Indonesian Journal of International Law

Volume 8
Number 2 *Progressive Development of International Law - Part II*

Article 15

4-30-2011

The Curious Case of Earth's Survival v. The World's Development

Natasha Christina Davis Wilson

The Curious Case of Earth's Survival v. The World's Development

Natasha Christina Davis Wilson[1]

The overexploitation of marine life is the first part of the planetary crisis. The second part of the crisis arises because man is ambitious and cannot be stopped from progressing everyday. This creates a dominoes effect, by raising concerns about species dependant on marine life, which would be everybody else. This threat on marine life along with hitherto unprecedented levels of development on a very fragile earth can lead to a very bleak future. Development and progress have made the world a smaller place. Development and progress have also ensured that there isn't so much of the earth left to go around. The nations of the world have always agreed that developing sustainably and with precaution is the only way forward if we are to have a future. We come to a juncture where what is legally sound may not be morally acceptable. Here arises the problem of balancing. This paper considers the earth's journey from the Stockholm Conference of 1972 and The Rio Declaration of 1992 to marine life and international trade issues faced by us today. It draws conclusions by tracing the evolution and the competition between the two parts of the planetary crisis. The paper offers an alternative story of the future, if the balance is not maintained between international norms and development by the nations of the world, by bringing forth paradigm shifts in the planetary crisis between ambitious nations and the survival of the living earth.

Keywords: *development, world, balance, planetary crisis, earth*

I. Introduction

On Earth – when there had been an Earth, before it was demolished to make way for a new hyperspace bypass – the problem had been with cars. The disadvantages involved in pulling lots of black sticky slime from out of the ground where it had been safely hidden out of harm's way, turning it into tar to cover the land with, smoke to fill the air with and pouring the rest into the sea, all seemed to outweigh the advantages of being able to get more quickly from one place to another – particularly when the place you arrived at had probably become, as a result of this, very similar to the place you had left, i.e. covered

[1] Student at the School of Law, Christ University, India.

with tar, full of smoke and short of fish.[2]

Man is a narcissistic species by nature. We have colonized the four corners of our tiny planet. Right now he has had enough of land, the time has come to loot and plunder the oceans. At the crossroads what would man want to pick? Saving the earth or rooting for development. This is when we consider man, to keep things interesting, consider reasonable man. Reasonable man has two faces. Face one – Reasonable man the consumer, face two- Reasonable man the citizen.

The consumer wants everything that will help make his life better. Fuel for his car, fish on his table, seals and polar bears in his zoo's when he takes his family on vacation. The consumer also feels that it is reasonable to dump his domestic waste into the ocean and pillage the oceans for pearls for his anniversary or even to accidently spill some oil into the ocean once in a while. It seems like a fair deal to him.

The citizen on the other hand feels very passionately about reforms in his nation. He encourages active participation in helping save the earth. He stood up and joined forces with others, and came forward to save the whales, he protested against, testing weapons, dumping chemicals and nuclear waste into the oceans. He also felt that animals should not be held captive and should be allowed to live in a hazard free environment.

The consumers of the world outnumber the citizens; this is evident from the number of ocean liners, industrial plants, oil rigs and large scale trawling in the world. Everything said and done, even reasonable man - the citizen would want utilities that would make his life more convenient, simply because it is the reasonable sentiment of every person to lead a more comfortable convenient life as long as it is someone else who is inconvenienced.[3]

At the end of the day, progress must be attained. We live in a world which is constantly moving forward. When we stop for a moment to figure out if we are the consumer or the citizen, we get left behind as we fight between what is morally acceptable to us and what is economically sound. It is tempting to never look back, but history shows us again and again, those who forget the past are doomed to repeat it.

---

[2] Douglas Adams, The Restaurant at The End of The Universe(1980).

[3] JOHN S. DRYZEK, THE POLITICS OF THE EARTH: ENVIRONMENTAL DISCOURSES 125 (Oxford University Press,1997).

II. Oceans - the Marine Sensation

The oceans occupy about 70% of the surface of the earth. It is the most extensive and the least understood ecosystem that exists.[4] The seas have always fascinated man; the ocean has been his lifeline for commerce as well as war not to mention a constant provider of food and other resources. The oceanic ecosystem is home to thousands of species of fish, mammals, plant life and even birds. Millions of people around the world depend on the ocean for their livelihood. The high seas have traditionally been used by nations for maritime trade, oil extraction, waste disposal and agriculture. The ocean has come handy in domestic life as well as in times of war. As man pillaged most of the marine environment in his haste to progress there came about several treaties for the protection of individual species like seals, halibut's etc,[5] there is a plethora of legal issues that arise from the marine environment. There are issues relating to fish stocks, trawling and fishing, coral bleaching, extinction of marine and dependant species and an infinite number of issues with regard to pollution and industries dependant on the marine eco system to name just a few.

A major factor that alters the marine environment is the immense amount of climate change our planet is facing. Climate change has led to a variation in the way species are distributed in the oceans, a general reduction in the coral reefs of the world. The melting polar ice caps have led to a rise in sea level which in turn would affect marine life.

Nations have come to notice that the resources of the sea, the fish in the sea, and the sea itself is finite and our inexcusable plundering of the ocean can only lead to the extinction of several species. But man was not always aware of the implications of improper use of the high seas, it always took a disaster to make man sit up, and take notice of the environment. He learnt that there was a risk when large quantities of hazardous and toxic substances were transported after the Torrey Canyon left a wide trail of oil contamination along the coastline.[6] He also learnt after the Minimata factory incident in Japan that mercury

---

[4] OXFORD HANDBOOK OF INTERNATIONAL ENVIRONMENTAL LAW 667-669(Daniel Bodansky, Jutta Brunnée, Ellen Hey. eds.,Oxford University Press,2007); Christopher C Joyner, 28 VAND. J.T.L., 635 (1995).

