Climate Change and North-South Divide: Between and Within

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Abstract

The traditional North-South divide has persisted through out the negotiations on climate change. Divergent state interests made striking a right balance between development and environmental protection an elusive endeavor as negotiators were striving to adopt a global climate regime. Four principles of international environmental law are of particular concern: the principle of common but differentiated responsibilities, the principle of equity, the precautionary principle, and the principle of sustainable development. With economic development being the overriding priority in developing countries, the negotiations leading to the Kyoto Protocol tend to prove that principles could be interpreted in different ways to fit particular interests. This study explains the confrontations between the North and the South and argues that climate change has by far strengthened the North-South divide both between and within. Accordingly, it concludes that there is a need to devise new principles.

Introduction

The Kyoto Protocol, which builds on the "United Nations Framework Convention on Climate Change" (FCCC) as the parent treaty, was adopted in 1997 and named after the Japanese city of Kyoto where the final negotiations took place. These two grand treaties have turned 'global warming' (see box 1) into a widely researched subject. Simply put, it refers to the observed and projected rises in the heating on the Earth surface, a fact produced by excessive concentrations of the greenhouse gases (GHG)¹ in the atmosphere, particularly the carbon dioxide (CO₂) (IPCC 1990, 1996.) Like other "so-called global environmental problems" which "are rooted in human activities taking place at local and national levels" (Kato 2001: i), the cause of the global warming was not global in the first place.

In fact, most of the adverse effects² of climate change so far recorded have their main sources in human-induced GHG emissions in the rich/developed countries (the North), whereas the poor/developing countries (the South), where resources and readily technological tools are widely unavailable, are those who have suffered and will stand to suffer even more.

Ironically, as soon as the South had begun with its industrialization in the 1980s, the time had also

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Box. 1 Greenhouse Effect and The Global Warming

Carbon dioxide as well as other chemical compounds absorb the earth's infrared radiation and trap heat close to its surface in what is called the green house effect. The increased concentrations of these gases in the atmosphere... gradually raise average global temperature... Industrialization is believed by most scientists to have drastically sped up this natural process...

Source: Extract from Porter and Brown (1996: 7)

Under normal conditions, a portion of the outgoing infrared radiation is naturally trapped by the atmosphere — and that is a good thing, because it keeps the temperature on Earth within comfortable bounds... The problem... is that this thin layer of atmosphere is being thickened by huge quantities of human-caused carbon dioxide and other greenhouse gases. And as it thickens, it traps a lot of the infrared radiation that would otherwise escape the atmosphere and continue out to the universe. As a result, the temperature of the Earth's atmosphere — and oceans — is getting dangerously warmer.

Source: Extract from Al Gore (2006: 26-7)

come, due to growing public awareness of environmental pollutions, for the global community to take appropriate actions to alleviate the impacts of the global warming. Indeed, global environmental issues became by then the third most hotly debated field side by side the international security and world economics (Porter and Brown 1996: 1). In this regard, intergovernmental negotiations under the auspices of the United Nations (UN) began in the late 1980s and the FCCC was adopted in 1992. The FCCC, however, did not include a legally binding obligation for reducing GHG and came into force in 1994. In order to establish such legal obligation, the Kyoto Protocol was signed in 1997 and eventually came into force in 2005.

While it has been globally acknowledged that climate change was caused by environmentally unsustainable industrialization in developed countries it is undeniable that GHG emissions in developing countries have rapidly grown as their economies develop. Consequently, a great tension between the original polluters (the North) and the late developers/victims (the South) could not have been avoided during the course of negotiating these two international instruments. This North-South divide³ between the rich and the poor gradually expanded as the South ardently claimed the responsibility of the North for having emitted excessive GHG into the atmosphere, causing the global warming; the South, consequently, demanded the North's responsibility to repair the atmosphere. At the same time, the South, vulnerable and unable to meet with the challenges of climate change, also demanded for compensation through the transfer of technology and financial resources assistance if it

is to ever participate in the efforts of combating climate change. Demanding that developed countries take the leading action is deeply rooted in the fact that it was they who are responsible for causing the global warming in the first place.

I. Climate Change as a Responsibility of the North

The most authoritative science of climate change is the works of the Intergovernmental Panel on Climate Change (IPCC). Jointly established in 1988 by the UN Environment Programme and the World Meteorological Organization, IPCC works are now done by more than two thousand scientists nominated by governments, international organizations as well as by non-governmental organizations.

In its 'First Assessment Report' published in 1990, IPCC argues that human activities have been leading to the rising concentrations of GHG in the atmosphere, notably the CO_2 , at a level that could not be naturally absorbed. This in turn would cause the global average temperature to rise approximately by $0.3\,^{\circ}$ C for every ten years (with the margins of \pm $0.15\,^{\circ}$ C) if the GHG emissions continue to rise as projected (IPCC 1990). The 'Second Assessment Report' published in 1996 further suggests that by the end of the twenty first century the global mean surface temperature would be $2\,^{\circ}$ C hotter. The most important finding of this second Report is its strong claim that a balance of evidence points to a discernable human influence on the global warming (IPCC 1996).

Table 1 indicates that the concentrations of three main green house gases — carbon dioxide (CO_2), methane (CH_4), and nitrous oxide (N_2O) — have rapidly increased from before the pre-industrial time to the early 1990s. Another widely cited study supports this finding, indicating a rise in the temperature of 0.7 °C from 1920 to 2000 (Hadley Center 1998). Indeed, in the early 1990s, GHG emissions in industrialized countries consisted of 82% of CO_2 , 12% of CH_4 and 4% of N_2O , and these gases contribute to the 'Radiative Forcing' in great a capacity with CO_2 accounting for 70%, CH_4 for 20% and N_2O for about 6% (Oberthür and Ott 1999: 7).

When compared with the GHG emissions in developing countries, the fact is that even as of 1995 the "[p]er capita emissions in the industrialized countries are typically as much as *ten times* the average in developing countries" (emphasis added. Grubb et al 1999: 28). All these findings clearly point to a stubborn fact: climate change has its root in human-induced industrialization in the North,

Table 1. Atmospheric Concentrations of Three main GHG

Gas	Pre-Industrial	Current (1994)	Change
CO_2	280 ppmv	358 ppmv	30%
CH_4	700 ppbv	1,721 ppbv	150%
N_2O	275 ppbv	311 ppbv (1992)	15%

Source: IPCC 1996. Notes: ppmv = parts per million by volume; ppbv = parts per billion by volume

thereby rendering the principal responsibility to fix the atmosphere to the North.

