

**INTEGRATING ENVIRONMENTAL PROTECTION
INTO INTERNATIONAL TRADE REGIME:
AN INEVITABLE CONSIDERATION FOR DEVELOPMENT**
การบูรณาการการคุ้มครองสิ่งแวดล้อมในระบบการค้าระหว่างประเทศ
: ข้อคิดที่หลีกเลี่ยงไม่ได้สำหรับการพัฒนา

Kittinut Supsoontornkul^{*}
กิตตินุต ทรัพย์สุนทรกุล

ABSTRACT

Trade and environment are equally important and mutually dependant as human society cannot stand without an efficient economy and a sustainable environment. It is vital to ensure that both regimes evolve towards the better condition without degrading each other. The problems occur when there is no clear parameter of the integration of environmental protection measures into international trading regime causing the unwillingness to cooperate, especially the developing countries which afraid to lose competitive advantages to promote national economic growth through international trade and investment. On the other hand, the unilateral efforts of the developed countries to address environmental problems by using trade-related measures may violate and undermine trade's principles because it may create unfair trade barriers and restrictions. Under multilateral trade rules and jurisprudence, the use of trade measures can be justified for environmental protection in certain circumstances. However, the further cooperation between trade and environmental organizations and developed and developing countries is needed in order to develop a win-win solution for the use of environmental trade measures and to negotiate for possible integration of other environmental protection measures into trade agreements without regressing the trading system.

^{*} Ph.D. student, University of Paris 1 Pan'the'on Sorbonne (France). E-mail :
ksupsoontornkul@gmail.com

บทคัดย่อ

การค้าและสิ่งแวดล้อมต่างมีความสำคัญเท่าเทียมกันและต้องพึ่งพาอาศัยซึ่งกันและกัน เนื่องจากสังคมมนุษย์ปัจจุบันไม่สามารถดำรงอยู่ได้หากปราศจากเศรษฐกิจที่มั่นคงและสิ่งแวดล้อมที่ยั่งยืน สิ่งที่สำคัญที่สุดคือการพัฒนาการค้าและสิ่งแวดล้อมไปสู่สถานะที่ดีขึ้นโดยที่ไม่ทำลาย ซึ่งกันและกัน อย่างไรก็ตาม การบูรณาการการคุ้มครองสิ่งแวดล้อมในการค้าระหว่างประเทศนั้นยังไม่มีชัดเจนและแน่นอนดังที่ประเทศต่างๆ โดยเฉพาะประเทศที่กำลังพัฒนาจึงไม่เต็มใจที่จะให้ความร่วมมือ เพราะกลัวว่าจะสูญเสียข้อได้เปรียบในการแข่งขันทางการค้าและการลงทุนระหว่างประเทศเพื่อพัฒนาเศรษฐกิจภายในประเทศตนในทางกลับกัน ประเทศที่พัฒนาแล้วได้บังคับใช้มาตรการทางการค้าฝ่ายเดียวเพื่อคุ้มครองสิ่งแวดล้อม ซึ่งมาตรการทางการค้านั้นอาจละเมิดข้อสัญญาว่าด้วยการค้าระหว่างประเทศ เพราะอาจก่อให้เกิดการกีดกันทางการค้าระหว่างประเทศที่ไม่ยุติธรรม ภายใต้ข้อสัญญาว่าด้วยการค้าระหว่างประเทศ ประเทศต่างๆ สามารถใช้มาตรการทางการค้าเพื่อคุ้มครองสิ่งแวดล้อมได้ในกรณีที่เข้าข่ายยกเว้นเท่านั้น อย่างไรก็ตาม องค์การการค้าและสิ่งแวดล้อมระหว่างประเทศ รวมถึงประเทศที่พัฒนาแล้วและประเทศที่กำลังพัฒนาจำเป็นต้องร่วมมือกันเพื่อหาทางออกในการใช้มาตรการทางการค้าเพื่อคุ้มครองสิ่งแวดล้อมที่สมประสงค์แก่ทุกฝ่าย รวมถึงเจรจาเพื่อหาวิธีที่จะควบรวมการคุ้มครองสิ่งแวดล้อมให้เป็นส่วนหนึ่งของข้อสัญญาว่าด้วยการค้าระหว่างประเทศ โดยไม่เป็นการทำให้ประสิทธิภาพของระบบการค้าระหว่างประเทศด้อยลง

INTRODUCTION

We now live in a globalization world where there are dramatically growth of international trade among nations, international circulations of capitals and multinational enterprises.¹ A global economic development through international trade has been significantly increased. International trade agreements and organization, General Agreement on Tariffs and Trade (GATT) and World Trade Organization (WTO), have been established to facilitate international trade circulation and resolve trade-related disputes.² Existing side by side with the up-growing trade regime are the concerns towards the environmental protection. Recently, many environmental problems have

¹ Barry C.Field & Martha K.Field, *Environmental Economics* 20 para1 (5th ed. 2009).

² Charles S.Pearson, *Economics and the Global Environment* 288 (2000).

been increased domestically and internationally. Environmental protection and economic development through trade are equally important and dependent matters, as human society cannot stand without an efficient economy and a sustainable environment.

The sustainable development, having long-term economic development without jeopardizing the environmental condition³, is desirable. However, it is difficult to achieve because economic development and environmental protection have been evolved in different notions; therefore, in certain circumstances both regimes happened to be in conflict in short- terms politics. Free trade competition in international arena for the economic development together with the lack of global environmental regulator lead to many environmental problems such as a constant increase of pollution emissions and low-environmental standards, both in domestic and international areas.