[5] Convention on the Conservation of Antarctic Seals, June 1, 1972, T.I.A.S. No. 8826; PATRICIA BIRNIE, ALAN BOYLE & CATHERINE REDGEWELL,INTERNATIONAL LAW AND THE ENVIRONMENT 376 (Oxford University Press,2009).

[6] Ved P. Nath, The "Torrey Canyon" Disaster Some Legal Aspects 44 Denv. L. J., 400 (1967).

emissions from a factory could poison fish and indirectly endanger the lives of the coastal community.[7] Man learns from experience, but the cost at which this experience is gained is too great.

III. The Global Commons - Our Common Heritage

A bulk of the 70% of the water bodies of earth is categorized as the high seas. They are the most expansive global common on earth. The pollution of the environment within state legislations is permissible as is apparent from various declarations,[8] but it is when questions about the pollution of the global commons arises that the situation becomes complicated.

The term 'common heritage' has received a very narrow precise definition under the United Nations Convention on the Laws of the Sea, 1982.[9] This definition applies only to non living resources and fails to take into consideration the waters above the deep sea-bed or living resources found in the ocean elsewhere, thus making the legal status of common heritage very doubtful. But the UN General Assembly has stated and thereby acknowledged that they are 'conscious that the problems of the ocean space are closely related and need to be considered as a whole'.[10] Though the United Nations Convention on the Laws Of the Sea[11] does not consider anything but the sea bed as common heritage of mankind it has laid down under Article 145 that the International Seabed Authority must regulate and prevent, pollution and 'interference with the ecological balance of the marine environment'.[12]

IV. The Tragedy Of The Ocean

The marine ecosystem is under attack, and the enemy is known- it is man and his need to develop and the need to make life convenient. This section of

---

[7] The Minimata Bay Disaster-Japan, available at http://www.hamline.edu/personal/amurphy01/es110/eswebsite/ProjectsSpring03/ebarker/Minamata%20Web%20Page.htm.

[8] See Declaration on Environment and Development, June 3-14 1992, U.N Doc.A/CONF.151/5/Rev.1 (1992) [hereinafter The Rio Declaration].

[9] United Nations Convention on the Laws of the Seas art.86, Dec.10, 1982, 1833 U.N.T.S. 397. [hereinafter UNCLOS].

[10] G.A. Res. XXV (1970).

[11] UNCLOS supra note 7.

[12] See Regulations on Prospecting and Exploration for Polymettalic Nodules in the Area, Doc ISBA/6/A/18, approved by the ISBA assembly on 13 July 2000.

the paper will discuss the two prime causes which contribute to oceanic pollution.

A.Oil Spills

On April 20th 2010, the world was once again reminded of the fragile character of the relationship between man and nature with the Deepwater Horizon drilling rig explosion which released approximately 4.9 million barrels of crude oil into the ocean.[13] This catastrophe is the largest of its kind in modern history. Following such disasters there is usually a hue and cry of "such a disaster should never happen again" but unfortunately for man the odds are against him and in all probability it will happen again, if not this something worse.

This disaster affects several overlapping spheres all at once. Firstly, the marine environment and tourism and other allied industries.[14] Finally, from evidence gathered by Researchers from the National Institute for Undersea Science and Technology it is apparent that large spots of oil plumes exists in the deep water.[15]

If one single incident, can unleash so much damage on the living world, it is perhaps impossible to understand the cumulative damage the earth sustains every time any incident occurs.

Approximately, 700 million tons of petroleum and petroleum based products cross the oceans every year and is increasing everyday. Accidental spillage is but one small factor of oil pollution in the oceans. Accidental spillage is talked about so often because it is the only form that is reported. But what of intentional expulsion of oil into the ocean? Be it in the in the form of bilge pumping, ballast dumping or even cleaning of the tank, lets not forget small leaks and seepages and all the other trickling drops from ships that burn oil.[16]

---

[13] Campbell Robertson, Clifford Krauss, Gulf Spill Is the Largest of Its Kind, Scientists Say, N.Y. TIMES available at http://www.nytimes.com/2010/08/03/us/03spill.html.

[14] Laura Tangley, Bird Habitats Threatened by Oil Spill. National Wildlife (National Wildlife Federation), available at http://www.nwf.org/News-and-Magazines/National Wildlife/Birds/Archives/2010/Oil-Spill-Birds.aspx.

[15] Justin Gillis, Giant Plumes of Oil Forming Under the Gulf, N.Y. TIMES,available at http://www.nytimes.com/2010/05/16/us/16oil.html?_r=1;Seehttp://www.noaanews.noaa.gov/stories2010/20100506_ spillsampling.html;See also http://www.nytimes.com/2010/05/16/us/16oil.html.

[16] . Hawkes, A Review of The Nature and Extent of Damage Caused by Oil Pollution at Sea,(paper presented at the N. Am. Wildlife Conf., Wash., D.C.)(1967); See also supra note 4.

Everyday we add more and more plastic into the environment. It would be foolhardy to call for an absolute ban on plastic. Plastic has essentially become a way of life. What we forget is that plastic is not degradable.[17] Every bit of plastic ever created still exists, its not going anywhere. The time now has come to find an alternative or to call for extreme amounts of caution.

Statistics indicate that the Americans alone throw away 2.5 million plastic bottles every hour. Imagine the sheer amount of plastic this is from just one continent in just one hour.[18] And all of this plastic heads to one dumping ground- the oceans. This has been happening for decades (remember again that this is just plastic bottles)[19] and has led to billions of tons of plastic to accumulate in the oceans. Plastic industries are responsible for a host of environmental issues such as the release of toxic pollutants, greenhouse gases, litter and both biodegradable and non biodegradable landfill waste because of their use of petroleum and petroleum based products.