However, in the international politics, responsibility does not automatically result in commitment to repair. On the one hand, sovereign states do not quickly resume discussions on a treaty expected to render them responsible, without first bargaining for the possible least costly compliance. Chayes and Chayes (1995) correctly identify three elements governing state compliance with international law: interest, efficiency, and international norms. While interests are presumed to have been served when a state freely subscribes to an international treaty produced after long negotiations, efficiency demands that compliance be cost-effective. Moreover, whether or not to join in a treaty regime can also be intimidated by the customary law norm *pacta sunt servanda*.

On the other hand, international relations are also affected by external as well as internal political (Kenneth 1979) and trade imperatives (Copeland 1996). In the North-South complex, not only there exist unavoidable relationships between the two camps, differing interests within members of each camp further make adopting international agreements a thorny business especially when responding to climate change carries with it deep economic implications. This fact needs to be first highlighted before one can think of principles that would ever be capable of framing the climate negotiations.

II. North-South: Divergent Interests

In all the negotiations leading to Kyoto, the North included the JUSCANNZ countries (Japan, United States, Switzerland, Canada, Australia, Norway, New Zealand), the European Union (EU), Russia, and CEITs (Countries with Economies In Transition), whereas the South consisted of the Group 77 and China (G-77/China). The G-77, amounting to some 130 states, now combines nearly all the developing countries which have traditionally gathered together at any UN General Assembly since 1964. This group further breaks into several groupings such as the petroleum exporting countries (OPEC), the small island states (AOSIS), and other developing countries including Asian group, African group, and Latin American group (Gupta 2000: 33 – 8). China, due to its status as a great power and a permanent member of the UN Security Council, is not included in the G – 77 although China usually joined the G-77 as a developing country, hence the label 'G-77/China'.

Since the primary cause of global warming is the excessive concentration of CO₂, which represents roughly 50% of all the anthropogenic GHG (Hunter et al 2002: 621), any meaningful measures to alleviate global warming would obviously require stringent reductions in CO₂ emission. With estimates of the costs of controlling emissions being projected to claim as much as 3% of the gross domestic product (WRI 1996: 320–2), the industrialized North has naturally had interest in non-stringent reduction commitment.

As of 1990, of the North's total CO₂ emissions which amounted to 13.728.306 Gg CO₂, the United States alone emitted 36.1%, the EU 24.2%, Russia 17.4%, and Japan 8.5% (leaving about 13% for

other OECD and CEITs). Consequently, if the EU could enjoy playing greener than others by pledging to deep cuts as a whole, Japan and the United States kept silent on real numbers until the last possible deadline, while Russia, no longer a great industrial manufacturer/exporter, was essentially looking to sell its unused 'hot air' (see below). Before the Kyoto negotiating process took place, the United States even became more and more unsupportive of climate talks after the Republican Party had captured Congress in a landslide victory in late 1994. In Europe too, the EU had previously failed to agree on its internal major policy of so-called 'carbon taxes' (Grubb et al 1999: 44).

Likewise, the South camp was also crumbling due to its internal divergent interests. While most developing countries live on agriculture, OPEC states' economies heavily depend on revenues from oil sales and would therefore be affected if oil demand from the North decreases in the event of stringent cuts in GHG emissions. At the opposite spectrum, the AOSIS countries were not concerned with economic implications but were fundamentally worried about their very geographic survival which had been threatened by the sea level rises due to global warming; hence they would demand, against OPEC's interests, for as stringent as possible a reduction commitment from the North. China, for its part, had mixed interests: China generally needed political support from developing countries for its return to the international arena after decades of "shame and humiliation" (Li 2004: 26) while being at the same time the greatest GHG emitting country in Asia and number two in the world only behind the United States (Nielsen and McElroy 1998: 27). Thus, China could not immediately talk of reduction commitment against the North, fearing that similar commitment would fall on itself soon or later.

All these different interests made negotiating a universal climate regime a tremendously difficult task. Divergent state interests demanded that their negotiating behavior be principled in order to map out a climate regime intended to secure universal participation for the sake of the globe amid deep traditional North-South differences.

III. Analytical Tools: Principles

As climate change entails global impacts of varying scopes and scales (Al Gore 2006), it would require solutions from the global community with all states participating in the system according to their individual responsibility and capability. Consequently, the 'principle of common but differentiated responsibilities' has been the overriding principle demanding that developed countries take the lead in combating the global warming. As for most developing countries (vulnerable victims of climate change), where economic development and poverty eradication are the overriding priorities, no equitable reason seems to prevent them from reaching a certain level of industrialization just because they are late developers. This is a typical line of argument attached to the idea of justice or equity often raised by developing countries. Hence, the 'principle of equity' will also be used as an analytical

tool.

Moreover, since the science of climate change is a relatively new and continually developing field usually based on very long-time scale such as one-hundred year scenarios, the 'precautionary principle' by which inaction cannot be excused on the ground of scientific uncertainty, has served as a profound basis from the beginning. Last but not least, if developing countries could be successful in asserting their needs to advance their development path, they are not to become free rider either. This argument, often articulated by the North, provides a basis for using the 'principle of sustainable development' in the analysis.⁷

IV. The Making of the FCCC

Negotiations

In the face of the mounting public awareness of the atmospheric problems, the UN established the "Intergovernmental Negotiating Committee" (INC) in December 1990 to negotiate a convention for combating climate change, scheduled for formal signatures at the UN Conference on Environment and Development (Rio Earth Summit) in 1992.8

The North-South battle took negotiators 15 months to draft the UN Framework Convention on Climate Change. The IPCC First Assessment Report served as the scientific base of all INC sessions in this regard.

