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Title

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Journal

UCLA Journal of Environmental Law and Policy, 22(1)

Author

Gillespie, Alexander

Publication Date

2003

DOI

10.5070/L5221019405

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Small Island States in the Face of Climatic Change: The End of the Line in International Environmental Responsibility

*Alexander Gillespie**

I.

SMALL ISLAND DEVELOPING STATES IN INTERNATIONAL LAW

Small island developing states (SIDS) are increasingly recognized as deserving of special consideration both in international law generally and in international environmental law in particular. This special recognition has grown since the 1992 Earth Summit and was clearly reflected in the 1994 Programme of Action for the Sustainable Development of Small Island Developing States (to be revisited in 2004) and within the 2002 Plan of Implementation from the World Summit on Sustainable Development.¹ These documents all reflect the same consideration: that most SIDS face an uphill battle in meeting the challenges of sustainable development irrespective of climate change. Accordingly, they already need specific assistance to meet the economic, social, and environmental problems which already affect them. Accordingly, as the Political Declaration of the 2002 World Sum-

* Associate Professor of Law, University of Waikato, New Zealand. New Zealand Law Foundation International Fellowship. Ph.D, Nottingham, 1994. LL.M, Auckland, 1990, Honors. LL.B, Auckland, 1988, Honors. Awarded fellowships from the Rotary, Fulbright & Rockefeller Foundations. Alexander Gillespie is the author of *INTERNATIONAL ENVIRONMENTAL ETHICS: QUESTIONS OF PHILOSOPHY IN INTERNATIONAL ENVIRONMENTAL LAW AND POLICY* (Oxford University Press, England); *BURNING FOLLIES, CLIMATE CHANGE AND THE NEW ZEALAND RESPONSE* (Dunmore Press, New Zealand); *CLIMATE CHANGE IN THE SOUTH PACIFIC: IMPACTS AND RESPONSES IN AUSTRALIA, NEW ZEALAND AND SMALL ISLAND STATES* (Kluwer Academic Publishers, Netherlands); *THE ILLUSION OF PROGRESS: UNSUSTAINABLE DEVELOPMENT IN INTERNATIONAL LAW* (Earthscan, London, 2001).

1. JOHANNESBURG SUMMIT 2002, WORLD SUMMIT ON SUSTAINABLE DEVELOPMENT: PLAN OF IMPLEMENTATION ch. VII (Sept. 2002), available at http://www.johannesburgsummit.org/html/documents/summit_docs/2309_planfinal.htm.

mit on Sustainable Development concluded, the countries of the world will, inter alia, "continue to pay special attention to the developmental needs of Small Island Developing States."² However, unfortunately for SIDS, the other dilemmas they face in achieving sustainable development are dwarfed by one environmental problem: climate change.

II.

CLIMATE CHANGE

"Climate change" refers to "a change of climate which is attributed directly or indirectly to human activity that alters the composition of the global atmosphere and which is in addition to natural climate variability observed over comparable time periods."³ This anthropogenic climate change is caused by "greenhouse gases." The primary greenhouse gases are carbon dioxide, methane, and nitrous dioxide. These gases are increasing in concentration in the atmosphere. The evidence for this may be seen from the scientific data of the oscillations of historical greenhouse gas concentrations through to more specific contemporary measurements. These measurements show concentrations of greenhouse gases not found in the atmosphere for thousands of years.

III.

THE SOURCES OF THE POLLUTANTS

Modern industrial society is the primary culprit in terms of the creation of greenhouse gases. Since the Industrial Revolution, industry, agriculture, and transport have all contributed vast amounts of emissions. Historically, the lion's share of these pollutants came from developed countries. This share may be seen in terms of sovereign output (i.e., the countries' overall emissions) and per-capita output (i.e., an average individual's emissions from one country compared to another). Both ways of measuring output involve a different emphasis as well as a different political point of view.⁴ For example, in the mid-1990s, the global average for per-capita carbon dioxide emissions, in kilo-

2. The Johannesburg Declaration on Sustainable Development, Sept. 4, 2002, para. 24.

3. United Nations Framework Convention on Climate Change, May 9, 1992, art. 1, 31 I.L.M. 849, available at <http://unfccc.int/>.

4. IPCC, CLIMATE CHANGE 1995: ECONOMIC AND SOCIAL DIMENSIONS OF CLIMATE CHANGE 7-8 (James P. Bruce et al. eds., 1996).

grams, was 4157. Despite the average, the differences in the global total ranged from 19,675 kgs for the United States through to 949 kgs for China, 652 kgs for India, all the way down to 2 kgs for Somalia.⁵ Although there are some developing countries which are taking their per-capita outputs to comparable levels of those of developed countries, such as Turkey, Korea, and Mexico,⁶ the broad disparity in emissions on a per-capita basis between the developed and developing world is expected to continue into the foreseeable future. Conversely, when viewed from a sovereign basis, the United States has 36.1% of the total emissions of developed countries, the Russian Federation has 17.4%, Japan has 8.5%, Germany has 7.4% and the UK has 4.3%.⁷ However, unlike the remaining differences between developed and developing countries with regard to greenhouse gas emissions on a per-capita basis, a clear change is occurring with regard to sovereign emissions. The key change is that the aggregate emissions from developing countries are growing at a much higher rate than developed countries.⁸ If such increases continue, it is expected that the developing world will be producing more carbon dioxide from the burning of fossil fuels by 2005 than all the industrialized countries were producing in 1988.⁹ Between 2010 and 2025, the developing world should be responsible for well over half of all global emissions.¹⁰ Certain key developing countries are expected to make exponential increases in their emissions. For example, by 2025 (if not earlier) China is expected to be the world's largest emitter, in overall terms, of greenhouse gases.¹¹

5. WORLD RESOURCES INSTITUTE, *WORLD RESOURCES 2000-2001: PEOPLE AND ECOSYSTEMS: THE FRAYING WEB OF LIFE* 282 (2000).

6. See Fred Pearce, *Countdown to Chaos*, NEW SCIENTIST, Nov. 29, 1997, at 22.

7. Annex. Total carbon dioxide emissions of Annex I Parties in 1990, for the purposes of Article 25 of the Kyoto Protocol. COP 3, Kyoto (1997). FCCC/CP/1997/1/Add.1. March 18, 1998.

8. Report of the Conference of the Parties on its Fourth Session, Held at Buenos Aires from 2 to 14 November 1998, 47 para. 10(b), UNFCCC, Decision 11/CP.4, U.N. Doc. FCCC/CP/1998/16/Add.1; ENERGY INFORMATION ADMINISTRATION, *INTERNATIONAL ENERGY OUTLOOK 2000*, DOE-EIA-0484, at 167 (2000).

9. Fred Pearce, *Time For Politicians to Act*, NEW SCIENTIST, Oct. 15, 1988, at 21.

10. Fred Pearce, *supra* note 6, at 22; Debora MacKenzie, *Communication Gaps Undermine Reports on Global Warming*, NEW SCIENTIST, June 23, 1990, at 27; see A. Reddy & J. Goldemberg, *Energy for the Developing World*, SCIENTIFIC AMERICAN, Sept. 2000, at 63, 69.

11. Vaclav Smil, *China's Greenhouse Gas Emissions*, 4 (4) GLOBAL ENVIRONMENTAL CHANGE, 325-32 (Dec. 1999).

IV.

