness under the "narrow" definition of like products applicable to article III:2, noted that while a commonality of end uses would not be sufficient, physical identity might be sufficient for a finding of likeness under the article.'[162]

The *EC Asbestos* case however brought in a different aspect of determining likeness in products. The Appellate Body incasu had to determine whether or not carcinogenic asbestos fibres were like non-carcinogenic fibres.[163] The Appellate Body stressed that the panels must look at all the evidence that is of relevance to a likeness determination. The Appellate Body's report proceeded to state that in the process of examining the *Border Tax Adjustment Report*, panels must look at each criterion separately and then weigh all the relevant evidence. [164] Taking this approach into consideration the Appellate Body then went on to include a consideration of health risks associated with the products in question in the determination of their likeness and 'on this basis found the products to be unlike.'[165]

In this instance the Appellate Body took a bold stance of widening their approach of determining like products and considered the health element attached to the products in question. This stance provided for the possibility of determining product likeness on criteria unrelated to actual functionality, such as non-product related PPMs.[166] Undoubtedly paving the way for disputes such as the *Brazil- Measures Affecting Imports of Retreaded Tyres* (*Brazil-Retreaded tyres*) to adopt a similar approach.

The most significant factor that is common in both cases and what makes these rulings so unique is the fact that the products in question had health risks associated to them. For instance in the *EC Asbestos* disputes convincing scientific evidence was presented by the European Communities that showed that the use of products with chrysotile have the strong potential of

[162] Ibid at 15.
[163] Bernasconi-Osterwalder et al op cite note 1 at 13.
[164] Ibid.
[165] Potts op cit note 22 at 16.
[166] Ibid.

causing lung cancer and/or mesothelioma.[167] Whilst in the *Brazil-Retreaded Tyres* it was noted that:

'*At the end of their useful life, tyres become waste, the accumulation of which is associated with risks to human, animal, and plant life and health. Specific risks to human life and health include:*

(i) The transmission of dengue, yellow fever and malaria through mosquitoes which use these tyres as breeding grounds; and

(ii) *The exposure of human beings to toxic emission caused by tyre fires which may cause several disabilities or negative effects on health*.'[168]

3.6 GATTARTICLE XX AND THE PPMs DEBATE

Article XX is another provision that plays a very crucial role in the interaction of the GATT and PPMs. A discussion of article XX is vital for an analysis of PPMs because many PPMs violate article I, III or XI[169] and as noted the defending Member may still be able to justify the challenged measure under article XX.[170] 'Most of the headings listed under article XX are designed to allow countries to diverge from the main GATT principles of non-discrimination under a limited set of clearly identified circumstances set forth under the headings of the article.'[171]

As it was noted in the previous chapter, it was clearly articulated within the *US-Gasoline* Appellate Body report that the procedure for PPMs to be found eligible under article XX involves:

1. 'A determination of the eligibility of the measure concerned under the specific headings of the article and
2. A determination of the conformity of the application of the measure with requirements of the chapeau of the article.'[172]

In relation with the first noted guideline, the WTO has interpreted the headings falling under article XX in such a manner so as to accommodate PPM- based measures. Many examples can

[167] Appellant Body Report *EC-Asbestos* op cit note 41 para 157.
[168] Sebastien Thomas '*Trade and environment under the WTO rules after the Appellate Body report in Brazil-retreated tyres*' (2009) 4 JICLT 43.
[169] Charnovitz op cit note 89
[170] Bernasconi-Osterwalder et al op cit note 1 at 211.
[171] Potts op cit note 22 at 23.
[172] Ibid at 23-24.

be given to support such a line of reasoning. In the *US-Gasoline* dispute the panel agreed with the fact that the United States measure 'was a policy to reduce air pollution resulting from the consumption of gasoline was a policy within the range of those concerning the protection of human, animal and plant life mentioned in article XX (b).'[173]

Another example which strongly supplements this line of reasoning is also found within the Appellate Body reports of the *US Shrimp-Turtle* case. After a thorough evaluation of article XX (g), the Appellate Body found that sea turtles were a 'natural resource' that is also exhaustible. It was also noted that the measure in contention was reasonably related to conserving sea turtles. The Appellate Body then stated that the measure was made effective in conjunction with restrictions on domestic production or consumption.[174] Considering that all the requirements attached to article XX (g) were fully fulfilled, the 'Appellate Body considered the measure to be provisionally justified under that particular provision.'[175]

Even in disputes that do not entail environmental protection, PPM based measures have been able to comfortably satisfy the requirements of one of the sub-paragraphs under article XX. The recent case of *European Communities-Measures Prohibiting the Importation and Marketing of Seal Products* (*EC- Seal Products*) is one such example. According to the background facts of this case the European Union had a ban on import seal products or placing them on the market, together with an implementing regulation setting out exceptions to the ban.[176]Canada and Norway challenged this measure at the WTO stating that it discriminates against their industries as it allowed seal products from indigenous hunters to enter the European Union market.[177]The Appellate Body upheld in its conclusion that the European Union seal regime falls within paragraph (a) of article XX because it is necessary to protect public morals.[178]

The second part of the guidelines involves the determination of whether or not the measure has been applied in conformity with the chapeau of article XX. This section of article XX has been the most challenging for PPM- based measures to overcome. Noted from the above for a measure

[173] Panel Report *US-Gasoline* op cit note 146 para 6.21.
[174]Lester & Mercurio et al op cit note 42 at 408.
[175] Ibid.
[176]Rob Howse, Joanna Langille & Katie Sykes *' Sealing the deal: The WTO's Appellate Body's Report in EC Seal Products'* available at http://www.asil.org/insights/volume/18/issue/12/sealing-deal-wto%E2%80%99s-appellate-body-report-ec-%E2%80%93-seal-products accessed on 4th August 2014
[177]Ibid.
[178]Ibid.