First INC Session (Geneva, Feb. 1991)

Negotiators shared view on a number of issues ranging from 'principles' to the North-South transfer of technology. They debated on the principle of common but differentiated responsibilities and the principle of equity "taking full account of the necessity for the energy consumption of developing countries to grow as their economies develop". While the 'polluter pays principle' — which means that developed countries must pay for polluting the environment — was also raised, this was short lived due to the embarrassing fact that leading members of the G — 77/China like China, India, and Brazil had also rapidly become the major polluters. In a serious attack on the North, however, it was suggested that "consumer patterns in developed countries should be changed". Negotiators also disputed over whether the convention should incorporate binding reduction commitment or leave the matter to a subsequent protocol.

Second INC session (Geneva, June 1991)

While most North countries simply shared a common position toward non-stringent GHG reduction commitment, Japan (also the United Kingdom) took a distance from the straight non-commitment stand by circulating the idea of a process called "pledge and review" which would allow countries to set their own targets with the implementation reviewable by other parties; this idea was rejected right away by at least India and China (Bodansky 1994: 65). The South, in fact, had taken a

much wider step to make their case. Surprisingly, just days before the second INC session, China organized a 'Ministerial Conference of Developing Countries on Environment and Development' in Beijing 18 – 19 June 1991 with the participation of 41 ministers. The outcome was the 'Beijing Declaration' whose terms on the North's responsibility could not have been heavier:

The FCCC currently being negotiated should clearly recognize that it is the developed countries which are mainly responsible for excessive emissions of greenhouse gases, historically and currently, and it is these developed countries which must take immediate action, with time-bound targets, to stabilize and reduce such emissions. Developing countries cannot be expected to accept any obligations in the near future... [D]eveloping countries must be provided with the full scientific, technical and financial cooperation necessary to cope with the adverse impacts of climate change (Beijing Declaration 1991, paragraph 13).

All the primary elements set out in the Beijing Declaration were incorporated in, namely the limitation and reduction of CO₂ emissions by taking into account differentiated responsibilities and capabilities of states. In addition, developing country delegates also succeeded in having provisions on the transfer of technology and financial resources compiled into the draft work.¹¹

Third INC Session (Nairobi Sept 1991)

Various proposals were made for the first time. Delegates disputed over whether or not to include provisions on "national strategies or programmes" in the convention. Furious of the possibility that such provisions would curb their national development path through internationalized norms, many developing countries argued "that it would constitute an interference in their domestic policy".¹²

Developed and developing countries also disputed over the types of commitments to take. For instance, when the South demanded that the North provide technology and financial resources and that the South's involvement be predicated on such provision, the North advanced the opposite claim holding that any provision of technology and financial recourses should be based on how well the South would implement its commitment.¹³ This counter argument was clearly meant to elude the responsibility so ardently charged by the Beijing Declaration.

On other occasions, the South raised the concept of 'right to development' to allow them to use their natural resources regardless of external interference. This concept met with fierce resistance from the North which also strongly disagreed on the inclusion of the so-called polluter pays principle. Nevertheless, the G – 77/China seemed to succeed in asserting that GHG emissions, especially the CO_2 emissions, should be stabilized by the North at the 1990s level by around the year 2000. 14

Fourth INC Session (Geneva Dec 1991)

With the "consolidated working document" before them, North-South negotiators had to engage in more productive arguments. The draft included an article to which developed countries would oppose from the first letter to the ending. "The right to development is an inalienable human right" while "Economic development is [for developing countries] the prerequisite for adopting measures to address climate change". These two phrases were a source of discontentment for industrialized countries which had actually been trying to engage the group G – 77/China in taking GHG reduction commitment. If the right to development was an inalienable right for states and economic development the prerequisite before a state would think of climate problem, developing countries would necessarily become free riders. These two worrisome assertions bogged down at the final session in New York. The United States, Saudi Arabia, and Kuwait continued to oppose to any GHG reduction commitment to the 1990 levels by the year 2000 (Chasek 2001: 129).

Fifth INC Session (New York Feb 1992)

The outcome of the fifth session, convened twice, was the final text of the Convention formally adopted and signed days later at the Rio Earth Summit in June 1992 without alterations as the 'United Nations Framework Convention on Climate Change' (FCCC). The terms 'inalienable human right' and 'prerequisite' were eliminated, to the South's pain. 'Sustainable development' and 'essential' came to take their place respectively. The South was, however, left to content itself with the Article 3.1 which later became the most referred foundation governing both the Convention and its subsequent Kyoto Protocol:

The Parties should protect the climate system for the benefit of present and future generations of humankind, on the basis of *equity* and in accordance with their *common but differentiated responsibilities* and respective capabilities. Accordingly, the developed country Parties should *take the lead* in combating climate change and the adverse effects thereof. (FCCC, Article 3.1. Emphasis added)

Analysis: FCCC and its Divisive Force

"The ultimate objective of this Convention and any related legal documents that the Conference of the Parties may adopt is to achieve... stabilization of greenhouse gas concentrations in the atmosphere at a level that would prevent dangerous anthropogenic interference with the climate system" (FCCC, Article 2).

In order to allocate commitments among member states, the FCCC distinguished countries included in 'Annex I' group which essentially refers to all developed countries (OECD and CEITs) from those included in 'Annex II' group which comprises only the OECD countries as of 1992. Developing countries belong in the so-called 'non-Annex I Parties'. ¹⁶

At the first glance it seems as if developing countries had benefited from this division in two broad ways. First, the FCCC has established a Financial Mechanism in its Article 11 by which Annex II countries (OECD) commit themselves to transferring financial resources to developing countries for covering the costs incurred in the course of preparing 'national inventory', also referred to as 'national communication' (a report on the national GHG emissions); they are also committed to

provide resources and technology for dealing with policies/measures any developing country would take to mitigate or adapt to, climate change (Article 4.3). The only one true commitment applying to developing countries is the periodical making and submission of their national communication.

Second, only developed countries have a commitment to stabilize GHG emissions to "a level that would prevent dangerous interference with the climate system" (FCCC, Article 2). Thus, developing countries could continue to emit GHG at any level they wish.

The primary victory of the South over the North under the FCCC largely rests with the Annex I parties' commitment to stabilize the GHG emissions by 2000 to the 1990s level (Art. 4.2[a] and [b]). Not bearing a reduction commitment, the South has unlimited right to emit its GHG. However, the North's commitment is not legally binding. Article 4.2 (b) reads thus "... with the aim of returning individually or jointly to their 1990 levels..." The term used here is 'aim', and not 'obligation'. Consequently, the FCCC has no provision on punishment for non-compliance.