As there are no international environmental agencies that can impose command-and-control⁴ environmental regulation and enforcement over international communities, many countries take, either unilaterally or multilaterally, efforts to address environmental problems by using market-based tool, trade-related measure.⁵ Trade-related measures are effective because they serve as *carrots and sticks*, i.e. incentives for complying and sanctions for not complying with certain environmental standard.⁶ Unfortunately, such measures are subject to strong debate under multilateral trade agreements due to its trade-restrictive characteristics.⁷

To solve those new problems, the relationship between trade and environmental regimes need to be clarified and harmonized. Trade regime should not be a rival of environmental protection and vice versa. Trade rules should not prohibit the use of appropriate trade-related measure to address environmental problems if it is effective and necessary. Given the fact that trade organization is very stable and effective in

³ Frances Harris(ed), *Sustainable Development*, Global Environmental Issues 267 (2004).

⁴ Field, *supra* at 212 para 1.

⁵ Peter Uimonen & John Whalley, *Environmental Issues in the New World Trading System* 66-67 (1997).

⁶ Rafael Leal-Arcas, *International Trade and Investment Law: Multilateral, Regional, Bilateral Governance* 27 para 1(2010).

⁷ Andrea Bianchi(ed), *The Impact of International Trade Law on Environmental Law and Process*, Environment, Human Rights & International Trade 114-121 (2001).

setting common rules and resolving trade-related conflicts, though it is not environmental organization, it should be an ally to environmental protection. Integrating environmental protection into international trade regimes is necessary because trade and environment are mutually important and dependent on each other; thus, it is of the essence to balance both regimes, focus on definition of *win-win* strategies, and find the way towards the sustainable development.

PART I INTERNATIONAL TRADE AND ENVIRONMENTAL PROTECTION : CURRENT CONCERNS AND CONFLICTS IN REGIONAL AND INTERNATIONAL VICINITY

1. ENVIRONMENTAL AND TRADE ISSUES IN GLOBAL SCALE

While a rapid growth of international trade have brought many benefits to the people and society, there are still critical concerns with regards to the impact of such growth on a global environment condition.

1.1 The inevitable environmental degradation: An example of global warming

Undeniably, trade has positive effects on people and society as a whole. International trade has stimulated economic growth and generated wealth among nations. It also paves the way for an environmental consideration and international political cooperation in exchanging advance information and developing technology.

Economic growth and wealth of nations generated by international trade are believed to be the essential driving forces for a demand on environmental protection. It is argued that the relationship between economic growth and environment appears in an inverted U-shaped figure called “Environmental Kuznets Curve” (EKC).⁸ The *EKC* shows that at the early stage of the economic growth, the environment condition is worsen due to massive economic activities and pollution; however, at later stage when nations and people become rich, the environment condition will become better because people and government will have both demand and capacity to clean up the pollution.

⁸Gene M. Grossman & Alan B. Krueger, *Economic Growth and the Environment*, 110 Quaterly Journal of Economics 2, 353-377 (1995).

Nonetheless, the *EKC* does not demonstrate the complete analysis of environmental effect because it fails to take into account of the following factors:

(i) The *EKC* fails to answer the question of irreversible environmental damage occurring before the turning point. It argues that the environment would become better after the developing countries would be able to invest money in cleaning operations. This notion is based on the assumption that the existing environmental damages are reversible. However, most environmental harms are considered as irreversible and such harms could occur before the turning point;

(ii) The environmental improvement is not automatic. Once an income per capita rises, there will be strong demand towards pollution control regulation. However, such demand will need to be implemented through national regulations. For the people's demand to be translated into efficient environmental regulations, the countries need to have appropriate authorities in place and an efficient democracy system. Unfortunately, this is not always the case.

Carbon emissions (CO₂) have been steadily increased since the expansion of world economy in 1990s. No *EKC* effect has yet appeared for CO₂ emissions. On the contrary of environment-income relationship, those emissions gradually increase as income increases.⁹

This problem may be a result of an economic growth without economic development. Economic growth means an increase scale of economic activities without any change in economic structure.¹⁰ In contrast, economic development includes changes in economic structure, technology and social transformation such as education, health care, public transportation and legal institution.¹¹ Thus, economic growths without development means while there is massive expansion of economic activities, the nature of such activities are the same, *i.e.* no cleaner technology to help reducing the consumption of fuel-based energy and emission of polluting substances. As a result, the pollution and resource depletion will grow along the outputs.

In sum, it is incorrect to cite *EKC* as a claim that if countries promote economic growth, the environment will eventually take care of itself because the analysis

⁹Field, *supra* at 406.

¹⁰*Id.* at 400.

¹¹*Id.*

of *EKC* bases on the presumption of perfect market and political mechanism which rarely exist in a reality.

1.2 The integration of environmental protection into international trading system: A principle of sustainable development

Economic development through international trade and environmental protection have long been seen as extreme rivals. Environmentalists see an economic development arising from unrestricted international trade and investment as a degradation of environment but economists see it as an improvement of environment. Economic development and environmental protection have been evolved in different paths but they are connected and dependant matters. The key is to find the best compromising strategy to develop the “win-win” solutions and tackle the conflicting issues.

The political goal of “sustainable development” has been adopted among 172 nations during the United Nations Conference on Environment and Development in 1992 in Rio (Brazil).¹² Principle 3 of Rio Declaration reintegrates both needs of environmental protection and economic development by stating that the right to development must be fulfilled so as to equitably meet development and environmental needs of present and future generation.¹³

The basic goal of economic policy is a development on sustainable scale.¹⁴ To be specific, sustainable scale means that we must consume the energy and natural

¹²United Nations, Section on UN Conference on Environment and Development, The Earth Summit 1992, available at <http://www.un.org/geninfo/bp/enviro.html> (last visited July 5, 2013).

¹³United Nations Environment Program, Section on Environment for Development, Rio Declaration on Environment and Development 1992, available at <http://www.unep.org/Documents.Multilingual/Default.asp?documentid=78&articleid=1163> (last visited July 5, 2013).