Plastic is the number one factor of ocean pollution and the dumping of plastic should be regulated. There is no existing regulation for disposal of plastic either at a domestic or at an international level. All we can do is chant "reduce, reuse, recycle" at the risk of sounding like a cartoon cliché from the 90's. Reduction of plastic consumption, using what we have till we cannot anymore and recycling is the only option we are left with, if the preservation of the earth for the survival of our future generations ever figures on our 'to do lists'.

V. What We Have Is Not Always What We Need

What, almost all, countries lack is an agency with environmental information about the physical environment surrounding the disaster area. This agency needs to be able to provide basic information about the inhabitants of the region (plant and animal life), bathymetric information, information on tides, currents and other necessary information on the shoreline and should also keep an ecological and habitat database.[20] This would help in times of disaster when such vital information can be used to prevent further spread of damage, help in rescue operations and clean up of the area.

---

[17] ALAN WEISMAN, THE WORLD WITHOUT US, (St. Martin's Press,2007).

[18] Available at http://www.cleanair.org/Waste/wasteFacts.html.

[19] Available at oceana.org.

[20] Id. at 64.

Another advantage of such an organization is that apt responsibility can be imposed on parties. There have been instances when all damage is accorded to the oil spill though sometimes weather and other pollutants are the cause. When there is ecological monitoring all factors are considered and identified in a scientific manner and there is no excessive blame imposed.[21]

VI. What We Know

At this juncture what needs to be addressed primarily is the conservation and sustainable use of the marine eco system. The first step in this direction would be to achieve 'optimum sustainable productivity' which should be done in such a manner as to not affect other ecosystems or species; this was emphasized in the World Charter for Nature in 1982.[22] Living resources are finite by nature, and when used excessively and without proper regulation may lead to irreversible damage as they may not be capable of regeneration at the same speed in which they are exploited. An illustration of this would be trawling or fishing during the breeding season.

This can have an adverse effect as with the advancement of technology trawling takes place over several months at sea and all operations are carried on within the trawler. This helps industry as trawling can happen at a large scale with minimum input, but this destroys the ecological balance as trawling in a particular area for a period of time can deplete the fish stocks and does not leave the fish with much time for regeneration.[23]

This does not mean that fishing and trawling in the seas should be banned. What needs to be encouraged among nations is regulation and control. This is reiterated by the High Sea's Convention which states that states are well within their rights to act on the high seas as long as due regard is given to the interests of others.[24] This Article gained popularity when it formed the basis for the decision in the Icelandic Fisheries Case where the Court held that states should pay due regard to the interests of other states when it comes to the conservation and equitable exploitation of the fishing resources of the high seas.[25]

---

[21] See generally Bowman's discourse on the limpets of Scotland, Ritchie, supra note 15.

[22] 23 ILM 455(1983).

[23] Available at http://www.guardian.co.uk/environment/2010/may/04/fishing-techniques-decline.

[24] Convention on the High Seas art.2, Sep. 30, 1962, 13 UST 2312 [hereinafter CHS]; See also UNCLOS supra note 7 at art.87(2).

There were studies conducted in the early 70's and 80's by the Group of Experts on the Scientific Aspects of Marine Pollution [hereinafter GESAMP]which led to startling information about the significant amount of damage caused by oil, nuclear waste, chemicals and effluents of modern industrialized society.[26] What most of this led to was the depletion of oxygen[27] in marine environments which led to the loss of biodiversity and an alteration of sensitive ecosystems both in and around the ocean.

According to the second GESAMP report in 1990, studies in the field of marine environment have proved that the most pressing need of the day is international regulation. Research has shown that in fields where there has been regulation and international control, the polluting factor has been significantly reduced, an instance would be the reduction of nuclear waste in the oceans. In contrast to this polluting factors such as sewage have increased as it has never been addressed at an international level and most third world nations do not have proper systems to combat marine pollution.[28] Such pollutants have long since, stopped being a regional issue as it has attained a position where it has risen to being an international issue. It not only pollutes regional or territorial waters as there are no boundaries separating these water bodies from the high seas.

VII.The Regulation We Have

Thirty eight years ago, the civilized nations of the world came to a consensus that the earth was deteriorating and steps needed to be taken immediately to make sure the world didn't plunge into extinction anytime soon. Twenty years later, post the Stockholm Declaration, everything was still the same. The civilized nations once again convened, this time in Rio de Janeiro, and reaffirmed what they agreed upon in Stockholm and were of the opinion that to achieve sustainable development it was important to focus on social and economic development. To further their vision, a global programme entitled Agenda 21 was introduced. The world's nations met at various conferences after Rio, including the Doha Ministerial Conference and the International Conference on

---

[25] I.C.J. Reports 3 and 175 (1974).

[26] GESAMP,The State of the Marine Environment UNEP (1990).

[27]Available at http://news.yahoo.com/s/yblog_upshot/20100914/od_yblog_upshot/massive-fish-kill-reported-in-louisiana.

[28] GESAMP Report (1990).

Financing for Development.[29]

The developed industrial nations of the world pushed for progressive legislation with regard to fish stock, climate change, bio diversity, whereas the developing nations of the world wanted better access to trade, markets and assistance to develop their lagging markets.[30] Thus a middle path was envisaged that encouraged the growth of markets so long as it did not deplete the environment and kept in mind the fundamental principles of sustainability and intergenerational equity.

The ideals the various conferences and declarations sought to achieve were lofty at best as the nations that came together did not share a common goal and had various needs. Thus implementing such high standards uniformly would not be possible as some nations simply did not have the capacity to comply with them. For instance a nation battling with poverty could not reasonably be expected to comply with principles such as sustainable development. The choices nations had to make were difficult to say the least. The choice between the survival of its people or the earth.