When viewed against the 'principle of common but differentiated responsibilities' ("common responsibility" and "differentiated responsibility" are not new to international law)¹⁷ the FCCC is the first global convention which expressly endorses the principle in its full name, thereby strengthening its force as a proclaimed legal principle of international environmental law. Its implication is to take word for word: "Accordingly, the developed country parties should take the lead" (FCCC, Article 3.1), and therefore only developed countries fall under the aim of stabilizing their GHG emissions for the time being. The United States, for instance, had no problem accepting the principle but was rather asking "why" only developed countries should take the lead. According to the United States delegates, past emissions are old story and that they accepted the principle mainly because of their relatively big wealth (Grubb et 1999: 38, footnote 10), not because of their acceptance of any historical responsibility.

By incorporating this principle into the body of the text as a provision (not in the preamble), the FCCC has strengthened the legal significance of 'common but differentiated responsibilities' more than any other international instruments. This enhanced recognition establishes a firm precedent which could serve to divide the North from the South (with a bias toward the South) in discussing any other global issues in the future.

The South was primarily seeking the North's responsibility on the grounds of historical responsibility, high per capita emissions of developed countries, and the principle of equity as laid down in the Article 3.1's "on the basis of equity". As already discussed above, while it is relatively simple to claim the North's responsibility on the grounds of past (and current) emissions and the South's generally low per capita emissions, the understanding of the principle of equity, however, has proved problematic.

On the one hand, developing countries often linked equity to the so-called "right to development" for which they had even sought to give a status as an inalienable right. True, in the 1986 UN General

Assembly's 'Declaration on the Right to Development', it was proclaimed that "The right to development is an inalienable human right" (Resolution 41/128, Dec 4, 1986, Article 1). The 'Rio Declaration' in 1992 following the adoption of the FCCC further recognizes the right to development. However, this recognition requires that it "equitably meet developmental and environmental needs of present and future generations" (Rio Declaration, Principle 3). While many developing countries enthusiastically interpreted this Rio Principle 3 as establishing their right to development, the claim was bogged down by the world's largest CO₂ emitter, the United States. When signing the Rio Declaration, just after signing the FCCC, the US attached an interpretative statement expressly stating that "development is not a right" but simply "a goal". The exact meaning and scope of the right to development remain contentious.

On the other hand, while developing countries thought of the equity issue as an intragenerational equity among peoples of the present generation ("taking full account of the necessity for the energy consumption of developing countries to grow as their economies develop"), the phrase preceding the "on the basis of equity" is "The Parties should protect the climate system for the benefit of present and future generations of humankind" (FCCC, Article 3.1.Emphasis added). This Article clearly refers to the 'principle of intergenerational equity' which requires the present generation to conserve for the future generations the options for using, the quality of, and the access to, natural resources in no worse conditions than when they were received (Weiss 1988). In other words, intergenerational equity entails a deliberately sustainable use of natural resources¹⁹ as immediately stated in the same Article 3: "the Parties have a right to, and should, promote *sustainable* development" (Article 3.4.Emphasis added). Consequently, instead of establishing a 'right to development' itself, the FCCC intended to reinforce the 'principle of sustainable development', or at most, a right to sustainable development.

Another source of conflict dividing the North from the South is the Article 4.2 (a) which states: "These Parties [Annex I] may implement... policies and measures jointly with other Parties and may assist other Parties" in meeting the objective of the Convention. This provision was later known as 'Joint Implementation' (JI). Since scientifically any emission of GHG anywhere in the world into the atmosphere equally counts due to their global circulation, any reduction of them anywhere also equally counts. Therefore, JI between parties would be a cost-effective measure as them would allow GHG mitigating projects to be implemented where it is cheapest to do so, rather than strictly requiring particular parties (i. e. Annex I) to reduce GHG at home regardless of costs. Regarding the 'cost-effective' measure, Article 3.3 states:

The Parties should take precautionary measures... lack of full scientific certainty should not be used as a reason for postponing such measures, taking into account that policies and measures... should be cost-effective so as to ensure global benefits at the lowest possible cost [...]

While Parties did not place objections to the inclusion of the 'precautionary measures', or more precisely the 'precautionary principle', one cost-effective mode proposed by the North stirred up confusion. In effect, the Convention was ambiguous on whether a JI — a cost-effective measure — conducted between an Annex I party (investor) and a non-Annex I party (host) may generate some kind of 'credit' for the investor to use as if it had stabilized at home, thus helping it comply with its stabilization commitment. Under the FCCC, only Annex I countries are under a commitment to stabilize GHG emissions by 2000 to the 1990s level. As a consequence, it would be questionable whether a JI conducted between an Annex I party and a non-Annex I party could help Annex I parties comply with their commitment since allowing such mode of compliance would constitute, in the eyes of developing country negotiators, an unacceptable shift of commitment from a developed country to a developing country.

In view of all these, the four underlying principles of the FCCC do not seem to have helped unite Parties but instead seem to have revived the old and traditional political conflict between the rich and the poor over the right to use natural resources. The exact implications of the FCCC as well as its implementation started to loom as soon as delegates left Rio. As a product of 15 month-long negotiations, the FCCC did not succeed in imposing a legally binding reduction obligation on the part of developed countries, let alone a soft commitment with an aim to stabilize their GHG emissions. Developing countries merely got promises that they would receive technology and new and additional resources to help them mitigate the adverse effects of climate change at home. They had received none of these until the Kyoto Protocol. In fact, the post-FCCC period was essentially a period of continuing confrontations between the losers (Annex I) who would not want, actually would not be able, to meet the Convention's objective alone, and the winners (non-Annex I) who were expecting for new technology and financial resources while all such institutional arrangements yet needed to be negotiated from new scratches.

To be certain, the FCCC, adopted in 1992, has reinforced a set of principles and expectations to govern parts of international relations between rich and poor states after the fall of the Berlin Wall barely three years earlier. Climate change has by far become the greatest challenge facing humanity. Using global environmental protection as a tool, the South has, with the help from worldwide environmental non-governmental organizations, successfully induced the richer North to take the lead, a duty attached with a commitment to reduce GHG emissions — hence reducing overall industrial productivity as pointed out by the above-cited WRI report — and a commitment to transfer technology and monies to the poor to fight with the adverse effects of global warming.

