ENVIRONMENTAL IMPERATIVES IN A GLOBALISED WORLD: THE ECOLOGICAL IMPACT OF LIBERALISING TRADE

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Abstract

As the new economic order takes hold under the recent phenomenon referred to as 'globalisation', spreading its rapacious tentacles into the social, economic and cultural fabrics of every nation, signs of impending disaster are becoming increasingly apparent, particularly in the context of globalisation's impact on the ecological well-being of the planet and its inhabitants. Like many other universally recognised paradigms such as sustainable development or even free trade, the term globalisation cannot be reduced to a single, readily understood and accepted concept. Instead, it is constantly changing shape, depending on how, where and against whom or what the impacts of globalisation apply.

There is now little doubt amongst leading economists, ecologists, conservationists and indeed large segments of the citizenry of both developed and developing countries that the insidious nature of globalisation is causing horrendous and, in many cases, irreversible damage to many of its potential beneficiaries, the most important of which are the natural environment and its human inhabitants. Such concerns have belied the promises of the major economic powers, including the most powerful players on the world stage – the transnational corporations.

One must surely pause to consider that our coincidental inabilities to alleviate effectively our most pressing global concerns—such as climate change, the eradication of poverty, disease, the plight of indigenous peoples in both the North and the South, and the worsening scarcity of food, water, clean air and sustainable energy resources needed to fuel the world's insatiable demand for economic expansion, to name a few—may be directly attributable to the impact of globalisation.

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This paper will discuss the role that trade liberalisation, technological innovation, development pressures and the move away from local economies to a world dominated by transnational corporations, including those of the media, have played in undermining the relative stability or balance in ecological terms that had previously existed. It will provide some suggestions as to how we might begin to bridge the widening chasm between trade liberalisation and the protection of the environment.

I INTRODUCTION

The unabated escalation in global environmental problems will significantly affect the quality of life led by human society as the increasing desolation of our natural world through unsustainable human activities threatens to surpass the ecological limits of our biosphere. Much irreversible damage has been caused by unprecedented economic expansion since the end of World War II, inflicted on nature by those who are dependent on these very ecosystems for their survival. We have now reached a threshold of insupportable demands on our environment by adopting an economic system that is geared towards an incessant expansion of output to satisfy immediate human consumption, which is the very antithesis of what we refer to as 'sustainable development'. The malevolence imminent in the impacts of globalisation is clear from the nexus between the finite environment in which we exist and the intensive use of remaining resources required to compete on an international scale. Increased development and consumption are not new ideas as deregulation and economic restructuring have been previously embraced and proven fundamentally unsuccessful.² As countries have developed, more people in the world are hungry than ever before. The limitless growth envisaged by globalisation has created benefits for few, and in fact, even the standards of living in the United States (US) have been declining since 1980.3 Instead, increased trade has helped enlarge disparities in world living standards.4

Globalisation threatens basic human rights. The social and environmental impacts of transnational corporations, whose operations reduce the amount and quality of resources for the future, are evident in deforestation, polluted waterways and escalating numbers of endangered species. The encouragement of intensive resource use inherent in globalisation leads to exploitation of poor and minority communities. As countries compete for trade, levels of protection are lowered to provide investor-friendly regulatory environments. Each country undercutting the next leads to slave labour and sweatshops and causes environmental degradation through poor waste management and unrestricted abuse of resources.

4 Ibid.

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D Korten, 'The Failures of Bretton Woods' in J Mander and E Goldsmith (eds), *The Case Against the Global Economy* (1996), 23.

J Mander, 'Facing the Rising Tide' in J Mander and E Goldsmith (eds), *The Case Against the Global Economy* (1996), 3.

D Morris, 'Free Trade: The Great Destroyer' in J Mander and E Goldsmith (eds), *The Case Against the Global Economy* (1996), 223.

Similarly, the removal of barriers to information, investment and trade leaves transnational corporations themselves largely unregulated as they move operations to countries with lower standards of environmental protection. The benefits to which developed countries have become accustomed now threaten developing economies as wage raises, environmental protection, and insurance and employer liability lift costs of production and reduce international competitiveness.⁵ The provisions of the General Agreement on Tariffs and Trade (GATT) are almost entirely negative.⁶ They tend to limit national governments from regulating the use of the environment, rather than providing them guidelines for enacting regulations, and are frequently criticised as too narrowly focused on the commercial benefits of trade facilitation. Likewise, the World Trade Organization (WTO) is unclear on its mission with regards to environmental goals, leaving a gap between domestic law and the environmental impacts of corporations' overseas operations. This has recently been addressed most notably in the US through the extraterritorial application of domestic laws to regulate conduct abroad. Where international environmental treaties have previously been relied on, vague and indefinite standards have proved ineffective mechanisms⁸ and now domestic corporate legislation is being extended across the global commons.

II GLOBALISATION – WHAT IS IT?

The global economic arrangement under discussion is based, in part, on the concept of unlimited expansion. The global economy is primarily based on free trade rules and deregulation of markets and aims to accelerate development in all areas of the globe. The fundamental objection from environmentalists is based on the fact that we live in an ecosystem with finite resources. The limits to non-renewable resources have been realised for some time, but to intensify competition for renewable resources threatens to destroy the regenerative capacities of our ecosystem. The global development paradigm is berated by arguments concerning promises of poverty alleviation and an increase in well-being of human society which have not been realised. Indeed, this path of development has resulted in increasing losses in biodiversity and a widening and disproportionate division of wealth in human society. The global development are widening and disproportionate division of wealth in human society.

⁵ Ibid

D Hunter, J Salzman and D Zaelke (eds), *International Environmental Law and Policy* (2002) 1147.

D Esty, Greening the GATT (1994) 53; D Hunter, J Salzman and D Zaelke (eds), International Environmental Law and Policy (2002) 1148.

S Spracker and E Naftalin, 'Applying Procedural Requirements of U.S. Environmental Laws to Foreign Ventures: A Growing Challenge to Business' (1991) 25 The International Lawyer 1043, 1051-52; D Hunter, J Salzman and D Zaelke (eds), International Environmental Law and Policy (2002) 1435.

Korten, above n 1, 23.

World Resources Institute, Millennium Ecosystem Assessment, 2005. Ecosystems and Human Well-Being: Biodiversity Synthesis (2005) 4.

The concern with globalisation emerges in the free market ideology whereby power is vested in the market as opposed to the state. Korten describes the necessity of maintaining a balance between state and market power in order to protect the public interest from corporations.11 The magnitude of economic power held by a handful of these transnational corporations creates a necessary role for government to maintain a balance in market and community interests. The economic strength of large corporations poses a threat in an unregulated global market as they are free to allocate remaining resources beyond regenerative capacities. More particularly, they direct scant attention towards internalising the social and environmental costs of production.

III THE ROLE OF TRANSNATIONAL CORPORATIONS IN A GLOBAL ECONOMY

The nature of huge corporations creates a powerful financial influence requiring governance. By virtue of their sheer financial size, which often equals or exceeds the gross domestic product of some individual nation states, many corporations have the ability to exert enormous influence on governments of small states, with little accountability or concern for anyone apart from their shareholders. It is estimated one quarter of the total assets of transnational corporations are controlled by the ten largest companies.¹² One quarter of global output and half of foreign direct investment are controlled by only a small percentage of these corporations, ¹³ exerting an enormous influence on the global economy. The increase in the number of transnational corporations after World War II was the result of increasing labour costs in developed countries, increasing value in economies of scale, improvements in technology facilitating transport and communication and a growing consumer culture. 14 This expansion of the post-war economy has turned increasing focus on the exploitation of natural and human resources in developing countries. As regulatory regimes in developed countries respond to civil society's need for more stringent controls, transnational corporations are pushed to explore opportunities for competitive advantage in less regulated states. This in turn generates ethical problems of bribery, corruption, employment issues, and environmental and cultural impacts.¹⁵ The raison d'être of a corporation is to show a profit, especially for publicly held companies where growth and expansion are the markets' measures of success. National governments are facing difficulties in maintaining ongoing adequate control over transnational corporations as they grow in size and influence, and, as many of them become multi-national, they may eventually lose their nationality. It may be argued that transnational corporations are expanding beyond existing forms of regulatory control with calls for self-regulation and corporate

¹¹ Korten, above n 1, 25.