PRESENT CHANGES AND FUTURE PREDICTIONS

The scientific evidence of global warming currently available is consistent with, but does not yet provide definitive proof of, the theories of climatic change.¹² The current evidence consists of continual record-breaking annual global temperatures;¹³ increased precipitation and storm activity; enhanced unusual weather patterns¹⁴ over a number of (but not all) regions;¹⁵ an increase in cloud cover over some regions;¹⁶ increased frequency and intensity of droughts in some regions;¹⁷ changes in species migration;¹⁸ shrinkage of glaciers; thawing of permafrost; later freezing and earlier break-up of ice on rivers and lakes; lengthening of mid- to high-latitude growing seasons; pole-ward and altitudinal shifts of plant and animal ranges; declines in some plant and animal populations; and earlier flowering of trees, emergence of insects, and egg-laying in birds. Associations between changes in regional temperatures and "observed changes in physical and biological systems have been documented in many aquatic, terrestrial, and marine environments."¹⁹ There is also already evidence that sections of the ocean are becoming less saline²⁰ and warmer.²¹

Exactly where such trends will take us in the future, in terms of overall temperature changes, is a matter of debate. That is, the current estimates of what the temperature change will be by 2100 range between 1.4°C and 5.8°C.²² The variance in this figure is due to unpredictable factors such as technology, demographic

12. IPCC, CLIMATE CHANGE 2001: THE SCIENTIFIC BASIS, 2 (J.T. Houghton et al. eds., 2001) (hereinafter IPCC, SCIENTIFIC BASIS).

13. *Id.*; *Hotting Up*, NEW SCIENTIST, Mar. 20, 2002, at 15.

14. IPCC, SCIENTIFIC BASIS, *supra* note 12, at 5; Fred Pearce, *The Mother of All El-Ninos Revealed*, NEW SCIENTIST, Jan. 18, 2003, at 4.

15. IPCC, SCIENTIFIC BASIS, *supra* note 12, at 4.

16. *Id.*

17. *Id.* at 5.

18. Fred Pearce, *It's Started*, NEW SCIENTIST, Mar. 30, 2002, at 11.

19. IPCC, CLIMATE CHANGE 2001: IMPACTS, ADAPTATIONS, AND VULNERABILITY 3 (James J. McCarthy et al. eds., 2001); *Heat Seeking Fish Holiday in Cornwall*, NEW SCIENTIST, May 18, 2002, at 25.

20. Rob Edwards, *Freezing Future*, NEW SCIENTIST, Nov. 27, 1999, at 6; Robert Adler, *Fresher Waters*, NEW SCIENTIST, July 31, 1999, at 22.

21. IPCC, THE SCIENTIFIC BASIS, *supra* note 12, at 4; *Growing Greenhouse*, NEW SCIENTIST, March 3, 1990, at 26; *Sea For Yourself*, NEW SCIENTIST, Apr. 21, 2001, at 23.

22. IPCC, SCIENTIFIC BASIS, *supra* note 12, at 13.

change, and economic development.²³ This is an important point: the full effects of climate change are not unalterable and choices that governments make in the present have the ability to influence any final outcome. Despite the fact that the climatic future is not set in concrete, it is likely that without any radical changes to current emissions that humanity will witness temperature increases in the range of 0.1°C to 0.2°C per decade over the short term future.²⁴ Although these figures appear small, if they continue unabated they may come to represent eventual temperature changes which have not been seen for tens of thousands, if not hundreds of thousands, of years.

V.

THE IMPACTS OF CLIMATIC CHANGE UPON SIDS

The adverse effects of climatic change are those which result in alterations in the physical environment or biota “which have significant deleterious effects on the composition, resilience, or productivity of natural and managed ecosystems, or on the operation of socio-economic systems or on human health and welfare.”²⁵ These adverse effects could result in significant impacts on many ecological systems and socio-economic sectors.²⁶ It is likely that these effects will be more pronounced on developing countries due to their restricted ability to adapt to quickly changing situations.²⁷

In terms of specific effects, climatic change will affect a vast number of ecologically related considerations. In terms of overall problems facing a large number of countries it is expected that climatic change will, in certain areas, affect food production in terms of output and location,²⁸ cause fresh water stress,²⁹ in-

23. IPCC, EMISSIONS SCENARIOS 2000, 1-15 (Nebojsa Nakicenovic et al. eds., 2000); Fred Pearce, *All Bets Are Off*, NEW SCIENTIST, Sept. 18, 1999, at 5; *All Change*, NEW SCIENTIST, Nov. 4, 2000, at 13.

24. IPCC, SCIENTIFIC BASIS, *supra* note 12, at 13.

25. Framework Convention on Climate Change, Art. 1, Definitions (hereinafter FCCC).

26. The Geneva Ministerial Declaration on Global Electronic Commerce, May 20, 1998 WT/MIN(98)/DEC/2; Report of the Second Session of the Conference of the Parties, UN Doc. FCCC/CP/1996/15/Add.1 at Annex para. 2 (Oct. 29, 1996).

27. IPCC, CLIMATE CHANGE 1995: IMPACTS, ADAPTATIONS AND MITIGATION OF CLIMATE CHANGE: SCIENTIFIC-TECHNICAL ANALYSES 9 (Robert T. Watson et al. eds., 1996).

28. *Id.*; IPCC, THE REGIONAL IMPACTS OF CLIMATE CHANGE: AN ASSESSMENT OF VULNERABILITY 6 (Robert T. Watson et al. eds., 1997).

crease heat waves,³⁰ and, in conjunction with other factors, cause increased levels of certain diseases such as malaria and dengue fever.³¹

With particular regard to SIDS, a number of additional threats may be considered paramount. Firstly, the sea levels may rise slowly due to thermal expansion of the oceans and reactions of the icecaps.³² The time frame adopted for this picture will affect the picture of the anticipated sea level rise. As a rule, increases in the rise of sea levels are much greater the further the time frame is cast.³³ For example, in 500 years an eventual rise of seven to thirteen meters may be likely.³⁴ However, the typical time frame is 100 years. Thus, between 2000 and 2100, the global mean sea level is projected to rise by between 0.09 and 0.88 meters.³⁵

Sea level threats may have a detrimental effect on a number of industrialized and developing countries.³⁶ However, as bad as sea level increases may be for these countries, it is the SIDS which are at the edge of extreme risk. This threat has been repeatedly recognized within the discussions of the United Nations Framework Convention on Climate Change (FCCC),³⁷ regional group-

29. IPCC, CLIMATE CHANGE 2001: IMPACTS, ADAPTATIONS, AND VULNERABILITY 4, 9 (James J. McCarthy et al. eds., 2001); IPCC, THE REGIONAL IMPACTS OF CLIMATE CHANGE: AN ASSESSMENT OF VULNERABILITY 5 (Robert T. Watson et al. eds., 1997).

30. IPCC, CLIMATE CHANGE 2001: IMPACTS, ADAPTATIONS, AND VULNERABILITY 5 (James J. McCarthy et al. eds., 2001); WORLD RESOURCES INSTITUTE, WORLD RESOURCES 1998-1999: A GUIDE TO THE GLOBAL ENVIRONMENT—ENVIRONMENTAL CHANGE AND HUMAN HEALTH 67-69 (1999).