'to be justified under article XX, measures must not be applied in a manner that constitutes arbitrary discrimination, unjustifiable discrimination or a disguised restriction on international trade.'[179]

Undoubtedly a large number of cases have found it a mammoth task to successfully meet the requirements as set out within the chapeau of article XX and consequently it has created a challenging hurdle for PPMs to be GATT compliant. Multiple examples can be derived from WTO case law/jurisprudence which shows the limiting nature of the chapeau in relation to PPMs. In *US-Gasoline* the Appellate Body 'stated that although the baseline establishment rules fulfilled the criteria of the measures falling within article XX (g), they failed to meet the requirements of the chapeau which guides the application of the provisions.'[180]

Another illustration that shows the steepness of the requirements laid out within the chapeau is also found within the texts of the *Brazil-Retreaded tyres* dispute. 'Both the panel and the Appellate Body had accepted that Brazil's measures would have the effect of reducing the amount of discarded tyres and thus fell within the range of policies covered by article XX (b) to reduce the risks to human health.'[181] Despite the existence of serious health implications, that was associated with the dumping of used tyres, [182] the provisions of the chapeau did not give a leeway for Brazil to uphold its ban of retreated tyres from the European Union. 'At the same time it shows that the DSB is strict in its interpretation of the chapeau to ensure that measures are not carried out in a way which cause arbitrary or non-justifiable discrimination or amount to disguised restrictions on international trade.'[183]

3.7 ARE PPMs THE KEY FOR THE ATTAINMENT OF ENVIRONMENTAL SUSTAINABILITY?

The relationship between PPMs and sustainable development is one of paramount importance and which has been recognised on a global scale through the Rio Declaration of 1992.[184]

Principle 8 of the Rio Declaration reads as follows:

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[179] Ibid.
[180] Tuner op cit note 86 at 200.
[181] Ibid at 204.
[182]Thomas op cit note 168 at 43.
[183] Turner op cit note 86 at 205.
[184] The 1992 Rio Declaration on Environment and Development defines the rights of the people to be involved in the development of their economies, and the responsibility of human beings to safeguard the common environment http://www.sustainable-environment.org.uk/Action/Rio_Declaration.php accessed on 8th August 2014.

'*…to achieve sustainable development and a higher quality of life for all people, states should reduce and eliminate unsustainable patterns of production and consumption and promote appropriate demographic policies.'*

This shows the linkage that exists between PPMs and sustainable development. International instruments such as the 1992 Rio Principles have encouraged the use of sustainable consumption and production patterns, 'and the use of appropriate PPM-based measures is one way of achieving that goal.'[185] Though the WTO as an international organization has paid recognition to the concept of sustainable development via the Preamble of the Marrakesh Agreement, the same cannot be safely confirmed as regards to PPMs. The crux of this portion of the debate is to illustrate the necessity element of PPMs by showing their effectiveness in attaining sustainable development.

Many arguments have been submitted for and against PPMs as a tool for the attainment of sustainable development. But 'coming to terms with the appropriate and inappropriate uses of PPM-based measures and the opportunities and challenges facing such measures, is a critical first step for leveraging such instruments effectively toward the achievement of sustainable development.'[186]

A number of arguments have been submitted on the reasons why 'trade- related PPM measures are inappropriate policy instruments. Some of the arguments for instance entail that 'critics of trade related PPM-based measures claim that PPM-based restrictions impinge upon the sovereignty of the exporting state because they aim to influence PPMs abroad. The claim regarding national sovereignty is linked to the idea that the importing state is imposing its values or ethical and cultural preferences on the exporting state.'[187] As a symbol of the seriousness and gravity of this factor the then Director-General (D-G) of the WTO (Renato Reggiero) in 1997 stated that 'one nation could not, in its economic relations with its trading partners apply trade restrictions in an attempt to change the process production methods.'[188]

[185]Bernasconi-Osterwalder et al op cite note1 at 204.
[186]Potts op cit note 22 at 4.
[187] Bernasconi-Osterwalder et al op cite note 1 at 204.
[188] Turner op cit note 86 at 199-200.

Another anti-PPM-based measure line of reasoning revolves around the fact that PPMs may be resorted to mainly for protectionist interest.[189] Though this is definitely an undeniable factor it is however 'an interest that is shared by all trade related measures bearing no special relationship to whether those measures specify PPM requirements or mere product characteristics.[190]

On the other hand PPM-based measures have positive elements attached to them which automatically equate them as a necessity within the GATT. An illustration of this is found in the mere fact that PPMs are simply more effective in bringing about sustainable development.