¹² I Haq, 'World Investment Report 2000 Released: Developing States Warned Against Unbridled Cross-Border Mergers, Acquisitions', Business Recorder, 4 October 2000; R Fowler, 'International Environmental Standards for Transnational Corporations' (1995) 25 Environmental Law 1; D Hunter, J Salzman and D Zaelke (eds), International Environmental Law and Policy (2002) 1405. 13

Ibid

¹⁴ Fowler, above n 12, 1406.

¹⁵ Ibid

codes of conduct to meet expectations of the public. But who are the public? Expectations of those in developed countries will likely find an attentive audience whilst the voices of the poor and minorities of developing countries are ignored. The standard of international regulation created by the GATT and the WTO is inherently biased against environmental protection and towards economic growth, the main objective for their creation. Repeated rejection by arbitral panels as well as by the WTO Appellate Body of the protection offered by sanitary and phytosanitary provisions of the GATT (Article XX) in a series of notable cases bears witness to this fact.

The chapeau or introductory paragraph of Article XX states:

Subject to the requirement that such measures are not applied in a manner which would constitute a means of arbitrary or unjustifiable discrimination between countries where the same conditions prevail, or a disguised restriction on international trade nothing in this Agreement shall be construed to prevent the adoption or enforcement by any contracting party of measures:

[followed by two provisions relevant to environmental protection]

- (b) necessary to protect human, animal or plant life or health; ...
- (g) relating to the conservation of exhaustible natural resources if such measures are made effective in conjunction with restrictions on domestic production or consumption ... ¹⁶

Both the arbitral panels and the Appellate Body in the *US Gasoline* case¹⁷ indicated that in order to invoke these exceptions, the defending party must first demonstrate that the measure falls under at least one of the exceptions (b) or (g) listed under Article XX and second that it satisfies the requirements of the chapeau. Specifically, this provision questions not so much the measure or its specific contents as such, but rather the manner in which that measure is applied. A measure may indeed discriminate, but not in an 'arbitrary' or 'unjustifiable' manner.

Article XX (b) requires the performance of what has been commonly referred to as the 'necessity test', i.e., the measures must be necessary to protect human, animal or plant life or health.

In the *US Gasoline* case, the Appellate Body also clarified the meaning of Article XX(g) by stating that a measure would qualify as 'relating to the conservation of natural resources' if it exhibited a 'substantial relationship' with, and was not merely 'incidentally or inadvertently aimed at' the conservation of exhaustible natural resources.

General Agreement on Tariffs and Trade [hereinafter GATT], 30 October 1947, 55 UNTS 194, art XX.

United States – Standards for Reformulated and Conventional Gasoline, WTO Doc WT/DS2/AB/R, AB-1996-1 (1996) (Report of the Appellate Body).

The Appellate Body report in the *US Shrimp* case¹⁸ identified two requirements in order to determine whether a measure has been applied in an unjustifiable manner: first, whether a serious effort has been made by the Contracting Party adopting the measure, and second, whether the measure is flexible.

There has been some speculation that had the argument in the *Shrimp* case been based on paragraph XX(g), the Appellate Body might have issued a decision in favour of environmental protection, rather than impugning the measure as a restraint of trade, or, in the words of the panel, the measure to be excepted under Article XX must not 'undermine the multilateral trading system.'

It is, in the view of this writer, extremely unlikely that this would have been the case given the broad discretionary nature of the language set out above and the proclivity of panels over a long period of time to rule against any measure that could be construed to operate as a restraint of trade. Moreover, the decisions of both the panel and the Appellate Body made it clear that the requirements of the chapeau clause had not been met and, even if the Appellate Body was willing to consider the effect of XX(g) as it did in this case, this would not be enough.

The United Nations (UN) sought to relieve some of these concerns about inadequate environmental regulation in its failed attempt to draft a Code of Conduct for Transnational Corporations as a method of influencing their activities. This followed the exposure of wide scale unethical practices by transnational corporations in the late 1970s, in particular the involvement of US companies in the 1973 coup that overthrew President Salvadore Allende of Chile.²⁰ Although the

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United States – Import Prohibition of Certain Shrimp and Shrimp Products, WTO Doc WT/DS58/AB/R, AB-1998-4 (1998) (Appellate Body Report). In this case the panel was convened to examine a prohibition imposed by the US on the importation of certain shrimp and shrimp products under section 609 of Public Law 101-162 ('section 609') and associated regulations and judicial decisions. Section 609 prohibited importation to the US of shrimp harvested with commercial fishing technology that may adversely affect sea turtles. It also provided an exception for shrimp imported from states certified thereunder. The relevant portion of this exception, applicable where sea turtles are otherwise threatened, permits certification if the exporting state adopts a regulatory program governing the incidental taking of sea turtles comparable to that of the US and with an average incidental taking rate comparable to US vessels. This regulatory program would require 'turtle excluder devices' to be used by commercial shrimp trawling vessels operating in areas where turtles are likely to be found. The panel found that the requirements of the chapeau had not been met and therefore it was unnecessary to consider Articles XX (b) or (g).

The Appellate Body reached the same conclusion to the effect that the US measure does not comply with the *chapeau* after analyzing the availability of an exception under Article XX(g). The Appellate Body interestingly established a balancing test for satisfaction of the requirements of the *chapeau* and proceeded to examine the US measure by using a means-ends analysis and a least trade restrictive alternative test analysis. The Appellate Body also found that the measure contained actual discrimination (discrimination that is not simply the necessary result of the US environmental program) in the way that it was applied. See discussion in Appellate Body Report, ibid, and in J Trachtman, 'Decisions of the Appellate Body of the World Trade Organization' (1999) 10 *European Journal of International Law* 192, 194.

Hunter, Salzman and Zaelke, above n 6, 1410.

Code-drafting initiative proved unsuccessful, it ultimately led to the adoption by the Organization for Economic Cooperation and Development (OECD) of the Declaration on International Investment and Multinational Enterprises in 1991 (revised 2000), which acknowledged a set of voluntary rules of conduct.²¹ However, the success of these guidelines has faltered on ambiguous language and discretionary adoption.²² In addition, these guidelines are intended to be implemented nationally within government agencies and are not considered binding standards. There is no enforcement against parties of a conflict arising under the standards and no judgment is made as to the behaviour of any company in question.

IV THE CONSEQUENCE OF FOREIGN DIRECT INVESTMENT

With the revenue of transnational corporations exceeding the gross national product of most countries, investment in developing countries has been an advantageous use of capital.²³ It is estimated around 85% of the global total of foreign investment comes from companies of developed industrial countries.²⁴ The monopolised nature of foreign investment creates favourable circumstances for the operations of transnational corporations whilst it creates conflict between the perpetuation of economic deficiencies in developing countries and their need to compete in the market. A large portion of private investments are through portfolio investments, which is a particularly unpredictable style of investing.²⁵ The danger posed to developing countries by such investments lies in their flexibility, where investors are able to withdraw funds very quickly from developing economies if confidence in business prospects is lost.