31. Mark Schrope, *Global Warming, Global Fever*, NEW SCIENTIST, June 29, 2002, at 22; Paul R Epstein, *Is Global Warming Harmful To Health?*, SCIENTIFIC AMERICAN, Aug. 2000, at 36-43; IPCC, CLIMATE CHANGE 2001: IMPACTS, ADAPTATIONS, AND VULNERABILITY 7 (James J. McCarthy et al. eds., 2001); IPCC, CLIMATE CHANGE 1995: IMPACTS, ADAPTATIONS AND MITIGATION OF CLIMATE CHANGE: SCIENTIFIC-TECHNICAL ANALYSES 12 (Robert T. Watson et al. eds., 1996).

32. IPCC, SCIENTIFIC BASIS, *supra* note 12, at 16.

33. *Id.*

34. Fred Pearce, *Washed Off the Map*, NEW SCIENTIST, Nov. 25, 2000, at 5.

35. IPCC, SCIENTIFIC BASIS, *supra* note 12, at 16.

36. IPCC, THE REGIONAL IMPACTS OF CLIMATE CHANGE: AN ASSESSMENT OF VULNERABILITY 7, 15-16 (Robert T. Watson et al. eds., 1997); IPCC, CLIMATE CHANGE 2001: IMPACTS, ADAPTATIONS, AND VULNERABILITY 11 (James J. McCarthy et al. eds., 2001).

37. Conference of the Parties, *Report of the Conference of the Parties on Its Seventh Session, Held at Marrakesh from 29 November to 10 November 2001, Addendum, Part Two: Action Taken by the Conference of the Parties, Decision 1/CP.7*, U.N. Doc. FCCC/CP/2001/13/Add.1 (Jan. 21, 2002), available at <http://unfccc.int/resource/docs/cop7/13a01.pdf>.

ings such as the South Pacific Forum,³⁸ and the UN Global Conference for the Sustainable Development of Small Island Developing States, which noted:

While small island developing states are among those that contribute least to global climate change and sea level rise, they are among those that would suffer most from the adverse effects of such phenomena and could in some cases become uninhabitable.³⁹

This prognosis is possible given the fact that many SIDS rarely rise more than three to four meters above present mean sea level.⁴⁰ A one-meter rise in sea level could result in an 80% land loss for the Majuro Atoll in the Marshall Islands.⁴¹ The Maldives consist of some 1300 tiny islands, with an average size of only one to two square kilometers in width and an average one to one and a half meters above mean sea level.⁴² Tuvalu consists of five atolls and four separate reef islands and has a total land mass of only twenty-three square kilometers, virtually all of which is under two meters above sea level.⁴³ Kiribati consists of 700 square kilometers on thirty-three islands, most of which are also less than two meters high.⁴⁴ All of these SIDS are directly at risk. Larger islands such as Tonga and Vanuatu are also threatened.⁴⁵

The overt threats to SIDS are due to the fact that the adaptive capacity of human and ecological systems is generally low in these areas, while their vulnerability is very high. The 2001 projected sea-level rise will most probably cause enhanced coastal erosion, loss of land and property, dislocation of people and the consequent threat of 'environmental refugees,'⁴⁶ reduced resili-

38. See, e.g., 24TH SOUTH PACIFIC FORUM, FORUM COMMUNIQUE ¶ 29 (Aug. 1993), available at <http://www.forumsec.org.fj/Home.htm> ("[G]lobal warming and sea level rise were among the most serious threats to the Pacific region and the survival of some island states.").

39. Report of the Global Conference on the Sustainable Development of Small Island Developing States, Global Conference on the Sustainable Development of Small Island Developing States, Annex I, part 1, sec. III, U.N. Doc. A/CONF.167/9 (Oct. 1994).

40. IPCC TECHNICAL PAPER V, CLIMATE CHANGE AND BIODIVERSITY 34 (Habiba Gitay et al. eds., 2003).

41. IPCC, CLIMATE CHANGE 1995: IMPACTS, ADAPTATIONS AND MITIGATION OF CLIMATE CHANGE: SCIENTIFIC-TECHNICAL ANALYSES 11 (Robert T. Watson et al. eds., 1996).

42. Sue Wells & Alasdair Edwards, *Gone With the Waves*, NEW SCIENTIST, Nov. 11, 1989, at 29.

43. *Toddleoo Tuvalu*, NEW SCIENTIST, Mar. 25, 1989, at 22.

44. Fred Pearce, *Turning Back the Tide*, NEW SCIENTIST, Feb. 12, 2000, at 44, 45.

45. *Don't Let Us Drown, Islanders Tell Bush*, NEW SCIENTIST, June 13, 1992, at 6.

46. Anne Beston, *Sea Disaster Seen for Millions*, NEW ZEALAND HERALD, Feb. 15, 2000, available at <http://www.nzherald.co.nz/storydisplay.cfm?thesection=news&>

ence of coastal ecosystems, saltwater intrusion into freshwater resources, and high resource costs that will be necessary to respond and adapt to these changes. Islands with very limited water supplies are also highly vulnerable to the impacts of climate change on the water balance. Tourism, an important source of income and foreign exchange for many islands, may face severe disruption from climate change and sea-level rise. Limited arable land and soil salinization make agriculture in SIDS, both for domestic food production and cash crop exports, highly vulnerable.

In addition to the problem of sea-level rises, two further consequences of climate change may have a disproportionate effect upon SIDS. First, with regard to worsening weather patterns, some of the climatic phenomena most commonly linked to global warming are storms, tornadoes, and cyclones.⁴⁷ The evidence, according to the insurance industry, is that weather-related damage has increased fourfold since 1960.⁴⁸ Although this is an area of uncertainty (especially with regard to region-specific impacts), it is predicted that, as the climate warms, precipitation in certain areas will increase⁴⁹ as will storm activity.⁵⁰

The second point requiring attention is that of the disruptive effects that climate change will have on specific ecosystems. Typically, the climatic change effects upon ecosystems are linked to the ice caps and forests. However, there is an equally important body of work of direct relevance to SIDS relating to the effects upon oceans. The concern is due to the fact that the oceans sequester and store larger amounts of carbon than land-based reserves. In doing so, they retain heat storage and control thermal inertia. Accordingly, oceans are the "flywheel" of the climate system.⁵¹ Although the biological consequences of a changing climate upon the oceans are far from being fully understood, it is believed that the change may bring about detrimental

thesubsection=&storyID=118211; Fred Pearce, *Grain Yields Tumble in Greenhouse World*, NEW SCIENTIST, Apr. 18, 1992, at 4.

47. Fred Pearce, *Europe's Wake-Up Call*, NEW SCIENTIST, Aug. 24, 2002, at 4; Robert Adler, *Here Comes the Rain*, NEW SCIENTIST, Dec. 22, 2001, at 11; Paul Simons, *Why Global Warming Could Take Britain by Storm*, NEW SCIENTIST, Nov. 7, 1992, at 35.

48. Fred Pearce, *Insurers Count Cost of Global Warming*, NEW SCIENTIST, July 27, 2002, at 7; LESTER R. BROWN, VITAL SIGNS: 2000-2001 70-71 (Earthscan 2001).

49. IPCC, SCIENTIFIC BASIS, *supra* note 12, at 13.

50. *Id.* at 5, 16.

