Reaching a Climate Agreement: Beyond the Copenhagen Accord

Gautam Dutt

This article synthesises the pledges made by both industrialised and developing countries, following the Copenhagen Accord, and their implications for stabilising the earth’s climate as well as for the future course of the negotiations. This discussion briefly mentions the issues involved in different greenhouse gases and their measurement, and focuses on the important objective of the need to have an agreement without contradictions. This remains a major omission in the debate on climate change.

When Dutt (2009) was written two months before the United Nations climate conference at Copenhagen (UNFCCC 2009), I was not optimistic about the outcome of the conference, and suggested some ways of an equitable arrangement.

The conference duly took place in mid-December, heavily attended, but chaotic and without any legally binding agreement to set the course for mitigating and adapting to climate change. Much has been written about the Copenhagen conference, mostly negative, so this paper is not meant to be another post-mortem, but rather to understand the outcome of the conference and to point the way forward.

Of the four major goals I meekly proposed in that article, one has been amply met. It had been argued in Dutt (2009) that total world emissions of greenhouse gases (GHGs) need to decrease soon, and fall sharply thereafter, if we are to avoid disastrous and irreversible climate change. I proposed that advanced developing countries take on commitments to limit their future emissions of GHGs. India and other emerging economies have all taken a strong proactive position in mitigating climate change and limiting future emissions.

Recognising differences in the accuracy of GHG emissions accounting, it was also proposed that separate agreements on energy-related carbon dioxide (CO₂) emissions, forestry, agriculture, and fluorinated gases be drawn up. This second goal was partially met at the conference. Reducing deforestation from forest degradation, called REDD, was treated separately, and a number of industrialised countries assigned substantial funds to support these activities in developing countries (UNFCCC 2009). The two countries responsible for the bulk of deforestation, Brazil and Indonesia, made strong statements to reduce deforestation in their respective countries. India’s commitment on limiting future emissions specifically excludes agriculture, leaving agriculture open to future negotiations. China’s commitments are limited to CO₂ emissions.

A third more ambitious goal was based on the contraction and convergence principle (GCI 2007). Countries with high per capita emissions, those with high emissions per GDP or high emissions per human development index (HDI), should reduce their emissions more than those whose economies are already more emissions efficient. While this third goal was not entirely met, both India and China expressed their future emissions in terms of emissions per unit of GDP, i.e., declaring a goal to make their economies more emissions efficient. My third goal was explained in detail in the previous paper, and will not be discussed further, except to note that historical emissions cannot be the basis for emissions in the longer term.

My fourth goal was to spell out an agreement that avoided contradictions with existing agreements, specifically the Kyoto Protocol (KP). As far as I can tell, there were no discussions either at the conference or at the numerous conference post-mortems on this issue.

Let us first look at the Copenhagen Accord (2009). This document was drafted by a handful of countries. It was not agreed on by the United Nations Framework Convention on Climate Change (UNFCCC) plenary of 192+ parties, which merely “noted it”. It is therefore not legally binding.

The key provisions of the Copenhagen Accord are (as summarised by Müller 2010):

- a recognition of the objective to reduce global emissions in order to hold the increase in global temperature below 2 degrees Celsius, and a commitment to take action to meet this objective consistent with science and on the basis of equity;
- the commitment by developed countries — Annex I parties to the convention — to implement individually or jointly the quantified economy-wide emissions targets for 2020, to be submitted to the UNFCCC for inclusion in the first of the Appendices by 31 January 2010;
- the fact that developing countries — non-Annex I parties to the convention — will

Gautam Dutt (gdutt@mgminnova.com) is with MGM Innova, a company involved in developing climate change mitigation projects.
implement mitigation actions, including those to be submitted to the UNFCCC for inclusion in the second of the Appendices by 31 January 2010;

- collective commitments by developed countries to (i) provide new and additional quick start resources, approaching $30 billion for the period 2010-12, and (ii) jointly mobilise $100 billion per annum by 2020;
- the establishment of (i) a High Level Panel to study the contribution of the potential sources of revenue, including alternative sources of finance, towards meeting this goal, (ii) a Copenhagen Green Climate Fund as an operating entity of the financial mechanism of the Convention, and (iii) a Technology Mechanism to accelerate technology development and transfer.