VIII. The Choice We Can Make

A.Developing Sustainably

The year 1972 was a time when nations were groping in the dark with new environmental policies, with no precedent and no regulatory authority but for a declaration they all pledged to follow. An enormously influential concept that emerged was that of sustainable development,[31] which is now, a principle of Customary International Law.[32]

---

[29] The Johannesburg Declaration on Sustainable Development, Johannesburg 2002 From Our Origin to The Future, A/CONF.199/L.6/Rev.2.

[30] Lavanya Rajamani, From Stockholm to Johannesburg: The Anatomy of Dissonance in The International Environmental Dialogue in Review of European Community and International Environmental Law, 25-26(2003).

[31] Brundtland Report defines sustainable development as "development that meets the needs of the present without compromising the ability of the future generations to meet their own needs" World Commission on Environment and Development, Our Common Future, Oxford University Press, (1987).

[32] Philippe Sands, International Law in the Field of Sustainable Development, 1994 BRIT. Y.B.INTL'L L 303, 333.

People talk about sustainable development everyday, on television, over the radio, and in public meetings. Some nations mandate sustainable development, consultants discuss it widely and universities lecture on it. A basic understanding can be gleaned from the definition of the Bruntland Report of 1987.[33]

Nations are obliged to sustainably use[34] the environment.[35] They have an obligation to protect the environment beyond the areas of their national jurisdiction.[36] The Gabcikovo-Nagymaros Project case[37] specifically referred to the principle of sustainable development. Environmental protection must be an integral part of the process of development and cannot be observed in isolation with it.[38] Specific measures have to be taken in order to preserve and protect biological diversity and promote the protection of the ecosystem.[39] It is necessary that the needs of the future generations are safeguarded and not exploited.[40]

Nowhere was it unambiguously stated then and now that there was an inherent 'right to sustainable development' or even a 'decent environment'.[41] The closest the Rio Declaration comes to such an interpretation is in Principle 3, wherein it endorses a 'right to development' supplements both the environment and developmental needs, of both the present and the future generations.[42]

Thus it may be inferred that the Rio Declaration supported the preservation of the environment but simultaneously gave due regard to developmental activities of the state. This may be inferred from Principle 2 of the Rio Declaration, wherein it directs states to make use of their resources in accordance with their

---

[33] World Commission on Environment and Development, Our Common Future, Oxford University Press, (1987).

[34] Convention on Biological Diversity, June 5, 1992. 1760 U.N.T.S. 79 [hereinafter CBD]at art 2, "Sustainable use" means the use of components of biological diversity in a way and at a rate that does not lead to the long-term decline of biological diversity, thereby maintaining its potential to meet the needs and aspirations of present and future generations.

[35] Id. at art 1.

[36] CBD, supra note 33, at art 3; Rio Declaration, supra note 6, at principle 2, Stockholm Declaration on the Human Environment, June 5- 6 1972, U.N. Doc.A/CONF.48/14/Rev. 1(1973) [hereinafter The Stockholm Declaration] at principle 21.

[37] Gabcikovo-Nagymaros Project (Hung. v. Slvk.) 1997 I.C.J. 7 (Sept. 25).

[38] Rio Declaration, supra note 6, at principle 4.

[39] CBD, supra note 33, at art 8.

[40] Rio Declaration, supra note 6, at principle 3.

[41] John G. Merrils,Environemnyal Rights, in OXFORD HANDBOOK OF INTERNATIONAL ENVIRONMENTAL LAW 667-669 (Daniel Bodansky, Jutta Brunnée, Ellen Hey. eds.,Oxford University Press,2007).

[42] Rio Declaration, supra note 6, at principle 3; BIRNIE ET ALL, Supra note 3, at 115.

regional or domestic policies, as long as it does not affect or damage the environment of other states or any area beyond their national jurisdiction.[43] This is an apparent flaw, as it does not lay down a common international standard, but leaves it to the discretion of the state to act depending on self imposed standards that the state itself regulates. When there is a lack of a global standard, states tend to regulate developmental and environmental activities according to convenience, which is detrimental to the environment as most industrialized nations pick developmental activities over preservation of the environment.

This does not mean there is no recourse within international law. International law has not permitted states to conduct activities in common spaces or even within their own territory without regard for other states or the global environment. It has been laid down as part of state practice, judicial decisions, multilateral environmental agreements and by way of the work of the International Law Commission that the principle of good neighbourliness will be taken into consideration when formulating policy or pronouncing judgments.[44] The only saving grace under the Rio Declaration are Principles 2,18 and 19, which provides that states have a duty to prevent transboundary harm, to warn all states about likely emergencies, and to give prior notice before such activities are undertaken.[45]

Environmental protection was never considered as important as the protection of persons and property to which harm has been inflicted on. This is evident from decisions passed such as in the Trail Smelter Arbitration where damage to wildlife, ecology and biodiversity were ignored.[46]

But with the passage of time even the judicial bodies have taken note of the importance of protection of the environment. An instance of this can be noted in the Request for an Examination of the Situation Case,[47] and in the International Court of Justice's Advisory Opinion on the Legality of the Threat or use of Nuclear Weapons.[48] In both of these situations the Court held that that states do indeed have an obligation to protect the environment and that international law requires states not to cause or permit serious damage to be caused to the

---

[43] Rio Declaration, supra note 6, at principle 2.

[44] BIRNIE ET ALL, supra note 3, at 137.

[45] Rio Declaration, supra note 6.

[46] 33 A.J.I.L. 182(1939).

[47] Request for the Examination of the Situation in Accordance with the Court's Judgment in the Nuclear Test's Case , I.C.J. Reports 288(1995).