51. IPCC, CLIMATE CHANGE 1995: IMPACTS, ADAPTATIONS AND MITIGATION OF CLIMATE CHANGE: SCIENTIFIC-TECHNICAL ANALYSES 14 (Robert T. Watson et al. eds., 1996).

results by raising the temperatures of the oceans. This will probably change migratory patterns for a number of ocean species,⁵² facilitate habitat destruction especially in critical areas for dependent species,⁵³ and lead to drastic changes in ocean circulation, vertical mixing, and overall climatic stability. Such effects could have strong implications in terms of nutrient availability, biological productivity, and the structure and functions of marine ecosystems most critically affected.⁵⁴ For the species which are already endangered, the effects may be terminal. This is especially so where the species are endemic and have few options regarding migration. Unfortunately, the biodiversity in and around SIDS often fits squarely within these criteria.⁵⁵

Coral reefs are key oceanic ecosystems and are often associated with SIDS. The prognosis for these ecosystems is typically one of advanced bleaching because of reduced calcification rates due to higher greenhouse gas levels. This may happen because coral reefs require highly stable environments, and temperature fluctuations of just one or two degrees above normal can have a devastating impact upon them.⁵⁶ Episodes of coral bleaching over the past twenty years have been associated with several causes, including increased ocean temperatures. Between 1998 and 2002, an estimated 16% of the world's coral reefs died from bleaching.⁵⁷ It is likely that "future sea surface warming [will] increase stress on coral reefs and [will] result in [the] increased frequency of marine diseases."⁵⁸ In addition, mangrove, sea grass beds, and other coastal ecosystems and their associated biodiversity may be adversely affected by rising temperatures and accelerated sea-level rise. Declines in coastal ecosystems will

52. See W. S. Broecker, *Thermohaline Circulation, the Achilles Heel of Our Climate System: Will Man-Made CO² Upset the Current Balance?*, SCIENCE, Nov. 28, 1997, at 1582.

53. IPCC, THIRD ASSESSMENT REPORT: SUMMARY FOR POLICY MAKERS 2, 11 (James J. McCarthy et al. eds., 2001).

54. REPORT OF THE INDEPENDENT WORLD COMMISSION ON THE OCEANS, THE OCEAN: OUR FUTURE 45 (Cambridge University Press 1998).

55. IPCC TECHNICAL PAPER V, CLIMATE CHANGE AND BIODIVERSITY 31-34 (Habiba Gitay et al. eds., 2003).

56. See Fred Pearce, *Grief on the Reef*, NEW SCIENTIST, Apr. 20, 2002, at 11; Mark Schrope, *Corals Face Catastrophe*, NEW SCIENTIST, May 27, 2000, at 8; *The World's Coral Reefs in Hot Water*, 29 (3) ECOLOGIST 1 (1999); M. Cocker, *Coral Reefs Don't Like It Hot*, GUARDIAN WEEKLY, Dec 19, 1999, at 32.

57. Fred Pearce, *It's Started*, NEW SCIENTIST, Mar. 30, 2002, at 11.

58. IPCC, CLIMATE CHANGE 2001: IMPACTS, ADAPTATIONS, AND VULNERABILITY 12 (James J. McCarthy et al. eds., 2001); Lynn Dicks, *Worm Brings Death to Coral*, NEW SCIENTIST, Apr. 12, 2003, at 16.

probably also have a negative impact upon reef fish and will threaten reef fisheries, as well as the livelihoods of those who rely upon such resources.⁵⁹

In conclusion, the potential effects of climatic change upon SIDS are extreme. This is because SIDS will most likely experience the same effects of climatic change as other countries in terms of impacts on food, water, disease, and heat waves. However, in addition, SIDS will also suffer a series of problems which will be uniquely detrimental to them. These are sea-level rise, increased erratic weather, and changing ecosystems. Each one of these effects will be difficult enough to manage. Cumulatively, the ultimate outcome may only be guessed at.

VI.

THE INTERNATIONAL RESPONSE TO CLIMATE CHANGE

A. *The Accepted Ecological Limit and the Scientific Recommendations*

The accepted ecological obligation to be regarded as the guide in the international negotiations in this area is found in the FCCC. This guiding provision stipulates that the ultimate objective of the Convention is to achieve the

stabilization of greenhouse gas concentrations in the atmosphere at a level that would prevent dangerous anthropogenic interference with the climate system. Such a level should be achieved within a time-frame sufficient to allow ecosystems to adapt naturally to climate change, to ensure that food production is not threatened and to enable economic development to proceed in a sustainable manner.⁶⁰

In hard numbers, the Intergovernmental Panel on Climate Change has suggested that to stabilize (not necessarily reduce) the build-up of greenhouse gases in the atmosphere to prevent a doubling of the pre-industrial concentrations of greenhouse gases will require emissions levels “to decline to a very small fraction of current emissions.”⁶¹ The typical figure associated with this cut

59. IPCC, CLIMATE CHANGE 2001: IMPACTS, ADAPTATIONS, AND VULNERABILITY 17 (James J. McCarthy et al. eds., 2001).

60. FCCC, art. 2.

61. IPCC, SCIENTIFIC BASIS, *supra* note 12, at 12.

is an approximate reduction of 60% in the current level of greenhouse gas emissions.⁶²

B. *The International Legal Response*

In spite of a long process of discussions, the 1992 FCCC eventually failed to contain any hard goals on reducing greenhouse gas emissions. Rather, the soft obligation for developed countries was to reduce their greenhouse emissions to the levels that existed in 1990 by the end of that decade.⁶³ However, the soft target within the FCCC was soon recognized as inadequate and the signatories thereafter concluded the Kyoto Protocol. The final target adopted in the Kyoto Protocol obliged developed countries to reduce their greenhouse emissions by “at least 5 per cent below 1990 levels in the commitment period 2008 to 2012.”⁶⁴

C. *The Difficulties Between the Ecological Limits and the Legal Response*

Despite the achievements of the Kyoto Protocol, there are three clear problems in this area which make the chasm between the scientific and legal responses very wide.

First, the overall targeted reduction period is remarkably limited. The defense against this limitation is that it is hoped that the Kyoto Protocol targets will be increasingly revisited (ideally like those of the Montreal Protocol) as the scientific needs solidify along with the will of the international community to confront the problem. However, although this may be the desire, the first step of the Kyoto process (a 5% reduction in the face of the necessary 60% reduction) is comparatively small, when it is considered that the first step of the Montreal process was a 50% cut in the harmful emissions.⁶⁵ This is not to demean the 5% target. Rather, it is to point out that given the very slow rate of progress based upon both the size of the target and time it has to achieve

62. See IPCC CLIMATE CHANGE 1994: RADIATIVE FORCING OF CLIMATE CHANGE AND AN EVALUATION OF THE IPCC 1592 EMISSION SCENARIOS (J.T. Houghton et al. eds., 1995).

63. FCCC, art. 4 (2) (a).

64. Kyoto Protocol to the United Nations Framework Convention on Climate Change, art. 3, 11 December 1997, 37 I.L.M. 32 (1998). The targets for developed countries are differentiated. Accordingly, not all countries have the same reduction target.

65. Montreal Protocol on Substances that Deplete the Ozone Layer, Sept. 16, 1987, S. TREATY DOC. NO. 10, 100th Cong., 1st Sess. (1987) art. 2 Annex A, reprinted in 26 I.L.M. 1541 (1987).

it, if the international community continues at the same pace, it will, from the perspective of the SIDS, most probably be too late to make any meaningful difference.

