THE USE OF TRADE INSTRUMENTS FOR PROTECTION OF ENVIRONMENT: AN ANALYSIS OF EXTERNALITIES AND CONFLICT

Veer Mayank[*]

ABSTRACT

Trade environment conflicts have characterised the emergence of the trading regime from the very inception of trading activities and they were mostly localized and solvable at the local level. The advent of globalization however shifted the trade-environment conflict to the global level and this was recognized by incorporating exceptions to GATT disciplines under Article XX of the GATT Agreement. The use of these exceptions has been at the root of conflicts that came up for resolution at the WTO (GATT) dispute resolution arrangements where the use of the exceptions have been alleged as a protectionist device and an attempt to avoid the obligations under the trade agreement. This article presents an attempt to analyze the conflicts that have arisen between the requirements of environmental protection and the mandate of WTO (GATT) regimes and thereafter presents a solution to the conundrum of the trade - environment disputes.

Keywords : *Trade Conflict, Environment, GATT, WTO.*

I. Introduction

PROTECTION OF environment has acquired a great urgency in today's time. Serious damage to the environment through anthropogenic activities[1] is providing urgency to the

[*] Assistant Professor, Department of Law, Sikkim Central University, Gangtok.

[1] Manas Ray, "The Anthropocene era has placed an ethical challenge before the human race." *The Indian Express*, January 8, 2021, *available at:* https://indianexpress.com/article/opinion/columns/the-anthropocene-era-has-placed-an-ethical-challenge-before-the-human-race-7164534/ (last visited April 12, 2021); B. Marvick, E. C. Ellis, *et.al.*, "When did the Anthropocene begin on Earth?", August 30, 2019, *available at:* https://www.downtoearth.org.in/news/climate-change/when-did-the-anthropocene-begin-on-earth--66431 (last visited on March 5, 2021); Adam Vaughan, 'Human impact has pushed Earth into the Anthropocene, scientists say.' *The Guardian International Edition*, January 7, 2016, *available at:* https://www.theguardian.com/environment/2016/jan/07/human-impact-has-pushed-earth-into-the-anthropocene-scientists-say (last visited on March 3, 2021); Stephen Buryani, 'The plastic backlash: what's behind our sudden rage – and will it make a difference?', *The Guardian*, November 13, 2018, *available at:* https://www.theguardian.com/environment/2018/nov/13/the-plastic-backlash-whats-behind-our-sudden-rage-and-will-it-make-a-difference (last visited March 3, 2021); Roni Dengler, 'Two Studies Confirm that Human Activities Are Making Storms Worse.' *Discover*, November 14, 2018, *available at:* http://blogs.discovermagazine.com/d-brief/2018/11/14/humans-are-exacerbating-severe-storms/#.W_UV4oEvO00 (last visited on Nov. 23, 2018);

cause of protection of the environment. The Human Development Report, 2020 points out that a consensual opinion has emerged that the Earth is entering the Anthropocene era from the Holocene era.[2] The objective of mitigating climate change dons the agenda of world forums on environment particularly the 'conference of parties' at the UNFCCC[3] and the scientists repeatedly emphasize the importance of taking measures to control the emissions of Greenhouse Gases (GHGs) to save the coming generations from deluge.[4] Warnings have been issued with increasing regularity that if preventive and rectification measures are not undertaken immediately, it might be too late and the world would enter an irreversible decline towards a complete change in the environment.[5]

In the face of such dire warnings, countries and leaders have started taking steps towards the resolution of the environmental pollution, but have not achieved the kind of success required for the purpose of the resolution of the problem.[6] Countries that assembled at the Madrid Climate Change Conference, 'Conference of Parties (COP25)' (hereinafter COP 25) which took place in Madrid, Spain from December 2, 2019 to December 13, 2019 attempted to build on the developments at COP 24 to fully implement the Paris Climate Change Agreement of 2015. It sought to emphasize the development of the carbon markets, involvement of the private sector in adaptation and enhanced support from developed countries to the developing countries for adaption finance, technology transfer and capacity building. COP 25 failed to secure adequate financial commitments from countries for the purpose of mitigation of climate change.[7] It however appears from COP26 held at Glasgow in October – November, 2021 that countries have discarded their sluggish approach to meeting the climate change

[2] United Nations Development Program (UNDP), *Human Development Report 2020: The Next Frontier Human Development and Anthropocene* (Dec. 15, 2020).
[3] United Nations Climate Change, "*What is the United Nations Framework Convention on Climate Change?*" 2021, *available at:* https://unfccc.int/process-and-meetings/the-convention/what-is-the-united-nations-framework-convention-on-climate-change (last visited on March 15, 2021).
[4] Phoebe Weston, "Top scientists warn of 'ghastly future of mass extinction' and climate disruption", *The Guardian*, January 13, 2021, *available at:* https://www.theguardian.com/environment/2018/oct/08/global-warming-must-not-exceed-15c-warns-landmark-un-report (last visited on March 16, 2021); Joe McCarthy, "13,784 Scientists Say These 6 Things Can Stop Climate Catastrophe", *Global Citizen*, January 6, 2021, *available at:* https://www.globalcitizen.org/en/content/6-step-plan-for-fighting-climate-change/ (last visited on Feb. 24, 2021).
[5] *Ibid.*
[6] NASA (National Aeronautics and Space Administration), "The Effects of Climate Change", *NASA*, May 24, 2021, *available at:* https://climate.nasa.gov/effects/ (last visited on May 26, 2021). It quotes from IPCC report "Taken as a whole, the range of published evidence indicates that the net damage costs of climate change are likely to be significant and to increase over time."
[7] United Nations Climate Change. "Statement by the Executive Secretary of UN Climate Change, Patricia Espinosa, on the Outcome of COP25", *available at:* https://unfccc.int/news/statement-by-the-executive-secretary-of-un-climate-change-patricia-espinosa-on-the-outcome-of-cop25 (last visited on Feb. 27, 2021).

crisis as necessary finance, in the form of pledges, has been secured for climate change mitigation agenda.[8] COP26 has led to the finalization of the 'Paris Agreement rulebook'[9] which lays down the modalities as to how the countries are held accountable for delivering on their climate action promises and self-set targets under their 'Nationally Determined Contributions'.[10] COP 26 or the Glasgow Climate Pact besides obtaining promises and action plans for the necessary finances for implementing the objectives also seeks to encourage market mechanism for supporting the transfer of emissions reduction between countries.[11] Non-market mechanism are also sought to be encouraged for achieving cooperation between countries on mitigation and adaptation to climate change.[12]

While attempts are being made to seek resolution of the issues of climate change, yet the principal problem that becomes the Gordian knot of this issue is the divide between the development levels and developmental requirements of the developing and the developed countries. Development,[13] where ever takes place has some, even if nominal, cost to the environment. The primary vehicle for ensuring development and the equitable distribution of

[8] COP26 Outcomes: Finance for Climate Adaptation, *available at:* https://unfccc.int/process-and-meetings/the-paris-agreement/the-glasgow-climate-pact/cop26-outcomes-finance-for-climate-adaptation#eq-3 (last visited on Apr. 17, 2022).

[9] The Glasgow Climate Pact – Key Outcomes from COP26, *available at:* https://unfccc.int/process-and-meetings/the-paris-agreement/the-glasgow-climate-pact-key-outcomes-from-cop26 (last visited on Apr. 17, 2022).

[10] COP26 Outcomes: Transparency and Reporting, *available at:* https://unfccc.int/process-and-meetings/the-paris-agreement/the-glasgow-climate-pact/cop26-outcomes-transparency-and-reporting#eq-3 (last visited on Apr. 17, 2022)

[11] COP26 Outcomes: Market mechanisms and non-market approaches (article 6), *available at:* https://unfccc.int/process-and-meetings/the-paris-agreement/the-glasgow-climate-pact/cop26-outcomes-market-mechanisms-and-non-market-approaches-article-6 (last visited on Apr. 17, 2022)

[12] *Ibid.*

[13] 'Development' as an idea or even as a concept is value laden and thus open to large number of interpretations. Owing to this, 'development 'avoids a single definition or meaning. The conception implied to 'development' changes with time too. In 1950s and 60s, development would have implied 'liberation of the people' and was based on 'structural transformation'.

C. Gore, "The rise and fall of the Washington consensus as a paradigm for developing countries" 28:5, *World Development*, 789–804 (2000); An alternative understanding that is in vogue today is that which comes through from the neo-liberal model of development promoted by the idea in the Washington consensus. This understanding of the definition of 'development' attempts reduction in poverty and attainment of the developmental goals.

A. Thomas, 'Development as practice in a liberal capitalist world" 12:6, *Journal of International Development*, 773–787 (2000). In the context of trade-environment interface, which is the theme of this paper, it would be contextual and relevant to discuss the idea of development from the standpoint of protection of environment and environmental justice. The idea of environmental justice promotes that conception of 'sustainable development', whose basic theme is promotion of sustainable development through intra- and inter-generational equitable distribution of costs and benefits of development.