French suggests that industries will generally be drawn to investment in developing countries by low labour costs, greater availability and quantities of natural resources, and strategic placement to access new markets.²⁶ And, although environmental controls borne by developed economies may not be the strongest motivating factor for a transfer of manufacturing location, there are benefits derived from taking advantage of lenient laws once the move is made. From leniency in environmental regulation, two conflicting obstacles arise, both impinging on the host countries. Firstly, when transnational corporations move manufacturing operations to developing countries, the problems of the poor are perpetuated. The negligible wages of slave labour and alleged use of sweat shops does nothing to ameliorate the inequities between the wealthy few and large minorities of these

²¹ Ibid.

J Nolan, 'Human Rights, the Environment and Business – What Corporate Lawyers Need To Know', July 2004, 66.

Haq, above n 12, 1405.

H French, 'Assessing Private Capital Flows to Developing Countries', State of the World (1998) 146-65; D Hunter, J Salzman and D Zaelke (eds), International Environmental Law and Policy (2002) 1407.

²⁵ Ibid.

²⁶ Ibid.

countries.²⁷ Profits return to those comfortably living in developed countries whilst the resources of poorer states with little bargaining power are depleted at an increasingly efficient rate. Secondly, the response of international organisations to this problem has been to increase monitors and restraints of environmental standards on developing countries.

The increase in environmental regulation diminishes the competitive advantage of developing countries in the global market. The elimination of access to unused resources in developing countries makes these countries less favourable for investors and they suffer a flight of investment which only goes to restore the inequities between those and developed countries.

V THE BHOPAL DISASTER

To increase competitiveness, transnational corporations engage in cost-cutting measures to compete in a deregulated global market. This significantly increases the instances of environmental accidents. The Bhopal disaster in India is considered the world's worst industrial disaster. As many as six thousand people lost their lives and an estimated two hundred thousand subsequently suffered disabilities²⁸ when a pesticide plant owned by Union Carbide India, which was in fact majority-owned by the Union Carbide Corporation of the US, accidentally released 40 tonnes of toxic gas over Bhopal neighbourhoods.²⁹ The circumstances of the ensuing legal proceedings are cause for concern with regard to the accountability of transnational corporations. Operations and maintenance of the plant were so inadequate that safety systems intended to control gas releases were not operational when the leak occurred.³⁰ Further, the Corporation had overridden requests of the Indian plant management by storing liquid methyl isocyanate (MIC) in large tanks as opposed to producing it as needed and using smaller, and less dangerous, tanks for storage.31 Astonishingly, it emerged that the MIC backup tank intended for emergency transfers in the case of an accident was being used as storage for additional MIC and the refrigeration unit for the tank had been disconnected though storage of liquid MIC required a temperature of 0 degrees Celsius to minimise the risk of gas reactions.32

The Bhopal disaster presents a case against the globalisation of trade where multinational companies have no regard for accountability in their operations. It is simple to suggest imposing greater responsibility for transnational corporations but in reality, and in a competitive market, these deaths become mere statistics and not

²⁷ United States - Import Prohibition of Certain Shrimp and Shrimp Products, WTO Doc WT/DS58/AB/R, AB-1998-4 (1998) (Appellate Body Report).

²⁸ M Khor, 'Global Economy and the Third World' in J Mander and E Goldsmith (eds), The Case Against the Global Economy (1996) 49.

²⁹ D Dembo, 'Bhopal: Settlement or Sellout?', Summer 1989, Global Pesticide Monitor http://www.panna.org/resources/pestis/PESTIS.burst.135.html at 16 August 2006.

³⁰ Ibid. 31

Ibid. 32

Ibid.

a lesson learned. Union Carbide managed to settle its liability for billions of dollars below the compensation originally sought by the Indian government in lawsuits initially litigated in India and followed by a series of suits also filed in the US.³³ The final settlement confirms the favourability of the investment climate in developing countries such as India where gross negligence against human life and the natural world does not entail substantial economic loss for transnational corporations. Corporations engage in manipulative tactics to avoid responsibility and minimise the repercussions of compensation.

Transnational corporations delay proceedings to draw litigation out over long periods for the media spotlight to fade, while also gaining themselves time to restructure assets with which to pay compensation. A recent example of such behaviour involved the proposed settlement of the James Hardie Industries Limited \$4.5 billion asbestos compensation claim, the largest in Australian history.³⁴

Environmental concerns are closely related to human rights. The right to live in a clean and stable environment is becoming an imperative for survival. Most developing countries rely on agriculture and subsistence to survive, largely providing for the daily needs of their families. The introduction of manufacturing plant causes many to leave their traditional practices to work for insufficient wages and sometimes repressive regimes.³⁵ Damage to their natural ecosystems, especially in the event of industrial accidents, impinges on the community's subsistence. The withdrawal of investment is devastating where communities have abandoned self-reliance, making them poorer from dependence on trade. Greater accountability is needed to convey the message that corporate irresponsibility will have significant ramifications. UN agreements must be negotiated favourably towards developing countries with binding conditions for foreign investors as it is increasingly apparent that GATT agreements and the WTO are insufficient mechanisms to improve corporate accountability.

VI THE ARGUMENTS FOR GLOBALISATION

Free trade is embraced, in part, on the assumption that an increase in competition will increase innovation by encouraging cross-border technology transfers, thereby increasing productivity and decreasing prices through economies of scale. However, Daly suggests,

...the regenerative and assimilative capacities of the biosphere cannot sustainably support even present levels of resource use, much less the many-fold increase

Hunter, Salzman and Zaelke, above n 6, 1466. See also n 29.

R Alderton, B Wordley and K Morrissey, 'Hardie agrees to \$4.5bn payout', *The Age* (Melbourne) 22 December 2004, http://www.theage.com.au/news/National/Hardie-agrees-to-45bn-payout/2004/12/21/1103391769614.html at 16 August 2006.

Fowler, above n 12, 1406.

required by 'upward harmonisation' of consumption standards. Still less can the ecosystem afford to consume even more per capita.³⁶

To increase productivity, countries must specialise in areas of production for which they have the most abundant resources. However, this approach to development presumes the ability for *unlimited growth* while the resources to supply everincreasing trade intensity are finite. Furthermore, the exhaustion of available resources at a level of maximum efficiency solves nothing, it merely degrades the environment and depletes essential resources with which human must live indefinitely. Arguments for liberalised trade suggest sustainable development can be promoted whilst increasing efficient consumption of resources.³⁷

Such arguments claim that by encouraging trade between nations, they become economically interdependent and will be less likely to use armed force to resolve their conflicts. This was in fact one of the principal rationales underpinning the discussions held at Breton Woods in 1945 following World War II aimed at stabilising the world economy and which led to the establishment of the GATT, the International Monetary Fund (IMF) and the World Bank.

Under the then envisaged scenario, global stability will be enhanced as stronger ties are formed between nations and a stable international community will be formed. Countries will produce goods and services based on comparative advantage whereby capital and labour are devoted to the most beneficial production.³⁸ Specialisation in goods ensures maximum production by creating economies of scale. The perceived benefits of specialisation result in larger production quantities based on the notion of a consumption driven society.

This will not necessarily occur, however, as consumption requires demand. For example, increasing the quantity of goods available may cause wastage of resources that could be used by future generations. The perceived necessity for increased efficiency of production anticipates insatiable consumption, which is unrealistic in a society that is becoming more environmentally aware in response to visible disparities between the wealthy few and the rest of the community. Moreover, large scale production is especially undesirable in chemical and hazardous industries as the danger of an accident is more likely and more devastating.

Economies of scale will benefit consumers by providing greater choice for purchase at lower prices. This reduction in cost is borne by those living in poor circumstances in developing countries as their resources are used up rather than generated by

H E Daly, 'Problems with Free Trade: Neoclassical and Steady-state Perspectives' in Zaelke et al (eds), *Trade and the Environment: Law, Economics and Policy* (1993) 147-152, 155-157; D Hunter, J Salzman and D Zaelke (eds), *International Environmental Law and Policy* (2002) 1136.

Hunter, Salzman and Zaelke, above n 6, 1127.