¹⁴Herman E.Daly (eds), *Problems with Free Trade : Neoclassical and Steady-State Perspectives*, Trade and the Environment : Law, Economics and Policy 147-152, 155-157 (1993).

resources within the regenerative capacity and we must not produce waste or pollution beyond the absorptive capacity of the ecosystem.¹⁵

2. DIFFICULTIES IN APPLYING INTERNATIONAL CHALLENGES TO DEVELOPING COUNTRIES IN REGIONAL SCALE

2.1 The utopia of market circumstance

In order to move towards a sustainable development, it is necessary to address an inherent bias of present economic system against environmental protection. According to the theory of the “**invisible hand**” introduced by Adam Smith (The Wealth of Nation), individual pursuing wealth maximization will, through the mechanism of the market, maximize the common good.¹⁶ In other words, when the free market works well, it will render the common good for the society by itself without any governmental intervention. The simple mechanism of the market is the rule of supply and demand. Once the environmental goods such as clean air or water in demand become scarce, the price will increase. Then people would try not to pollute the valuable assets more.

However, in reality, it is not the case because the market fails to take into account the effect of the “Prisoner’s Dilemma”¹⁷ as described in “The Tragedy of the Commons” by Garrett Hardin. “The Tragedy of the Commons ” is the term used to explain the cause of degradation of common environmental goods.¹⁸ Most environment resources or substances have no market value: They are public goods, free to everybody but belong to nobody. Thus, everybody takes advantage of it but nobody

¹⁵ Id.

¹⁶ Adam Smith, *An Inquiry into the Nature & Causes of the Wealth of Nations*, Book IV Of System of Political Economy § 2 (1904).

¹⁷ Steven Kuhn, *Prisoner's Dilemma*, The Stanford Encyclopedia of Philosophy (Spring 2009 Edition), Edward N. Zalta (ed.), available at <http://plato.stanford.edu/cgi-bin/encyclopedia/archinfo.cgi?entry=prisoner-dilemma> (last visited 20 July, 2011).

¹⁸ Garrett Hardin, *The Tragedy of the Commons*, 162 Science 1243-1248 (1968)

preserves it because in the absence of regulation, there is nothing to guarantee that other people will restrain themselves from exploiting it too.¹⁹

Therefore, due to the market's failure to place any limitations or regulations, the participants in free market will maximize their wealth by over-exploiting public resources and the result will be the degradation of such resources.

2.2 The competitive advantages and negative externalities

The main reason to discharge polluting substances in the environment instead of cleaning them is because it is cost-free in the producer's point of view in short-term periods. Without governmental regulations, producers do not have to bear the cost of cleaning.²⁰ If the released wastes are beyond the absorptive level, they will reappear in the form of pollutions. Because those pollutions are external cost of product, they are borne by public instead of producers. In term of economic, they are called "*negative externalities*".²¹

Making the polluters pay for the full environmental cost of their activities by internalizing the negative externalities into the products' price could be a solution: An effective price mechanism showing to consumers the real cost of production and showing to producers what consumers' valuation are.²²

The "*Polluter Pays Principle*" (PPP) urges governments to impose regulations ensuring that the cost of products or services reflect both basic cost of operation and

¹⁹ For instance, believing in the freedom of the sea, fishing fleets have overfished and brought many species of fish to great depletion. Eventually, the fishing industries will be economically affected from such depletion. By exploiting natural resources over the regenerative capacity, short-term economic growth is maximized but long-term economic and environmental condition is degraded. The same problem occurs in the field of pollution, *i.e.* in the absence of regulation, people treat air or water as a pollution sink because for short-term benefit, it is cheaper to discharge toxic wastes to the environment without wasting money to clean it.

²⁰ Hunter et al , *supra* at 126-127.

²¹ *Id.*

²² David Pearce et al., *Blueprint for a Green Economy*, 154-157 (1989).

environmental cost.²³ As a result of internalization of externalities, polluting products will be more expensive in the market. The consumers will eventually switch to cleaner products forcing the manufacturers to improve the production and cleaning process or adopt cleaner advance technology.

Nevertheless, *PPP* is controversial because most developing countries have not yet accepted it due to the issue of competitive advantages.²⁴ By focusing on short-term economic gain, many developing countries export goods that do not internalize the environmental externalities into the price of the goods. Such goods are cheaper than goods from other countries that have adopted *PPP*. Therefore, goods without externality cost from developing countries gain competitive advantages in the international market.

2.3 The regulatory chill or stuck-at-the-bottom effect

While it is contentious whether the international trade competition actually leads to the *race-to-the-bottom* effect in environmental regulations or *pollution haven* in term of trade composition effect, the actual current problem is a “regulatory chill” or “stuck-at-the-bottom effect”. The *stuck-to-the-bottom* effect is a situation where competition in international trade has decelerated any improvement of environmental regulations that could lead to higher cost of productions for domestic products.²⁵ The unwillingness of the governments to improve environmental regulation due to the fear of losing competitiveness affects not only on national scale but also on global scale.

The most obvious example is the unwillingness of governments to bind themselves under international environmental agreements such as Kyoto Protocol, a collective policy response to a climate change problem.²⁶ The greater the potential impact on domestic producers and export markets, the more difficult it is to build political support for policy change; thus, the only way to encourage the improvement is to

²³ Hunter et al, *supra* at 516-519.

²⁴ *Id.* at 516.

²⁵ Gareth Porter, *Trade Competition and Pollution Standards: “Race to the Bottom” or “Stuck at the Bottom”*, 8 *The Journal of Environmental Development* 133-151 (1999).