B. Gebeyehu, B. Adugna, *et. al* "Environmental Justice and Sustainable Development." in Leal Filho W. (eds) *Encyclopedia of Sustainability in Higher Education* (Springer, 2019); D.E. Newton, *Environmental Justice: A Reference Handbook Contemporary World Issues* (ABC-CLIO, LLC, California, 2nd edn. 2009)

the fruits of development is trade and market economy and this presents the vexed conundrum of balancing the relative importance of trade and environment at their interface.

II. Interface of Trade and Environment

The interface between trade and environment is characterised by the factum of the environment being in the nature of 'public goods'[14] and therefore profitable to being factored out of costs calculations. Public goods are by nature not dependent on the bearing of the costs for their provisioning by the consumers. This inherent nature of the public goods reduces the incentive to pay for the public goods and thereby they are under provisioned in a free market economy. The lack of incentive to pay for the public goods produces the 'free rider' problem, that is the person who has not paid for the 'public goods' nonetheless enjoys its use.

The conflict at the trade environment interface arises due to the presence of externalities[15] in trading activities. Externalities arise when the costs or benefits from an activity is not factored into the price of a goods or services and are borne or available to a third party. Thus, when negative externalities occur, the costs that need to be factored into the manufacture or production of goods and services are not factored into the price and thus represent a tax on a third person[16] who is not associated with the transaction. On the other hand, when positive externalities occur, the total benefits that occur are again not factored into the costs of the goods and services and are therefore enjoyed by a third party without adequate payment for

[14] 'Public Goods' are goods that are 'non-rivalrous' and 'non-excludable', implying which that no one can be excluded from the use or enjoyment of the 'goods' and the use of 'goods by one individual doesn't reduces the availability of the 'goods' for other. The 'goods' that are available for the use of everyone are known as 'global public goods'. Public parks, maintenance of law and order, national defence, etc. are regarded as public goods. Clean environment also falls into the category of 'Public Goods'. For an explanation of the concept of 'public goods' see, Thomas Helbling, "Back to Basics: What are Externalities? *available at:* https://www.imf.org/external/pubs/ft/fandd/2010/12/pdf/basics.pdf (last visited on Apr. 17, 2022);

[15] 'Externalities can be understood as an indirect effect on people who are not involved in consumption, production and investment transactions of individuals, households and firms'. For a basic explanation of externalities see, Thomas Helbling, "Back to Basics: What are Externalities?, *available at:* https://www.imf.org/external/pubs/ft/fandd/2010/12/pdf/basics.pdf (last visited on Apr. 17, 2022); Another definition of externalities is "Externalities refers to situations when the effect of production or consumption of goods and services imposes costs or benefits on others which are not reflected in the prices charged for the goods and services being provided." see, Definition of Externality, *available at:* https://stats.oecd.org/glossary/detail.asp?ID=3215 (last visited on Apr. 17, 2022).

[16] Person here includes both natural and juristic. A simple example of such negative externality would be where a polluter makes a decision of production of goods only on the basis of direct cost and benefit. The indirect of harm resulting from pollution is not factored into the production decision. This becomes a tax on the third person who is harmed by pollution and can be neutralized by shifting the tax burden on the polluter. See, Thomas Helbling, "Back to Basics: What are Externalities?, *available at:* https://www.imf.org/external/pubs/ft/fandd/2010/12/pdf/basics.pdf (last visited on Apr. 17, 2022).

the benefit of those goods and services. Thus, an indirect subsidy is thereby available to the third person unassociated with the transaction. The presence of externalities distorts the operation of market principles that works on the logic of apportioning the resources for the most beneficial activity for a society calculated on the basis of costs and benefits to a society.[17] Countries and individuals therefore strive not to include environmental considerations in their manufacturing decisions, thereby shifting the costs of environmental protection on 'others'[18], which then leads to a 'race to the bottom'[19] as the competitors then try to outcompete each other in ignoring environmental considerations.

Trade on the other hand, works by adopting market principles and thereby promotes efficiency[20] by apportioning the resources to the most useful activity. The necessity to counter the trade - environment externality results in taxes and subsidies being imposed by the governments on the production or consumption of imported goods and services with which there is a perception that externalities have not been factored into the costs. However, the imposition of taxes on such goods and services results in the modification of the price

[17] In economics market has been defined as "A market is where buyers and sellers transact business for the exchange of particular goods and services and where the prices for these goods and services tend towards equality." *See,* Market Definition, *available at:* https://stats.oecd.org/glossary/detail.asp?ID=3251 (last visited on Apr. 16, 2022). Another understanding of the market is brought by Ronald Coase. He explains markets in the following terms "…allocation of factors of production between different uses is determined by price mechanism". See, R. H. Coase, "The Nature of the Firm", 16:4 *Economica* 387 (1937). In the same article at page 388, he provides another explanation of the principles of market functioning "…price movement directs production, which is coordinated through a series of exchange transactions on the market"; Market equilibrium has been understood as "At any particular point in time, markets can be in "equilibrium" or "disequilibrium" depending on whether or not aggregate supply equals aggregate demand at the prevailing price." *See,* Market Definition, *available at:* https://stats.oecd.org/glossary/detail.asp?ID=3251 (last visited on Apr. 16, 2022). For a better understanding of market equilibrium see, George B. Richardson, "The Theory of the Market Economy", 46:6 *Revue économique* (1995). Market failure has been defined as "Market failure is a general term describing situations in which market outcomes are not Pareto efficient" and one of the conditions for market failure is the presence of externalities. see Market Failure Definition, *available at:* https://stats.oecd.org/glossary/detail.asp?ID=3254 (last visited on Apr. 16, 2022).

[18] 'Others' here implies both countries and individual firms. Both 'countries' as well as individual firms will attempt to transfer their costs of manufacturing to a third person. This would provide them competitive advantage. Countries do so by having lax environmental regulations or lax enforcement of environmental regulations whereas firms within countries would attempt to do so by avoiding following the environmental regulations. The idea here is to explain how externalities operate to provide competitive advantage. For a reading on the attempts by the developed North to enforce environmental regulations on developing South, *see*, Clive George, "Environmental and Regional Trade Agreements: Emerging Trends and Policy Drivers", *OECD TRADE AND ENVIRONMENT WORKING PAPER 2014/02* (2014), *available at:* https://www.oecd-ilibrary.org/environment-and-regional-trade-agreements_5jz0v4q45g6h.pdf (last visited on Apr. 17, 2022)

[19] "A situation in which companies compete with each other to reduce costs by paying the lowest wages or giving workers the worst conditions". Cambridge Dictionary. "*Meaning of race to the bottom in English*", 2021, *available a*t: https://dictionary.cambridge.org/dictionary/english/race-to-the-bottom (last visited on May 24, 2021). While the definition is for a company, it is equally applicable for countries when the countries try to outdo each other by providing lax environmental legislations.

[20] Efficiency means "Efficiency means achieving maximum output from a given level of resources used to carry out an activity", see Efficiency Definition, *available at:* https://stats.oecd.org/glossary/detail.asp?ID=4776 (last visited on Apr. 16, 2022).

finding mechanism (price mechanism[21] or price discovery mechanism[22]) of the particular goods and services and thereby distorts the prices of such goods and services.[23] If such taxes and subsidies are not applied on or provided to the participants in such trade, then certain participants that have factored in the externalities are priced out[24] of the market. The conflict arises at this interface between trade and environment.[25] When taxes or duties are imposed on polluting goods or where subsidies are provided to goods that are non-polluting, to factor in the externalities, allegation of protectionism arises.

III. Use of Trade Instruments for Protection of Environment

While there is a difference of opinion[26] on the use of trade instruments for the purpose of achieving the objectives of environmental protection, yet the trade instruments are frequently used for the purpose and this leads to generation of the conflict. Trade sanctions for environmental objectives are used for two purposes. The first is where the trade measures are used to attain a 'specific non-trade value or a specific non-trade goal'[27] while the second purpose for which such a trade sanction is used is where the ground rules are required to be

[21] "Price mechanism refers to the system where the forces of demand and supply determine the prices of commodities and the changes therein. It is the buyers and sellers who actually determine the price of a commodity.", see Definition of Price Mechanism, *available at*: https://economictimes.indiatimes.com/definition/price-mechanism (last visited on Apr. 16, 2022).

[22] "The process of establishing a market price at which demand and supply for an item are matched.", see Definition of Price Discovery, *available at:* https://stats.oecd.org/glossary/detail.asp?ID=6218 (last visited on Apr. 16, 2022).

[23] This is known as market distortion and has been defined as "Market distortions are events, decisions, or interventions taken by governments, companies, or other agents, often in order to influence the market. They are often the response on market failures, i.e., circumstances that prevent perfect competition and achieving an optimal equilibrium in the market." see, W. Wuyts, "Market Distortions Encouraging Wasteful Consumption." in Leal Filho W., Azul A.M., *et.al*. (eds), *Responsible Consumption and Production. Encyclopedia of the UN Sustainable Development Goals.* (Springer, 2020).

[24] It means "to force (oneself or one's product) out of competition by charging prices that are too high", see Meaning of Price out of the Market, *available at:* https://www.collinsdictionary.com/dictionary/english/price-out-of-the-market (last visited on Apr. 16, 2022).