D Ricardo, *The Principles of Political Economy and Taxation* (1817) 81; D Hunter, J Salzman and D Zaelke (eds), *International Environmental Law and Policy* (2002) 1128.

transnational corporations, which take more capital from Third World countries than has been invested in them.³⁹ Daly enunciates an important distinction between protection of a truly inefficient industry against competition and protectionist national policy of full-cost pricing against standards-lowering competition. 40 Although the GATT makes an exception for prison labour, no consideration for competition against child labour, uninsured risky labour, or subsistence wage labour is made.41

Free trade will not of itself prevent companies usurping environmental standards, and increased competition around the global market will inevitably encourage them to maximise profit by externalising social and environmental costs. This inevitability is due to the deregulated nature of the international market. Permissive standards for some firms generate pressure for those countries with higher standards to conform so as to remain competitive.

Free trade fails to account for the considerable wastage incurred in trading products internationally. For example, figures from 1991 show four billion tons of freight were exported by ship worldwide using 8.1 exajoules of energy, matching that used by the entire economies of Brazil and Turkey combined.⁴² In addition, seventy million tonnes of freight were transported by plane that year using 0.6 exajoules, equalling the total annual energy use of the Philippines.⁴³ The overlap of transporting similar products across the globe consumes fuel and requires materials for constructing ships; similarly, the emissions of planes and road trains in shuffling goods has significant implications on the environment. Goldsmith suggests if environmental costs of increased transport were properly internalised, world trade would be exposed as uneconomic. Using today's prices for oil would reflect a staggering increase in both transportation costs and energy consumption.

VII TECHNOLOGICAL INNOVATION

Free trade is expected to instigate efforts by domestic companies to innovate in the face of wider competition leading to the dissemination of information and a flow of new technology and products between countries. We are faced with a general reluctance to moderate our consumption and population growth, with many resting the weight of a solution on technological breakthroughs. The expectation by many that the scientific community would, within a reasonable time-frame, provide an acceptable technological solution to the problems associated with nuclear waste disposal, encouraged the development of an industry back in the 1960s that is not much closer to finding a solution to this global problem than it was half a century ago.

³⁹ Morris, above n 3.

⁴⁰ Daly, above n 36, 1134.

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⁴² E Goldsmith, 'Global Trade and the Environment' in J Mander and E Goldsmith (eds), The Case Against the Global Economy (1996) 85. 43

An associated argument for the use of technology states that if environmental goals could be integrated into technological innovations, the transition to a sustainable future would happen faster, more cheaply and with more influential results.⁴⁴ For example, it is suggested that developments in biotechnology could generate benefits for the environment by diminishing farming dependency on agrichemicals known to cause soil salinity and acidity. 45 The removal of national barriers to information, investment and trade will allow a rapid diffusion of technology which can be used in response to environmental problems on a global scope.

The diffusion of technology is, however, more complicated in practice. Such innovations are the result of research and development, the majority of which is conducted in developed countries with the requisite infrastructure and resources. The cost of technologies for developing countries is beyond their means and is usually transferred in accordance with international agreements such as Chapter 4 of Agenda 21.46 However, the distribution of the benefits of technology depends on the honesty of those who use them, as harmful technologies can be disseminated just as quickly. There are uncertain perils associated with technology as unintended environmental impacts seem to follow from strategies used to avoid reducing consumption. For example, increasing efficiency has only increased total resource consumption. Cars with greater efficiency can be driven more, and lowering the cost of cars makes them more affordable to more consumers. The net result is an overall increase in the number of cars produced, resources burned, and pollution emitted even while relative efficiencies increase.⁴⁷ Transferring new technologies to developing countries is viewed as a necessary concession to facilitate their

United Nations, 'Agenda 21', Program of Action for Sustainable Development, UN Doc A/CONF.151/26 (Vol II) 13, Rio de Janeiro, Brazil, 1992.

Chapter 4 aims to encourage greater efficiency in use of energy and resources. According to

Reducing the amount of energy and materials used per unit in the production of goods and services can contribute both to the alleviation of environmental stress and to greater economic and industrial productivity and competitiveness. Governments, in cooperation with industry, should therefore intensify efforts to use energy and resources in an economically efficient and environmentally sound manner by:

- Encouraging the dissemination of existing environmentally sound technologies;
- (b) Promoting research and development in environmentally sound technologies;
- Assisting developing countries to use these technologies efficiently and to develop (c) technologies suited to their particular circumstances;
- (d) Encouraging the environmentally sound use of new and renewable sources of energy;
- Encouraging the environmentally sound and sustainable use of renewable natural resources.

⁴⁴ G Heaton, R Repetto and R Sobin, Transforming Technology: An Agenda for Environmentally Sustainable Growth in the 21st Century (1994); D Hunter, J Salzman and D Zaelke (eds), International Environmental Law and Policy (2002) 69.

Hunter, Salzman and Zaelke, above n 6, 74.

participation as global competitors and to encourage the introduction of environmentally sound practices as seen in Chapter 34 of Agenda 21.⁴⁸

It is beyond the scope of this paper to deal with issues underlying the protection of intellectual property rights (IPRs). However, the transfer of technology is directly affected by the extent to which IPR protection is factored into trade negotiations, and international treaties and conventions.

VIII TRANSFERRAL OF RISKS

The uncertainties of technology pose great risks to the environment. One of the greatest threats of technology is that developments will only transfer environmental risks. Correspondingly, in attempting to create environmentally sound solutions, technological advances will instead create new problems. A notable example is the harmful effects of the widespread use of dichloro-diphenyl-trichloroethane (DDT) as a pesticide from the 1940s to 1960s. 49 DDT replaced highly toxic copper- and arsenic-based pesticides previously used against a broad spectrum of insects and agricultural pests. It was considered a remarkably safe product for its time, being stable, inflammable and not demonstrating any of the known characteristics associated with toxicity. In fact, the chemist who discovered DDT's insecticidal properties in 1938 was awarded the Nobel Prize. Harmful effects of using DDT emerged after two decades of widespread use. It was found to be a persistent organic pollutant consequently accumulating in the body fat of exposed animals and people. Serious effects were witnessed for animals throughout the food chain, particularly top-tiered carnivores which had significantly higher concentrations of the toxin. The outcome killed songbirds, fish, and birds of prey and caused cancer and neurological effects in humans, leading many developed countries to ban its use.

Negative experiences such as the impacts of DDT demonstrate the need for caution and scrutiny of developing technologies. Concerns arise from unintended and unforeseen consequences of technologies created for the benefit of globalisation. Controls must address both responsible production by chemical manufacturers and adequate regulation of proposed solutions via environmental assessment.

IX SUSTAINABLE DEVELOPMENT

Those opposing free trade argue that the models used for development by its proponents have in fact been proven to be environmentally destructive. The

strengthening of countries' own technological capabilities.'

United Nations, 'Agenda 21', *Program of Action for Sustainable Development*, A/CONF.151/26 (Vol II) 13, Rio de Janeiro, Brazil, 1992.
Sections 34.7-34.8, state: 'The availability of scientific and technological information and access to and transfer of environmentally sound technology are essential requirements for sustainable development... The primary goal of improved access to technology information is to enable informed choices, leading to access to and transfer of such technologies and the

The example of DDT is taken from Hunter, Salzman and Zaekel, above n 6, 83.

ambition to increase production and development requires a shift in perception from continuous growth to development which maintains ecosystems for future generations. The culture and value of poor communities also need maintaining by preserving 'human rights as the primary objective of international trade, investment and finance policy and practice.' Trade can be seen as a threat to the ability of developing countries to secure their own goals. This is pertinent in the context of GATT and WTO agreements which require a forfeiture of some governmental authority and could be perceived as an encroachment on national sovereignty. Countries have obligations to their communities which may be affected by trade liberalisation by way of production locations and the scale of hazardous industries and waste management of manufacturing plants.