[48] I.C.J. Reports 22(1996).

environment based on both the precautionary principle as well as the principle of intergenerational equity.[49] Environmental jurisprudence is not as well developed as the other branches of law, judicial decisions are the key to determining environmental issues, and it alone helps reaffirm the existence of there being an obligation which is legal in nature to protect, preserve and to use the environment sustainably.[50]

The United Nations in an attempt to instill sustainable development into nations as more than just anther buzzword bought out Agenda 21 in the year 1992 at the Rio Earth Summit.[51] This initiative was "a comprehensive plan of action to be taken globally, nationally and locally by organizations of the United Nations System, Governments, and Major Groups in every area in which human impacts (sic) on the environment."[52] Agenda 21 was largely recognized as a soft law and therefore there weren't many countries who implemented it in their local legislations. Agenda 21 has often been described as 'possibly the most far-reaching and voluminous" example of international soft law 'ever to be attempted."[53]

Most of marine life can be termed and categorized as renewable, as it is wholly based on reproduction. Reproductive surplus forms the biological basis for sustainable harvesting corporations engage in. This means that any species, when presented with favorable conditions can reproduce. For instance a seed when given ideal soil, water, weather and sun can produce several plants, some of which is stored for future plantation and the rest harvested, thus resulting in sustainable harvesting. The same principle of reproductive surplus can be applied to the fish in the ocean. Given ideal circumstances they can reproduce

---

[49] See also supra note 36.

[50] BIRNIE ET ALL, supra note 3, at 140.

[51] United Nations (UN) (1993) 'Agenda 21' in United Nations, Report of the United Nations Conference on Environment and Development, Rio de Janeiro, 3-14 June 1992, Volume I : Resolutions Adopted by the Conference, New York: United Nations [A/CONF.151 /26/ Rev.1(Vol.I)].

[52] Id.

[53] "Soft law" policy is not binding. This is a common procedure in the U.N.'s policy development strategy. "Soft law" documents are quite often followed by treaties or covenants, which are binding international law; alternately, soft law can find immediate application through local legislation or policy without an internationally binding agreement. How can communities use 'soft law" and nonbinding international agreements? available at http://www.idrc.ca/en/ev-30130-201-1-DO_TOPIC.html; Peter H. Huang, International Environmental Law and Emotional Rational,31, J. L. STUD, S237, S253(2002).

abundantly, so long as they are allowed to grow to their adult size or to a size capable of reproduction and are not captured at a guppy stage. There are several other factors such as the destruction of habitats, introduction of new species which may alter the habitat of a native species and even disease. A simple example would be the reduction of human population with the outbreak of smallpox in America or bubonic plague in Europe.[54]

There was a review of data for 72 fish stocks which showed that when the adult population size declined the reproductive surplus significantly reduced.[55] A remedy that has been adopted in this regard is the No-take Marine Reserves (NTMR). This is a place where all types of extraction from the marine environment especially fishing is banned permanently.[56] This has been a preferred solution to combat problems of the marine environment[57] like loss of marine biodiversity,[58] and chronic over-fishing.[59] At the same time, NTMR can also bring about social and economic benefits through tourism.[60]

B.Moving Forward with Precaution

When in doubt follow the precautionary principle.[61] We do this unwittingly everyday, when we buy fire extinguishers and health insurance, when we encourage seat belts and helmets even when we know the chances of us being in an accident is low. So it only makes sense to us that our law makers do the same, advocate precaution in all activities.[62] But to forever stop ourselves from

---

[54] R. Hilborn, C. J. Walters, D. Ludwig, Sustainable Exploitation of Renewable Resources,26, ANN. REV. ECOLOGY & SYSTEMATICS, 45, 52 (1995).

[55] Myers RA, Rosenberg AA, Mace PM, Barrowman N, Restrepo VR. In Search of Thresholds for Recruitment Overfishing, 51, ICES J. (1994).

[56] Roberts CM & Polunin NVC, Are Marine Reserves Effective in Management of Reef Fisheries?, 1, REV. FISH BIO. FISH , 65 (1991); See also Dayton PK, Sala E, Tegner MJ, Thrush SF, Marine Protected Areas: Parks, Baselines, and Fishery Enhancement, 66, BULL. MAR. SCI.617(2000).

[57] Dayton et al. id. at 55; Gell FR & Roberts CM, The Fishery Effects of Marine Reserves and Fishery Closures. WWF-US(2002).

[58] Jackson JBC et al. Historical Overfishing and The Recent Collapse of Coastal Ecosystems,293, SCIENCE,629, (2001).

[59] Pauly D, Christensen V, Guenette S, Pitcher T, Sumaila UR, Walters C, Watson R & Zeller D, Towards Sustainability in World Fisheries, 418, NATURE,689 (2002).

[60] Dayton et al., supra note 55; Gell and Roberts, supra note 56.

[61] Interpreting The Precautionary Principle (Timothy O'riordan & James Cameron Eds., 1994); Protecting Public Health & The Environment: Implementing The Precautionary Principle (Carolyn Raffensperger & Joel A. Tickner Eds., 1999).

moving forward on the basis of a harm that may or may not exist amounts to no progress at all.

The precautionary principle is not as widely propagated as the principle of sustainability, but examples of its applicability can be seen as early as 1986 in the moratorium on commercial whaling. Precautionary principle is an acknowledged part of international law but its specific implications can only be understood when applied to a definitive context.[63]

The fishing in high seas needs to be looked at with the precautionary principle in mind as it is impossible to find any accurate data on fisheries and there are no EIA procedures which lay down how far fish stocks may be exploited. When such a situation with so many variable elements is looked at with the precautionary principle one can assess the situation with reference to both environmental law as well as inter generational equity.[64] The precautionary principle is applied when there is lack of concrete scientific proof, as is the case of fishing in the high seas and territorial waters. In such a scenario the appropriate response of a state would be to preserve the fish stock until a proper assessment of the risk can be made and in their discretion decide whether or not a moratorium on fishing should be imposed till the situation is remedied.[65]

But an alternative to the precautionary principle would be to have a rational system of risk regulation which takes necessary precaution and not necessarily implements the precautionary principle.[66]

IX. The Industrialized World and the Environment

The world is made up of two kinds of nations, those that are industrialized and developed and those that are trying desperately to economically liberate themselves from the merciless developed nations. In most instances, it can be

---

[62] Cass R. Sunstein, Beyond the Precautionary Principle, 151, U. PA. L. REV., 1003(2003).