[25] Clive George, "Environmental and Regional Trade Agreements: Emerging Trends and Policy Drivers", *OECD TRADE AND ENVIRONMENT WORKING PAPER 2014/02* 6 (2014), *available at:* https://www.oecd-ilibrary.org/environment-and-regional-trade-agreements_5jz0v4q45g6h.pdf (last visited on Apr. 17, 2022).

[26] Arvind Subramanian, "Trade measures for environment: A nearly empty box?." 15:2 *World Economy* 135-152 (1992); John Beghin, D. Roland-Holst, *et al*., "A survey of the trade and environment nexus: global dimensions", 23 (Winter) *OECD Economic Studies* 167-192 (1994).

[27] A specific non-trade value or goal could be protection of dolphins during the fishing of tuna fishes or protection of turtles during shrimp fishing. Dolphins or turtles are not required to be killed, but they do get caught and inadvertently killed since they are associated with specific schools of fishes. Environmental considerations require that dolphins and turtles need to be protected but this is an environmental goal and not a trade related objective. See *infra* 30 and 31

made uniform.[28] The tuna - dolphin cases[29] and the shrimp - turtle cases[30] are representative of the first form of thinking while the second form of activity is reflected in the proposals for taxation for products being imported from countries that have less stringent environmental standards.

The environment - trade conundrum is contoured further with the presence of externalities, use of shared resources and the 'tragedy of the commons'.[31] The role of externalities in reducing the costs of economic activities when extending beyond the borders effectively results in a subsidy that is being provided by the one country for the economic activities of the other country.[32] The problem of the 'tragedy of commons' in the trade-environment conundrum becomes starkly evident when we observe the fisheries subsidies negotiations at the WTO.[33] 'Tragedy of commons' arises when there is the shared common resources which

[28] Michael J. Trebilcock and R. Howse, *Regulation of International Trade* 559 (Routledge (Taylor and Francis Group), London and New York, 2005); for an elaborate discussion on making ground rules uniform or leveling the playing field see Clive George, "Environmental and Regional Trade Agreements: Emerging Trends and Policy Drivers", *OECD TRADE AND ENVIRONMENT WORKING PAPER 2014/02* 6 (2014), *available at:* https://www.oecd-ilibrary.org/environment-and-regional-trade-agreements_5jz0v4q45g6h.pdf (last visited on Apr. 17, 2022).

[29] GATT, *United States—Prohibition of Imports of Tuna and Tuna Products from Canada*, L/5198,BISD 29S/91 (22 February 1982); GATT, *United States—Restrictions on Imports of Tuna ('US—Tuna (Mexico)')* DS21/R (unadopted), BISD 39S/155 (September 3, 1991).

[30] World Trade Organization, *United States—Import Prohibitions of Certain Shrimp and Shrimp Products*, Report of the Panel, WT/DS58/R (May 15, 1998); World Trade Organization, *United States—Import Prohibition of Certain Shrimp and Shrimp Products*, Appellate Body Report, WT/DS58/AB/R (October 12, 1998).

[31] 'Tragedy of Commons' occurs when a commonly available resource that is available to everyone, is utilized in a fashion that its very use reduces its availability. When a particular resource is over utilized by an individual, then the availability of the resources is reduced for everyone else. Thus in the case of 'tragedy of commons', the self-interest of an individual utilizing a resource goes against the interests of the society. Tragedy of Commons was popularized by Garrett Hardin in his article "Tragedy of Commons". Refer Garrett Hardin, "Tragedy of Commons", 162:3859 *Science* (1968). The phrase however was first conceptualized by William Forester Llyod. See, Garrett Hardin, "Tragedy of Commons", *available at:* https://online.hbs.edu/blog/post/tragedy-of-the-commons-impact-on-sustainability-issues (last visited on Apr. 17, 2022). It is also pertinent to point out here that this theory cannot be accepted as an absolute truth. Where resources are managed by communities and individuals living in close proximity the tragedy of commons doesn't occurs. See Elinor Ostrom- the "non-tragedy of the commons", *available at:* https://wle.cgiar.org/news/elinor-ostrom-%E2%80%9Cnon-tragedy-commons%E2%80%9D (last visited on Apr. 17, 2022). However the Noble Laureate Elinor Ostrum has qualified her finding that tragedy of commons occurs when the resource is sought to used or controlled by external groups who exert their power. International trade is essentially about free global markets and thereby control over resources by external groups.

[32] The example of Transboundary Water Pollution is frequently cited for as an example of cross-boundary subsidization of economic activities. Gerard van der Laan and Nigel Moes, "Transboundary Externality and Property Rights: An International River Pollution Model". Tinbergen Institute Discussion Paper, (No. TI 2012-006/1 (2012)).

[33] The fisheries subsidies negotiations are as stark example of depletion of global commons owing to subsidies for the commodity even when the stocks of fishes are running low. The open high seas are 'global commons' and hence not subject to property rights and fishing is therefore open to all. See, Factsheet: Negotiations on fisheries subsidies, *available at:* https://www.wto.org/english/tratop_e/rulesneg_e/fish_e/fish_intro_e.htm (last visited on Apr. 27, 2022).

is for the use of the members of the society but such a shared resource doesn't falls within the jurisdiction of any of the states and thus, the protection or the conservation of it, forms no one's responsibility.[34]In such instances, this common resource is then exploited by the users without any intention of taking care of such global commons. In short since the property rights in resources that are regarded as 'commons' are absent or unformed, the said resource becomes available to everyone capable of exploiting the resource. There is another concept of 'shared natural resource' which emerges out of our understanding of 'commons' but doesn't answer the definition of 'commons' and is therefore distinct from commons. 'Shared natural resources[35] are resources that extend across jurisdictions and across national boundaries. 'Shared natural resources' present inchoate property rights or at least ill-defined property rights over the resource concerned and this leads to overexploitation of resource since the externality resulting from the overexploitation is borne by the corresponding party or parties sharing the common resource. 'Shared natural resource' is different from commons in that it is not open to all, but that doesn't prevent its overexploitation and in that it resembles commons.

Management of such global commons or the use of the shared resource merits a study since such use affects the parties concerned and in the case of global commons, the world in general. The instruments used for changing the behaviour of states are sanctions or inducements and both have their benefits and drawbacks. While the sanctions are largely ineffective where the states are hostile to each other and in general they have a large number of political ramifications, the policy of inducement has moral hazard[36] built into it as the

[34] The 'tragedy of Commons' of High Seas, "Governing the oceans: The tragedy of the high seas", *The Economist Print Edition, Leaders*, February 22, 2014, *available at:* https://www.economist.com/leaders/2014/02/22/the-tragedy-of-the-high-seas (last visited on March 15, 2021).

[35] For an understanding of shared natural resources see A.O.Adede, "Utilization of shared natural resources: Towards a code of conduct", 5 (2) *Environmental Policy and Law* 66-76 (1979).

[36] "Moral hazard describes behaviour when agents do not bear the full cost of their actions and are thus more likely to take such actions." Definition of Moral Hazard, *available at*: https://stats.oecd.org/glossary/detail.asp?ID=1689 (last visited on Apr. 17, 2022). While the definition is succinct, it fails to explain its impact. Moral hazard arises when a party to a transaction starts taking risks or initiating actions which normally it would not have, had it not been aware of the fact that someone else is going to bear the costs of those risks or actions. The best example of same is the 'Too Big to Fail' concept. A financial institution that cannot be allowed to collapse is regarded as 'too big to fail' and thus it starts taking risks which normally it would not have, since it is secure in the knowledge that it would be bailed out by the government eventually if those risks materialize. Moral hazard in international environmental law arises when the polluting country becomes aware that it would be paid to reduce pollution and thus it makes no effort to reduce pollution. See also Emmanuel Petrakis & Anastasios Xepepadeas, "Environmental consciousness and moral hazard in international agreements to protect environment", 60(1) *Journal of Public Economics* (1996).

inducement receiving state might angle for more transfer of financial assistance for the purpose of changing its behaviour.[37]

The use of trade instruments for achieving the environmental objectives is not always a clear case of management of externalities or such other laudable objective. Such a use can transform itself into disguised protectionist policy for protection of domestic industries. Even where the intent is managing the externalities associated with the imported goods, the use of the instruments is for the protection of the domestic markets and workers against the unfair trade practices in the foreign countries and is indifferent to the objective of raising the environmental standards in other countries.[38] The primary rationale for such measures is that the country bears the costs of maintaining the environment for it has kept the environmental standards in the country high and on the other hand, the domestic industry and the workers suffer as the country with lower environmental standard prices out their goods from the market. The perception of unfairness arises from the argument that it is unfair to a country that it should be forced to accept a weaker or a more permissive environmental standard to maintain its competitiveness as other countries have adopted a more permissive environmental standard. It is also welfare diminishing that a country adopting higher standards, ends up losing market share to countries with more permissive environmental standards.[39]

The use of such duties which serve to harmonize the rules of the game for everyone have more or less a protectionist intent rather than the intent to effect a change in the environmental policies of the affected countries. The primary reason being that the costs associated with environmental rules and regulations, even if harmonised across the whole

[37] Michael J. Trebilcock and R. Howse, *Regulation of International Trade* 561 (Routledge, Taylor and Francis Group, London and New York, 2005).