²⁶ Lyuba Zarsky, *Stuck in the Mud? Nation States, Globalization, and the Environment*, *The Earthscan Reader on International Trade and Sustainable Development*, 19-44 (2002).

generate win-win situation, *i.e.* improvement of both competitiveness and environmental performance.²⁷

Furthermore, in many developing countries, the problem is about an ineffective enforcement of the environmental regulations rather than the stringency of such regulations.²⁸ The inefficiency of the enforcement process includes the lack of clear authority to monitor industrial pollution and to prosecute violators and the lack of strong punishment.²⁹ The underlying problem of an ineffective enforcement of environmental regulation is that the governments have ignored the public demand for more stringent pollution control. This ignorance from the governments could be a result from undemocratic system or unstable democratic system where those pollution-intensive industries have connection with elected representatives or officials.³⁰

2.4 Disparities among developed and developing countries and political groupings: The diversity of political standing, economic status, and environmental and commercial regulations

The main obstacle for the integration of environmental protection into international trade regime is the disparity among international and regional actors. Each country has its own interest, ethic and value to protect. They do not share the same political position: some are democratic, some are dictators, and some are aristocratic. They do not share the same economic status: some are communists, some are capitalists, some are economically developed and some are economically developing. They do not share the environmental and commercial principles: some have very strong

²⁷ *Id.* at 25.

²⁸ Sheoli Pargal & David Wheeler, *Informal Regulation of Industrial Pollution in Developing Countries: Evidence from Indonesia*, 104 *Journal of Political Economy* 6, 1315 (1996).

²⁹ Bryan Bachner, *Coming Home to Roost: Pollution, Law, and Economics in the People's Republic of China*, 5 *Geo. Int'l Envtl. L. Rev.* 643-650 (1993).

³⁰ Kurt Weyland, *Democracy without Equity*, Pittsburgh: University of Pittsburgh Press 129 (1996).

environmental policies and enforcement while some do not consider environment as a national priority.

For instance, developing countries or political grouping such as ASEAN have not integrated any environmental protection measures into their trading system. Since integrating environmental protection into the main systems is harder and more costly than just making political speech or natural reservation, the developing countries would integrate environmental protection such as adopting cleaner technology to produce goods only when there are foreign supports. Without foreign donors, initiation has rarely been made.

The disparities among countries are immense. It is not probable, if not impossible, to close the gaps. Thus, it is very challenging to have a consensus or any harmonized cooperation concerning the environmental protection through international trade.

PART II EFFECTIVENESS OF WORLD TRADE ORGANIZATION IN ADDRESSING INTERNATIONAL ENVIRONMENTAL PROBLEMS

As international trade has important effects on environment and environmental regulations, it is of the essence to examine the role of World Trade Organization in addressing trade – related environmental problems and its implication towards environmental protection agreements and regulations.

1. THE ROLE OF WORLD TRADE ORGANIZATION

General Agreement on Tariffs and Trade (GATT) has been created in 1944 to lay down groundwork for economic growth through open markets.³¹ As a result of trade negotiation “Uruguay Round”, World Trade Organization (WTO) has been established on January 1, 1995 forming a forum for implementing the multilateral trading system, negotiating new trade agreements, and resolving trade disputes.³²

³¹ Hunter et al, *supra* at 1256.

³² World Trade Organization, Section on What is WTO ?, available at http://www.wto.org/english/thewto_e/whatis_e/who_we_are_e.htm (last visited July 10, 2013).

1.1 The principle of GATT and WTO

The original GATT including specific agreements covering many trade-related issues have been incorporated into WTO Agreement.³³ The main objective of GATT is to reduce trade barriers among members and to remove distortions in international markets so as to ensure that goods and services are not discriminated on the basis of their national origins.³⁴ The non-discrimination principle is a cornerstone of GATT that can be portrayed by two main obligations: the Most Favored Nation (MFN) and the National Treatment.

Under the Most Favored Nation (MFN) obligation, member states of WTO have to treat “like products” importing from other member states of WTO the same way,³⁵ *i.e.* member states cannot discriminate against or favor imported products from certain member states. If member states decide to give advantage to imported product from state A, member states also have to give the same advantage to like products from all other member states. Under the National Treatment obligation, member states cannot treat imported products from other member states different from domestic like products.³⁶ In other words, member states cannot impose internal regulations or tax on imported products so as to give advantage edge for domestic like products. This principle seeks to prevent discrimination between imported and domestically produced like products.

1.2 The general exception clause Article XX

Under GATT/WTO principles, member states are free to impose any trade-related national regulations as long as they do not contradict to the non-discrimination principles described above. However, Article XX of GATT provides general exceptions to the non-discrimination principles. The use of trade-related measure that is inconsistent with the non-discrimination principles can be justified under the environmental grounds provided in Article XX.

³³ Hunter et al, *supra* at 1257.

³⁴ *Id.* at 1256.

³⁵ *Id.*

³⁶ *Id.*

Under Article XX, there are two exceptions on environmental grounds for trade-related measure:³⁷

(i) Trade-related measures are necessary to protect human, animal, or plant life or health;³⁸

(ii) Trade-related measures relates to the conservation of exhaustible natural resources, provided that such measures are made effective in conjunction with restrictions on domestic production or consumption.³⁹

Nevertheless, both exceptions are subject to the introductory clause or the *Chapeau Clause* of Article XX requiring that such trade-related measures must not be applied in a manner constituting a mean of arbitrary and unjustifiable discrimination between countries where the same conditions prevail, or a disguised restriction on international trade.⁴⁰

By focusing on the manner of how such trade measure is applied, the *Chapeau Clause* aims to screen out the use of trade-related measures as a protection mechanism for the domestic product. Some countries may impose trade-related measure such as bans, quotas, or standards on imported products claiming that they are necessary for environmental protection. Nevertheless, those measures could be used as disguised restriction on international trade to protect domestic production. This could happen in the situation where the importing state has stringent environmental policy requiring the domestic manufacturers to internalize environmental externalities (using clean energy for production or cleaning waste before release it to the environment). Therefore, the price of domestic products are higher than the imported products from exporting countries which have less stringent environmental policies and do not take into account of environmental externalities.

To eliminate the competitive advantages of cheap imported products and help the domestic products, the importing countries may impose trade measure preventing those imported products. Additionally, trade measure could be used in the case where

³⁷ General Agreement on Tariffs and Trade Art XX, 1947, available at http://www.wto.org/english/docs_e/legal_e/gatt47_01_e.htm (last visited 6 July, 2013)

³⁸ Id. at (b).

³⁹ Id. at (g).