[63] BIRNIE ET ALL, supra note 3, at 203.

[64] Garcia, S.M., The precautionary approach to fisheries and its implications for fishery research, technology and management: an updated review. In PRECAUTIONARY APPROACH TO FISHERIES. PART 2: SCIENTIFIC PAPERS, 1- 75(1996). Prepared for the Technical Consultation on the Precautionary Approach to Capture Fisheries (Including Species Introductions), Lysekil, Sweden (1995), FAO Fisheries Technical Paper, No. 350.

[65] BIRNIE ET ALL, supra note 3, at 203.

[66] Supra note 61.

noted that it is often the industrialized nations that are better aware but it is also them who contribute to the problem more that those who are ignorant.

The industrial nations are those that have used up all of their resources in the best possible manner, so as to reap maximum benefits and leaving nothing to chance. Whatever the social and environmental cost, they have achieved their position in the rungs of the developed world through the best possible allocation of their resources; whereas developing nations have only begun their journey.

Industrial nations have time now to consider all that they have destroyed on their road to development. The economically affluent nations of the world have wrecked havoc with our natural environment, they then came together and made plans on how to right their wrongs, why then cannot they fix their own errors without forcing agendas upon unsuspecting underdeveloped economies of the world?

The answer to this is fairly simple. It is because with the advancement of technology, trade and commerce the world has become one big global market, with one integrated economy, heavily dependant on one another. For instance, a pearl harvested off the coast of Africa, by a country whose capital control is in Dubai, and may join other pearls harvested in India by a country whose capital hold is in the United Kingdom, to make a necklace in France to be used in Prague but paid for by a person in Zurich. So who should pay for any violation or any other environmental degradation caused? It is unfair to say the least, to expect a poorer nation to bear the brunt of the blame when it is in fact the developed world which is responsible. The lesser developed nations are expected to have learnt their lesson by watching other nations pillage the oceans on their way to development. But the fact remains that though they used the ocean indiscriminately their ends have been fulfilled they are rich and economically secure. But, now asking another nation not to repeat it is unacceptable as they too have an inherent right to development.[67]

The Right to Development is an inalienable human right, where the freedom to enjoy development exists with every individual.[68] States must formulate poli-

---

[67] KennetWayland, The Stockholm Conference on the Human Environment, Int. Affairs. 48, (INT. AFFAIRS ROYAL INST INT AFFAIRS, 37(1972),

[68] The Declaration on the Right to Development art.1, Oct. 21,1986 A/RES/41/128.

cies that would guarantee development for all people,[69] and also have a responsibility to eliminate obstacles that may come in its way to providing development to its people.[70] The Stockholm Declaration of the United Nations Conference on Human Environment states that:

> "[E]conomic and social development is necessary for ensuring a favourable living and working environment for man and for creating conditions on earth that are necessary for the improvement of the quality of life."[71]

The Declaration also stressed on the sovereign rights of States to exploit their natural resources.[72] There is no longer a conflict between the right to environmental protection and the right to economic development.[73] This has been reflected in the principles of various treaties. The rights of developed nations to impose strict environmental standards on developing nations are limited keeping in mind the economic and social costs incurred upon by developing nations.[74] Differential responsibility is imposed on countries based on their capacity.[75] Therefore, the environmental policies laid down by nations should not adversely affect the economic development of the developing countries.[76]

X. International Trade and the Environment

The global multilateral trading system is massive to say the least and what lies at its core are, the World Trade Organisation General Agreement on Tariffs and Trade [GATT].[77] Today they are under attack by the environmentalists. Environmentalists have for decades believed that international trade blindly fos-

---

[69] Id. at Article 2(3).

[70] Id. at Article 3(3).

[71] The Stockholm Declaration, supra note 35.

[72] Id. at principle 21.

[73] Marc Pallemaerts, International Environmental Law From Stockholm to Rio: Back to the Future? in GREENING INTERNATIONAL LAW 17 (Philippe Sands ed., 1993).

[74] The Rio Declaration, supra note 6.

[75] Supra note 6 at principle 7.

[76] The Stockholm Declaration, supra note 35, at principle 11.

[77] The GATT, Oct. 30, 1947, TIAS No. 1700, 55 UNTS 188, entered into force on January 12, 1948. The GATT has been amended several times The GATT was originally intended to be a provisional agreement until the establishment of the International Trade Organization (ITO), which would have been a specialized agency of the United Nations. However, plans for the ITO were abandoned when it became clear that its charter would not be ratified. For the history of the ITO and the GAIT, See generally Robert E. Hudec, The Gatt Legal System And World Trade Diplomacy (1975); John H. Jackson, World Trade And The Law Of Gatt (1969).

ters the exploitation of natural resources and the picture they paint is often one of big corporations taking undue advantage, and one of big business' looting and plundering the natural bounty of the earth.[78]

Environment has always worked to the detriment of trade either because of harmful exploitation of natural resources or because of the disastrous after-effects of trade on the environment. There have been numerous instances where treaties have come into existence to prevent harm to the environment by way of trade. An example would be the Swiss international conference to end the import and production of white phosphorous matches as it created a "loathsome occupational disease".[79] Since then as many as 250 Multilateral Environmental Treaties [MEA's] have come into existence.[80]