The second difficulty is that although the 5% reduction is comparatively small, it has already resulted in vast difficulties for one of the key greenhouse gas emitters – the United States – which has chosen to walk away from the Kyoto Protocol and refused to ratify it.⁶⁶ This act not only diluted the overall effectiveness of the Protocol due to the overt absence of the world's largest emitter of greenhouse gases; it also threatened the existence of the overall Protocol due to the modalities within the Protocol requiring 55% of the (developed) countries with reduction obligations to ratify it before the Protocol comes into force.⁶⁷ Thus, as a consequence of the United States' refusal to ratify the Protocol it became necessary for virtually all other industrialized countries to ratify the Protocol in order for it to enter into force.⁶⁸

The third problem is that the reductions envisaged by the Kyoto Protocol only apply to developed countries.⁶⁹ Moreover, any attempts to begin to place even the smallest of mandatory, as opposed to voluntary,⁷⁰ limits upon the greenhouse gas emissions of developing countries have been forcefully resisted, despite the clear pressure from high level fora such as the G8.⁷¹ Although there may be strong political justifications for this point of view, from the perspective of those at the end of the ecological effects of climate change, failure to include at least the primary developing countries, which will soon become the principal emitters of greenhouse gases, in any meaningful reductions of even stabilization targets is very bad news.⁷²

66. Paul Brown, *U.S. Isolated by Treaty to Arrest Climate Change*, GUARDIAN WEEKLY, July 26, 2001, at 1, available at <http://www.guardian.co.uk>.

67. Kyoto Protocol, art. 25(1).

68. 8 Y.B. INT'L ENVTL. L., 184-185 (1997); see *U.S. Gives Kyoto the Cold Shoulder*, NEW SCIENTIST, Nov. 13, 1999, at 12.

69. Kyoto Protocol, Preamble, para. 4.

70. Joanna Depledge, *Coming of Age at Buenos Aires*, 41 (7) ENVIRONMENT 15, 18 (Sept. 1999); Kristian Tangen, *The Climate Change Negotiations: Buenos Aires and Beyond*, 9 (3) GLOBAL ENVIRONMENTAL CHANGE 175-78 (1999); Bharat H. Desai, *Institutionalizing the Kyoto Climate Accord*, 29 (4) ENVIRONMENTAL POLICY AND THE LAW 159, 161 (July 1999).

71. See 1998 G8 BIRMINGHAM SUMMIT COMMUNIQUE (May 1998), available at <http://www.g8.utoronto.ca/summit/1998birmingham/finalcom.htm>; See 2001 G8 ENVIRONMENT MINISTERS COMMUNIQUE (Mar. 2001), available at <http://www.g8.utoronto.ca/environment/2001trieste/communique.html>.

72. This is not to suggest that reduction targets for developing countries should be simply forced upon them. Clearly, developed countries have to take the lead in this

The conclusion of these three points is that the Kyoto Protocol is a weak instrument in terms of its overall targeted goals of reduction, its failure to include the United States, and its failure to encompass developing countries.

VII.

SIDS WITHIN THE CLIMATE CHANGE NEGOTIATIONS

A. *Substantive Influence*

At the fourth formal meeting in the negotiations leading to the formation of the FCCC, the Alliance of Small Island States (AOSIS) emerged as a group independent of either the industrialized or developing country groupings.⁷³ Their independent status developed because of their unique position in the climate change debate in that, of all countries, they are probably the most threatened by the effects of climatic change. As such, their desire to halt global warming is greater than all other countries (developed and developing) whose agendas may be complicated by any number of other objectives. This specific role has been evident since the late 1980s when specific gatherings, such as the South Pacific Forum, have tried continually to focus world attention on the threats that SIDS face from climate change.⁷⁴ This problem, and the necessity to solve this problem is, as the 1994 Global Conference on the Sustainable Development of Small Island Developing States noted, of “utmost importance to small

process, due to their clear historical legacy for the cumulative build-up of greenhouse gases in the atmosphere. Moreover, despite the fact that the developing countries' emissions will eventually eclipse those of the industrialized countries, the continuing disproportionate per-capita emissions, in line with the technological and economic ability to successfully confront climate change actually make the nexus between developing countries accepting reductions and developed countries giving them suitable enticements to act a small one. That is: the demand for developing countries making adequate reductions must be balanced against the assistance from the developed countries to make this possible. However, this is not the place to discuss the labyrinth. Rather, the bold point remains that the developing countries are not obliged to make any greenhouse reductions (irrespective of the linkages for why this is, or ought to be another way).

73. 2 Y.B. INT'L ENVTL. L., 112 (1991).

74. See 19TH SOUTH PACIFIC FORUM, FORUM COMMUNIQUE ¶ 31 (Sept. 1988), available at <http://www.forumsec.org.fj/Home.htm> (discussing the lead-up to the U.N. FCCC); see also 20TH SOUTH PACIFIC FORUM, FORUM COMMUNIQUE ¶ 20 (July 1989), available at <http://www.forumsec.org.fj/Home.htm>; see also 21ST SOUTH PACIFIC FORUM, FORUM COMMUNIQUE ¶¶ 6-7 (Aug. 1990), available at <http://www.forumsec.org.fj/Home.htm>.

island developing states.”⁷⁵ The particularly vulnerable status of SIDS was reconfirmed at the 2002 World Summit on Sustainable Development.⁷⁶

Such needs and vulnerability have resulted in SIDS receiving special recognition within the FCCC⁷⁷ as well as being given advanced speaking rights in this forum. They made notable use of their special status in the mid-1990s by trying to achieve meaningful reduction targets, such as AOSIS’ proposal for a 20% reduction in greenhouse gases emitted by industrialized countries in 1995.⁷⁸ Unfortunately, this proposal met with little success.⁷⁹ Thereafter, SIDS’ advanced speaking rights failed to make any noticeable impact on the international diplomatic landscape.

Despite this omission at the FCCC level, the SIDS continue to reiterate their “deep concerns” about climate change in a number of other fora that are easier for SIDS to control. For example, in the South Pacific Forum, the members continue to call for “urgent action to reduce greenhouse emissions and for further commitments in the future by all major emitters.”⁸⁰ Within the South Pacific context, such demands have become a clear source of tension with some of the SIDS’ more reticent neighbors, such as Australia, who have refused to ratify the Kyoto Protocol.⁸¹ The overall disappointment with both the United States and Australia with regard to this matter cannot be understated. This is probably best displayed by the serious consideration given in the region by some of the SIDS to attempt to sue both Australia and the United States over their failure to ratify the Protocol.⁸²

75. Report of the Global Conference on the Sustainable Development of Small Island Developing States, U.N. Doc. A/CONF.167/9, October, 1994, Annex II, sec. I. para. 19.

76. JOHANNESBURG SUMMIT 2002, WORLD SUMMIT ON SUSTAINABLE DEVELOPMENT: POLITICAL DECLARATION ¶ 36 (Sept. 2002), available at <http://www.unhabitat.org/wssd/joburgdec.asp>.