⁴⁰ Id.

the importing countries wants to protect domestic manufacturers, especially small or medium manufacturers, who produce high-quality products in conventional ways (home-made/ hand-made products) from low-quality imported products manufactured by big industrialized manufacturers who are able to produce massive amount of products in lower price.

As it is not an initial objective of GATT, environmental protection serves only part of exceptions to the main obligations. Therefore, in light of environmental protection, it is crucial to examine how far WTO panels are willing to allow justification under Article XX.

2. THE RULINGS OF WTO ON ENVIRONMENTAL ISSUES

Under general exceptions Article XX of GATT, member states may impose trade-related measure, even it may create trade barriers and contravene to non-discrimination obligation, if such measure is necessary to protect environment or relates to the conservation of exhaustible natural resource, provided that such measure must be applied in a non-arbitrary and justifiable manner and must not be a disguised restriction on international trade. However, the core debate of whether WTO leaves a sufficient space for environmental protection through the imposition of national trade-related measure depends upon the WTO's application and interpretation of exceptions under Article XX. The GATT/WTO interpretation of Article XX concerning process and production methods and extraterritoriality can be examined from cases below.

2.1 The legality of process and production methods: examples of US-Tuna/Dolphin and US-Shrimp/Turtle cases

Under Article XX, trade measures that are necessary to protect environment or relates to the conservation of exhaustible resources could be justified. What kind of trade measure is at issue? What kind of trade measures that can be justified under Article XX (b) and (g)? Does it include the trade measure concerning the production or processing methods of the product?

The production and processing methods (PPMs) are the manner how the products are made or how the natural resources are extracted, grown, or harvested.⁴¹

⁴¹Bernasconi-Osterwalder et al, *supra* at 203.

The trade measure concerning PPMs is directed to how the products are produced not to the nature of products itself.

For example, a law banning the importation of tuna fish is not a PPM but a law banning the importation of tuna fish **caught by using** a drift net is a PPM.⁴²

The PPMs trade measure can be in forms of trade ban, control, or quotas on imports. There are two kinds of PPMs measure: product-related and non-product-related:⁴³

(i) The product-related PPMs measures are applied to assure the safety and quality of the end products, which could have effect on consumer. It concerns substances creating health risk for consumers that leave trace in the products such as pesticide residue in the agricultural products or other toxic remains in food;⁴⁴

(ii) The non-product-related PPMs measures are not related to the end product. They are applied to assure the achievement of environmental objective such as a ban on whale meat taking in violation of the whaling moratorium.⁴⁵

The use of PPMs is crucial in an environmental perspective but at the same time it is controversial in economic perspective. In an environmental perspective, the producing and disposal method of the products are of the essence because the environmental damage, pollution, will usually occur during such process not from the product itself.⁴⁶ Many environmental externalities occurring from the production method in one country can affect not only national but also global environmental concerns such as an emission of CFC particles effecting ozone layers. PPMs measure ensures that the market takes into account of environmental externalities so that the consumers can distinguish goods that are produced using clean and sustainable methods from goods that are produced using dirty or unsustainable methods.

⁴²Steve Charnovitz (eds), *Solving the Production and Processing Methods (PPMs) Puzzle*, The Earthscan Reader on International Trade and Sustainable Development 230 (2002).

⁴³Bernasconi-Osterwalder et al, *supra* at 204.

⁴⁴*Id.*

⁴⁵*Id.*

⁴⁶UNEP-IISD, *Environment and Trade : A Handbook* 53-57 (2nd ed. 2005).

Despite the benefits of PPMs in addressing environmental concerns, PPMs can create a negative economic effect on the exporting countries because PPMs can create financial and technological burdens on small producers, particularly developing countries because they have to adapt their PPMs according to the requirement of importing countries. Moreover, by denying the entrance of imported products, PPMs measure can be used as a protection mechanism for domestic products.

As to the legality of PPMs measure under WTO jurisprudence, the debate concerns the non-product-related PPMs. Previously it was perceived that GATT/WTO rules prohibit non-product-related PPMs measure. This perception arose from the GATT's decision on US-Tuna/Dolphin case in the early 1990s. In US-Tuna/Dolphin, a case where United States banned the importation of tuna fish caught by using techniques which results in an incidental kill of marine mammals in excess of U.S. practice, the panel concluded that U.S. importation ban on tuna concerned the process of tuna harvesting rather than tuna as a product and could not be qualified for justification under Article XX because of its extraterritorial application.⁴⁷ This decision directed on the extraterritorial issue and did not rule that non-product-related PPMs measure cannot be justified under Article XX.

Now, due to the WTO panel's decision of US-Shrimp/Turtle case, it becomes apparent that non-product-related PPMs measure could be justified under Article XX if it is applied in a non-arbitrary and justifiable manner according to the chapeau clause.

In US-Shrimp/Turtle case, U.S. law prohibited the importation of shrimp harvested in a way that might harm sea turtles unless the exporting countries were certified by U.S. administration as having regulatory program to prevent incidental mortality of turtle comparable to that of the U.S. (Turtle Excluder Devices or TEDs) or it was certified as having a fishing environment that did not pose threat to sea turtles.⁴⁸ The Appellate Body held that the trade ban could be possibly justified under Article XX (g) but the measure had been taken in an arbitrary and unjustified manner which was

⁴⁷ *United States-Restrictions on Imports of Tuna*, panel report (DS21/R) circulated 3 September 1991 (Not Adopted).

⁴⁸ *United States-Import Prohibition of Shrimp and Shrimp Products* (brought by India, Malaysia, Pakistan, and Thailand), Appellate Body report (WT/DS58/AB/R) adopted 6 November 1998.

inconsistent with the *Chapeau Clause* of Article XX because the U.S. failed to take efforts in negotiation with the exporting countries or to make administrative determination more flexible by taking into account of exporting countries' circumstances.⁴⁹ For instance, the exporting country may have adopted other protective measure for turtle conservation.