Similarly, concern surrounds the idea that liberalised trade will undermine environmental protection as countries relax the enforcement of regulatory standards to compete on an international scale. This is reflected in Principle 8 of the Rio Declaration on Environment and Development.⁵¹

If countries repeatedly reduce standards to rival one another, it is expected companies and producers will relocate where the lowest environmental standards are enforced in order to gain a competitive advantage and thereby impairing sustainable development. Integration of countries into the global economy will impede sustainable development as environmental constraints are confronted at once on multiple fronts, lessening opportunities to learn over time from experience and thereby accelerating the rate of environmental degradation.⁵²

The law has a role to regulate and limit the actions of transnational corporations, orienting them towards a sustainable future. Behaviour must be guided towards a common good, in observance of obligations to other humans, to other living organisms, and to future generations. Globalisation cannot be supported even at the present level of resource use, let alone at the magnitude of consumption envisaged, which far exceeds the regenerative capacities of our biosphere. It is a compelling argument against globalisation where free trade introduces conspicuous inconsistencies between the benefits of production and the environmental costs of growth.

The constraints of sustainable development seem impossible to impose on a consumer-minded society. Daly enunciates the term to envisage 'development

C Dommen, 'Raising Human Rights Concerns in the World Trade Organisation: Actors, Processes and Possible Strategies' (2002) 24 *Human Rights Quarterly* 1; D Hunter, J Salzman and D Zaelke (eds), *International Environmental Law and Policy* (2002) 1132.

United Nations, *Rio Declaration on Environment and Development*, UN Doc A/CONF.151/26 (Vol I), 31 ILM 874 (1992) (Adopted at the United Nations Conference on Environment and Development, Rio de Janeiro).

Principle 8 states: 'To achieve sustainable development and a higher quality of life for all people, States should reduce and eliminate unsustainable patterns of production and consumption and promote appropriate demographic policies'.

Hunter, Salzman and Zaelke, above n 6, 1137.

without growth' as society becomes aware of the necessity to adapt its dependency on consumption.⁵³ He suggests policy guidelines to sustain the environment whereby renewable resources should be exploited such that harvesting rates do not exceed regeneration rates, and waste emissions do not exceed the renewable assimilative capacity of the local environment. Also, non-renewable resources should be depleted at a rate equal to the rate of creation of renewable substitutes.⁵⁴

It would appear impossible for our society to conform to such controls on consumption. However, closing the equity gap may be misunderstood if it is interpreted as the need to enrich the poor towards our standards of living.⁵⁵ Discussion in this paper has suggested this is an unrealistic goal as resources will not sustain our culture of consumption. Perhaps redistributing wealth or lowering standards expected by developed countries are the only realistic solutions. The sustainable size of our population depends upon our overall environmental impact and consumption patterns. Many have denied this reality and accepted the more desirable outcomes assured by trade advocates, or rested their hopes on technological advances to rescue their lifestyle.

Perhaps the higher quality of life envisaged in Principle 8 of the Rio Declaration proposes community content with a healthy lifestyle and certainty of basic necessities such as drinking water. The extent of damage previously inflicted on the Earth has impressed upon us the imperative of making the inevitable transition to environmental sustainability. It remains to be seen 'whether nations will have the wisdom and foresight to plan for an orderly and equitable transition to environmental sustainability, rather than allowing biophysical limits to dictate the timing and course of this transition.' ⁵⁶

X INTERNATIONAL REGULATION: THE GATT AND THE WTO

This paper has discussed the need for regulation of the international economy. One of the responses to this need has been the use of the General Agreement on Tariffs and Trade (GATT) and its counterpart the World Trade Organisation (WTO). Despite the use of these mechanisms to supervise the global economy, there are significant flaws in their operation, particularly with regard to environmental sustainability. The purpose of establishing the GATT is to reduce progressively trade barriers between its members, thereby removing any distortions in the international market.⁵⁷ However, the GATT was originally intended to be a multilateral treaty and not an organisation, and furthermore, it was brought into

R Goodland and H E Daly, 'Environmental Sustainability: Universal and Non-Negotiable' (1996) *Ecological Applications* 6(4), 1003-13; D Hunter, J Salzman and D Zaelke (eds), *International Environmental Law and Policy* (2002) 154.

H E Daly, 'Sustainable Growth? No Thank you.' in J Mander and E Goldsmith (eds), *The Case Against the Global Economy* (1996) 192.

July 15 Ibid

⁵⁶ Ibid 159.

D Hunter, J Salzman and D Zaelke, above n 6, 1147.

operation by the Protocol of Provisional Application under which most governments were able to approve the implementation of GATT without submission for legislative approval.⁵⁸

The WTO was created to provide a medium for the implementation of the multilateral trading system and for negotiating new agreements and resolving disputes. Although the WTO recognises trade liberalisation has implications for the environment and recognises the need for environmental preservation, this has not necessarily translated into its agreements.⁵⁹ For example, the Agreement on Technical Barriers to Trade, which seeks to improve market access, does not provide an absolute exception for environmental protection measures.⁶⁰ The limited environmental recognition by the WTO, however, does represent an improvement upon the GATT. The GATT came into force in 1948 and has been criticised that its 'substantive rules, which predate the emergence of the environment as a critical issue are too narrowly focused on the commercial benefits of trade facilitation and must be updated to reflect environmental considerations.'⁶¹ Indeed the GATT was originally negotiated without any reference to risks to the environment from economic growth.

The GATT imposes provisions that are close to entirely negative, meaning that the capacity for national regulatory discretion is restrained. Generally, the trade pacts of the GATT and the WTO concentrate power in international organisations to restructure market rules in favour of a global market and are considered to be ignorant of the concomitant environmental consequences of world trade.⁶² This raises concerns for the decline of democratic institutions as the expansion of multinational corporate power limits a country's legal and practical ability to subordinate corporate activity to the country's goals.⁶³ These restrictions are pertinent in the area of environmental preservation.

It is suggested that the WTO explicitly targets democratic laws where the WTO rules forbid domestic legislatures to undertake certain objectives,⁶⁴ for example, the prohibition of any significant subsidises to promote energy conservation, sustainable farming practices or environmentally sensitive technologies.⁶⁵ Of similar concern is the influence exerted on trade negotiations by corporate lobbyists who do not represent the interests of communities and have not been elected to represent

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J Chen and G Walker (eds), Balancing Act: Law, Policy and Politics in Globalisation and Global Trade (2004) 8.

S Alam, 'Trade-Environment Nexus in GATT Jurisprudence: Pressing Issues for Developing Countries' (2005) 17(2) *Bond Law Review* 2.

D Hunter, J Salzman and D Zaelke, above n 6, 1149.

D Esty, Greening the GATT 53 (1994); D Hunter, J Salzman and D Zaelke (eds), International Environmental Law and Policy (2002) 1148.

Korten, above n 1, 4.

⁶³ Korten, above n 1, 94.

⁶⁴ Korten, above n 1, 96.

⁶⁵ Korten, above n 1, 96.

their countries.⁶⁶ Corporate lobbyists have established a coalition called Intellectual Property Committee with members including Pfizer, IBM and General Electric, while non-government organisations are expressly excluded from attending or contributing. The balance of power in favour of parties aspiring for economic growth has led to a neglect of environmental obligations.