The current dispute between the industries and the environmentalists boils down to basic economics and legislation. There is no standard environmental regulation regime followed, besides certain declarations such as those of 1972 and 1992, and most countries are left free to formulate their own domestic policies. Some nations have stringent policies such as the United States of America when it comes to environmental policies whereas others like Mexico, are rather lax to say the least. Environmentalists feel that this gives some nations an undue advantage over other economies with a more stringent environmental model.[81]

A popular concern of the environmentalists in the year 1992, started with a comment by the then head of the chief economist of the World Bank who stated that industries should be encouraged to relocate to under developed nations. He felt that a clean environment is only demanded by those with a high income elasticity. This was seen as a threat by environmentalists who believed that industries would set up camp in countries with lax environment laws and export to other nations. The fundamental issue that comes to question is why human lives are under valued simply because they fall in lower income bracket than others.[82]

---

[78] Martin Kohr, The GATT and Environmental Protection, GREENPEACE,14,15(1990). See also Virginia I. Postrel, The Big Green Trade-Killing Machine, WALL ST. J., A18,(1990).

[79] Fletcher, Charles R., Greening World Trade: Reconciling GATT and Multilateral Environmental Agreements Within the Existing World Trade Regime. J. TRANSNT'L. L. & POL'Y.,(1996).

[80] See United Nations Environment Protection, The Register of International Treaties and other Agreements in the field of Environment, Nairobi, UNEP/Env.Law/2005/3(1999).

[81] See Roberto Suro, In Search of a Trade Pact with the Environment in Mind, N.Y. TIMES, Apr. 14, 1991, at 4.

The best alternative is always to let countries handle their own responsibility by allowing them to impose their own environmental legislations. So that countries can determine policies according to their varying needs. But more and more pollution is being regarded as a global phenomenon and this means that nations cannot be reasonably expected to create their own environmental policies as each nation would only make policies which work to their advantage in matters relating to trade and investment. The only option legislators are left with, is not ideal but it is the only way forward, i.e. to recognize state responsibility for the control of pollution and to develop a basic minimum set of internationally applicable norms for maintaining the quality of the living environment.[83]

What is increasingly apparent is that all of these laws that different nations device are contrary to each other, with international and domestic legislations duplicating each other or running in direct contradiction to each other. This leads to a lot of confusion and starts affecting international trade.[84]

This conflict has intensified over the last decade, especially post 1990.[85] The fundamental problem being that neither the environmentalists nor the industries care or know enough, to find out about each others goals or ideals, all of which have their own merits. So what we are left with is two opposing groups, both with worthy objectives pit against each other. No society should have to pick between the growth of the economy and the safety of their living environment. Both of these are equally important to the well being of the present and future generations.[86]

Most nations are party to both the WTO and have treaty obligations under

---

[82] See Let Them Eat Pollution, ECONOMIST, Feb. 8, 1992, at 66.

[83] See, e.g., WORLD COMMISSION ON ENVIRONMENT AND DEVELOPMENT, OUR COMMON FUTURE (1987); Edith Brown Weiss, In Fairness to Future Generations: Planetary Trust And Intergenerational Equity (1989).

[84] See Ernst-Ulrich Petersmann, Trade Policy, Environmental Policy, and the GATT, 45, AUSSEN- WIRTSCHAFT, 197 (1991); Free Trade's Green Hurdle, ECONOMIST, June 15, 1991, at 61. For an earlier view of the potential conflict between international trade and environmental protection, See Wolfgang E. Burhenne & Thomas J. Schoenbaum, The European Community and the Management of the Environment: A Dilemma, 13 NAT. RESOUCES L.J. 494 (1973).

[85] Els Reynaers, Multilateral Environmental Agreements and the WTO, in BEYOND THE TRANSITION PHASE OF THE WTO AN INDIAN PERSPECTIVE ON EMERGING ISSUES 275 (Dipankar Sengupta, Debashis Chakraborty & Pritam Banerjee eds., Academic Foundation, 2006).

[86] Thomas J. Schoenbaum, Free International Trade and Protection of the Environment: Irreconcilable Conflict?, 86, AM. J. INT'L L.,702 (1992).

MEA's. Here arises a problem of conflicting interests of the party, where fulfillment of one obligation may lead to the violation of the other.[87] A case of this can be observed from the following example, under the Convention on International Trade in Endangered Species, a practice of "split listing" has been adopted. By way of this policy certain species are allowed to be used in trade only by some countries and banned under others, depending on whether they are endangered. This would run in contravention of the WTO as this would fall under trade of "like products" and would amount to subjecting nations to preferential treatment.[88] This would violate the Most Favoured Nation Principle enshrined in the GATT[89] wherein members shall not discriminate products by virtue of their place of origin.[90] When such a negotiation takes place it is the ultimate test for the WTO and how it can relate to other international treaty regimes.[91]

XI. Our Position Today

There has been an evolution of environmental jurisprudent within the WTO treaty regime, and the tilt is towards taking environmental issues into account. The option countries have is to approach the Dispute Settlement Panels and the Appellate Body, this cannot assure if the balance will fall towards the MEA's or the WTO but it gives nations an opportunity to be heard and to defend themselves. This shows a favourable shift towards a direction where there is a possibility of member states agreeing on supporting both regimes.[92]

It is agreed that trade has adverse effects on the environment, this in a lot of cases is unavoidable, but environmentalists need to see the other side of the picture. This picture is one that depicts international trade working at its best for

---

[87] Note that the exact definition of conflict in international law is unclear. For the purpose of this paper the various notions and nuances of "conflict" will not be taken up. See e.g. Joost Pauwelyn, The Role of Public International Law in the WTO: How Far Can We Go?, 95, AM. J. INT'L L.,535, 550-52 (2001).