[38] See the following in the context of imported goods. Clive George, "Environmental and Regional Trade Agreements: Emerging Trends and Policy Drivers", *OECD TRADE AND ENVIRONMENT WORKING PAPER 2014/02* 6 (2014), *available at:* https://www.oecd-ilibrary.org/environment-and-regional-trade-agreements_5jz0v4q45g6h.pdf (last visited on Apr. 17, 2022); Clive George and S. Yamaguchi, "Accessing Implementation of Environmental Provisions in Regional Trade Agreements", *OECD TRADE AND ENVIRONMENT WORKING PAPER 2018/01*.

[39] Antoine Dechezleprêtre & Misato Sato, "Inclusive Solutions for the Green Transition: Green Policies and Firms' Competitiveness", *OECD Issue Paper* (2018), *available at:* https://www.oecd.org/greengrowth/GGSD_2018_Competitiveness%20Issue%20Paper_WEB.pdf (last visited on Apr. 17, 2022).

world, would be very different as they would be dependent upon the local environmental conditions[40] and this leads to the evolution of conflict at the trade-environment interface.

The other argument that is advanced by the free trade protagonists is that weaker environmental standards in certain countries lead to a pressure on other countries that have higher standards to lower their standards since countries with higher standards tend to lose market share in the trade of particular goods or services. This line of argument intrinsically assumes that there is a general obligation upon all countries to abide by a certain environmental standard and such a choice cannot be dictated by the unique socio-economic situation of a country. This argument would be self-defeating since a general obligation cannot be assumed.

Looking from another angle, the costs of complying with the higher environmental standards is thereby shifted to the countries with permissive environmental regime. These countries to remain competitive, attempt to reduce the costs, which in effect becomes a reduction in the income of the country concerned.[41] In general, it is the developing countries that have lower or permissive environmental standards as they suffer from overpopulation, poverty and other ills of underdevelopment. An income reducing activity[42] for a developing country, instead of providing development, merely exacerbates the underdeveloped nature of its economy. This then brings into the question as to whether the protection of environment is a superior norm or the development of the underdeveloped population of the world is a superior norm and which of the above two norms should give way to the other?[43] Whether the development of a large section of population can be held hostage to the cause of environmental protection? Additionally, the question also arises whether the lowering of environmental standards is the only policy choice that is available for the development of economy and the other choices like investment in technologies to lower the costs are not? There may be different opinions to the above questions, but one accepted truth is that the costs of the policy choices of one

[40] *Supra* note 37 at 562; Clive George and S. Yamaguchi, "Accessing Implementation of Environmental Provisions in Regional Trade Agreements", *OECD TRADE AND ENVIRONMENT WORKING PAPER 2018/01*
[41] *Supra* note 37 at 562.
[42] An income reducing activity is one where the GDP growth of the country is affected. Complying with higher environmental standards raises the cost of products since the externalities in the production are reflected in the prices. Increase in cost affects demand which in effect may affect employment.
[43] For an alternative perspective on the idea of poverty reduction which is intrinsically linked with development, in the context of environmental standards, please see an empirical study by Daniele Malerba, "The Trade-off Between Poverty Reduction and Carbon Emissions, and the Role of Economic Growth and Inequality: An Empirical Cross-Country Analysis Using a Novel Indicator", 150 *Social Indicator Research* (2020).

country cannot be imposed on another country and the unilateral extra-jurisdictional application of internal measures of a nation through the border measures does exactly that.[44] The argument which militates to the extent of warning against such lowering of environmental standards is that it would lead to a race to the bottom[45] and the only solution to prevent such a race to the bottom is some sort of cooperation to achieve the system of rules. The question of trade sanctions then becomes a mechanism to enforce the rules of the game and encourage the participants to comply with the cooperative mechanism instead of being non-cooperative. On the other hand, such imposition of trade sanctions can also be seen as disturbing the cooperative harmony that has been achieved and unilaterally modifying the rules.

Article XI and Article XX of GATT

Article XI Para 1 of GATT[46] provides for the 'General Elimination of Quantitative Restrictions' on the import or export of an article, whereas Article XI Para 2 of the GATT provides for exceptions to the above provision.

Article XI Para 1 provides:[47]

> No prohibitions or restrictions other than duties, taxes or other charges, whether made effective through quotas, import or export licenses or other measures, shall be instituted or maintained by any contracting party on the importation of any product of the territory of any other contracting party or on the exportation or sale for export of any product destined for the territory of any other contracting party.

Thus, subject to exceptions, as listed out in Para 2, Para 1 prohibits all measures that act as a restraint on trade and most of the border measures that are legislated or imposed for the purpose of the protection of environment fall under this prohibition. On the other hand,

[44] See, Barbara Cooreman, "The Extra-territorial reach of National Measures under WTO Law", in Barbara Cooreman (eds.) *Global Environmental Protection through Trade A Systematic Approach to Extraterritoriality*. (2017). The author has cited various cases at the WTO where extra-jurisdictional application of national laws was found to be in violation of the obligations under the WTO agreement. The author though strongly argues for providing legal sanctions to unilateral trade measures for the protection of environment, since the MEA's in this regard are found lacking (see page 57). However, the present position is that unilateral trade measures have extra-jurisdictional application are disallowed under WTO law.
[45] *Supra* note 37 at 563.
[46] General Agreement on Tariffs and Trade 1994 (GATT 1994), 1867 UNTS 187; 33 ILM 1153 (1994).
[47] *Ibid.*

GATT under Article XX provides a general exception from the operation of the provisions of the agreement, provided that, the measures listed under Article XX shall not be adopted as a disguised restriction on international trade or should constitute a means of unjustifiable and arbitrary discrimination between countries where similar conditions prevail.

For the current discussion, two provisions, namely Article XX (b) and XX (g) are relevant and important. Article XX (b) provides that restrictions can be imposed on international trade "for the purpose of protecting human, animal or plant life or health". Similarly, Article XX (g) provides that restrictions can be imposed on international trade for the purpose of "… conservation of exhaustible natural resources, provided that such measures are made effective in conjunction with restrictions on domestic production or consumption". These two measures nowhere, incorporate the word 'environment' in their provisions, however, they have been frequently been used for the purpose of justifying the use of trade instruments for environmental protection.

The Cases at the GATT and the WTO

The Salmon - Herring Case

The Salmon - Herring dispute (Canada – Herring and Salmon; Claimant: United States)[48] revolved around the measure enacted by the Canadian government which provided that the catch of Salmon and Herring fish would have to be processed at the Canadian shores/factories before being shipped to other destinations.[49] The argument of Canada for the requirement was that Salmon and Herring are seasonal catches and unless the catch was tightly regulated, which could be done only if very accurate data related to the catch was available; there are chances of overfishing which may lead to an overexploitation of an exhaustible natural resource.[50] The second argument that Canada presented was the fishing industry in Canada was dependent upon the catch and unless a proper processing volume is ensured for them, it

[48] GATT, *Canada—Measures Affecting Exports of Unprocessed Herring and Salmon*, Report of the Panel, BISD 35S/98 (March 22, 1988).
[49] *Id*., at para.. 2.2 mentions the provision that restricted the exports through the "Regulations Respecting Commercial Fishing for Salmon in the Waters of British Columbia and Canadian Fisheries Waters in the Pacific Ocean (Pacific Commercial Salmon Fishery Regulations) provide in paragraph 6: "6. No person shall export from Canada any sockeye or pink salmon unless it is canned, salted, smoked, dried, pickled or frozen and has been inspected in accordance with the Fish Inspection Act ..."
[50] *Supra* note 48, para. 3.6.

might lead to a decline in the industry or overfishing.[51] If overfishing is not allowed when the catch is good, then due to the volumes not available, the fishing industry would suffer. The argument of the US was that the US routinely made the catch data available to the Canadian authorities on request and for the purpose of maintaining the fishing industry, fishes could be imported instead of putting restrictions.[52] In short, the argument of the US was that there were less restrictive trade measures that could have been resorted to. If the landings of the fishes were to take place at the Canadian shores the cost of procurement of the fishes for the American industry would be raised adversely affecting the industry.[53]

The GATT panel ruled that the other less trade restrictive means were available for the purpose of effecting conservation of the fishes and hence conservation was not the primary motive of the measure, but it was a disguised restriction on international trade.[54]

Tuna - Dolphin Case - I

The Tuna-Dolphin-I (US – Tuna I; Claimant - Mexico)[55] Case raised an interesting question before the GATT panel and that was 'can an internal measure which may be prima facie valid under Article III requirements of GATT, but has a trade restrictive affect and is seemingly in conflict with the obligations under Article XI of GATT be allowed?[56] The measure in question was enacted by the US to ensure conservation of dolphins and was taken as a conservation measure from an environmental protection perspective.