The protection of sea turtles had long been a problem of recognition for which international legislation came about slowly. [191] Ranging from the period of 1924 -1996 some steps had been taken towards the conservation of migratory sea turtles. An example of this was in 1979 when the World conference on Sea Turtle Conservation called for the promulgation of regulations requiring the use of equipment that excludes the capturing of sea turtles.[192] This requirement only became an effective reality in 1996 when the affected governments negotiated the first treaty on the conservation of sea turtles.[193]

Another reason why PPMs are a necessity within the GATT is also because of the fact that the WTO is characterised with a very broad Membership. As of 26 June 2014 the WTO has 160 Member states that have agreed to abide to WTO laws and commitments.[194]Considering the fact that the WTO has a large number of countries that have all agreed to follow the laws and principles as set out within the GATT the incorporation of PPMs would be a reasonable stance. This is based on the fact that effective broad membership treaties are difficult to achieve.[195] 'Many environmental problems are not addressed by treaties with sufficient country membership and compliance.' It is clearly evident that the WTO does not have a problem as regards to membership; assimilating PPMs into the GATT would be a tremendous leap towards attaining sustainable development.

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[189] Potts op cit note 22 at 4.
[190] Ibid.
[191] Charnovitz op cit note 89 at 71.
[192] Ibid.
[193] Ibid.
[194] 'Understanding the WTO: The Organization' available at http://www.wto.org/english/thewto_e/whatis_e/tif_e/org6_e.htm accessed on 6th August 2014.

[195] Charnovitz op cit note 89 at 71.

Another valid consideration for the inclusion of PPMs into the GATT lies in the fact that PPMs have always been part and parcel of environmental law. This linkage goes all the way back to 1925 when Mexico and the United States both agreed to set up an international Fisheries Commission to conserve marine life in the Pacific Ocean. Given these factors and going back to the confirmed fact that trade and the environment are two intertwined elements, the suggestion of incorporating PPMs into GATT is not in itself a radical suggestion.

3.8 CONCLUSION

Generally the term PPMs refers to the manner a particular good is made or harvested. PPMs are then categorised into product related PPMs and non-product related PPMs. This distinction is very important as it addresses the manner in which WTO laws and regulations treat a particular PPM-based measure. Articles I, III, XI and XX are the relevant provisions in addressing the linkage between GATT 1994 and PPMs. In many disputes involving PPM based measure a large number of these complaints found PPMs to be in contravention of article I (MFN) and III (NTP). Another important link that article III encompassed was the like products tests. It can be safely verified that in determining the likeness between different goods WTO panels and the Appellate Body have not to a great degree strayed away from the set guidelines for determining likeness. This has made it very challenging for PPMs to be acceptable within the GATT. As for the article XX provisions most PPMs are able to slide into qualification under one of the sub-paragraphs of article XX but are not able to meet the requirements of the Chapeau in most instances. Though PPMs have a lot of controversy to them, it is however an undeniable factor that PPMs are characterised by many positive reasons which make a very strong case in proving their ability to attain sustainable development.

CHAPTER FOUR

4.1 PPMs AND THE DEVELOPING WORLD

INTRODUCTION

It has been shown in the above texts that there is the need to have PPMs within the global and general context. The aim of this portion of the research paper is to propose how PPMs would be an aid in bringing about the ultimate goal of sustainable development for developing countries and especially those in the SADC developing region. The chapter will firstly embark on discussing the PPMs debate as per the perspectives of the developed and developing countries. The whole underlying reason is to show the general view of developing nations in this debate. From this point the discussion will shift to an assessment of the diverse economic trade related activities in the SADC states. The focus will namely be on copper mining in Zambia, Democratic Republic of Congo (DRC) and its forestry sector and finally the general mining sector of South Africa. The purpose is to show the rate of environmental degradation that is attached to some of SADC's member countries main economic activities that generate trade. Through the presentation of this evidence suggestions of why PPMs are necessary within an international instrument such as the GATT will be highlighted.

4.2 THE PPMs DEBATE VIS-À-VIS THE DEVELOPING (SOUTH) AND DEVELOPED (NORTH) COUNTRY PERSPECTIVE

According to the practices of the WTO, 'there are no definitions of "developed" and "developing" countries.'[196] The onus is upon the members 'to announce for themselves whether they are "developed" or "developing" countries.'[197] Currently two thirds of the WTO's members are nations with the status of a developing country.[198] Developing countries are said to play an important and active role in the WTO because of their numbers and their increasingly looking to trade as a vital tool in their development efforts.[199]

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[196] 'Who are the Developing countries in the WTO' available at http://www.wto.org/english/tratop_e/devel_e/d1who_e.htm accessed on 22 November 2014.
[197] Ibid.
[198] 'Understanding the WTO: Developing countries' available at http://www.wto.org/english/thewto_e/whatis_e/tif_e/dev1_e.htm accessed on 22 November 2014.
[199] Ibid.