However, the adoption of the FCCC did not guarantee durable benefits for the South. On the one hand, while the OECD comprises of developed countries which share some basic commons in their western civilization more or less based on Christianity (except Japan as of 1992) as expressed in art, history, philosophy, and technology, developing countries are too colorful a complex comprising of

"Sinic" (Chinese), Hindu, Buddhist, Islamic, Latin American, and possibly African civilizations.²⁰ This multi-civilization complex suggests the presence of differing interests too difficult to hold within a very big group as negotiations got more complicated under changing expectations and results less predictable, as witnessed in the running up to Kyoto.

On the other hand, the FCCC also left a card open for developed countries by giving the "first session" of the "Conference of the Parties" (COP 1) the authority to "review the adequacy" of their commitment (FCCC, Article 4.2[d]), thereby minimizing any strong hope that Annex I parties would be willing to fulfill their commitment since they still had another great opportunity to re-bargain at COP 1's review.

V. Post-FCCC: Broadening the Divide

The divisive force generated during the FCCC negotiations found more strength in the aftermaths. In effect, with the Convention now adopted, Parties continued to engage in further negotiations preparing for its entry into force which eventually occurred in March 1994. During the interval, the Intergovernmental Negotiating Committee had six more sessions with a focus originally on Financial Mechanism (FCCC, Article 11) and particularly on the contentious JI (ENB Vol. 12 No. 11).

While financial matters proceeded quite smoothly with the Global Environment Fund (GEF) receiving the task to govern the financial flow (GEF is also responsible for the Ozone matter), JI continued to divide North-South, being a thorny subject on which INC negotiators were never able to agree. The more boldly the United States (and other JUSCANNZ hiding behind it) tried to advocate JI,²¹ the sharper disagreement from developing countries (most visibly, China) became. The greatest conflict was whether JI should apply to all Parties (not limited to Annex I Parties alone) and, more importantly, whether it may generate 'credits' for the investor so as to be used as part of the investor's fulfillment of its commitment (ENB Vol. 12 No. 11, Grubb et al 1999: 43–7, Oberthür and Ott 1999: 43–5). Under the principle of common but differentiated responsibilities, for instance, the South found every good reason to quash any attempt to include commitment for it at the stage when the North should take the lead.

The line of division partly owed to the ambiguous provision of the FCCC itself. Article 4.7 states:

The extent to which developing country Parties will effectively implement their commitments under the Convention will *depend on* the effective implementation by developed country Parties of their commitments under the Convention related to financial resources and transfer of technology... (Emphasis added).

The term "depend on" sufficed to cause division of thoughts. The North could interpret it as meaning that the South must do whatever necessary whenever the North provides monies and technology to do so ('depend on the North'). Developing countries would defend the opposite claim, that the South has no obligation to act and would act only if it judged fit after receiving resources and technology ('depend on the South'). Soon after the Convention came into force in March 1994, this dividing line got more agitating. At the tenth INC session, the United States (North) apparently tried to interpret that technology transferred via JI would constitute fulfillment of the Annex II's obligation (as discussed above, Annex II parties have such obligation). In a counter strike, China (South) retorted that "JI should not be confused with technology transfer" (ECO 29 August, 1994).

The entry into force of the Convention caused more frustration on the question of whether or not to recognize the commitment of the Annex I Parties as 'inadequate' to meet the Convention's objective. This was because Annex I Parties were already failing to fulfill their commitments and, therefore, looking for ways to not only get rid of those commitments but essentially to involve developing countries (ENB Vol. 12 No. 11). The time left before COP 1 took place in March-April 1995 was very short with only two more INC sessions scheduled for two great issues: JI and review of adequacy of Annex I countries' commitment.

As for JI, the divisive line of arguments was derived from fears (Kato 2006: 3):

They feared that, 1) Once they accept the notion of joint implementation, they may be drawn willy-nilly into accepting what eventually amounts to imposing some kind of emission reduction obligations on their own emissions, which was expected to grow rapidly over the next 20 to 30 years and was projected to reach more than half of the world's total GHG emissions by 2020 – 2025: 2) Since the investor (Annex I) country would be able to pick and choose the most cost-effective emission reduction projects involving readily available technologies, when the time comes for the developing countries also to undertake some form of emission reduction obligations of their own, they would be left with little choice but to implement domestic measures at a much higher cost involving the use of more advanced, high-cost technologies (i. e. the problem of picking a "low-hanging fruit" or "cream skimming" by the developed countries); and 3) Because of a big gap in negotiating power and technological capacity between the developed and developing countries, certain types of projects with less advanced or now obsolete technologies might be effectively forced upon developing countries along with an offer (or at a threat of reduction or withdrawal) of official development assistance (ODA), thus leading to a form of neo-colonialism or the so-called "carbon colonialism".

JI and the review of adequacy were sure to bring hardness on the last two sessions of INC — INC – 10 and INC – 11 — indeed one of the critical times in North-South relations after the end of the Cold War. While major developing countries such as China and India were trying hard to demand that developed countries first fulfill their existing commitments before talking of 'new' commitments

(mainly because they both feared that new commitments would eventually involve them given their rapidly growing GHG emissions),²² the smaller island states (AOSIS) surprised their leading allies by submitting to the tenth INC session a concrete proposal for a 'protocol' demanding 'new' commitments for Annex I parties to reduce at least 20% of CO₂ to the 1990 level by the year 2005.²³ This break within the coalition G-77/China could be treated as a sign of trouble in the South camp.

At the North camp, while the United States kept refusing to even refer to the term 'protocol' or 'commitment' and would only talk of 'process' and 'new aim' (essentially, a non-binding aim as in the case of the FCCC), Germany (the scheduled host of COP 1) introduced its "elements paper" along with the AOSIS proposal by — though with a provision that would require advanced developing countries to limit the rise of their emissions — strongly calling on Annex I Parties to take on concrete GHG reductions (ENB Vol. 12 No. 11). Thus, the North camp, too, came to witness a break apart. It should be noted that Germany was largely perceived as the only EU country that could easily play green pledging for deeper cuts than did other major EU members because of its huge energy conservation earned from the refinement of the former eastern Germany's industrial structure.