[88] See Extensively: Chris Wold, Multilateral Environmental Agreements and the GATT: Conflict and Resolution?, 26 Envtl. L. 841, 848.888(1996).

[89] Doc. GATT/1 529 (Feb. 3, 1992) at art,1. [hereinafter GATT LAW].

[90] Rhys, supra note 84 at 280.

[91] J. Cameron, J. Jacobs, G Van Calster, Trade And Environment: Law And Policy (Cameron,2000).

[92] Cahmovitz, Steve ,Expanding The Mea Mandate In The Doha Agenda, Global Environment Andtrade Study (Gets)(2003). See Also Submission By The United States TN/TE/W/20, 10 February 2003, para.4and Submission by the Separate Customs Territory of Taiwan, Penghu, Kinmen and Matsu, TN/TE/W/36, 3 July 2003, para. 14.

both trade and environment. When international trade takes place the following goals are met (1) environmental standards that are commonly followed by all nations including developing nations which currently ignore environmental norms,[93] (2) termination of subsidies which are not environmentally friendly and ineffective,[94] (3) and finally calling for overall economic growth which will increase the finances of all nations, especially in developing countries, which will lead to the control of pollution and the safeguard of the environment.[95]

The mere fact that the environment is so hotly debated in the WTO is proof of the growing importance of international environmental law. Though the trade and environment regimes have objectives that are polar opposites of each other, there are several times when they overlap each other such as the WTO including the term "sustainable development" in its preamble.[96]

XII. Conclusion

Modern society has environmental standards. Standards are developed either as a response or an outcome of ever increasing societal consciousness about the way resources are used and the adverse effects f environmental impact, which manifests as negative impacts on plant and animal life. Developing nations around the world when faced with these norms and standards see them as a Non- Tariff Barrier than an environmental standard.[97]

---

[93] The GATT only requires that restrictions apply to domestic production as well as imports and that standards not be disguised protectionism. GATT LAW, supra note 88, at 22-24.

[94] Id. at 32-35. Ending inefficient agricultural subsidies in richer countries would have the effect of shifting agricultural production to poorer countries that use less than one-tenth the amount of chemical fertilizers and pesticides as, for example, countries in Europe. Agricultural trade liberalization would therefore produce a substantial increase in global environmental quality. Id. at 34.

[95] GATT LAW, supra note 88, at 2-6.

[96] Relevant excerpt of the Preamble of the Agreement Establishing the WTO reads as follows: "Recognising that their relations in the field of trade and economic endeavour should be conducted with a view of raising standards of living, ensuring full employment and a large and steadily growing volume of real income and effective demand, and expanding the production of and trade in goods and services, while allowing for the optimal use of the world's resources in accordance with the objectives of sustainable development, seeking both to protect and preserve the environment and to enhance the means of doing so in a manner consistent with their respective needs and concerns at different levels of economic development (...)."

[97] Nivedita Dutta, Mayank Sinha & UpasAna Gaur, Environmental Standards As Non-tariff Barriers And He Problem Of Market Access In Beyond The Transition Phase Of The Wto An Indian Perspective On Emerging Issues 347 (Dipankar Sengupta, Debashis Chakraborty & Pritam Banerjee eds., Academic Foundation 2006).

The crux of the problem between environment and trade has one disputed object, the market and access to market. It is a crucial aspect and lies at the heart of trade liberalization and the sustainable development paradigm. If markets are allowed to flourish freely it leads to creation of additional capital and overall economic growth. The excess funds can then be directed towards poverty elevation and environment protection.[98] This is ideal for developed nations but for developing nations such as India this raises several issues: (1) a mere imposition of trade sanctions or environmental standards will not amount to actual action, there need to be national legislation which runs parallel to such standards; (2) environmental standards sometimes acts as a trade barrier thus reducing market access for export and import from developing nations; and (3) developing nations are not as equipped as the developed economies to be able to implement environmentally friendly policies due to lack of funds and technical know how and may not be compatible with existing models of production and marketing strategies.[99] With regard to fisheries trade between developed and developing countries is dicey. The new trade regime calls for lower subsidies thus opening the market to a wider audience but environmental standards imposed by developing nations have created a non-tariff barrier thus limiting the market.[100]

It is true that by industrialisation we can change the lives of a few successive generations, and make life on earth pleasurable, but all of this they can have only if we destroy the earth for our more remote descendants, who will inherit a polluted earth.[101]

The dream is simple, to have a plethora of wildlife and industry exist side by side in harmony. The reality is not quiet that simple. One exists at the cost of the other. Industry would perish if there were no resources to exploit and in most cases over-exploit natural resources. The wheels of progress would come to a standstill if man stood for minimum damage to environment as industry would lose its basic source of resources.

This development, this struggle for progress is not sentimental. All the earth can hope and trust is that when it has served our needs faithfully, there may still

---

[98] Id. at 347.

[99] Supra note 96 at 359.

[100] Supra note 96 at 365.

[101] Edith Brown Weiss, The Planetary Trust: Conservation and Intergenerational Equity, 11 Ecology L. Q.,495(1984).

remain some glimmer of the life our ancestors once knew. The earth is struggling with sudden evolution and adaptation. A battle between the future and what exists, and the question is reduced to a simple choice: survive or perish. When we embrace our environment as a part of ourselves, our potential will know no limit. The future is still filled with promise. And the present generation looks up to the law makers rife with expectation. But when we fight our obligations, the uncertainty of our journey looms before us, and we have to question whether we want to transform our earth, to make it vanish and can we really change everything and expect to continue surviving? Today we need to pledge to heal the earth and to save us from ourselves.[102]

[102] Heroes, television show (directed by Tim Kring), 2006.