Generally the developed members of the WTO are of the view that 'environmental problems are more often associated with production process, than with the product itself.'[200] In developed countries PPM-related standards are becoming more stringent and comprehensive.[201] This is in response to improved understanding of environmental risk and public preference for tighter environmental protection.[202] As a result of such an outcome developed countries are 'strongly opposed by the third world as they destroy the competitiveness of their products in the international markets.'[203] The debate about the competitiveness effects of environmental regulation has focused on the costs of compliance and the variations between environmental regulatory systems in different countries.[204]

This argument generally recognizes that PPMs may produce economic benefits in terms of improved human health and efficient use of resources, but they also affect competitiveness at the sectorial or enterprise level.[205] Though this argument carries a substantial amount of weight, it is a fact that 'most economic studies suggests that there is no specific link between the level of environmental regulation adopted between the level of environmental regulation adopted by a country and its economic performance in terms of competitiveness of its industry.'[206]

On the other hand PPM-based measures are met with specific hostility by developing countries.[207] A number of arguments have been brought forward by developing countries which clearly show their dislike towards the use of PPM-based measures. For instance 'many developing countries are worried about the possibility of PPMs, becoming non-tariff barriers. Exporters of developing countries are apprehensive that their products may be denied access or they may have to incur high adjustment costs in order to maintain access to overseas markets.'[208]

The developing member countries of the WTO have also submitted an argument against PPMs which revolves around the aspect of protectionism. According to the south PPMs would 'give

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[200] Rene Vossenaar, Halina Ward (ed) and Duncan Brack (ed) 'Trade, Investment and the Environment' (2000) 153.
[201] Ibid.
[202] Ibid.
[203] Manchanda & kumar Lal Op cit note 25.
[204] Vossenaar, Ward (ed) & Brack (ed) op cit note 200 at 156.
[205] Ibid.
[206] Sandeep K. Tetarwai & Pradeep S. Mehta 'Process and Production Methods (PPMs)-Implications for Developing Countries' available at http://www.cuts-international.org/7-2000.pdf accessed on 29th August 2014.
[207] JochimWiers 'WTO Rules and Environmental Production and Processing Methods (PPMs)' ERA Forum (2001) 101 available at http://link.springer.com/article/10.1007%2FBF0281754 accessed on 10th December 2014.
[208] Tetarwai & Mehta op cit note 206.

countries greater opportunity to protect their industries unfairly against foreign competition.' [209] Besides the protectionism argument some of the developing countries argue that PPMs could bring about the possibility 'of several nations using their superior commercial power to impose their environmental standards on other nations without their consent or participation in the development of such standards.'[210] This would lead to a serious disregard of the sovereignty of developing countries.

Developing countries also argue that, 'their social priorities differ from those of developed countries.' Some of them, for instance 'might be more concerned about clean water as an environmental issue than with global warming. Or they may be more concerned about education, health care and infrastructure than about any environmental issue.'[211]

Another practical argument that developing countries bring to the forefront in this issue is that 'developed countries became rich by exploiting natural resources in an unsustainable manner in the past. Now since they have become wealthy, they are capable of maintaining high environmental standards and so are taking in the tune.'[212] Concrete evidence as presented in history shows this fact as being true and accurate. For example the Industrial Revolution which began in Britain in the 1700s, is said to have caused serious cases of deforestation.[213] This view however does not create a solid enough form of basis, which allows for the international community as a whole through the laws of international trade to put into place measures which tackle environmental issues.

While each of the arguments brought forward by the south have a legitimate basis. It has been observed by scholars like J. Potts that the specific submissions put forward by developing countries apply equally to a wide range of other policy measures, and therefore have little merit as against PPM measures per se.[214] For instance with regards to the protectionist argument, 'the ability of PPM requirements to serve protectionist purposes is undisputable.'[215] But, 'the potential of trade-related PPM measures to serve protectionist interests is shared by all trade-

[209] Ibid.
[210] Ibid.
[211] Ibid.
[212] Ibid.
[213] 'The Industrial Revolution and it impact on our environment' available at http://eco-issues.com/TheIndustrialRevolutionandItsImpactonOurEnvironment.html accessed on 31st August 2014.
[214] Potts op cit note 22 at 5.
[215] Ibid.

related measures bearing no special relationship to whether those measures specify PPM requirements or mere product characteristics.'[216]

In terms of the sovereignty argument, 'it is unclear how exactly a PPM requirement can be said to infringe upon the national sovereignty of its trading partners. If the implementation of PPM-based policy restricts access to a particular market, then it remains within the authority of the foreign jurisdiction to decide whether or not it wants to access that market.'[217] Also both PPMs and non-PPM based policy measures can have significant impacts upon the pursuit of foreign policy objectives.[218] For instance 'SPS requirements on food products will inevitably require foreign jurisdictions to undertake new procedures in much the same manner as a particular PPM measure.'[219]

Finally in terms of the differing social priorities argument, one can term such an approach as being naïve. This is based on the simple reason that in this day in age, the environment should be seen by all nations as a common concern. Especially more so with the increasing environmental problems such as climate change which are proving to have detrimental effects on both developed and developing countries.