USA has enacted a measure requiring that the fishes 'tuna' have to be caught in a manner that should not have the effect of killing dolphins and the incidental taking of dolphins is reduced.[57] The schools of tuna are believed to be associated with pods of dolphins[58] and hence tuna fishing nets end up catching and killing dolphins. The internal regulation enacted

[51] *Supra* note 48, para. 3.11 and 3.33.
[52] *Supra* note 48, para. 3.10.
[53] *Supra* note 48, para. 3.10.
[54] *Supra* note 48, para. 4.7.
[55] GATT, *United States—Restrictions on Imports of Tuna*, 30 I.L.M. 1594, (1991). The panel ruling was not formally adopted by the GATT Council, by mutual agreement of the USA and Mexico.
[56] *Id*., at para. 5.8.
[57] The Marine Mammal Protection Act, 1972, as revised (MMPA), requires a general prohibition of "taking" (harassment, hunting, capture, killing or attempt thereof) and importation into the United States of marine mammals, except where an exception is explicitly authorized. Its stated goal is that the incidental kill or serious injury of marine mammals in the course of commercial fishing be reduced to insignificant levels approaching zero. *Supra* note 55, paras. 2.3 and 5.14.
[58] *Supra* note 55, para. 2.2.

in United States required that tuna be caught in safe manner not harming dolphins. Thus, it was not the fish that was being regulated but the production and the process method that was being regulated. The panel rejected the view that the internal measure was a measure that would have the protection of Article III of the GATT, but it would be contrary to the obligations enshrined under Article XI of GATT. According to the panel, Article III concerned measures that applied to and affected the nature of the product themselves.

After describing the import ban as not a measure that can be protected under Article III, the measure being contrary to Article XI of GATT then could only be protected by bringing the measure under the protection enshrined under Article XX (b) and XX (g). The first question that came up for determination was whether Article XX (b) was applicable. The panel replied to the question in the negative as according to the panel, the article only contemplates the protection of the animals within the jurisdiction of the state concerned.[59] Since the regulation enacted by the US operated outside the borders of the US, the panel rejected the argument of the US that article XX (b) would be applicable. The panel then moved to examine whether protection can be sought under Article XX (g) to which the panel responded that Article XX (b) is confined to internal measures within the domestic jurisdiction alone. The reason that was advanced by the panel was that if the scope of Article XX (b) was left unlimited the multilateral trading system would collapse as then the contracting parties would enact laws that would act beyond their orders.[60] The second reasoning provided by the panel was that the US has not demonstrated that the measure being framed was absolutely necessary as in that case it would be required to show that it has used all measures to ensure the conservation of the species and the US has not explored the possibility of international cooperation for conservation efforts.[61]

The next part was determining the applicability of Article XX (g) to the arguments advanced by the US. The panel determined that as with Article XX (b), the article could be invoked to justify measures that are necessary to protect its own environment. Article XX (g) has to be invoked when internal measures that have been used to protect the environment have to be complemented with restrictions on import and consumption of such goods.[62]

[59] *Supra* note 55, para. 5.25.
[60] *Supra* note 55, para. 5.27.
[61] *Supra* note 55, para. 5.28.
[62] *Supra* note 55, para. 5.32.

Tuna - Dolphin - II

The Tuna - Dolphin II[63] case was brought in for the purpose of challenging the secondary embargo created by the measure adopted by the US to block the imports of tuna that were not caught in a dolphin friendly manner. While the primary embargo was applicable on countries that were harvesting the tuna not in consonance with dolphin friendly requirements of the legislation; the secondary embargo was applicable on third countries that did not have an embargo of the same nature as that of the US.[64] Thus, where such countries lacked the embargo, the US law prevented them from exporting to US independent of whether or not the tuna that is being exported is caught in a dolphin friendly manner or not.

In this case, there was a reinterpretation of the Articles XX (b) and XX (g) of the GATT by the panel. The position adopted by the panel in Tuna - Dolphin I case was that Articles XX (b) and (g) could be invoked only where there is a question of the protection of the domestic environment. The panel stated that neither 'general international law' nor the GATT articles prohibit the extraterritorial application of the domestic provisions and therefore an artificial limitation cannot be imposed on the interpretation of the articles. The panel also looked into the *travaux preparatoires* of the GATT 1947 and concluded that the *travaux* nowhere suggests that global environmental legislation making is prohibited. However, it agreed with the final determination of the panel in Tuna Dolphin I and reached a conclusion that allowing the countries flexibility under Article XX to force other countries to change their domestic policies, the balance of rights and obligation between the contracting parties, particularly the right of market access would undergo a serious change.[65] The Panel on the above reasoning held that under the guise of Article XX, neither the primary embargo, nor the secondary embargo could be justified and hence by this ruling, practically outlawed the use of trade measures to induce an environmental policy change in other countries.[66]

[63] GATT, *United States—Restrictions on Imports of Tuna,* Panel Report, GATT Doc. DS29/R (1994).
[64] *Id.*, at para. 2.12.
[65] *Supra* note 63, para. 5.38.
[66] *Supra* note 63, para. 6.1.

Taxes on Automobiles

'Taxes on Automobiles'[67] was a dispute between the United States and the EC related to the differential taxes that were introduced based on the emissions from the vehicles. The United States had introduced taxes on vehicles that did not meet the emission standards as required by the legislation in the US. The taxes were implemented in a fashion so that the emission of the vehicles manufactured by a particular manufacturer was averaged out and the vehicles of such manufacturers were permitted if it complied with the norms.[68] The EC argued that the tax that was imposed was against the obligations as enshrined in the national treatment obligations under GATT.[69]

The EC had argued that the national treatment obligations only concerned the physical characteristics of a product and hence products cannot be differentiated on the basis of considerations other than the physical characteristics.[70] The panel rejected the view and held that distinctions as long as they are non-protectionist and are based on an objective criterion cannot be deemed to be violative of Article III National Treatment requirement of GATT. The panel held that conservation of fuel or fuel economy is a valid criterion and the automobiles can be differentiated on the basis of such criteria.[71] The panel however, did find an element of discrimination in the fact that the CAFE (Corporate Average Fuel Economy)[72] which balanced out the low fuel economy of domestic production of vehicles with the high fuel economy of vehicles by the same manufacturer as discriminatory for foreign manufacturers as they would have a domestic product to utilize the facility.

[67] GATT, *United States—Taxes on Automobiles*, Report of the Panel, DS31 /R, 1–124 (unadopted) (September 29, 1994).
[68] *Id.*, at paras. 2.14-2.24.
[69] Article III para 1 of GATT provides " …internal taxes and other internal charges, and laws, regulations and requirements affecting the internal sale, offering for sale, purchase, transportation, distribution or use of products, and internal quantitative regulations requiring the mixture, processing or use of products in specified amounts or proportions, should not be applied to imported or domestic products so as to afford protection to domestic production". The General Agreement on Tariffs and Trade (GATT 1947), *available at:* https://www.wto.org/english/docs_e/legal_e/gatt47_01_e.htm#articleIII (last visited on Apr. 19, 2022).
[70] *Supra* note 67, para. 3.51.
[71] *Supra* note 67, para. 5.37.
[72] *Supra* note 67, para. 5.67.

Reformulated Gasoline Case

In the case of reformulated gasoline,[73] Brazil and Venezuela challenged the US environmental regulation that provided for the sale of gasoline that conformed to the clean fuel requirement.[74] The clean fuel requirement was standardized based on the emission standards of 1990s baseline. The baseline could be determined on the basis of two criteria - either refinery specific or on the basis of the average 1990 US gasoline baseline.[75] The kind of baseline that was applicable depended upon whether the seller was a domestic refiner, importer or foreign refiner. In the case of domestic refiner, the baseline applied was based on the individual, ex-refinery gasoline quality, for importers, it was decided on the basis of the quality of gasoline actually imported, while for the foreign refiners, the quality that was required was the average US gasoline quality of 1990s period. The panel accepted the argument, that the differentiation in the application of standards constituted a violation of the national treatment obligations.[76]

However, the US sought to bring the measure under the ambit of Article XX (b) and XX (g). The US argued, that the measure was necessary to protect 'human, animal, plant life and health' and also for conservation of exhaustible natural resource which was clean air.[77] The panel while accepting the US contention, that clean air is an exhaustible natural resource, ruled against the US, for in the view of the panel, the method adopted for achieving the objective was not 'least trade restrictive'.[78] The US has not tried to consult or coordinate with foreign governments for the purpose of determining the quality of the fuel at the refinery level nor has the US imposed the same requirement for the domestic as well as foreign refineries. Thus, the panel determined that the objective of the policy of the US was not environmental conservation or protection as was made out to be.[79]

[73] World Trade Organization, *United States—Standards for Reformulated and Conventional Gasoline*, Report of the Panel, WT/DS2/R (January 29, 1996).
[74] 'EPA Clean Fuel Requirement (Gasoline Rule)', Regulation of Fuel and Fuel Additives; Standards for Reformulated and Conventional Gasoline; Final Rule, 40 CFR 80, 59-Fed. Reg. 7716 (February 16, 1994), *available at:* https://www.govinfo.gov/content/pkg/FR-1994-02-16/html/94-20.htm (last visited on Apr. 19, 2022).
[75] *Supra* note73, paras. 2.5 - 2.8.
[76] *Supra* note 73, paras. 6.10-6.11.
[77] *Supra* note 73, para. 6.37.
[78] *Supra* note 73, paras. 6.25-6.29.
[79] *Ibid.*