In view of these proposals by AOSIS and Germany, the tenth INC session not only broadened the traditional North-South divide but also brought it to another stage of a two-fold divide: between and within. At the eleventh INC session this doubled divide grew more destructive challenging the G – 77/China coalition. Evidently, in an act widely disagreeable to the AOSIS, the growing GHG emitter China, fearing that new commitment would require more Chinese role, "vigorously attacked" the findings of the IPCC at INC – 11 and warned that governments could not make decisions based on scientific uncertainty (Chayes and Kim 1998: 524).

Eventually, the first 'Conference of the Parties' (COP 1) whose primary task was to review the adequacy of Annex I Parties, recognized that the existing commitments of Annex I Parties are not adequate, but with an assurance that no new commitment would be introduced to developing countries. Important is to note that agreements at COP 1 were only forged after the G – 77/China deliberately dropped OPEC countries out in order to gain support from the EU (ENB Vol. 12 No. 21). This further enhances the idea of the divide within.

Decisions of COP 1, widely known as the "Berlin Mandate", set off for a new process and a new "Ad hoc Group on the Berlin Mandate" (AGBM) to negotiate a "protocol or another legal instrument" with binding "quantified limitation and reduction objectives" (QELROs) for reducing Annex I GHG emissions. This new process gave birth to the Kyoto Protocol adopted at COP 3 in December 1997. COP 1 also decided on the JI issue by establishing the pilot phase for "Activities Implemented Jointly" (AIJ), mainly open to Annex I Parties although non-Annex I parties could participate on a voluntary basis, and no credits should result thereof.

VI. Kyoto Protocol

Negotiations²⁴

It took AGBM eight sessions over two and a half years before a final draft of a protocol was agreed. During the first two sessions of AGBM the United States and OPEC were mainly trying to delay the process by insisting on the need for more "analysis and assessment" to study the impacts of Policies and Measures (PAM), especially after the EU proposed at AGBM-2 three lengthy annexes on PAM. No serious talk about targets and timetables took place yet. At AGBM - 3, Parties poured in disputes over the findings of the IPCC Second Assessment Report, in particular on the IPCC's assertion that there is a discernable human influence on global warming (IPCC 1996).

The pace changed, however, from AGBM – 4 when the United States declared it would support binding targets and timetables (QELROs) for reducing GHG emissions, mainly with an anticipation of the introduction of market-based emissions trading into the Protocol being negotiated. AGBM – 4 received a great attention as the session took place together with the second session of COP (COP 2). The outcome of COP 2, so-called "Geneva Ministerial Declaration", acknowledged the support for legally binding QELROs. In an almost comic scene, delegates had to keep applauding aloud in order to ignore the opposition raised by some oil exporting countries representatives. This method earned anger over the non-transparency associated with the adoption of the Declaration. Nevertheless, AGBM–5 instituted a framework to compile formal proposals. Only at AGBM–6 did the EU finally put its proposal on the table, calling for 15% cut by the year 2010 of a basket combining carbon dioxide, methane, and nitrous oxide.

Already at AGBM-7, the JUSCANNZ group was still unsure of the whole, submitting no proposal. Japan, due to its status as the scheduled host of the coming COP 3, had to take the lead by proposing at AGBM - 8 a thin cut of only 5% (until 2010) of all the three gases combined. This was a tactical response to the G - 77/China's proposal submitted earlier, which called for a gas-by-gas reduction of 7.5% by 2005, 15% by 2010 and 35% by 2020 for carbon dioxide, methane, and nitrous oxide respectively. Thus, the South preferred a gas-by-gas approach to the North's combined basket. From Washington via TV screen, President Clinton finally announced the US proposal for a reduction of a combined basket of six, instead of three, gases: CO₂, CH₄, N₂O, HFCs, PFCs, and SF₆, and for the period 2008-2012, instead of a specific year as proposed by others. The most contentious statement of his speech was that the United States would not honor such commitment unless key developing nations "meaningfully participate" in the efforts (ENB Vol. 12 No. 66). However, COP 3 in December 1997 adopted the Kyoto Protocol which imposes GHG reduction targets only on Annex I parties using the combined basket of all the six gases as proposed by the United States for the first commitment period 2008-2012. Under the Kyoto Protocol, developing countries are not under such commitment.²⁵ The United States signed the Protocol but, as soon as the Bush administration took power, declared it

would not honor its Kyoto commitment and has not ratified the text.26

Analysis: "Kyoto Surprise": North-South Cooperation via CDM

The Precautionary Principle, by which inaction is not excusable given the disastrous adverse effects of global warming, went through climate negotiations successfully producing two instruments with an almost universal participation of states — the FCCC and the Kyoto Protocol — despite scientific uncertainties. The Protocol resolved the JI issue by finally limiting its application to Annex I Parties (Protocol, Article 6). Recall that JI was a cost-effective measure emanating from the Precautionary Principle as stipulated in the FCCC Article 3.3 (see above). By means of this principle, the attack by Chinese delegates on the IPCC's findings at INC–11, though *scientifically* legitimate, was to no avail. However, as environmental science is by definition uncertain due to the imperfect understanding of the relationship between man and nature, the attack by China (*the* leading country of the South) should be viewed from a *political* point of view: China (the South) was essentially afraid of a moral pressure for its taking action (in detriment to its growing economy). True to this thesis, China definitely gave up its fight at COP 1 (only a few weeks after INC – 11) in anticipating that the agreements at COP 1 (Berlin Mandate) would guarantee that no new commitment would be added to developing countries.

The Principle of Equity which usually refers to justice or fairness (Sands 2003: 152) has resulted in a Protocol that essentially relaxes developing countries by imposing legally binding GHG reductions only on developed countries with an overall cut of 5% below the base year 1990 level.

The Protocol also applied the Principle of Common but Differentiated Responsibilities to adopt the 'Annex B' which specifies differentiated reduction targets in numbers for each developed country Party. For instance, while New Zealand, Russian Federation and Ukraine do not have to take on any cut during the first 'commitment period 2008 – 2012' (with their target being set to 100), Japan must reduce 6% and the United States 7% from 1990 level²⁷ (targets set to 94 and 93 respectively). All the fifteen members of the European Union must each reduce 8%. In the contrary, Australia and Iceland can emit up to 8% and 10% above their 1990 emissions (targets set to 108 and 110 respectively). Thus, the division within the North became a legal obligation under the Protocol. The South, however, does not suffer from such division as developing countries only share one real obligation since the FCCC: making and submitting their national communication.