Based on the analysis conducted of PPMs in the context of the north and the south, developing countries generally have the view that PPMs should not be integrated with the GATT. Despite the gloomy image portrayed by the PPMs debate in the context of the developed and developing world tensions, it is also undeniable (as will be shown later) that environmental degradation is a serious problem in developing countries. It has also been submitted that with incentives and supportive measures developing countries can be assisted to move towards more 'environmentally friendly' PPMs.[220]

[216] Ibid.
[217] Ibid at 5-6.
[218] Ibid at 5.
[219] Ibid.
[220] Vossenaar et al op cit note 200 at 154.

4.3 EVIDENCE OF ENVIRONMENTAL DEGRADTION IN SADC DEVELOPING COUNTRIES

This portion of the paper will present evidence of environmental degradation from developing countries within the SADC region. Purpose is to show generally the rate of environmental degradation in developing countries. Through the presentation of this evidence suggestions of why PPMs are necessary within an international instrument such as the GATT will be given.

'As it is the case globally, the last few decades have seen the increasing deterioration in environmental quality in the Southern African region.'[221] SADC which is currently made up of fifteen countries was formed in 1992 in Windhoek Namibia as a successor to the Southern African Development Coordination Conference (SADCC) which was founded in 1980.[222] 'It is an inter-governmental organisation whose goal is to promote sustainable and equitable economic growth and socio-economic development through efficient productive systems, deeper co-operation and integration, good governance and durable peace and security.'[223]

As it is the case with many regions in Africa, the SADC region is endowed with an abundance of natural resources. For instance in the case of Zambia, it is presently the World's fourth largest producer of copper and has around 6% of the world's known reserves.[224] Most of the economies of the SADC states rely on primary economic activities such as mining, fishing and agriculture to be the backbone of their economies. An illustration of such an economy is the South African economy. According to the data presented by the Chamber of Mines (South Africa), mining accounts for about 18% of South Africa's total GDP and 20% of investments.[225] Hence it is these economic activities that trade is generated.

The DRC offers the ideal example of how an economic activity which generates trade and also brings about gross environmental degradation. The DRC contains half of Africa's tropical forest

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[221] Jan Glazewski *Environmental Law in South Africa* (2014) 1-6.
[222] Oliver C. Ruppel& Katharina Ruppel-Schlichting *Environmental Law & Policy in Namibia* 2 ed (2013) 69.
[223] SADC Facts & Figures' available at http://www.sadc.int/about-sadc/overview/sadc-facts-figures/ accessed on 15th August 2014.
[224] Ibid.
[225] Mining and minerals in South Africa' available at http://www.southafrica.info/business/economy/sectors/mining.htm#.U-3qKyfMuW8 accessed on 15th August 2014.

and the second largest continuous tropical forest in the World.[226] Characterised with such a large and vast forest it is not surprising that commercial logging is one of the contributory elements to the Congo's economic framework.

According to the data presented by the organisation Forest Monitor, the DRC government granted their timber concessions to about sixty companies.[227] These sixty companies hold approximately half of the existing concessions and produced a reported 300,000m^3 of timber in 2005.[228] From this timber harvested over 90% is exported to the European markets principally to France, Belgium, Portugal and Italy, hence generating the DRC a significant amount of income.[229]

Clearly this sector has proven to be of great importance to the DRC's economic set-up but it has also brought about serious environmental problems. To date deforestation is one such problem that has arisen and it has proven to have associated detrimental effects.[230] It has resulted in the fragmentation of intact forests and to the altering of their ecology and biodiversity loss such as local extinction of plant and animals that depend on them.[231] In respect to the 'wicked problem' of climate change deforestation is not in any way aiding in overcoming this issue. 'Climate simulations for the region indicate that rainfall will become more intense and more destructive over the coming years bringing floods, landslides and soil erosion.[232]

In this instance the use of PPMs would be a reasonable avenue to resort to in order to curb the rate of environmental degradation. As mentioned earlier, over 90% of the timber harvested from the forests of the DRC is exported to Europe. By having PPMs in the GATT with a strong ethos of environmental sustainable development would ensure that timber which is not harvested in a

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[226] Deforestation in the Democratic Republic of Congo available at http://earthobservatory.nasa.gov/IOTD/view.php?id=7927 accessed on 17th August 2014.
[227] 'The timber sector in the DRC: A brief overview' available at http://www.forestsmonitor.org/uploads/2e90368e95c9fb4f82d3d562fea6ed8d/Description_of_the_Timber_Sector_in_the_DRC.pdf accessed on 17th August 2014.
[228] Ibid.
[229] Ibid.
[230] Ruppel&Ruppel-Schlichting op cit note 222 at 70.
[231] 'Democratic Republic of Congo' available at http://www.forestintheworld.org/democratic-republic-of-deforestation accessed on 17th August 2014.
[232] Democratic Republic of Congo talks climate: The public understanding of Climate change' available at http://r4d.dfid.gov.uk/PDF/Outputs/MediaBroad/02-Democratic-Republic-of-Congo-Talks-Climate.pdf, accessed on 17th August 2014.

manner not in compliance with environmental PPMs is restricted from entering the importing nations' markets.