The US filed an appeal with the Appellate Body where the AB held that the language of the text of Article XX(g) does not takes in the reading of least restrictive measure that has been adopted by the Panel. It held that under the Vienna Convention on the Law of Treaties, the terms of the treaty have to be interpreted in their 'ordinary meaning'. The AB further stated that the chapeau to the GATT obliges the panel to interpret the exceptions in Article XX in a fashion that they while being invoked as a matter of legal right; they should not be applied in a fashion as to frustrate the legal rights of the parties under the agreement. In short what the AB held was that there should not an 'unjustifiable discrimination', 'arbitrary discrimination' and 'disguised restriction' on international trade, when the exceptions permitted under Article XX are invoked. In the instant case of reformulated gasoline, the US did not act to reduce the cost burden on the foreign refineries as it did with the domestic refineries.[80]

Shrimp/Turtles Case

In the Shrimp/Turtles Case[81], the US has brought in an embargo against countries that permitted shrimp harvesting without requiring the trawlers to have Turtle Excluder Devices.[82] The conditions that the relevant legislation imposed upon the exporters were that either the exporter shows that shrimp were caught in a manner that cause no harm to the turtles or where the shrimp were not caught in a safe manner, the country of export has a program that was similar to that of the United States that required a determination that the shrimp so harvested have not led to incidental harm to the turtles or a determination that shrimp has been harvested from an area that do not have the danger of any incidental turtle deaths.[83]

The case was presented as a violation of Article XI of the GATT agreement. The US chose not to contest the Article XI violation claim, but instead chose to defend the measure under Article XX of the GATT[84]. The panel did find that the measure violated Article XI of the GATT[85] and also that the defense to US under Article XX was not available.[86] The reasoning

[80] *Supra* note 73, para. 6.40.
[81] World Trade Organization, *United States—Import Prohibitions of Certain Shrimp and Shrimp Products*, Report of the Panel, WT/DS58/R (May 15, 1998).
[82] Turtle excluder devices and its role are mentioned in *Id.*, at para. 2.5.
[83] *Supra* note 81, para. 2.11.
[84] *Supra* note 81, para. 7.13.
[85] *Supra* note 81, paras. 7.16-7.17.
[86] *Supra* note 81, paras. 7.49-7.62.

of the panel for denying the defenses under Article XX of GATT was that they imposed a risk on the continuity of the multilateral trading system. The panel reasoned:[87]

> In our view, if an interpretation of the chapeau of Article XX were followed which would allow a Member to adopt measures conditioning access to its market for a given product upon the adoption by exporting Members of certain policies, including conservation policies, GATT 1994 and the WTO Agreement could no longer serve as a multilateral framework for trade among Members as security and predictability of trade relations under those Agreements would be threatened. This follows because if one WTO Member were allowed to adopt such measures, then other Members would also have the right to adopt similar measures on the same subject but with differing, or even conflicting, policy requirements. Indeed, as each of these requirements would necessitate the adoption of a policy applicable not only to export production…but also domestic production, it would be impossible for a country to adopt one of those policies without the risk of breaching other Members' conflicting policy requirements for the same product and being refused access to these other markets.

The Appellate Body in the above case[88] rejected the panel's ruling and its interpretation holding that 'trade measures cannot be so fashioned in a way as to affect other nation's environmental policies'. The AB gave an expansive interpretation to the powers of the states under Article XX overturning the simplistic interpretation given to the provisions contained in Article XX by reading the provision in the light of the chapeau of Article XX, wherein the panel had held that 'unilateral trade measures' that have the objective of protecting the global environment as opposed to the domestic environment are excluded from the ambit of GATT.[89] The AB in this case by overturning the panel's ruling, brought the global environmental trade measure within the ambit of the GATT jurisprudence, which earlier has been practically excluded by the interpretation of the panel in the earlier reports[90]

The Appellate Body held:[91]

> It appears to us, however, that conditioning access to a member's domestic market on whether exporting Members comply with, or adopt, a policy or policies unilaterally prescribed by the importing Member may, to some degree, be a common aspect of measures falling within the scope of one or another of the exceptions (a) to (j) of Article XX… It is not necessary to

[87] *Supra* note 81, para. 7.45.
[88] World Trade Organization, *United States—Import Prohibitions of Certain Shrimp and Shrimp Products*, Appellate Body Report, WT/DS58/AB/R (October 12, 1998).
[89] *Id.*, at para. 121.
[90] *Supra* note 55 and 63.
[91] *Supra* note 88, para. 121.

> assume that requiring from exporting countries compliance with, or adoption of, certain policies (although covered in principle by one or another of the exceptions) prescribed by the importing country, renders a measure a priori incapable of justification under Article XX. Such an interpretation renders most, if not all, the specific exceptions of Article XX inutile, a result abhorrent to the principles of interpretation we are bound to apply.

The present case is also notable from another point of view and which is that through this case, the AB brought in the environmental law and jurisprudence for consideration in the WTO jurisprudence. The AB gave merit to the concept of 'sustainable development' in the preamble to the WTO.[92] The AB found that the measure that the US has brought in suffered from the vice of unjustifiable discrimination and therefore repugnant to its obligations under other provisions of the GATT, but it cannot be derailed merely on the ground that the chapeau to article XX does not permit unilateral trade measures for the protection of global environment.

The Renewable Energy Disputes

The renewable energy disputes present an entirely different type of disputes to the world community. While the earlier trade - environment disputes exemplified by the tuna - dolphin and shrimp - turtle cases revolved around the use of border restriction measures for achieving an environmental objective, the new conflicts that are being engendered at the trade-environment interface has arisen from the use of subsidies and/or the requirement of complying with the 'local content requirements'[93] for availing the subsidy. Several cases have come up before the Dispute Settlement Understanding (DSU) regarding the use of subsidies/ local content requirement (LCR)/countervailing duties for use by the renewable energy industry. The cases that have been brought before the WTO are as under.[94] The

[92] *Id.*, at para. 129.

[93] 'Local content requirements' imply restrictions imposed by governments on foreign investments (FDI or for setting up of Greenfield projects) requiring the investor to use to local goods to a certain percentage. This is with the objective of fostering domestic industries and/or for the purpose of preventing the outflow of foreign exchange. Imposition of local content requirements is prohibited under Article 2 of the TRIMs Agreement

[94] World Trade Organization, *Canada – Certain Measures Affecting the Renewable Energy Generation Sector and Canada – Measures Relating to the Feed-In Tariff Program*, Report of the Panel, WT/DS412/R, WT/DS426/R (Dec. 19, 2012); World Trade Organization, *European Union and Certain Member States — Certain Measures Affecting the Renewable Energy Generation Sector*, DS452, (Nov. 5, 2012); World Trade Organization, *India — Certain Measures Relating to Solar Cells and Solar Modules*, DS456 , (Feb. 6, 2013); World Trade Organization, *United States — Countervailing Duty Measures on Certain Products from China*, DS437, (May 25, 2012); World Trade Organization, *China — Measures concerning wind power equipment*, DS419, (Dec. 22, 2010); *United States — Countervailing Duty Measures on Certain Products from China*, DS43, (May 25, 2012).

conflict arises as the 'Green Industrial Policy'[95] is rejected outright by the trade advocates and it is merely seen as a protectionist device to provide protection to the domestic industry. On the other hand, the use of trade protection measures - antidumping and countervailing duties - has been held as legitimate.

The Canada - FIT Regime

The Canadian - FIT Regime[96] that was legislated into law through the 'Green Energy and Green Economy Act'[97] of 2009 in the Canadian province of Ontario guaranteed the payment of a fixed rate per kWh of electricity generated and fed into the grid under a 20 or a 40-year contract.[98] However, to be eligible to enter into a contract, the renewable energy generators have to compulsorily have certain percentage of local manufactured goods for use in their generating facility. The case moved along the route where the legality of the measures rested on the answers to the question whether there is a violation of the obligations under the national treatment clause and whether there is a violation of the TRIMs agreement.[99]

The Panel had no difficulty in finding that the local content requirements were in fact a violation of the TRIMs agreement.[100] The measure brought in by Canada could only be protected under Article III: 8 (a) of the GATT which provided that "laws, regulations or requirements governing the procurement by governmental agencies of products purchased for governmental purposes and not with a view to commercial resale or with a view to use in the production of goods for commercial sale." The panel however reached a conclusion that such

[95] 'Industrial policy' is the policy of industrial development of a state with the purpose of promoting the economic development of the State. It takes into account the direction in which technology or the market is developing and provides directions and incentives for adapting to the changes. Green industrial policy takes into account the objectives of climate change mitigation and protection of the environment and seeks to promote adaptation of the industrial policymaking to these objectives. See, Larry Karp & Megan Stevenson, "Green Industrial Policy; Trade and Theory", *Policy Research Working Paper No. 6238, World Bank* (2012), *available at:* https://openknowledge.worldbank.org/handle/10986/12081 (Apr. 19, 2022).

[96] World Trade Organization, *European Union and Certain Member States — Certain Measures Affecting the Renewable Energy Generation Sector*, DS452, (Nov. 5, 2012).