77. FCCC art. 4 (8)(a).

78. AOSIS Protocol, Noted in 5 Y.B. INT’L ENVTL. L. 164 (1994). See Debora MacKenzie, *No Advance in Sight on Greenhouse Treaty*, NEW SCIENTIST, Sept. 10, 1994, at 6. Editor, *Hot Air in Berlin*, NEW SCIENTIST, Mar. 25, 1995, at 3.

79. Report of the Conference of the Parties on Its First Session, United Nations Framework Convention on Climate Change, Conference of the Parties, 1st Sess, pt. I, proceedings, para. 57-58, May 24, 1995 UN Doc. FCCC/CP/1995/7/Add.1; Sebastian Oberthur & Herman Ott, *The First Conference of the Parties*, 25 (4) ENVIRONMENTAL POLICY AND THE LAW 144 (Aug./Sept. 1995).

80. Thirty-Third Pacific Island Forum (Fiji, August 2002). PIFS (02) 8, para. 24-25. 81. *Id.* at para. 26.

82. Michael Christie, *Lawsuits May Be Next Weapon in Climate Change Fight*, REUTERS, Mar. 6, 2002, available at http://www.enn.com/news/wire-stories/2002/03/03062002/reu_46587.asp.

B. *Special Considerations for SIDS Within the FCCC*

In addition to their special status within the working of the FCCC, the SIDS are also unique in their linkage to climate-related financial assistance to meet the adverse effects of climate change.⁸³ They are at the front of the queue in terms of financial assistance for both capacity-building and general assistance to meet their reporting and first level analysis (including scientific assistance) needs for national programs, public education, etc.⁸⁴ Likewise, with regard to financial assistance for adaptation to climate change,⁸⁵ the SIDS are at the front of this staggered process.⁸⁶ Finally, a dedicated fund exists for assisting the most vulnerable countries⁸⁷ of which the SIDS (along with the Least Developed Countries) are, once more, at the forefront.⁸⁸ The Fund for assisting the most vulnerable countries focuses largely upon the initial stages of adaptation by making sure national adaptation plans⁸⁹ are adequate and the capacity-

83. Report of the Conference of the Parties, United Nations Framework Convention on Climate Change, Conference of the Parties, 7th Sess., pt. II, Decision 2/CP.7: Capacity Building in Developing Countries (Non-Annex I Parties), at 5, U.N. Doc. FCCC/CP/2001/13/Add.1 (2002), available at <http://unfccc.int/resource/docs/cop7/13a01.pdf>.

84. Kyoto Protocol, art. 11(2)(b); Implementation of the Buenos Aires Plan of Action, United Nations Framework Convention on Climate Change, Conference of the Parties 6, Decision 5/CP.6, U.N. Doc. FCCC/CP/2001/7/L.7 (2001); Funding Under the Convention Framework Convention on Climate Change, Conference of the Parties 7, annex sec. 1, Decision 7/CP.7, U.N. Doc. FCCC/CP/1995/13/Add.1 (2002).

85. See Report of the Conference of the Parties, U.N. FCCC, 7th Sess., Decision 6/CP.7: Additional Guidance to an Operating Entity of the Financial Mechanism, at 40, U.N. Doc. FCCC/CP/2001/13/Add.1 (2001).

86. Report of the Conference of the Parties on Its First Session, United Nations Framework Convention on Climate Change, Conference of the Parties, 1st Sess., pt. 3, Decision 11/CP.1, at para. 1.d, U.N. Doc. FCCC/CP/1995/7/Add.1 (1995); Initial Guidance on Policies, Programme Priorities and Eligibility Criteria to the Operating Entity or Entities of the Financial Mechanism, para. 1.d, Report of the COP, Berlin, 1995, pt. II, Action Taken. FCCC/CP/1995/7/Add.1. June 6, 1995; COP 6, Part One. Action Taken By The Conference Of The Parties At The First Part Of Its Sixth Session. Personal Observations of the Chair.

87. FCCC art. 3 (2) & 4. (4).

88. Report of the Conference of the Parties, U.N. FCCC, 7th Sess., Decision 6/CP.7: Additional Guidance to an Operating Entity of the Financial Mechanism, at 40, U.N. Doc. FCCC/CP/2001/13/Add.1 (2001).

89. Report of the Conference of the Parties, U.N. FCCC, 7th Sess., Decision 28/CP.7: Guidelines for the Preparation of National Adaptation Programmes of Action, at 7, U.N. Doc. FCCC/CP/2001/13/Add.4 (2001), available at <http://www.mct.gov.br/clima/ingles/negoc/pdf/Cop7/28cp7.pdf>, (showing that these were clearly going well as in 2002, the COP decided they did not need to be reviewed); Report of the Conference of the Parties, U.N. FCCC, 8th Sess. Decision 9/CP.8: Review of the

building process of these countries is well-supported by suitable experts.⁹⁰

VIII.

MOVING OUTSIDE OF THE CONVENTIONAL DEBATE

When the overt risks posed to SIDS are juxtaposed against the limited and precarious nature of the Kyoto Protocol, the question needs to be asked: what can be done to improve the situation? A number of suggestions have been advanced in an attempt to answer this question. These suggestions fall into the categories of broadening the ambit of leverage via human rights considerations and re-aligning the debate in terms of broad obligations regarding sustainable development, as enshrined in international law.

A. *Human Rights vs. Inter-Sovereign Negotiations*

Given the dire nature of the current international legal situation, some commentators have suggested that there may be merit in pursuing actions in other international or political arenas, with a view to enhancing the legal status of the citizens of SIDS in the face of climate change. Such ideas typically include conventional and/or evolving human rights theories. The traditional human rights claims, when viewed from a SIDS perspective, may invoke key articles from the Universal Declaration of Human Rights, such as Article 15, which provides that no one shall be denied their nationality.⁹¹ More liberal approaches argue that there is (or should be) a human right to a clean and secure environment which should be enforced. The genesis of this claim comes from the 1972 Stockholm Declaration on the Human Environment which stated as its first principle, "Man has the fundamental right to freedom, equality and adequate conditions of life, in an envi-

Guidelines for the Preparation of National Adaptation Programmes of Action, at 21, U.N. Doc. FCCC/CP/2002/7/Add.1 (2002).

90. Report of the Conference of the Parties, U.N. FCCC, 7th Sess., Decision 29/CP.7: Establishment of a Least Developed Countries Expert Group, at 14, U.N. Doc. FCCC/CP/2001/13/Add.4 (2001), available at <http://www.mct.gov.br/clima/ingles/negoc/pdf/Cop7/29cp7.pdf>; Report of the Conference of the Parties, U.N. FCCC, 7th Sess., Decision 6/CP.7: Additional Guidance to an Operating Entity of the Financial Mechanism, at 40, U.N. Doc. FCCC/CP/2001/13/Add.1 (2001), available at <http://unfccc.int/text/program/sd/ldc/documents/13a01p40.pdf>.