Another illustration of environmental degradation in the SADC that is closely interlinked to an economic trade related activity is that of copper mining in Zambia. 'In the world today, natural resources are not only an important contributor to the national economy of many states, but also an indispensable part of international trade.'[233] As many types of natural resources, especially minerals and fossil fuels, are exhaustible and unevenly distributed globally, they are extremely volatile in price in international market, and are an easy target in international trade frictions.[234] Resource-related trade frictions could be particularly thorny given that trade in natural resources often sparks wide environmental concerns in addition to its profound economic implications.[235]

Though Zambia has other minerals, it has predominately been a copper mining nation. The projections presented by the Zambian Mining Sector profile of June 2013 show that copper production has increased from 572,793 tons in 2008 and rising over 800,000 tons in 2012 with a projection that copper will reach 1,500,000 tons by the year 2016.[236]

Just as it is the case with the DRC, the manner in which the copper is harvested/extracted and processed generates a negative environmental impact. Over the years Zambia's need to earn exchange has created environmental problems caused by long and dangerous smelting processes of copper ore which heavily pollute the air and water sources.[237] In addition to the air pollution the emission of sulphur dioxide has gravely stunted vegetation growth and hence in some instances causing necrosis.[238]

As suggested in the DRC context PPMs would also bar the circulation of copper mined in ways very harmful to the environment. PPMs would be a double benefit because not only is the copper mined and processed in a sustainable manner bringing in foreign income but the environment is also protected.

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[233] Manjiao op cit note 89 at 939.
[234] Ibid.
[235] Ibid.
[236] Zambia Development Agency 'Mining sector profile' available at http://www.zda.org.zm/sites/default/files/Zambia%20Mining%20Sector%20Profile%20-%20%20July%202014.pdf accessed on 24th December 2014.
[237] 'Zambia Copper case' available at http://www1.american.edu/ted/zambcopp.htm accessed on 17th August 2014.
[238] Elisha Ncube, Clement Banda and Jhonnah Mukwita 'Air pollution on the Copperbelt of Zambia: Effects of sulphur dioxide on vegetation and humans' available at www.academyjournals.net accessed on 17th August 2014.

In terms of mining, Zambia is not the only SADC country that heavily relies upon the trade and economic benefits that emanate from this sector. Mining generally has historically been the mainstay of the South African economy and has shaped both its social and environmental fabric.[239] It is a well-known factor that mines and mining operations contribute to economic development and provide jobs, but they also bring about suffering for individuals and communities by causing damages to the land, water and air around them.[240] In essence mining has brought about a great deal of wealth at the price of extensive ecological damage.[241]

Signs of serious ecological damage in the South African context can witnessed by the release of acidic water, otherwise known as acidic mine drainage (AMD) into the country's already stressed water supplies in the northern gold fields of Witwatersrand region.[242]

'Depending on the area, water may contain high levels of salts, sulphate, iron and aluminium, toxic heavy metals such as cadmium and cobalt, and radioactive elements.'[243] The elements which have contaminated the water usually have the effect of polluting the soil and water supplies as it spreads underground and flows into streams and rivers.[244] As a result of such horrendous environmental degradation, it has been stated by the Department of Water and Sanitation that South Africa will require an estimated amount of R10 billion for acid mine mitigation in the Witwatersrand gold fields.[245]

The few illustrations noted in the above texts only give a slight glimpse of the environmental problems in the SADC family of nations. It is therefore important to have in place measures that curb/prevent environmental degradation. Thus developing measures that regulate the manner a

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[239] Glazewski op cit note 221 at 17-3.
[240] 'When mines break Environmental laws: How to use criminal prosecution to enforce environmental rights' available at available at http://www.atlascopcoexploration.com/1.0.1.0/354/TS3.pdf accessed on 19th August 2014.
[241] Anna Azarch, 'Acid mine drainage: A prolific threat to South Africa's environment and mining industry' (2011) available at http://www.consultancyafrica.com/index.php?option=com_content&view=article&id=680:acid-mine-drainage-a-prolific-threat-to-south-africas-environment-and-mining-industry&catid=92:enviro-africa&Itemid=297 accessed on 14th December 2014.
[242] Ibid.
[243] 'Acid Mine Drainage in Johannesburg' (2011) available at http://www.greenpeace.org/africa/en/News/news/Acid-Mine-Drainage/ accessed on 15th December 2014.
[244] Ibid.
[245] Kevin Crowley, 'SA needs R10bn for acid-water clean-up,' (2014) available at http://www.moneyweb.co.za/moneyweb-mining/sa-needs-r10bn-for-acidwater-cleanup accessed on 15th December 2014.

product is harvested or produced would be an important stride towards environmental sustainable development in the region.

Also considering PPMs in light of SADC developing countries is the fact that their economies are primary based economies. This alone makes them naturally heavily dependent upon the environment. Rapid environmental degradation would also be a detrimental effect upon their economies. Hence by having PPMs within international trade regulations might be a possible avenue for reducing the fast rate of environmental degradation.

It is also important to point out that most countries in the region have direct domestic regulations that are responsible for enforcing environmental protection. For example in South Africa the National Environmental Management Act[246] (NEMA) is one of the key pieces of legislation that deals with the environment generally, whilst Zambia makes use of the Environmental Protection and Pollution Control (Amendment) Act.[247] It is common for states to 'often rely on direct regulation only.'[248] Though PPMs are characterized with a great deal of controversy, it should not be forgotten that they too share a common trait with the domestic laws. That shared similarity is the protection of the environment.