[97] World Trade Organization, *Canada – Certain Measures Affecting the Renewable Energy Generation Sector and Canada – Measures Relating to the Feed-In Tariff Program*, Report of the Panel, WT/DS412/R, WT/DS426/R (Dec. 19, 2012) para. 2.1.

[98] *Id.*, at para. 7.64.

[99] The Agreement on Trade Related Investment Measures (TRIMs) is negotiated under GATT framework during the Uruguay Round Negotiations and forms part of the WTO Agreement

[100] *Supra* note 97, para. 7.166.

was not the case as commercial profits were being made out of the resale of electricity generated and hence there was commercial resale.[101]

India - US Solar Panel Dispute

In the case of India - US solar panel dispute wherein the panel report[102] was appealed before the Appellate Body,[103] the Indian measure that was challenged by the US were the domestic content requirements under the Jawaharlal Nehru National Solar Measures that were required, to establish a renewable energy plant in India and receive a guaranteed contract.[104] The United States challenged the Indian measures on grounds that it violated the national treatment obligation under the GATT, the TRIMs agreement since it imposed the domestic content requirement which was against the obligations in the TRIMs agreement.[105] The panel and the appellate body both held against India that the measure was in contravention to its obligations under the WTO agreement. The paper here is not concerned with the nuances of the panel and appellate body reasoning, other than what the reasoning for the claims under Article XX (j). Since article XX in general sits at the interface between trade obligations and the requirement of measures for the protection of the environment.

The argument of India was that Article XX (j) permits departure from the obligations under the WTO agreement, if the disputed measure relates itself with the acquisition or distribution of products which is in short supply in general or in the local context. India had contended that it requires solar panels for *energy security and ecologically sustainable growth*,[106] but the solar panels are in short supply and therefore it needed to bring in the challenged measure. The panel held that the provision 'short supply' doesn't means 'short supply of nationally manufactured goods' and the lack of domestic manufacturing capacity cannot be taken as to mean that the concerned goods are in short supply.[107] On appeal before the appellate body, the finding was reached that the question of short supply would come into the picture only when the purchase of goods from both domestic and international sources in a particular

[101] *Id.*, at para. 7.152.
[102] World Trade Organization, *India — Certain Measures Relating to Solar Cells and Solar Modules*, DS456 Report of the Panel, WT/DS456/R (February 24, 2016).
[103] World Trade Organization, *India — Certain Measures Relating to Solar Cells and Solar Modules,* Appellate Body Report, WT/DS456/AB/R (September 16, 2016).
[104] *Supra* note 102, paras. 2.2, 7.55 and 7.69.
[105] *Supra* note 102, para. 3.1.
[106] *Supra* note 103, para. 7.238.
[107] *Supra* note 103, para. 7.224.

region or geographical area is insufficient to meet the demand. This view of the appellate body leads to the denial of the claim of India.[108]

India also argued invoking the provision Article XX (d) which provides that measures which are contrary to the obligations enshrined in various provisions of GATT could be protected if they are "necessary to secure compliance with laws or regulations which are not inconsistent with the provisions of this Agreement, including those relating to customs enforcement, the enforcement of monopolies operated under paragraph 4 of Article II and Article XVII, the protection of patents, trademarks and copyrights, and the prevention of deceptive practices".[109] India advanced the argument that the Indian domestic content requirement measures are necessary to fulfill India international law obligations under the following instruments[110] and these instruments are not inconsistent with the provisions of GATT 1994 within the meaning of Article XX (d) of GATT 1994:[111]

1. The preamble of the WTO Agreement,
2. The United Nations Framework Convention on Climate Change,
3. The Rio Declaration on Environment and Development (1992), and
4. UN Resolution A/RES/66/288 (2012) (Rio+20 Document: "The Future We Want")

India identified the domestic laws separately and which were as under:[112]

1. Section 3 of India's Electricity Act, 2003, read with paragraph 5.12.1 of the National Electricity Policy,
2. Subsection 5.2.1 of the National Electricity Plan, and
3. The National Action Plan on Climate Change

With regard to the argument by India, the panel held that 'laws and regulations' mentioned in Article XX (d) mean the domestic laws and regulations. International laws and regulations are brought in which the ambit of Article XX (d) only when they are explicitly incorporated in the domestic law framework or where they have a direct effect on the domestic law of the

[108] *Supra* note 103, para. 5.83.
[109] *Supra* note 46, Article XX(d).
[110] *Supra* note 103, para. 5.96.
[111] *Id.*, at para 5.91.
[112] *Id.*, at para. 5.99.

country concerned. India claimed that the international laws have a direct effect on the domestic legal framework as they are automatically incorporated in the domestic legal framework so long, they are not in conflict with the domestic legislation in India. The panel however rejected the contention of India, holding that international law doesn't have a direct effect on the domestic law of the country and has to be incorporated into the domestic legal framework by some authority. As regards the second part of India's contention regarding the domestic laws and regulations, the panel held 'laws and regulations' to mean a domestically enforceable rule or legislation and not a general objective of obligation. On this ground, the panel held that the India's Electricity Act falls within the ambit of 'laws and regulations'; but not the plans or the policies.

On appeal before the appellate body, India argued that the 'Supreme Court of India' has recognized that sustainable development forms an integral part of the governance framework of the country and therefore the international laws cited by India has a direct effect on the domestic legal framework of the country.[113] The appellate body rejected the argument holding that to establish that international laws plays a role in guiding the policies of the executive branch of the country does not imply that the international law forms a part of the domestic legal framework of the country and hence is outside the scope of Article XX (d) of GATT.[114] Similarly for the argument that the policies and plans presented by India before the panel and the appellate body formed a part of the legal framework of the country, the appellate body held that the policies and plans do not show that they are legally enforceable. Thus, the contention of India was rejected on this ground also.[115]

The examination of the selected jurisprudence presented above presents the picture that the framers of the GATT text and the WTO covered agreement were conscious of the fact that trade has a direct interface with environmental considerations, particularly the protection of life and health of humans, animals and plants and the exceptions under article XX (d) that provides exemption from the obligations of GATT if a measure was undertaken to fulfill obligations under other rules and laws. However, the panel and the appellate body while being conscious of the fact have steadfastly avoided a too lenient an interpretation of the provisions and have effectively given primacy to the obligations contained in the other

[113] *Supra* note 103, para. 5.146.
[114] *Id.*, at para. 5.148.
[115] *Id.*, at para. 5.137.

provisions of the GATT and the WTO covered agreements. This is presumably to safeguard the operation of the multilateral trade treaty, but this has resulted in protection of environment becoming a secondary objective in the trade-environment interface.

IV. Conflict between Trade and Environmental Regulation

Trade and environmental regulation work on differing paradigms.[116] Trade regulation works on the principle that the obligations that are undertaken by the member countries and the concessions that have been made have to be protected by the concerned countries themselves. Thus, the interests that have to be protected by a country in trade affairs are exclusively those interests that lie within the sovereign jurisdiction of the country concerned. On the other hand, in the case of environmental matters, the interests that the countries seek to protect are concerned with the protection of the global commons. Degradation of such global commons is a concern of all countries and the presence of such global commons within the exclusive jurisdiction of a country plays little role in putting the concerned resource within the exclusive jurisdiction of the country concerned.

The conflict between having a global regulatory order for resources treated as global commons and the sovereignty principle that is inherent in the trade laws leads to the conflict between the trade and environmental regulations. The environmental treaties are generally built around the requirement to protect the 'commons' and hence it provides a responsibility on everyone to reduce emissions and prevent degradation. However, the question as to how to implement such responsibilities falls within the domain of other international agreements. When the environmental policy is sought to be implemented through trade measures, it turns hostile against the trade norms. Environmental protection can be enabled only when measures

[116] The concept of paradigms in Trade-Environment has to be looked at from the writings of different scholars. Regards it the paradigm of interaction between trading system and the environmental objectives to be that of 'linkage'. See, S. Charnovitz, "A New WTO Paradigm for Trade and the Environment", 11 *Singapore Yearbook of International law* 468 (2007). Another paper by Niccolò Pietro Castagno regards 'multilateralism of the WTO as the paradigm on which trade law works while environmental law (in the context of trade-environment interface and particularly sustainable development) survives on the paradigm of unilateral trade restrictions. See Niccolò Pietro Castagno, "Sustainable development and the international trade law paradigm", 13(2) *Journal of International Trade Law and Policy* 151 (2014). A third paper regards "nature as universe" as the paradigm for environment in general and climatic justice as a part of environmental law in particular. Sam Adelman, "A legal paradigm shift towards climate justice in the Anthropocene", 11:1 *Oñati Socio-Legal Series* 56 (2021). Diversion of finance to industries and enterprises through financial markets is attempted to be encouraged by the recommendations of the Task Force on Climate Related Financial Disclosures (TCFD). Recommendations of the Task Force on Climate Related Financial Disclosures (TCFD) Final Report, *available at:* https://assets.bbhub.io/company/sites/60/2021/10/FINAL-2017-TCFD-Report.pdf (last visited on Apr. 21, 2022).

are taken to restrict the trade that is harmful to the environment and promote trade that doesn't leads to degradation of the environment. Environmental laws require that the goods and services produced where there are negative externalities should be curbed or their production minimised and where the externalities are positive, such goods and services should be provided a preference in trading. Thus, the entire jurisprudence of environmental laws revolved around incorporating the costs and benefits associated with the externalities into the price of the goods and consequently in their trading patterns. The trade laws on the other hand, are bound by the principle of nondiscrimination and the principle of non-discrimination[117] doesn't take externalities into account while permitting trading. In addition, where the achievement of an objective is linked to restrictions on trade, the least restrictive trade measures have to be used. In short, the trade norms demand minimum restrictions on free trade and no discrimination between like products. Thus, trade laws do not allow discrimination if the only criterion for such discrimination is that a particular product has certain externalities attached to it.