However, the Appellate Body in US-Shrimp/Turtle case concluded that the non-product-related PPMs measure could be justified under GATT Article XX by assuming that there was "sufficient nexus" between the natural resource to be protected and the country enacting the environmental measure because the sea turtles migrated into U.S. water.⁵⁰ Thus, the question remains unanswered as to whether WTO allows justification of the non-product-related PPMs measure intended to protect environment or natural resource outside the territory of the member states enacting such measure. This relates to an issue of extraterritorial application of trade measure that will be discussed in the following section.

2.2 The extraterritorial jurisdiction: an example of US-Shrimp/Turtle cases

Article XX (b) and (g) give the power for member states to regulate trade measure on the ground of environment protection; however, they do not explicitly limit the member states' jurisdictional application of such trade measure. Are the trade measures employed by member states to address environmental concerns that could have possible effects on other countries acceptable under Article XX ?

It is noteworthy to mention the exercise of state's jurisdiction under the customary international law, even though the concept of state's jurisdiction under WTO jurisprudence may be more limited.⁵¹ According to the customary international law, the governmental authority can exercise its jurisdiction by applying laws to persons or activities, enforcing sanctions, or exercising judicial power.⁵²

There are five principles for states' authorities to exercise their jurisdiction:

⁴⁹ Id. at para 163.

⁵⁰ Id. at para 133.

⁵¹ Bernasconi-Osterwalder et al, supra at 236.

⁵² Id.

(i) The territory principle allows states to exercise jurisdictions over persons and activities within their territories;⁵³

(ii) The effects principle allows states to exercise jurisdictions over actions that have substantial effects within their territories;⁵⁴

(iii) The nationality principle allows states to exercise jurisdictions over their nationals wherever they are;⁵⁵

(iv) The universal principle allows exercise of states' jurisdiction over universally condemned activities such as genocide, slavery or torture;⁵⁶ and

(v) The protective principle allows states to exercise jurisdiction to protect vital national interests.⁵⁷

In line with the customary international law, the state can exercise its jurisdiction **extraterritorially** regarding environmental concerns in certain circumstances. For instance, base on the **effects principle**, a state can prohibit a person from emitting toxic substances that have adverse effect on human or animal in its territory.

On the other hand, under the unadopted report of US-Tuna/Dolphin case, it is perceived that GATT/WTO does not allow the state to exercise its jurisdiction when the effect of such exercise will be beyond its territory, *i.e.* the state's jurisdictional exercise has **extraterritorial effect**.

In US-Tuna/Dolphin case, U.S. under Marine Mammal Protection Act (MMPA) banned the importation of yellowfin tuna caught with purse seine nets that could cause incidental death of dolphins, unless the exporting countries proved that they had program-regulating dolphin kill rate comparable to that of the U.S. The panel considered that the trade measure taken by U.S. constituted a quantitative restriction on imports and could not be qualified for environmental exceptions under Article XX (b) or (g) because of its extraterritorial application.⁵⁸

⁵³ *Id.*

⁵⁴ *Id.* at 237.

⁵⁵ *Id.*

⁵⁶ *Id.*

⁵⁷ *Id.*

⁵⁸ United States-Restrictions on Imports of Tuna, panel report (DS21/R).

In other words, Article XX (b) or (g) do not have extraterritorial application so it can be invoked only to protect the environment or natural resources located within the state's territory. The panel further stated that if Article XX (b) or (g) permitted member states to take trade measure in order to protect environment **outside** its jurisdiction, each member state could **unilaterally** determine the conservation policies of other member states and those other member states would be forced to comply with such unilateral trade measure, otherwise they would lose trading rights guaranteed by GATT.⁵⁹

The panel was concerned about the equity and impingement of state sovereignty because the US-Tuna/Dolphin case involved the issue of non-product-related PPMs measure being employed in a way that it could have effect on the exporting country's regulations and practice. By adopting non-product-related PPMs measure, the importing state imposes its ethic, value, and culture preference to the other exporting states.

Despite the panel's effort to maintain the stability of trading system and the state's sovereignty, the decision of US-Tuna/Dolphin is misguided. The type of measure taken by U.S. was not exercised extraterritorially even its effects were beyond territory.⁶⁰ Under customary international law, the concept of extraterritoriality refers to a law or measure imposing on persons or activities in a foreign country. In this case U.S. did not impose or enforce measure outside its territory.⁶¹ U.S. did not forbid the use of purse seine net in catching tuna in other countries but did not allow the importation of the products from such harvest into U.S. By holding that U.S. exercised extraterritorial jurisdiction because of its effect rather than the exercise of jurisdiction itself, the panel went beyond the customary international law and invented more restrictive definition of extraterritoriality.

⁵⁹ Id. at paras 5.27 and 5.32.

⁶⁰ Bernasconi-Osterwalder et al, supra at 241.

⁶¹ Steve Charnovitz, *The Environment vs. Trade Rules : Defogging the Debate*, 23 *Envtl. L.* 495-496 (1993).

Moreover, the panel's assertion that Article XX does not cover trade measure having extraterritorial effect is ruled out by the decision of Appellate Body in US-Shrimp/Turtle case.⁶²

The Appellate Body found that:

*"The 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 of the exceptions (a)-(j) of Article XX."*⁶³

Thus, the presumption that importing state's measure requiring exporting states to comply with or adopt certain policies renders a measure incapable of justification under Article XX is an error in legal interpretation.⁶⁴

Nonetheless, in US-Shrimp/Turtle case, the Appellate Body hold that trade measure such as PPMs requiring exporting states to comply or adopt certain policies could be justified under Article XX upon the finding that there was "sufficient nexus", *i.e.* protected migratory turtle species at issue migrated through U.S. water.⁶⁵

This reasoning could work with the US-Tuna/Dolphin case as well because "Mexican" dolphins might travel in and out U.S. water:

(i) What will be the holding if there is no territorial connecting factor?