In comparison to its developed nation counterparts, pollution levels in developing countries are relatively low.[249] Therefore it would not seem necessary or reasonable for stringent regulations to be applied in international trade norms to govern the environmental problems that are found in the developing countries of the SADC. This view is however not shared by some the environmental groups.[250] The main emphasis is that it would be desirable for all countries irrespective of their stage of economic development to avoid further ecological and environmental degradation.[251] This should be done by requiring right from the beginning, both industrial and agricultural producers to adopt appropriate environmental standards.[252]

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[246] Act 107 of 1998.
[247] Act 12 of 1999.
[248] Christiane R. Conrad 'Process and Production Methods in WTO law: Interfacing trade and social goals' (2011) 71.
[249] Vinod Rege *GATT law and environmental related issues affecting the trade of developing countries* (1994) 28 JWT at 112.
[250] Ibid.
[251] Ibid.
[252] Ibid.

In light of this, the rules of the GATT could adopt the above given approach. Henceforth having a mode of dealing with PPMs in a predictable and transparent manner would be 'nipping the environmental problems in the bud' which in itself is positive within the sustainable development perspective.

Another advantage of having PPMs within GATT is that it would put a degree of pressure on developed countries to take steps to transfer knowledge and technology that is more environmentally efficient. This too would assist in promoting sustainable production methods in both developed and the developing world.

4.4 CONCLUSION

In conclusion when it comes to the PPMs debate, developed and developing countries have differing and opposing opinions. Developed countries generally submit that PPM-related standards are an appropriate way of responding to environmental concerns. Developing countries however hold as one of their many arguments that PPMs would become a non-tariff barrier thus distorting trade. Most nations in SADC have economies that are reliant on primary economic activities such as mining, fishing and agriculture. From the same activities trade is then generated. Unfortunately many examples can be given to show how trade related economic activities are causing serious forms of environmental degradation. Using a few SADC states (DRC, South Africa and Zambia) as examples PPMs generally would assist bringing about the element of environmental sustainable development in the developing country regions of the SADC.

CHAPTER FIVE

5.1 SUMMARY

The tension between trade and the environment is a very difficult and complex issue to resolve in a generalized manner. The WTO has come under increasing attack from environmentalists and others concerned about globalization and the WTO's lack of concern about sustainable development.[253] Trade laws do not exist within a vacuum and hence it is important for them to absorb other aims and values of the global community. The approach of this research paper was to show and advocate for the need to include PPMs within the current GATT regime for efficient environmental protection. 'As the cornerstone of the WTO package of agreements, the GATT plays a symbolic and, in many ways, leading role in the development of WTO law more generally.'[254] Analysis has shown that though trade and the environment are two differing elements, their interlinked nature is an undeniable factor. In order to fulfil its endeavour of showing the need to have PPMs in the GATT the following areas of interest were investigated and a number of solid conclusions were arrived at:

5.1.1 CURRENT LEGAL SET-UP OF GATT AND ITS EFFECTIVENESS

In evaluating the current set up in which environmental interests are said to be appreciated, the manner in which article XX is interpreted has proven to be the pinnacle provision that balances trade interests and environmental concerns. It is the provision within the GATT 1994 that addresses the tension that can arise between trade and other legitimate policy concerns which are listed in the form of exceptions in paragraphs (a)-(j). Of particular relevance are article XX (b) and (g) which offer general exceptions from international trade obligations for unilateral measures that have the purpose of 'protecting human, animal or plant life or health' and /or 'conserving exhaustible natural resources.'

The structure of article XX, that is its chapeau and listed exceptions, has significantly influenced the manner in which WTO tribunals have interpreted and applied article XX. Hence it is only those measures that satisfy the requirements as per the subparagraphs of the general exceptions which are then scrutinized for consistency within the chapeau.

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[253] Gary P. Sampson *Trade, Environment and the WTO: The Post-Seattle Agenda* (2000) 12.
[254] Potts op cit note 22 at 9.

An analogy of article XX (b) and (g) clearly indicated that though they have a steep criteria in the form of specific built-in requirement, disputes such as *EC-Asbestos* and *Shrimp-Turtle* have shown that these two provisions are more flexible in accommodating other policy measures. Through the disputes the WTO's working panels and the Appellate Body has dealt with, it can be safely concluded that the current GATT regime is not an effective mechanism to adequately protect the environment. This is derived from a number of varied and collective reasons. An example of such a reason is the fact that the provisions of article XX have been interpreted in a narrow and restrictive manner (especially the chapeau), such an approach has made it challenging for PPMs to be catered for within the provisions of the GATT.

5.1.2 PPMs AND THEIR LINKAGE TO THE GATT

PPMs can be generally referred to as activities related to the actual production of a good to the extraction of natural resources for eventual incorporation into goods, to trading practices used to bring goods to market.[255] The research paper also takes note of the fact that PPMs are not only strictly associated to environmental pollution, in its broad state it also incorporates aspects such as new technology, use of force, child and slave labour.

PPMs are in most cases differentiated into two main important categories which are:

1) The product related PPMs and
2) The non-product related PPMs.