The above being the case, the specific cases of conflict that arises between trade and environmental legislations essentially relates to the following:

a. The interface of sovereignty inherent in the right of the state to utilize its natural resources as it deems fit and the requirement that such utilization does not causes harm to other states. In the case of environmental degradation, such as ozone depletion or air pollution, harm to other states cannot be easily quantified and determined for the harm may not be visible and in addition it may not be easy to fix or stop the harm caused due to the activities of the concerned state except in extremely evident cases where the source of a problem can be traced to the delinquent state and the international law of state responsibility starts becoming applicable.[118] Where trade mechanisms interfere to counter this negative externality, it gives rise to conflict.

[117] The principle of non-discrimination prohibits discrimination between like products from different countries and between products from one's own country with foreign like products. See, WTO rules and environmental policies: key GATT disciplines, *available at:* https://www.wto.org/english/tratop_e/envir_e/envt_rules_gatt_e.htm (last visited on Apr. 20, 2022).

[118] *The Trail Smelter arbitration, the United States* v. *Canada* [1938 and 1941], RIAA vol. 3, pp. 1905-1982. Though the concept of 'State Responsibility' regarding environmental harm has not been explicitly made clear in any of the international instruments, yet the 'Trail Smelter' case is regarded as imposing responsibility upon states.

b. Right to development - International trade basing its foundations upon the theories of Ricardo[119] and Smith,[120] becomes a necessary ingredient in pulling the toiling masses around the world out of poverty. Trade necessarily requires increased resource use. Environmental protection on the other hand requires the use of resources in fashion that doesn't leads to harming the environment. The objectives of trade and protection of environment are thus on the opposite poles and they have to be reconciled. The right to development then brings the entire factum of responsibility for environmental degradation on the doorsteps of the developed countries for it is alleged by the developing countries that the rich countries have developed to this level, by sacrificing the environment and now they cannot turn back and say that developing countries should not harm the environment in their pursuit of development.[121]

c. Sustainable development - Sustainable development has been defined as "development that meets the needs of the present without compromising the ability of the future generations to meet their own needs".[122] However, as sustainable development definition is put up, it cannot be adopted as a legal right or an obligation since it is extremely vague. Environmental law bases itself upon the concept of sustainable development whereas trade law would have to clearly define the concept of sustainable development for it to clearly reconcile it with the principles of non-discrimination in trading relations.

d. Equitable utilization of shared resources - Another important principle of international environmental law is the equitable utilization of shared resources. This principle has developed over a period of time through the 1929 'river odder'[123] and the later 1974 '*Iceland Fisheries Case'*.[124] The two cases and the recognition that shared resources have to be utilized in an equitable fashion resulted in the draft UN Treaty that provide for utilizing shared international waters in an 'equitable and reasonable manner'

[119] *Supra* note 37 at 3. David Ricardo provided the theory of comparative advantage. Entities or nations should concentrate on the production of goods and services in which they have a comparative advantage

[120] *Supra* note 37 at 3. Adam Smith postulated the theory of absolute advantage. This theory was the initial theory on which trade in general was based but has since been replaced in nearly all cases by Ricardo's theory above and in some cases by other theories.

[121] The recent meeting held of the 'Conference of Parties' of the UNFCCC (COP 26) has taken some resolutions chief among which is related to the provision of financing and transfer of technology for adaptation purposes. Further countries have also agreed to adoption of reduction commitments for mitigation purposes. However, it remains to be seen, how far the promises are kept.

[122] This generally accepted definition first came out in the Brundtland Report also known as 'Our Common Future'. G. H. Brundtland, (ed). *Our Common future. Report of the World Commission on Environment and Development* (Oxford University Press, Oxford, 1987).

[123] *Territorial Jurisdiction of the International Commission of the River Oder, United Kingdom* v. *Poland,* (Order), [1929] PCIJ Series A no 23.

[124] *Fisheries Jurisdiction, United Kingdom* v. *Iceland (Judgment)* [1973] ICJ Rep 3.

which has to take care of the unique conditions of the countries such as their economic and social needs, ecological characteristics etc. However, while environmental law is based upon the principle on equitable utilization of shared resources, in terms of trade law, the concept of equitable utilization becomes very vague and in general contrary to the accepted principle of non-discrimination since it imposes a limit on the right of a state to utilize the shared resource. The message from the shrimp-turtle and the tuna-dolphin cases was that the resources may not be utilized in such a fashion as it may lead to their extinction and effective steps may be taken for reaching to such an agreement between the countries, but it didn't require that the resource use should be apportioned between the member states. The very factum of providing a quota between countries for utilization of shared resource is antithetical to the principles of trade law.

e. Common heritage of mankind - 'Common heritage of mankind'[125] is another important principle of 'international environmental law' and the ambit of the above principle revolved around addressing the regulation over the use of the resources that are in the global commons such as high seas, deep sea bed, outer space, ozone layer etc. The tragedy of the commons comes up in regard to the 'global commons' as the presence of commons that is not within the domestic jurisdiction of a state makes it available for uncontrolled commercial exploitation. The interface with trade law that arises in the case of global commons is nations are free to exploit the resource to the extent of their technological capacity, since trade law does not recognize any limitations on the exploitation of a resource so long it answers the non-discrimination principle. The concept of global commons requires that the benefits of the exploitation of the concerned resource is shared between all nations, however, this very concept flies in the face of norms the trade law.

V. Conclusion

From the discussion above, it is evident that the norms of trade and environmental law inhabit two very opposite ends. They approach the same objective - that is development - from different routes. While environmental law sees development as 'sustainable development',

[125] The concept of "common heritage for mankind" was first mentioned in 1954 Hague Convention for the Protection of Cultural Property in the Event of Armed Conflict [Convention for the Protection of Cultural Property in the Event of Armed Conflict 249 UNTS 240].

trade law on the other hand, while making 'sustainable development' its objective encompasses it within the perimeter of 'non-discrimination' and required the measures that are taken should be least restrictive to trade. Thus, while environmental law keeps sustainable development as its *ration de etere*, trade law provides for non-discrimination between goods and makes its objective of enhancing trade between nations and only secondarily considers the objective of sustainable development.

The two completely different sets of norms that characterise the two branches of international law cannot be reconciled in the fora that are meant exclusively for the trade regimes. Looking at the deepening interface between trade and environmental laws and the requirement for urgent action and cooperation between all nations to tackle the menace of climate change, it would be more appropriate if a separate forum is devised under the aegis of the United Nations that takes into account the requirements of the trade and environmental law and reaches a consensus on measures that need to be taken to guide the emerging jurisprudence under both the regimes.

Multiple suggestions have been forwarded by scholars to navigate the trade-environment interface. Chief among them has been the proposal of establishment of a mechanism in the form of a new international organization for the management of the trade-environment conundrum.[126] However this suggestion suffers from the infirmity that the expanse of the issues coming within the range of environmental governance is extremely vast. It ranges from global issues such as 'climate change' to being very domain specific as for example management of 'migratory species. Any new structure or international organization, out of necessity, would have to follow the model of UNEP (United Nations Environment Program) and would still not be able to replicate the functions of the WTO.[127] It is therefore obvious that a new organization to deal with the trade – environment conundrum cannot be a solution.

The solution to the trade – environment conundrum thus has to be searched at a politico-legal level. Developing countries face the primary challenges of poverty and absence of development which forces them to adopt environment degrading technologies. The developed

[126] Konrad von Moltke, *Trade and The Environment the Linkages and the Politics*, Roundtable on Trade and Environment, Held on Canberra (August 25, 1999), *available at:* https://www.iisd.org/system/files/publications/canberra.pdf (last visited on June 22, 2022).
[127] *Ibid.*

countries, on the other hand, while responsible for the environmental pollution over the past decades are shifting towards environment friendly technologies. To ensure that developing countries also start adopting environment friendly technologies and provide primacy to environmental considerations over trade, it has to be ensured that environment friendly technologies and assistance in terms of financial, technological know-how and human resources is provided to the developing countries. This would avoid trade rivalries in so far, the impact of environmental governance on trade is concerned and would also lead to synergies and research cooperation between the developed and developing countries for environmental protection and growth.

The trade advocates would prefer to have the demands of trade supersede every other objective while the apostles of the environmental policies would like to have an environmental law playing the role of an umbrella and guiding the interpretation of the entire body of trade law according to its tenets. In the context of urgency of environmental protection, however, it is necessary that the nations provide interpretative guidelines to the trade body for interpreting the trade agreements keeping in view the state of the environment and the urgent measures that are required to be taken to rectify the state of affairs.