(ii) If the environment or natural resources to be protected by importing state's measure are located completely outside the jurisdiction of importing state, either in the sovereign territory of other states or area beyond any state's jurisdiction, can the same reasoning be applied?

To shed some light on the above issue, it is worth mentioning the obligation of states not to cause environmental harm, a part of customary international law.

This obligation has been elaborated in Principle 21 of the 1972 Stockholm Declaration stating that:

⁶²United States-Import Prohibition of Shrimp and Shrimp Products ,WT/DS58/ AB/R, 1998.

⁶³Id. at 121.

⁶⁴Id.

⁶⁵Id. at para 133.

*“State have, in accordance with the Charter of the United Nations and the principle of international law, the sovereign right to exploit their own resources pursuant to their own environmental policies and the responsibility to ensure that activities within their jurisdiction or control **do not cause damage to the environment of other States or of areas beyond the limits of national jurisdiction.**”⁶⁶*

Since many environmental damages today are occurring globally, such as global warming or ozone depletion, the cutting down of trees in tropical forest in Thailand or the emission of pollution in China could cause damage across the globe. Thus, one could argue that there is “sufficient nexus” for justification under Article XX when European Union exercises measure requiring exporting countries to comply with its environmental standard in producing goods. This possible interpretation lies within the WTO’s discretion and attempt to move towards the integration of environmental protection.

PART III HARMONIZATION OF TRADE AND ENVIRONMENTAL POLICY

Although trade and environment systems have been developed in separate orders, their goals are not inconsistent. The two systems are equally important and should be reconciled to settle the existing problems and to prevent future conflicts that could occur from inevitable negative consequences of economic activities and the use of environmental protection measures. The harmonization could be implemented through the adoption of agreed minimum regulatory standard and the exercise of market-based tool (as eco-labeling).

1. PROMOTING THE ADOPTION OF INTERNATIONAL STANDARD

In the international regime, both free trade without any apparent or disguised restrictions and environmental protection for sustainable development are desirable. The unregulated international market and the disparity of national environmental policy lead

⁶⁶ Declaration of the United Nations Conference on the Human Environment, United Nations Environmental Programme, available at [http://www.unep.org/ Documents. Multilingual/ Default.asp? documentid=97&articleid=1503](http://www.unep.org/Documents/Multilingual/Default.asp?documentid=97&articleid=1503) (last visited July 15, 2011).

to both unfair trade due to competitive advantages and degradation of global environment. Thus, the market needs to be regulated and the environmental policies need certain degree of harmonization.

1.1 The upward harmonization of environmental standard

The ideal solution is to have an international “upward harmonization”⁶⁷ or a “reflexive harmonization”⁶⁸ of environmental standard concerning pollution control, production and disposal process or energy efficiency.

The idea is not to have a unification of the standard but to have similar or less-inconsistent environmental standard; thus, it will still be flexible and leave enough room for regulatory experiments in search for the more effective and suitable environmental regulation in higher level for certain regions according to local needs.⁶⁹

The reflexive harmonization of environmental standard such as setting minimum standard does not eliminate the possibility of environmental regulatory competition. However, it does prevent the downward environmental regulatory competition, *race-to-the-bottom* effect in environmental standard. Instead, it supports environmental regulatory competition above such minimum bar, *race-to-the-top* effect in environmental standard.

Setting green countervailing duties,⁷⁰ one of upward harmonization measures, would equalize the competitive advantages the low-environmental-standard countries gain from not adding environmental cost into the products; thus, if there is no more competitive advantage, there is no incentive for the countries to lower their environmental regulation.

However, the idea of setting minimum environmental standard has not been successfully accepted, especially due to the question of trade protectionism. Developing

⁶⁷ Porter, *supra* at 133.

⁶⁸ Barnard, *supra* at 642.

⁶⁹ *Id.*

⁷⁰ Thomas K. Plofchan, Jr., *Recognizing and Countervailing Environmental Subsidies*, 26 Int'l L., 780 (1992).

countries strongly oppose the idea because they consider it as a protectionist measure to take away their competitive advantage in the market.⁷¹

Implementing the upward harmonization measure is extremely difficult. Even if the developing countries agree on the plan, the next question is who get to decide the environmental standard. If the standard has been set too high and put too much burdens for the developing countries, then it is necessary to establish the entity to give support as regards to the transferring of clean and advance technology for production and waste disposal.

1.2 The South-South agreement on common minimum environmental standard

As it is apparent that the *race-to-the-bottom* effect in environmental standard does not normally occur in developed world due to its strong political system, the problem concentrates in the developing countries that refuse to agree upon the international upward harmonization due to the fear of losing competitiveness and foreign investments.

Thus, another alternative is to have a common minimum environmental standard among developing countries so that they would be able to negotiate and agree on the standard that they consider being suitable and meets both their economic and environmental demands.⁷² It is believed that if there were “South-South” minimum environmental standard agreement, those developing countries would not lower their environmental regulations or standard to attract capitals from foreign investment or to gain competitiveness in the international market from cheaper exports or toxic-intensive goods.

Unfortunately, it may not be the case because, as previously discussed, the real problem developing countries are facing is not the *race-to-the-bottom* effect in environmental regulation but the *stuck-at-the-bottom* effect. Even if the “South-South” minimum environmental standard has been reached, there is nothing to guarantee that it would be effective because the practical obstacle is **insufficient and inefficient**

⁷¹See more in Gareth Porter, *Pollution Standards and Trade : The “Environmental Assimilative Capacity”Argument*, 4 Geo. Public Pol’y Rev. 49-74 (1998).