Parties that accepted the Accord could inform the UNFCCC, and also submit their pledges as indicated in the Accord. Here is the status, as of 16 February (Copenhagen Accord 2010):

- All Annex 1 parties, except Ukraine, have submitted their pledges.
- Fifteen developing countries, or non-Annex 1 countries (NACs) pledged future emissions limitations.
- Another 14 NACs only submitted a list of so-called Nationally Appropriate Mitigation Actions (NAMAS), without quantitative commitments on total emissions.
- Another 29 NACs supported the accord, but with no pledges or NAMAS.
- Three NACs (Ecuador, Nauru, and Uruguay) declared that they did not support the Copenhagen Accord, since it did not adhere to the principles of the UNFCCC.

It should be noted that, although many countries did not submit any letter of support nor any commitments under the accord, those that did make up most of the world’s GHG emissions. This is reason to be optimistic about the outcome of the conference.

In this article I synthesise the pledges made by both industrialised and developing countries, following the Copenhagen Accord, and their implications both for stabilising the earth’s climate as well as for the future course of the negotiations. This discussion will only briefly mention the issues involved in different GHGs and their measurement, since they were discussed in detail in my previous paper. Most of the article will focus on the important objective of having an agreement without contradictions, since this issue remains a major omission in the debate on climate change.

There were many other issues discussed at Copenhagen, including the resources to be allocated by industrialised countries to support adaptation to climate change, especially in the most vulnerable countries. These issues, though important, are not discussed here.

Pledges to Reduce and Limit Future Emissions

In the months before the Copenhagen conference, most industrialised countries (or Annex 1 countries, as defined by the UNFCCC) made pledges to reduce their future emissions. These pledges were largely confirmed in early 2010, as inputs to the Copenhagen Accord. They are summarised in Table 1.

Table 1: Emissions Reduction Pledged by Annex 1 Parties Following the Copenhagen Accord

<table>
<thead>
<tr>
<th>Party</th>
<th>2020 (%)</th>
<th>Reference Year</th>
</tr>
</thead>
<tbody>
<tr>
<td>Australia</td>
<td>5 to 15</td>
<td>2000</td>
</tr>
<tr>
<td>Belarus</td>
<td>5 to 10</td>
<td>1990</td>
</tr>
<tr>
<td>Canada</td>
<td>17</td>
<td>2005</td>
</tr>
<tr>
<td>Croatia</td>
<td>5</td>
<td>1990</td>
</tr>
<tr>
<td>EU-27</td>
<td>1990</td>
<td></td>
</tr>
<tr>
<td>Iceland</td>
<td>15 to 30</td>
<td>1990</td>
</tr>
<tr>
<td>Japan</td>
<td>25</td>
<td>1990</td>
</tr>
<tr>
<td>Kazakhstan</td>
<td>15</td>
<td>1992</td>
</tr>
<tr>
<td>Liechtenstein</td>
<td>20 to 30</td>
<td>1990</td>
</tr>
<tr>
<td>Monaco</td>
<td>10</td>
<td>1990</td>
</tr>
<tr>
<td>New Zealand</td>
<td>10 to 20</td>
<td>1990</td>
</tr>
<tr>
<td>Norway</td>
<td>30 to 40</td>
<td>1990</td>
</tr>
<tr>
<td>Russia</td>
<td>15 to 25</td>
<td>1990</td>
</tr>
<tr>
<td>Switzerland</td>
<td>20-30</td>
<td>1990</td>
</tr>
</tbody>
</table>

Most “Parties” to the UNFCCC are countries. The main exception is the European Union. The term “parties” and “countries” are used here somewhat loosely.

The lower values in Table 1 correspond to what parties are willing to do unilaterally, while the upper end represents what each could do, provided there was a broad agreement involving other parties. Thus Australia pledges to reduce its 2020 emissions by 5% compared to its 2000 emissions, but could pledge as much as 15% if other countries committed to legally binding emissions reductions or limits. Note that Croatia pledges limiting its 2020 emissions to a value no larger than 5% above its 1990 emissions, i.e., a slight increase.