Another crucial factor that has further divided the North camp is the so-called 'bubble' allowed under the Article 4 of the Protocol. This Article allows Annex I members of a "regional economic integration organization" to re-arrange targets among its member states. So far only the EU is qualified under this bubbling. Accordingly, the EU Council adopted an internal re-distribution in 1998 by, for instance, demanding that the United Kingdom reduce 12.5% below its 1990 level while allowing Spain to emit up to 15% above 1990 (Doc. 9702/98, 16/17 June 1998). The North American Free Trade

Agreement (NAFTA) is disqualified due to Mexico not being a member of the Annex I. This has definitely given a comparable advantage for the EU over the United States and has been severely criticized (Kato 2006: 2—3):

[The bubble concept] was severely criticized by many Annex I countries other than the member countries of the European Union, because the "bubble" would apply only to regionally integrated organizations like the European Union (hence, it came to be known later as the "EU bubble"), and criticized as being unfair to the other Annex I Parties.

The Protocol further allows any Annex I Party to sell its unused assigned amount ('hot air') to any other Annex I Party (Protocol, Article 17 "Emissions Trading", ET). For instance, the Russian Federation could benefit from selling its hot air. This is because since the collapse of the Soviet bloc, the net economies of the Russian Federation have significantly dropped, making a huge difference between the current (until 2012) economy and the economy back in 1990. It was projected that Russian emissions in 2010 will be likely 15% below the 1990 level. Therefore, by allowing Russia to emit as much as it did in 1990 during the 2008–2012 period Russia will be able to sell its unused 15% of 'hot air' (Oberthür and Ott 1999: 198). All these mechanisms — JI, Bubbling, and ET — apply only to Annex I Parties.

The North-South divide persists. To be sure of, the Principle of Sustainable Development supported the birth of a brain new mechanism: "Clean Development Mechanism" (CDM, Protocol Article 12). Unlike JI and ET which had been contested over during INC and AGBM sessions before making their way to the Kyoto text, a provision on CDM only appeared on the negotiating text in the second week at Kyoto meeting. Surprisingly, the Article 12 on CDM is more elaborated (10 items) than those on JI (4 items) and ET (single item). The most significant characteristic of CDM is its being the only mechanism that allows Annex I Parties to get credit from GHG mitigating projects done in non-Annex I countries, something that developing countries had adamantly opposed to in the past because it would allow developed countries to easily meet their commitment by implementing least costly projects in developing countries (Kato 2006: 3). It is, in fact, JI in disguise. Regarding CDM, Article 12.2 states:

2. The purpose of the clean development mechanism shall be to assist Parties not included in Annex I [developing countries] in achieving *sustainable development* and in contributing to the ultimate objective of the Convention, and to assist Parties included in Annex I in achieving compliance with their quantified emission limitation and reduction commitments... (Emphasis added.)

Thus, 'sustainable development' is a condition for all CDM projects.²⁸ However, CDM has potential to cause divisions within the South. The reason is simple: Developing countries decide for

themselves the criteria of what to constitute 'sustainability' (FCCC/CP/2001/13/Add. 2, p. 20). Divergent state interests and other elements such as geographical, cultural, socio-economic conditions etc. all amount to different levels of attractiveness to investors. By giving the authority to decide on what constitutes sustainability to individual states, the principle could be well manipulated.²⁹ So far, CDM has been a subject of complaints from unattractive developing countries over the uneven distribution of projects. Fig. 1 shows that the poorest continent Africa is hosting only 5 projects out of 334 registered, whereas Asia/Pacific, and Latin America/the Caribbean each hosts more that 150 projects. This uneven distribution necessarily constitutes substantial divisions within the South.

The "Kyoto Surprise", as CDM has been called (Grubb et 1999: 101), has to some extent helped relax the North-South tension, a relaxation expressed in the growing number of projects annually (Ellis 2006). The popularity of CDM has brought many Annex I Parties to come to look for opportunities in non-Annex I countries, thereby generally increasing the frequency of international cooperation in the broadest sense. However, as shown in section V above, the "fears" persist and could intensify international relations in the future especially when, after most low-price CDM projects are used up, the time comes for developing countries to bear some GHG reduction commitment at higher costs.

Registered projects by region. Total 334

LAC (47.60%)

ASP(49.4%)

AFR (1.50%)
Other (1.50%)

Fig. 1 CDM Projects Distribution

Region	Number of Projects
Africa	5
Asia and the Pacific	165
Others	5
Latin America and the Caribbean	159

Source: http://cdm.unfccc.int/Statistics/Registration/RegisteredProjByRegionPieChart.html

Conclusion

That great efforts in bringing the FCCC and especially the Kyoto Protocol into existence are worth praising is beyond doubt. "[T]he Kyoto Protocol may prove to be the most profound and important global agreement of the late twentieth century" and "one of the defining achievements of international diplomacy" (Grubb et al 1999: xxxiii, 277). It should be so, given divergent state interests not only between but also within North and South. With the universal adverse effects of

climate change so much studied, and feared, inaction will not be an option.

However, the traditional North-South divide has also presented itself as an inseparable shadow of the past. Although it is relatively easy to blame the North for past emissions, it would also be difficult to ignore the ever growing emissions from key South states like China, India, and Brazil (Porter and Brown 1996: 92 – 6). Recently, while major economies of the North have significantly declined — i. e. Japan's sales went down from 12530 US\$ million in 2003 to 2833 US\$ million in 2005 — the South has been enjoying increased sales with i. e. China increasing sales from 4856 US\$ million in 2003 to 13720 US\$ million in 2005 (JETRO 2006: 5). Thus, asking the South to take on GHG reduction commitment would not immediately receive a positive response.

International environmental lawyers have devised principles to govern state behavior, four of which have been used in the article: principle of common but differentiated responsibilities, principle of equity, precautionary principle, and principle of sustainable development. Divergent state interests have, however, meant that these principles were interpreted in ways that best fit interests. As far as the climate change regime is concerned, these principles have been used by states to protect and maximize their capabilities and there is no sign that gray governments would become self-environmental in the foreseeable future.