⁷²Porter, *supra* at 143.

enforcement of such standard. To implement effective environmental standard, the monitoring and enforcing tools together with the great opportunity for public participation must be put in place.⁷³

Therefore, in negotiating the common minimum standard agreement, it is necessary to include the provision regarding monitoring and enforcing mechanism, which would be another challenge. The monitoring mechanism should collect data for any polluted activities and such data should be available to share among the parties to the agreement.⁷⁴

2. STRENGTHENING ECO-LABELING

In the absence of international environmental standard, every country remains free to produce domestic and exported products in any manners as they prefer according to their comparative and competitive advantages in the international trade arena regardless of the environmental consequences. It is highly contentious to push forward the internalization of environmental externalities by international agreements due to the question of equity and economic advantage. Thus, imposing appropriate eco-labeling, a labeling system that aims to provide environmental information regarding the products and the production and disposal process to the consumer⁷⁵, would seem to be best compromise and could fill the gap of trade and environmental dilemma choice.

2.1 The power of consumers' choices

As it is very difficult to coerce countries to strengthen their environmental regulations due to many limitations, eco-labeling is a less trade intrusive method because it is a market-based environmental tool serving as an indirect incentive for the countries to reconsider their environmental regulation. The best-case scenario would be that eco-labeling is a requirement under multilateral international agreement, especially trade agreement.

⁷³ Id. at 145.

⁷⁴ Id.

⁷⁵ Shahin, *supra* at 220.

However, in the case where there is no such agreement and as long as trade rules do not constraint appropriate eco-labeling, the importing countries may require imported products to put eco-label on products showing its environmental effect regarding production and disposal process.

Although the eco-labeling does not solve the problem concerning competitive advantage of the products that do not internalize negative environmental externalities into the final prices, it does leave the final decision into the hands of consumers. If most consumers prefer to buy the more environmental friendly products according to the eco-label such as carbon-emission-free or energy-saving products, it will increase the demand of importation of such products and the demand for non-environmental friendly such as heavy-carbon-emission or non-energy-saving products will be decreased accordingly. Consequently, by the pressure of competitiveness, the manufacturers would want to enhance and improve their environmental standard for product and production and disposal process.

Moreover, even in the case where eco-labeling is not mandatory, there is a strong tendency in an increase of voluntary eco-labeling system by private actor or non-governmental organization⁷⁶ such as International Organization of Standardization (ISO) that has developed series of environmental standards (ISO 14020).⁷⁷ These non-governmental standards together with the pressure of competitiveness in the market due to common labeling practice of competitor may eventually influence manufacturers, who initially do not want to label his products. Undeniably, consumers are likely to purchase products that have been labeled by credible organization than those which are not.

2.2 The complexities and limits of eco-labeling

Despite the less-trade-intrusive appearance of eco-labeling measure, the increasing complexity and diversity of eco-labeling schemes may create more problems for SMEs and exporting countries, especially developing countries due to more burdens such as adjusting cost.⁷⁸ Complex and diverse eco-labeling requirement may put developing countries on the disadvantage edge in the international market and may

⁷⁶Trade and Environment at the WTO, *supra* at 16 para 2.

⁷⁷Charnovitz, *supra* at 15 para 2.

⁷⁸Trade and Environment at WTO, *supra* at 16 para 2.

mislead the consumers' choices. The large number of different eco-labeling schemes may create confusion for consumers because they may not be able to recognize and trust the information shown on the labels.⁷⁹

To avoid the problem, every country should be able to participate in discussion regarding setting clear and appropriate eco-labeling standards. This will also eliminate those eco-labeling requirements that are discriminatory and disguised trade distortions. The eco-labeling standard may have to consider balancing between the local environmental concerns and global environmental concerns.⁸⁰

CONCLUSION

Together with the economic prosperity, technology innovation, international political stability, international trade has also brought about many environmental concerns, both in national and global scale. Economic growth without development or change in the nature of activities can lead to both domestic and international environmental degradation because the pollution is increased as the scale of economic activities is increased. Environmental degradation has occurred as result of the failure of unregulated market leading to the tragedy of the commons as well as the stuck-at-the-bottom effect of environmental regulations. The perfect circumstance is to have a sustainable development where trade and environment can, at least, coexist without degrading each other, or in the best-case scenario, place themselves in a new and innovative green economy.

Many countries have taken both unilaterally and multilaterally efforts to address the environmental problems by using trade-related measures. Inevitably, the use of environmental trade-related measures is likely to be in conflict with non-discriminatory trade rules and subject to strong scrutiny of GATT/WTO panels. Since GATT/WTO is not an environmental organization, the use of trade-related measure to address environment concerns serve only derogations to the main obligation of facilitating trade flow. The environmental exceptions provided in Article XX of GATT are broad and sufficient to allow the use of certain trade measures to tackle with environmental problems.

⁷⁹ Id. at 17 para 1.

⁸⁰ Id. at 17.

Moreover, GATT/WTO has recently developed more amicable jurisprudence towards the use of environmental trade measure.

Though GATT/WTO jurisprudence opens door for the possibility of the use of environmental trade measure to address the environmental concerns, the parameters of such usage are still unclear and need further interpretation and clarification. Instead of relying solely upon the guidance of GATT/WTO panels on case-by-case basis, other possible alternatives are available for the harmonization of trade and environmental regimes. Establishing environmental minimum standard regarding trading products or process, international or regional, could help reducing the *stuck-at-the-bottom* problem as well as removing the comparative and competitive advantages of pollution-intensive products or the products produced in environmental low-standard countries. Furthermore, using market-based and less intrusive method such as imposing eco-labeling to send the right environmental information to consumers is a bargaining alternative because it does not, at least not as much as other methods, compromise trade flow.

Conclusively, protecting the environment is a new challenge for international trade. It should be seen as a chance to develop stronger links between nations and political grouping such as ASEAN and to promote international trade: protection of the environment is neither an obstacle to development or trade unless it is intentionally used for this purpose. Trade and environment are both about long-term politics to promote developments and peace.

In contrast, short-term environmental and trading policies can only lead low-standard nations to fail on their way to development. A cleaner economy, respectful of the environment, could help international trade if it is use to promote safer goods and better producing conditions. The importance is that the environment protection for the present and future generations must not be used in a way to re-install old protectionist policies that international community has tried to eliminate since the end of World War II.