91. Universal Declaration of Human Rights G.A. Res. 217(III), U.N. GAOR, 3d Sess., Supp. No. 13, at art. 9, U.N. Doc. A/810 (1948) reprinted in BLACKSTONE'S INTERNATIONAL LAW DOCUMENTS 36, 41 (M. Evans ed., Blackstone 2001).

ronment of a quality that permits a life of dignity and well-being, and he bears a solemn responsibility to protect and improve the environment for present and future generations."⁹²

The last two words of this principle, pertaining to the so-called rights of "future generations," add an extra layer of depth to these arguments. This is especially so given the nearly endless manner in which the language of the "rights and interests of future generations" has become entwined in the documents of international law and international judgments.⁹³ For example, the International Court of Justice (ICJ) in its Advisory Opinion on the Legality of the Threat or Use of Nuclear Weapons clearly stated, "[T]he environment is not an abstraction but represents the living space, the quality of life and the very health of human beings, including generations unborn."⁹⁴ Given the fact that many of the forecasted detrimental effects of climate change will happen in the future and ultimately affect the generations yet unborn, this ideal has a particularly strong resonance.

Despite the philosophical allure of such ideas revolving around human rights discourses, it needs to be clearly recognized that these will not solve the problem of adequately confronting climatic change. There are three reasons for this. First, the appeal of the rights of future generations is only an idea. Moreover, as an idea, it is philosophically lacking in terms of both theory and possible application.⁹⁵ Beyond acting as a moral compass, the future generations argument has no legal standing in international law. Likewise, so-called human rights based upon environmental considerations have no standing in international law. The international community has already backed away from the strength of Principle 1 of the Stockholm Declaration. This retreat can clearly be seen with the first principle of the Rio Declaration in 1992⁹⁶ which represented a clear watering-down of the Stockholm Declaration on this idea. The 2002 World Summit on Sus-

92. Stockholm Declaration on the Human Environment (June 16, 1972), in Report of the United Nations Conference on the Human Environment, sec. 1, UN Doc. A/CONF.48/14/Rev. 1 (1972), reprinted in 11 I.L.M. 1416 (1972).

93. See ALEXANDER GILLESPIE, INTERNATIONAL ENVIRONMENTAL LAW, POLICY, AND ETHICS 107-26 (1997).

94. Legality of the Threat or Use of Nuclear Weapons, 1996 I.C.J. 95, ¶ 29 (July 8).

95. See GILLESPIE, *supra* note 93.

96. "Human beings are at the centre of concerns for sustainable development. They are entitled to a healthy and productive life in harmony with nature." Rio Declaration on Environment and Development, June 14, 1992, princ. 1, U.N. Doc. A/CONF.151/5 (1992).

tainable Development followed suit and presented an even thinner version than both of its predecessors on this point. It is also significant that no treaty refers explicitly to the right to a decent environment in such terms. This failure is not hard to understand when the slow progress of the rights discourse development is recognized. Even more widely accepted ideas, such as those relating to the rights of indigenous persons, that exist now (let alone the future) are currently struggling for recognition.⁹⁷

The final problem is one of substance based upon the current international system.⁹⁸ The difficulty is that climate change, as with all major international environmental problems, has to be dealt with on a state-to-state basis. To argue otherwise is to confuse apples and oranges. The solution to this problem will come from a satisfactory result as obtained between sovereign states. This means that the rights that individuals may or may not possess will not, in this context, provide the leverage necessary to achieve the desired goals within the Westphalian system that the global community currently inhabits. For example, when New Zealand and Australian citizens were concerned about the detrimental health and environmental effects of French atmospheric⁹⁹ and underground¹⁰⁰ nuclear testing in the South Pacific, they did not posit their cases upon the rights of individual citizens. Accordingly, the ICJ resolved the dispute through obligations owed between countries and not to individuals within them. Likewise, when countries were concerned that their water supply from neighboring countries was being detrimentally affected, their claim was not based on the effects on the individual but on the obligations owed between states in this area.¹⁰¹ Finally, when citizens of countries were threatened with complete and utter destruction by the possible use of nuclear weapons that other countries possessed, the case was not presented on the basis of

97. See Alexander Gillespie, *Aboriginal Subsistence Whaling: A Critique of the Interrelationship Between International Law and the International Whaling Commission*, 12 *COLO. J. INT'L ENVTL. L. & POL'Y* 77, 79-139 (2001); See Alexander Gillespie, *Biodiversity, Indigenous Peoples and Equity in International Law*, 4 *N.Z. J. ENVTL. L.* 1, 1-49 (2000).

98. PARTICIA BIRNIE & ALAN BOYLE, *INTERNATIONAL LAW & THE ENVIRONMENT* 256 (2d ed. 2002).

99. See *Nuclear Tests (N.Z. v. Fr.)*, 1974 I.C.J. 457 (Dec. 20).

100. See *Request for an Examination of the Situation in Accordance with Paragraph 63 of the Court's Judgment of 20 December 1974 (N.Z. v. Fr.)*, 1995 I.C.J. 288 (Sept. 22).

101. See *Case Concerning the Gabčíkovo-Nagymaros Project (Hung. v. Slov.)*, 1997 I.C.J. 92 (Sept. 25).

human rights (as clearly nuclear war must run contrary to every possible human right) but on the basis of state relations as traversed through a number of international state-to-state documents and obligations.¹⁰² This is not to suggest that human rights approaches do not have merit. Nothing could be further from the truth. Rather, this is to point out that human rights approaches will not provide the platform necessary to achieve change in this arena.

B. *Sustainable Development*

Given the limitations of the rights approach, as well as the current difficulties with the Kyoto Protocol, some commentators have suggested that attempts should be made to achieve leverage by arguing that the actions of many countries with regard to greenhouse gas emissions are blatantly unsustainable from a SIDS perspective. Given the mantra-like quality of “sustainable development” emanating from the 1972, 1992, and 2002 international conferences where, in the last one, the signatories pledged their “Commitment to Sustainable Development,”¹⁰³ this would appear a very strong argument due to its universal acceptance. In addition, when juxtaposed against the extremity of the climate change and SIDS debate, it should be very easy to apply. Indeed, if sustainable development is to mean anything, at base, it would have to encompass a state’s basic right not to be obliterated by the acts of other states which have a negative environmental impact.

Although this claim has an intuitive appeal, it too is doomed to failure. In an ideal world, the phrase “sustainable development” could be aired and all would agree and know what was meant by it. However, we do not live in an ideal world and the term “sustainable development” has become increasingly lost in a labyrinth of political¹⁰⁴ and philosophical¹⁰⁵ considerations.

Such fundamental differences, which are inherent in the term “sustainable development,” have a direct bearing on the question

102. Legality of the Threat or Use of Nuclear Weapons, General List No. 95 (Advisory Opinion of the International Court of Justice, July 8, 1996).

103. See JOHANNESBURG SUMMIT 2002, WORLD SUMMIT ON SUSTAINABLE DEVELOPMENT: POLITICAL DECLARATION (Sept. 2002), available at <http://www.unhabitat.org/wssd/joburgdec.asp>.

104. See ALEXANDER GILLESPIE, THE ILLUSION OF PROGRESS: UNSUSTAINABLE DEVELOPMENT IN INTERNATIONAL LAW AND POLICY (2001).