Prior to the provision for environmental exceptions in Article XX of the GATT, protection of the environment was considered a non-tariff trade barrier. Both the GATT and the WTO have since recognised the relationship between trade and the environment through the formation of the Group on Environmental Measures and International Trade, and the Committee on Trade and Environment, respectively, as a consequence of pressure from national and international policies.⁶⁷

XI THE CORE PRINCIPLES OF GATT AFFECTING THE ENVIRONMENT

There are problems implicit in the objectives of the GATT, as indicated by imbalances in negotiating positions of parties which disfavour conservation. Alam affirms three core principles on which the GATT bases its administration. Firstly, the Most Favoured Nation obligation in Article I asserts that no country should discriminate against any other, to ensure equal treatment of trading partners and reduction of trade barriers. Secondly, the National Treatment obligation in Article III disallows discrimination between imported and domestically produced goods. 99

1. The contracting parties recognize that 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.

Korten, above n 1, 96.

⁶⁷ Alam, above n 59, 2.

Article I of the GATT, above n 16, provides:

^{1.} With respect to customs duties and charges of any kind imposed on or in connection with importation or exportation or imposed on the international transfer of payments for imports or exports, and with respect to the method of levying such duties and charges, and with respect to all rules and formalities in connection with importation and exportation, and with respect to all matters referred to in paragraphs 2 and 4 of Article III, any advantage, favour, privilege or immunity granted by any contracting party to any product originating in or destined for any other country shall be accorded immediately and unconditionally to the like product originating in or destined for the territories of all other contracting parties.

⁶⁹ Article III of the GATT, above n 16, provides:

^{2.} The products of the territory of any contracting party imported into the territory of any other contracting party shall not be subject, directly or indirectly, to internal taxes or other internal charges of any kind in excess of those applied, directly or indirectly, to like domestic products. Moreover, no contracting party shall otherwise apply internal taxes or other internal charges to imported or domestic products in a manner contrary to the principles set forth in paragraph 1.

^{4.} The products of the territory of any contracting party imported into the territory of any other contracting party shall be accorded treatment no less favourable than that accorded to like products of national origin in respect of all laws, regulations and requirements affecting their internal sale, offering for sale, purchase, transportation, distribution or use. The provisions of this paragraph shall not prevent the application of differential internal transportation charges

Domestic products cannot be favoured over foreign products with the intention of protecting the domestic industry. The third core principle is the General Elimination of Quantitative Restrictions in Article XI.⁷⁰

These objectives hinder the competitiveness of a developing country which is subject to the GATT as it is expected to produce and compete against countries with far more experienced and superior production processes. In the case of Article I, developing countries cannot favour products from countries offered on more auspicious terms. In the case of Article III, a developing country cannot promote its own trade to strengthen its economy and assist the growth of local business without being in breach of the agreement. Additionally, developed countries cannot give preference to products produced using environmentally sustainable processes in accordance with their national objectives.

The ability to discriminate is based on the interpretation of 'like product'. If two products are not considered to be 'like' by definition of the Articles, then discrimination is allowed. The phrase has caused debate with regards to national health and safety standards which may restrict goods with harmful polluting effects, or chemicals or products which cause ozone depletion.⁷¹ The definition of the WTO is problematic in the sense that it facilitates the use of unsustainable manufacturing processes.

This contradicts Principle 8 of the Rio Declaration, which though unbinding, calls for the elimination of unsustainable practices. If the classification of products is based solely on final appearance, exploitative practices acquire a competitive advantage in the market as parties to the GATT cannot discriminate against products produced using environmentally damaging processes. Environmental policies require that products be distinguished according to the method of production used in an effort to internalise environmental costs of production.

The inherent bias of the GATT principles against environmental protection is evidenced by the 1971 GATT industrial pollution study which concluded that the low price of goods produced in a state that lacks environmental regulations is simply part of the country' competitive advantage, an interpretation supported by developing countries whose environmental standards provide cost advantages to compete in the export market.⁷²

72 Ibid.

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which are based exclusively on the economic operation of the means of transport and not on the nationality of the product.

Article XI of the GATT, above n 16, provides:

^{1.} 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 or on the exportation or sale for export of any product destined for the territory of any other contracting party.

J McDonald, 'Greening the GATT: Harmonising Free Trade and Environmental Protection in the New World Order' (1993) 23 (2) *Environmental Law* 12; Alam, above n 59, 9.

There is a visible conflict between allowing developing countries to use their lax environmental regulation as an advantage to gain global market access, and restricting their use of finite resources and perpetuating their poverty. More recently, the WTO Appellate Body has adopted a more open approach to defining 'like products.' The decision in the *Asbestos* case broadened the focus of the analysis to include non-trade concerns whereby the general criteria were merely to assist in examining relevant evidence and the definition was to be decided on a case-by-case analysis of all pertinent evidence.⁷³ However, discriminatory trade practices will not be tolerated on the basis of environmental, health or conservation grounds.⁷⁴ By defining 'like products' in this restrictive way, developed countries come under pressure to downgrade environmental standards to remain competitive against those developing countries which are not subject to the same regulation.

Similarly, markets will trade unsustainably produced goods, and countries will be forced to import and consume them as they are prohibited from discriminating against them. By this definition, the principles of the GATT are biased towards an economic system which works against environmental protection and is an ineffective medium for regulating the global players.

The third core principle is the General Elimination of Quantitative Restrictions in Article XI, which prohibits quantitative restrictions such as bans, quotas and licences on imported and exported goods. The exceptions to this Article allow for trade restrictions in circumstances where shortage of essential products occurs, although they are not considered effective on environmental grounds. For example, it has been found countries which have achieved their environmental objectives by using restrictive measures are in violation of Article XI. Likewise, the restriction of exports to control the exploitation of a country's natural resources will violate obligations under Article XI. This leaves developing countries that do not possess negotiating power exposed to transnational corporations to deplete their resources regardless of national environmental objectives.

It is unlikely the GATT and WTO will make explicit changes to environmental perceptions in their aims at expense of economy as this was not the basis for which they were established. To incorporate environmental considerations into the Articles of their agreements while prospectively developing a global economy is

European Communities – Measures Affecting Asbestos and Asbestos-Related Products, WT/DS135/AB/R [101-03]; Hunter, Salzman and Zaelke, above n 6, 1162.

McDonald, above n 71. Cases which have indicated this narrow definition include: the 'Tuna-Dolphin Case', GATT Council, United States – Restrictions on Imports of Tuna, DS 21/R-39S/155 (1991) (Report of the Panel); the 'Thai Cigarettes Case', Thailand – Restriction on Importation of and Internal Taxes on Cigarettes, GATT BISD 38 Supp 200, 201 (1990); the 'Danish Beer BottleCase', EC Commission v Kingdom of Denmark [1989] 2 CEC 167; the 'Reformulated Gasoline Case', United States – Standards for Reformulated and Conventional Gasoline, 35 ILM 274, 280 (1996).

Alam, above n 59, 7.

⁷⁶ Ibid 8.

⁷⁷ Ibid 8.

ineffective and has produced unclear rules for how governments may address environmental impacts.

There is an emerging trend towards the use of bilateral arrangements between members as they have increasingly sought to promote their own interests through regional trading agreements and economic partnerships to serve better the needs of their countries.⁷⁸

XII GLOBALISATION OF ENVIRONMENTAL LAW

Environmental law has responded to free trade by following suit. It has become necessary to expand environmental regulation beyond a national focus to address the influences of international policies. This expansion is also based on recognition that a healthy economy cannot exist in the long-term without a healthy environment to support it. The inexhaustible expansion of the global economy is a risky and short-sighted solution to poverty. The expectation that technology will solve our needs and create new supplies of resources invests all our eggs in one basket, proverbially speaking, which has not yet materialised. It is unknowable to what extent technological advances can offset the effects of increased consumption promoted by international trade. We must address the scale of human activity to stay within the physical limits of our biosphere by regulating the world's population towards sustainable practices so that something other than our problems and waste can be passed to the next generation.