Missing from this list are the United States (US) and Ukraine. The US expressed its pledge as a series of commitments for different future years (Table 2).

<table>
<thead>
<tr>
<th>Year</th>
<th>Emissions Reduction (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2020</td>
<td>17</td>
</tr>
<tr>
<td>2025</td>
<td>30</td>
</tr>
<tr>
<td>2030</td>
<td>42</td>
</tr>
<tr>
<td>2050</td>
<td>83</td>
</tr>
</tbody>
</table>

Ukraine had also made pledges prior to the Copenhagen conference, offering to reduce its 2020 emissions by at least 20% compared to 1990 levels. As of this writing (April 2010), it has not submitted a formal letter to the UNFCCC confirming the pledge.

Before discussing the developing countries, let us consider Taiwan. The country is not a member of the United Nations. It made the following commitments: to stabilise CO2 emissions at 2008 levels by 2016-20, reduce CO2 emissions to the 2000-level by 2025 and to further reduce that amount by 50% by 2050 (Tchii and Wang 2009).

As with the industrialised countries, a number of developing countries also made pledges to reduce their emissions through their own actions, in the months and days before the Copenhagen meeting (Pre-cph 2009). These pledges were expressed in five ways:

1. Maintain carbon neutrality: Bhutan,
2. Carbon neutrality by 2020 (Maldives) or 2021 (Costa Rica),
3. Emissions reduction (ER) in 2020 (or other year) with respect to a base year (as do Annex 1 parties):
   - Marshall Islands, Moldova and Papua New Guinea,
   - business-as-usual (BAU): Emissions reduction in 2020 (or other year) with respect to a BAU scenario: Brazil, Indonesia, Israel, Korea, Mexico, Singapore, South Africa,
   - GDP: Reduction in emissions intensity (emissions per unit GDP) in 2020 with respect to 2005: China and India.

ER is straightforward, meaning a reduction in emissions with respect to past levels. Pledges based on BAU and GDP were explained in Dutt (2009). Carbon neutrality means reaching a point where the net emissions of GHGs are zero, i.e., emissions are compensated by sinks — growing trees that absorb CO2 from the atmosphere. Two countries proposed to achieve this goal in about 10 years. It is noteworthy that Bhutan’s sinks exceed its emissions, so that their net emissions are currently negative.
Their pledge is to maintain their emissions below their sinks.

These pledges were largely confirmed following the Copenhagen meeting through official letters. The post-conference pledges are summarised in Table 3.

Table 3: Non-Annex I Pledges to Limit Future Emissions

<table>
<thead>
<tr>
<th>Country</th>
<th>ER/BAU/GDP</th>
<th>Base Year</th>
<th>Reduction Goal Year</th>
<th>Goal Year (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Brazil</td>
<td>BAU</td>
<td>2005</td>
<td>36.1-38.9</td>
<td>2020</td>
</tr>
<tr>
<td>Bhutan</td>
<td>Maintain carbon neutrality</td>
<td>2005</td>
<td>40-45</td>
<td>2020</td>
</tr>
<tr>
<td>China</td>
<td>GDP</td>
<td>2005</td>
<td>40-45</td>
<td>2020</td>
</tr>
<tr>
<td>Costa Rica</td>
<td>Carbon neutrality</td>
<td>2021</td>
<td></td>
<td></td>
</tr>
<tr>
<td>India</td>
<td>GDP</td>
<td>2005</td>
<td>20-25</td>
<td>2020</td>
</tr>
<tr>
<td>Indonesia</td>
<td>BAU</td>
<td>2005</td>
<td>26</td>
<td>2020</td>
</tr>
<tr>
<td>Israel</td>
<td>BAU</td>
<td>20</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Korea (South)</td>
<td>BAU</td>
<td>2005</td>
<td>30</td>
<td>2020</td>
</tr>
<tr>
<td>Maldives</td>
<td>Carbon neutrality</td>
<td>2020</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Marshall Islands</td>
<td>ER</td>
<td>2009</td>
<td>40</td>
<td>2020</td>
</tr>
<tr>
<td>Mexico</td>
<td>BAU</td>
<td>Not spec</td>
<td>30</td>
<td>2020</td>
</tr>
<tr>
<td>Moldova</td>
<td>ER</td>
<td>1990</td>
<td>25</td>
<td>2020</td>
</tr>
<tr>
<td>Papua/New Guinea</td>
<td>ER</td>
<td>50</td>
<td>2030</td>
<td></td>
</tr>
<tr>
<td>Singapore</td>
<td>BAU</td>
<td>NS</td>
<td>16</td>
<td>2020</td>
</tr>
<tr>
<td>South Africa</td>
<td>BAU</td>
<td>NS</td>
<td>34</td>
<td>2020</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>42</td>
<td>2025</td>
</tr>
</tbody>
</table>