With the negotiations concerning the subsequent commitment period currently taking place, principal concerns are still on how to engage developing countries when the present first commitment period ends in 2012. By contrast, many key developing nations such as China and India have made very clear that they would not agree to take on any GHG reduction commitment in the near future and, in fact, have even demanded for deeper cuts from the part of the North in the second commitment period (ideally expected to begin in 2013).30 Under the current climate change regime where developed countries are obligated to take the lead, their failure to meet the Kyoto targets will have disastrous effects on trust-building with the South. Recent reports have indicated that the EU, as the leading group of the North, seems already unlikely to meet its reduction targets (JIKO 2006). If the North is unable to fulfill its promises, the South would not likely compromise its right to emit CO2 and the worst outcome might be the abandon of the entire climate regime so difficultly negotiated. Within this intense context, further studies should consider two paths. First, unless new principles are devised to ethically address state interests, any hope that future negotiations on climate change would be less divisive either between or within the North-South complex could only be minuscule. Secondly, more efforts should also be focused on building principles empowering citizens to more effectively push their governments to become greener.

Notes

1 GHG in this paper refer to those not controlled under the Montreal Protocol (Ozone layer). GHG under the

- current Kyoto Protocol are: Carbon dioxide (CO₂), Methane (CH₄), Nitrous oxide (N₂O), Hydrofluorocarbons (HFCs), Perfluorocarbons (PFCs), and Sulfur hexafluoride (SF₆).
- 2 For a quick and non-technical elaboration on various adverse effects of climate change around the world, see Al Gore (2006).
- 3 During the Cold War, the terms used were West (American bloc) and East (Soviet bloc), whereas Developing Countries often declared to be non-aligned. After the Soviet collapsed, most countries of the former East bloc (currently known as CEITs) became part of the developed countries but some joint the developing countries group (see the complete list of countries in Gupta 2000: 35–7). In this paper, 'North-South' broadly refers to 'Developed-Developing'.
- 4 IPCC has three working groups. 'Working Group I' researches on the science of climate change, Working Group II is responsible for making scientific-technical analyses of impacts, adaptations and mitigation of climate change, and Working Group III analyses the economic and social dimensions of climate change. For an authoritative discussion on the history of IPCC, refer to Shardul Agrawala (1998).
- 5 Gupta (2000) also lists a 'Non-G-77' group, but this group did not seem to have a representative voice or negotiating position and has not been referred to as a separate group in the UN official reports of INC sessions.
- 6 Own calculations for EU based on FCCC/CP/1997/7/Add. 1, p. 60 ("Total carbon dioxide emissions of Annex I Parties in 1990 for the purpose of Article 25 of the Kyoto Protocol"). OECD in this paper refers to the Annex II of the FCCC.
- 7 For a quick review of these principles, see Hunter et al (2002: 371–438).
- 8 UN General Assembly's Resolution 45/212, 21 December 1990.
- 9 See A/AC. 237/6, p. 14.
- 10 Ibid at 12.
- 11 See A/AC. 237/9.
- 12 See A/AC. 237/12, p. 19.
- 13 Ibid.
- 14 See A/AC. 237/12, p. 18.
- 15 See A/AC. 237/15, p. 27.
- 16 This term 'non-Annex I' has been commonly used in the literature for convenience and is not a legal term used in the FCCC. Note also that 'non-Annex I' does not mean 'Annex II'. Actually, all countries listed in Annex II (OECD) are also listed in Annex I (OECD plus most CEITs). See Gupta 2000: 35–7 for more.
- 17 For a separate usage of these two attributes, see Sands (2003: 286-9).
- 18 "The United States cannot agree to, and would disassociate itself from, any interpretation of principle 3 that accepts a "right to development"... Development is not a right. On the contrary, development is a goal..." (cited in Hunter et 2002: 388-9).
- 19 'Sustainable' sometimes includes elements such as rationale, wisdom, soundness or even appropriateness. For a list of international instruments referring to these terms, see Sands (2003: 260–1).
- 20 This is principally based on the list devised by Huntington (1997). For a concise elaboration on different civilizations and their impacts on the world politics, see his work p. 40–56.
- 21 The US tried really hard to persuade developing countries saying that JI will bring in a significant transfer of technology and resources through foreign investments (See A/AC. 237/Misc. 33).
- 22 Details on the tenth and eleventh (and all the previous) sessions of the INC could be obtained at www.unfccc.org
- 23 See A/AC. 237/Misc. 36.
- 24 For a detailed coverage of AGBM-1, 2, 3, 4, 5, 6, 7, and 8, see ENB Vol. 12 No. 22 (1995), No. 24 (1995), No. 27 (1996), No. 38 (1996), No. 39 (1996), No. 45 (1997), No. 55 (1997), and No. 66 (1997) respectively.
- 25 For a concise coverage of the negotiations at Kyoto meeting, see Oberthür and Ott (1999: 77–91) and ENB Vol. 12 No. 76 (1997).
- 26 The Clinton administration signed the Protocol but did not forward it to the Senate, knowing that it would be bogged down there by the Republican-controlled Senate. Recently, however, mid-terms Congress elections in

- November 2006 gave the control to Democrats. It remains to be seen whether this change in Congress would lead to an eventual return to the Protocol regime. Note that in the United States, the Senate has the final word on the ratification of treaties.
- 27 The current Bush Administration has not ratified the Protocol; it dropped it out in 2001. The United States is therefore no longer bound by this reduction obligation. Note that Australia is the only other industrialized country that has not ratified the Protocol.
- 28 There are two more conditions for CDM which also apply to JI: 'additionality' and 'supplementarity'. However, discussion on these conditions falls outside the scope of this paper. See Kato (2006) for a quick history as well as the current situation of, and criticism on, CDM.
- 29 For criticisms from non-governmental organizations on CDM in practice, see e. g. Pearson Ben "The Clean Development Mechanism and Sustainable Development", *Tiempo Climate Newswatch*, at <www.tiempocyberclimate/newswatch/> as of July 2006.
- 30 FCCC/KP/AWG/2006/MISC. 1 (Paper No. 3 on China; Paper No. 6 on India).

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- -UN General Assembly's Resolution 45/212, 21 December 1990.
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