The promotion of environmental law is evident from the establishment of international institutions such as the UN Environment Program and the Commission on Sustainable Development. The international congresses of the IUCN World Conservation Union have produced reports which have significantly shaped environmental policy at regional and national levels.⁸⁰

In addition, the World Conservation Union has had significant influence on globalisation through its Commission on Environmental Law and Environmental Law Centre by preparing drafts of the UNESCO World Heritage Convention, the UN World Charter for Nature, the Convention on Biological Diversity and the International Covenant on Environment and Development.⁸¹ The establishment of international environmental conventions assist national policy makers in drafting laws in accordance with a universal standard. The benefits of international environmental law are simple. International standards create certainty of our common goals to maintain and promote the environment. They set examples for other countries to follow and encourage a cohesive approach to environmental

Chen and Walker, above n 58, 39.

B Boer, 'The Globalisation of Environmental Law: The Role of the United Nations' (1995) 20 *Melbourne University Law Review* 101.

IUCN, UNEP and WWF, Caring for the Earth: A Strategy for Sustainable Living (1991); Boer, above n 7979, 102.

⁸¹ Ibid.

sustainability. The shortcoming of conventions and treaties is that they remain non-binding until the time when a country chooses to ratify the agreement and legislate to its effect.

Though this approach to regulation does not demand compliance as does the trade agreements of the GATT and WTO, it has been highly successful in its application. The influence of international environmental law is evident in significant High Court and Federal Court cases of Australia. This approach allows for the variation in the economic development of different countries and in their individual capacities to enforce environmental regulations. It has exerted greater influence on community perception although it does not explicitly constrain trade in the same way trade agreements seek to constrain environmental objectives.

The success of globalising environmental law can be attributed to its flexibility to adapt to differing countries needs for regulation. The aspirational goals of environmental treaties seek to educate and inform communities to participate in shaping our future by cooperating on regional and international problems. Concentrating power in international organisations, as trade agreements do, removes critical decisions from the control of those they affect.

XIII POVERTY

Concern for human rights has stemmed from the impacts of transnational corporations on society and the environment. Early attempts to provide a code of conduct to regulate activities of transnational corporations were ineffective in that they were difficult to apply to practical circumstances. Recently, the UN drafted the 2003 UN Norms on the Responsibilities of Transnational Corporations and Other Business Enterprises with Regard to Human Rights, applying to both domestic and transnational corporations. He key issues concern freedom from discrimination, the right to security of person, respect of national sovereignty and environmental protection.

Whilst states have relinquished some of their sovereign powers to receive entry and membership into trade organisations, the international market has become self-regulated where transnational corporations impose obligations on themselves by following voluntary guidelines. The protection of human rights is particularly pertinent against the obligations of some trade agreements.

Eg, Commonwealth of Australia v Tasmania (1983) 158 CLR 1, Queensland v Commonwealth (1988) 62 ALJR 143; Friends of Hinchinbrook Society Inc v Minister for the Environment (1997) 142 ALR 632; Boer, above n 79.

Hunter, Salzman and Zaelke, above n 6, 1410. Eg, the OECD Guidelines for Transnational Enterprises, and the Tripartite Declaration of Principles Concerning Transnational Enterprises and Social Policy formulated by the International Labour Organisation.

UN Doc E/CN.4/Sub.2/2003/12/Rev.2 (2003).

The Agreement on Trade-Related Intellectual Property Rights (TRIPS) emerged from the GATT Uruguay Round in 1994 and exposed an obvious contradiction within the WTO, which, by definition was committed to liberalising trade, while creating a blatant protectionist mechanism. TRIPS standards prevented any imitations of products for a period of 20 years and extended to protection of processes, technologies, and methods to manufacture goods. Protection could also be extended to assure exclusive rights over related products. As 97 percent of all patents are issued to interests within the Northern developed countries, the multilateral regime demonstrated the manifestation of their interests at the WTO level. Camilleri and Myconos describe the devastating effect:

One of the most contentious aspects of this regulatory framework is that it limits access to – and the right to produce – medicines, seeds and educational material. Central to the critique of TRIPS have been concerns about food security and public health needs, and, most importantly, access to essential drugs. Not surprisingly, the North's reliance on TRIPS standards has prompted a dramatic North-South confrontation within the WTO. With over 13 million people from poor states dying each year from infectious diseases such as HIV/AIDS – governments are faced with purchasing necessary drugs at prices set for markets in the wealthier economies.⁸⁶

In response, states such as India and Brazil used parallel imports to bypass the manufacturer's preferred supplier and purchase medicines from a cheaper third party. In addition, compulsory licensing allowed governments to issue licences to local manufacturers to produce generic versions thereby circumventing the pharmaceutical companies' pricing regimes. The Doha Ministerial Declaration on TRIPS and Public Health recognised 'the gravity of the public health problems' and stated 'the TRIPS Agreement does not and should not prevent members from taking measures to protect public health.'

There have been several attempts made by pharmaceutical companies and governments to restrict actions of countries using these strategies by pressuring governments to alter patent laws, submitting complaints to the WTO against patent laws, and launching legal proceedings against governments of developing countries. This example shows the juxtaposition between the stated goal of alleviating poverty by transferring technology and intellectual resources to developing countries and the desire for profit and self-serving motivations.

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This example is taken from J Camilleri and G Myconos, 'WTO: The Competitive Dynamic of Globalisation at Work' in J Chen and G Walker (eds), *Balancing Act: Law, Policy and Politics in Globalisation and Global Trade* (2004) 26.

³⁶ Ibid 29.

XIV THE INCENTIVE FOR EXTRATERRITORIAL LAWS

The misuse of corporate power has caused states to respond by apply domestic environmental law extraterritorially. It has proven to be a successful influence in many instances although it conflicts with Principle 12 of the Rio Declaration.⁸⁷

The US has exerted powerful influence and control over activities occurring beyond its borders. For example, Congress passed a law to prohibit persons and vessels subject to the jurisdiction of the US from taking marine mammals on the high seas, in order to promote the conservation of marine mammals. Similarly, the US sought the responsible use of public funds by forbidding the Overseas Private Investment Corporation from funding foreign projects that would have an unreasonable or major adverse environmental impact. The benefit of these actions is the protection of the environment. The application of extraterritorial law has complemented international treaties and agreements where domestic compliance and enforcement mechanisms are more effective and operate promptly.

Extraterritorial application of environmental laws can be viewed as an extension of Principle 21 of the Stockholm Declaration which affirms the duty of states to ensure activities within their jurisdiction and control do not cause damage to the environment of other states or areas beyond the limits of national jurisdiction. This jurisdiction can be viewed as applying to citizen and government activities globally to prevent environmental damage. The application of domestic laws has been criticised as a form of eco-imperialism reflecting altruistic and self-serving motivations. 90 Spracker and Naftalin argue extraterritorial laws target countries which lack enforcement mechanisms to safeguard the environment though environmental degradation is not confined to specific areas, and must be addressed by all nations.

Mechanisms have also been devised to enforce environmental regulations internationally. Environmental management systems are encouraged by the European Union which created the Eco-Management and Audit Scheme (EMAS) to frame a series of requirements to certify a system. These include a written corporate environmental policy, an inventory of the environmental impacts of a company's production processes, and a management system including procedures to implement periodic audits.

United Nations, *Rio Declaration on Environment and Development*, adopted at the United Nations Conference on Environment and Development, Rio de Janeiro, UN Doc A/CONF.151/26 (Vol I), 31 ILM 874 (1992).

Principle 12 states: 'Unilateral actions to deal with environmental challenges outside the jurisdiction of the importing country should be avoided. Environmental measures addressing transboundary or global environmental problems should, as far as possible, be based on international consensus.'

Hunter, Salzman, and Zaelke, above n 6, 1435.

Hunter, Salzman, and Zaelke, above n 6, 1435.

⁹⁰ Spracker and Naftalin, above n 8, 1435.