It is the second category of PPMs in which the research paper gives a thorough analysis, since they target the production stage of goods. The given distinction is of important significance within the context of WTO law as it cuts a clear line in showing which PPMs are recognised by WTO law (product related PPMs) and which PPMs are not accommodated within the periphery of WTO rules (non-product related PPMs).

In addressing the linkage of PPMs and the GATT it should be noted that the regulatory treatment of most PPM trade issues are subject to articles I, III and XX of GATT 1994. The main underlying ethos under article I is that one WTO member cannot discriminate by treating the product of one WTO member better than the like product of another (MFN principle). By

[255] Ibid at 2.

looking at the disputes that the GATT and WTO panels have dealt with it was noted that article I could not be made conditional on any criteria that is not related to the subsequent product itself. The assessment of the article also shows that the law of PPMs under article I is somewhat unsettled. In disputes that the WTO dealt with (Indonesia-Automobile and Canada-Automotive Industry) producer characteristic standards were held to be in violation of article I in both cases. The unsettled element in this jurisprudence is derived from the Canada-Automotive, when the Panel suggested that PPMs are not per se violations of the MFN principle.

Under article III an examination of a measure involves determining the scope of article III in light of the PPM-based measure and then establishing the treatment of the like products. It can be safely concluded that a great number of measures fail to qualify within the scope of article III as they are in, most instances, found to be in contravention of the national treatment principle.

The second part of the examination under article III dealt with like products. In order to determine whether or not goods are indeed like products the following aspects of the like products test are incorporated:

1) 'like products determinations should be made on a case by case basis without relying on steadfast rules, and ;
2) That the issues considered under a like product analysis should include:
    - Product end uses,
    - Consumer taste and habit
    - Physical properties of the product[256]and
    - Tariff classification.'[257]

Though it was proclaimed through the *Border Tax Adjustment Report* that the guidelines were non-exhaustive thus emanating a sense flexibility. The assessment carried out shows that the WTO tribunals have strictly stuck to the set guidelines and have not demonstrated the flexibility element in most cases.

As for the article XX provisions most PPMs are able to slide into qualification under one of the sub-paragraphs. This was noted by analysing disputes such as the *US-Gasoline* and the *Shrimp-*

[256] Ibid at 13.
[257] Ibid at 14.

Turtle cases. The main hurdle under article XX however is mainly found in the Chapeau. Though the chapeau has to ensure that the measure does not constitute an abuse or misuse of the provisional justification made available in one of the sub- paragraphs of article XX, its requirements have made it tough for PPM based measures to penetrate the texts of the GATT and bring about an effective sense of environmental protection.

The aspect of PPMs being a necessity within the rules of international trade was also looked at under this sub-heading. The study found that PPMs and sustainable development have a paramount relationship that has been formally connected via Principle 8 of the Rio Declaration. From this point arguments such as the fact that PPMs have been more effective in bringing about sustainable development (for), and that they may be resorted to mainly for protectionist interests (against) were submitted and analysed. After thoroughly looking at those arguments it is concluded that though PPMs entail a great deal of controversy, they also have a great amount of counter arguments which equate to sustainable development.

5.1.3 PPMs AND THE DEVELOPING WORLD

In this chapter it was concretely concluded that when it comes to the PPMs debate, developed and developing countries have differing viewpoints. Developed nations generally submit that PPM-related standards are an appropriate manner of responding to environmental concerns. Developing countries have however submitted multiple arguments against PPMs. One such view is that PPMs have the potential of becoming non-tariff barriers which would in turn distort trade. Despite the resistance shown by developing countries towards PPMs, evidence of environmental degradation connected to trade related economic activities in developing countries is presented. This evidence is derived from developing countries within the SADC region (namely the DRC, South Africa and Zambia). From the presentation of this evidence suggestions for PPMs are then brought forward.

5.2 GENERAL RECOMMENDATIONS

In the consideration of non-product related PPMs within the context of the GATT, the following recommendations are useful and directive to a result that is more environmentally efficient:

- In overcoming the problem of unilateralism that is associated with PPMs, the WTO should set a combined policy framework for PPMs that can at least be used by Member countries as some form of predictable guideline. Such an approach would be beneficial since in most instances 'unilateral PPMs are seen as suspicious because they can easily be used as covert instruments of protectionism.[258]
- The WTO could put in place phase in time frames for PPMs within the GATT, giving its developing and least developed member nations a more lenient time frame so as to adjust.
- The WTO should assist developing countries to comply with PPMs. The WTO can achieve this by holding hearings to investigate the costs of controversial PPMs. The hearings could bring to light other means that are not as expensive to achieve the intended environmental purpose. Interestingly the same recommendation has been brought forward by other scholars.
- The WTO could also ensure that PPMs that are used by the international community also take into consideration the special needs of developing countries.
- The WTO should encourage its more developed country Members to create incentives and support so as to aid developing countries to move to more environmentally friendly PPMs.

[258] Lauren Ankersmit, Jessica Lawrence and Gareth Davies 'Diverging EU and WTO perspectives on extraterritorial process regulation' available at http://papers.ssrn.com/sol3/papers.cfm?abstract_id=2007098 accessed on 13th September 2014.

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