105. See ALEXANDER GILLESPIE, INTERNATIONAL ENVIRONMENTAL LAW, POLICY, AND ETHICS (1997).

as to whether sustainable development can, in any sense, be considered to be an enforceable legal principle as opposed to a moral goal. Indeed, it is possible to identify the main elements of the concept of sustainable development such as the moral consideration of future generations. However, their specific normative implications are far from certain in the manner in which they relate to each other in terms of international environmental concerns, let alone with regard to human rights law or international economic law.¹⁰⁶ One only has to examine the potpourri of ideas that accompanied the declarations in 1972, 1992, and 2002 to realize that although such declarations may contain many lofty ideals, when these are properly thought through, they may, in fact, be at loggerheads with each other. Accordingly, a consensus on the meaning of sustainable development or on how to implement it in individual cases is clearly lacking in the international arena.¹⁰⁷ This failure is obvious in practice where bodies such as the ICJ have steered away not only from the broader debates about the principles of what is or is not sustainable development, but also from the labyrinth of weighing social, political, philosophical, and economic values in the sustainable development debate. As such, it is much easier for the ICJ to slip into an examination of justiciable questions which focus on procedurally-related issues in the sustainable development debate (such as the adequacy of environmental impact assessments). Thus, it is only when the ideals of sustainable development can actually be run through some existing and agreed standards or principles that the adequacy of the goals and processes can be meaningfully evaluated.

IX.

UNDERSTANDING THE INTERNATIONAL COURT OF JUSTICE: THE CLIMATE NEGOTIATIONS AS THE ONLY GAME IN TOWN

Between 1994 and 1996, the ICJ struggled with the question pertaining to the legality of nuclear weapons. Although it eventually came to the conclusion that to use nuclear weapons in self-defense as a last resort was not illegal, it did set out a number of caveats along the way. Of particular note for this discussion was the idea that the question of the legality of nuclear weapons

106. See *PARTICIA BIRNIE & ALAN BOYLE, INTERNATIONAL LAW & THE ENVIRONMENT* 85 (2d ed. 2002).

107. See *id.* at 95.

could ultimately be decided outside of an ongoing international process. That is, the nuclear weapons possessing states were already engaged in the Non-Proliferation Treaty with its promise to “pursue negotiations in good faith on effective measures relating to cessation of the nuclear arms race at an early date and to nuclear disarmament, and on a treaty on general and complete disarmament under strict and effective international control.”¹⁰⁸ Because of this ongoing process within an existing, specific, international framework which was designed to conclude the substance of the question before the ICJ, the ICJ decided that the possession of such weapons could not be illegal. This was because – somewhat obviously – if states already had such weapons and were trying to negotiate a way to rid themselves of them, until the negotiations were concluded, the weapons could not, *ipso facto*, be considered illicit. The same conclusion exists for the climate change context.

This treaty provided what the ICJ called the “broader context”¹⁰⁹ in which to pursue and conclude such negotiations in good faith. This obligation of good faith in international negotiations is repeated in numerous other international instruments¹¹⁰ and in other ICJ cases such as those relating to nuclear testing¹¹¹ and the Gabcíkovo-Nagymaros Project.¹¹² In the latter instance, the parties were directed back to the negotiating table to “look afresh at the effects on the environment . . . [and find] . . . a satisfactory solution.”¹¹³ Moreover, this obligation to return to the bargaining table was not to be taken lightly because “the Court is mindful that, in the field of environmental protection, vigilance and prevention are required on account of the often irreversible character of damage to the environment and of the

108. Treaty on the Non-Proliferation of Nuclear Weapons, July 1, 1968, art. VI, 729 U.N.T.S. 169.

109. Legality of the Threat or Use of Nuclear Weapons, General List No. 95, para. 98 (Advisory Opinion of the International Court of Justice, July 8, 1996).

110. This basic principle is set forth in Article 2, paragraph 2, of the Charter. It was reflected in the Declaration on Friendly Relations Between States (resolution 2625 (XXV) of 24 October 1970) and in the Final Act of the Helsinki Conference of August 1, 1975. It is also embodied in Vienna Convention on the Law of Treaties, May 23, 1969, art. 26, 1155 U.N.T.S. 331 (according to which “every treaty in force is binding upon the parties to it and must be performed by them in good faith”).

111. See *Nuclear Tests (Austl. v. Fr.)*, 1974 I.C.J. 253, at 268 (Dec. 20).

112. See *Case Concerning the Gabcíkovo-Nagymaros Project (Hung. v. Slov.)*, 1997 I.C.J. 92, at 142 (Sept. 25).

113. *Id.* at 140.

limitations inherent in the very mechanism of reparation of this type of damage."¹¹⁴

The conclusion of the Gabcíkovo-Nagymaros judgment, like that on the Legality of Nuclear Weapons, is particularly telling. That is, beyond the obligations to negotiate in good faith:

It is not for the Court to determine what shall be the final result of these negotiations to be conducted by the Parties. It is for the Parties themselves to find an agreed solution that takes account of the objectives of the Treaty, which must be pursued in a joint and integrated way, as well as the norms of international environmental law¹¹⁵

X:

CONCLUSION

SIDS are already vulnerable to globalization in conventional economic, social, and environmental terms. They are, however, particularly vulnerable to one environmental problem above all others: climate change. Climate change has the propensity to change radically the ecology of SIDS at multiple levels and, in certain instances, it may threaten their very existence. Even for those SIDS that can survive sea level rises, they will still have to contend with climatic changes which will most likely affect everything from the species that they harvest to their status as a tourist destination.

The good news is the international community has agreed to a treaty and protocol which have the agreed underlying objective of stabilizing greenhouse gas concentrations in the atmosphere at a level that would prevent dangerous anthropogenic interference with the climate system. The bad news is that the Kyoto Protocol is nowhere near achieving this goal given the meagerness of the target, the failure of the United States to accept it, as well as the failure to include developing countries. Accordingly, given the way the negotiations are currently heading, it is likely that the international community will fail in the goal it has set for itself.

This failure is already being reflected in the climate negotiations themselves where the SIDS have slowly disappeared from making the substantive suggestions and actions akin to their original privileged role in the FCCC forum. Currently, the SIDS' influence appears to be one of being trapped within the financial

114. *Id.*

115. *Id.* at 141.

mechanisms of the regime which are closer to adaptation. In other words, the battle is already lost and the best approach for SIDS is to prepare for the inevitable rather than taking the lead at forcing mitigation. This retreat is regrettable as the climate future is open for capture.

Given this scenario, the question must be asked: where to from here? Are there other ways to secure the rights and interests of the SIDS? Within this realm, suggestions have ranged from utilizing human rights claims to re-orienting the debate to one of wide-ranging discussions about what is, or is not, sustainable development. Both of these approaches are doomed to failure if the objective is to solve the problem at hand by stopping the encroaching problem, rather than allowing it to occur.

If the objective is to solve the problem and protect the interests of those who are most at risk, it is essential that the climate negotiations are reinvigorated. Moreover, the International Court of Justice is clear on this point: when negotiations are ongoing in a distinctive forum, it will not interfere with those discussions unless they are being conducted in bad faith or are clearly diverting from either established principles or the goals of the Convention they are operating under. Here is the nub: given the accepted goal of the FCCC and the current dismal position of the Kyoto Protocol, it is possible that this failure of good faith is occurring, especially when viewed from the perspective of the SIDS given the limited time frame in which climate change must be confronted. As such, if the objective is to protect the interests of the citizens of the SIDS, two options need active consideration. First, the influence of SIDS needs to be reactivated and strongly enhanced within the FCCC negotiations. Second, there may be merit in seeking an ICJ advisory opinion in this area – to see if good faith is being met – as the consequences of climate change and the current international failure to meet the FCCC goals are both spectacular failures which the future generations of the SIDS will have to inherit.