Participating countries are assessed periodically on their compliance with their environmental management system by third parties and receive the right to use an EMAS symbol on their stationery to indicate the company complies with their standards. Although the scheme is voluntary, the European Union has taken steps to enforce EMAS against Greece and Portugal for failing to take necessary measures to give effect to the eco-management and audit scheme.⁹¹

Furthermore, the International Organisation for Standardisation (ISO) was established to standardise industrial and consumer products moving beyond national borders. For example, ISO 9000 Quality Standards Program implemented a series of five international standards to assure customers around the world that registered suppliers have a certified management system to ensure quality. For example, ISO 9000 Quality Standards Program implemented a series of five international standards to assure customers around the world that registered suppliers have a certified management system to ensure quality.

In response to growing environmental awareness, ISO 14001 was created to address the need for a series of international environmental management standards. The voluntary standards require inspection by an accredited third party and contain environmental audits, environmental performance evaluations, product life cycle assessments, and environmental product labelling. These mechanisms provide a form of regulation in the global market and ensure corporations are meeting specified standards. The increasing success of these two mechanisms has brought pressure on corporations to register and satisfy these standards in order to remain competitive.⁹⁴

XV REDIRECTING CULTURAL VALUES AND NORMS

Environmental sustainability has been distinguished as a form of social justice. Countries including India, the Philippines, Chile, Costa Rica and Ecuador have acknowledged the constitutional right to a healthy environment. With heightened environmental awareness in recent decades, the environment has become a higher political priority, and many constitutions now expressly guarantee a 'right to a healthy environment,' as well as the procedural rights necessary to implement and enforce this right. Similarly, courts around the world have interpreted the near-universal provision of 'right to life' to implicate the right to a healthy environment in which to live that life.⁹⁵

The acceptance of this right raises the obligations of a state to its people to implement strategies to achieve environmental stability. The shift to deregulation

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Press Release on Action Against Member States Re EMAS, Spicers, 30 January 1999; Hunter, Salzman and Zaelke, above n 6, 1420.

⁹² Hunter, Salzman and Zaelke, above n 6, 1421.

⁹³ Ibid.

H Barnette, 'Meeting Quality Standards: ISO 9000, 9002, 14000 and QS 9000', Iron Age New Steel, June 1996, 112; Hunter, Salzman and Zaelke above n 6, 1422.

C Bruch, W Coker, and C VanArsdale C, 'Constitutional Environmental Law: Giving Force to Fundamental Principles in Africa' (2001) 26 Colombian Journal of Environmental Law 131, 133-60; D Hunter, J Salzman and D Zaelke (eds), International Environmental Law and Policy (2002) 1358-9.

has left the trade market largely self-regulated as the intervention of governments has diminished, which has been particularly evident in the privatisation of public services. Bosselmann describes how governments have had similar problems in reconciling the market and the environment though they are not necessarily mutually exclusive. 96 There is a need to find a compromise between environmental justice and the market.

This conflict is manifest in the case of New Zealand. Having adopted radical changes to meet the requirements of sustainable development through environmental legislation, the undesirability of both the overregulated state and the irresponsible and unaccountable market became clear.⁹⁷

Market pressures influenced the application and administration of the *Resource Management Act 1991 (NZ)*, leading to the enforcement of environmental law being influenced by trade concerns. The difficulty in effecting change in environmental perceptions reflects the flaws and gaps in the design and enforcement of environmental policy.⁹⁸

A universally accepted definition of environmental justice must be identified to be used as a guiding principle for environmental legislation. Similarly, ambiguities in market mechanisms are difficult for governments to initiate when implications for the national economy are unclear. Professor Rehbinder suggests environmental taxation as a powerful incentive for changes in industry and consumer behaviour notwithstanding the conceptual difficulties in setting artificial prices on pollution and energy use.⁹⁹ Alternatively, Professor Deketelaere emphasises the need for direct regulation to remain the foundation for environmental policy. In Belgium, policy structure is based on the polluter pays principle and the principle of sustainable development. 100 Economic instruments are used to complement rather than replace the statutory regulatory system to improve flexibility and economic efficiency. Belgium has introduced levies covering a wide range of industrial activities and has also introduced ecotaxes incrementally to regulate packaging waste and harmful product such as batteries. Sustainable development is better achieved using a combination of regulatory and market mechanisms. The difficulties faced in regulating environmental problems in developing countries and

K Bosselmann, 'Environmental Justice v Deregulations? Themes of an Environmental Law Conference in Auckland' (1998) 2 New Zealand Journal of Environmental Law 209, 210.

⁹⁷ Ibid 214.

⁹⁸ Ibid.

Professor Eckart Rehbinder, Chair of the German Council for Environmental Advisors, addressed the conference of Environmental Justice and Market-Mechanisms: Key Challenges for Environmental Law and Policy, hosted by the University of Auckland Faculty of Law on the topic of 'States between Deregulation and Environmental Responsibility', ibid 216.

Professor Kurt Deketelaere, Director of the Institute for Environmental and Energy Law at the University of Leuven, addressed the conference of *Environmental Justice and Market-Mechanisms: Key Challenges for Environmental Law and Policy*, hosted by the University of Auckland Faculty of Law on the topic of 'Market Mechanisms in Belgian Environmental Law and Policy', ibid 219.

countries such as South Africa with transitional economies arise from the social injustice being experienced. Environmental justice, although closely associated with human rights, cannot be systematically pursued while governments are unable to deliver basic necessities such as employment and housing, and services such as water and electricity. Ultimately, environmental justice is an ideal to be pursued, the key to which is an understanding that any justice will involve cooperation and compromise from both environmental and trade groups to find a solution, not to dispute the margin of control for either side, but rather, to discover a common solution that other parties will accept. 101

XVI CONCLUDING COMMENTS

The concern raised by globalisation emerges from the free market ideology whereby power is placed in the market as opposed to the state and calls the protection of the public interest into question. Globalisation creates a necessary role for government to maintain a balance in market and community interests. The consumption levels of our population exceed the regenerative capacities of our biosphere, calling for regulation of the international market. The primary response has been the inclusion of environmental policies into the GATT and WTO agreements, though these agreements are inherently biased towards economic growth, the main objective for their creation.

Arguments for liberalised trade suggest sustainable development can be promoted while increasing efficient consumption of resources. Such arguments claim that by encouraging trade between nations, they become economically interdependent and conflict will be less likely resolved by armed force.

However, damage to natural ecosystems caused by expanding industries across national borders, impinges on the community's subsistence and their basic human rights to live in a healthy environment. This is especially the case for hazardous industries and chemical production. Development in poor countries will not necessarily improve the circumstances of income disparities as gains from trade are more likely received as profits for multinational corporations.

There is an important distinction between protecting inefficient industry in developing countries and the protection of national policy against competition that threatens to lower environmental standards and the minimum wage. Permissive standards for some firms generate pressure on those countries with higher standards to conform so as to remain competitive. It is asserted that if transnational corporations operating in developing countries with lax enforcement and regulation of production and process methods internalised all their costs, their activities would be exposed as uneconomic. The law has a role to regulate and limit actions of transnational corporations towards a sustainable future. Behaviour must be guided

¹⁰¹ Ibid 221.

towards a common good and enhance obligations to one another and to future generations.

The concept of environmental justice must be orientated towards the public good and be used to regulate in a transparent and accountable manner. The ideologies of environmental justice and efficient global trade are not mutually exclusive and require reconciliation in order to conserve as much of the remaining environment as possible. It is asserted that policies for cost-efficiency, flexibility and deregulation must be introduced progressively without over-regulating by the state and stifling the economy. At the same time, environmental standards must be clearly defined to enable governance of the economy.

This transition must be implemented at both international and national levels by way of treaties and conventions, and by way of legislation and a shift in cultural mind set respectively. The transition from a consumer driven, to environmentally sustainable society is inevitable and requires facilitation by the state in finding commonality between the needs and constraints of our generation.