A note on the Indian pledge. In a speech to the Lok Sabha on 3 December 2009, Union Minister of State for Environment and Forests, Jairam Ramesh stated the following:

Based on the exercises that the Mid-Term Appraisal in the 11th Five-Year Plan, if the emission intensity has declined by 17.06% between 1990 and 2005, the Planning Commission has concluded that we can have a 20 to 25% reduction in emission intensity between 2005 and 2020.

What is wrong with this statement?

(1) India’s commitment to limit future emissions is basically its BAU scenario, as indicated by the minister’s own speech. This implies that India was not willing to take any extra steps to reduce emissions at all, beyond that which would happen anyway. Clearly this is not an ambitious target considering what countries are asking others to do to combat climate change. Nevertheless it can be seen as a starting point of a negotiation process. For instance, India could presumably reduce its emissions more than this, provided it receives financial and other support to do so. (2) The other thing wrong about the statement is the date when it was made. The Copenhagen climate conference started on 7 December. Surely, making the official position public four days before the conference sounds more like cramming before the examination, instead of studying for it, since the Bali conference at the end of 2007?

Lest we feel that only India waited till the last moment, look at Table 4. Except for Mexico and Indonesia, all major developing countries made announcements in mid-November or later, i.e., with less than three weeks to go before the conference. And only 11 developing countries made any pledge at all, before the conference. At summit meetings, the text of any accord is negotiated months in advance, leaving mostly the signature for the actual meeting. No wonder then that nothing was agreed: there was nothing to agree on!

Table 4: Announcement Dates of Emissions Limit Pledges by Developing Countries, Prior to the Copenhagen Conference

<table>
<thead>
<tr>
<th>Announcement Date</th>
<th>Country</th>
</tr>
</thead>
<tbody>
<tr>
<td>15 March 2009</td>
<td>Maldives</td>
</tr>
<tr>
<td>28 August 2009</td>
<td>Mexico</td>
</tr>
<tr>
<td>25 September 2009</td>
<td>Indonesia</td>
</tr>
<tr>
<td>6 November 2009</td>
<td>Kazakhstan</td>
</tr>
<tr>
<td>14 November 2009</td>
<td>Brazil</td>
</tr>
<tr>
<td>17 November 2009</td>
<td>Korea</td>
</tr>
<tr>
<td>26 November 2009</td>
<td>China</td>
</tr>
<tr>
<td>2 December 2009</td>
<td>Singapore</td>
</tr>
<tr>
<td>3 December 2009</td>
<td>India</td>
</tr>
<tr>
<td>6 December 2009</td>
<td>South Africa</td>
</tr>
</tbody>
</table>

So the Copenhagen Accord is only the first serious step in formulating an agreement. As noted above, several more countries have made commitments (Table 3) and another 43 have announced NAMAS or merely accepted the accord.

The parties to the UNFCCC that have made pledges to reduce or limit their emissions include the US, EU, all other developed countries (if we include Ukraine), Russia, as well as the major developing countries. Together they make up at least 80% of the world’s total GHG emissions. The UNFCCC includes all members of the UN, which adds up to at least 192 parties. Reaching agreement is difficult because an agreement not only has to specify what each country is willing to do to reduce or limit its emissions, but also what it expects what every other country to do. Note that many of the pledges, and especially upper limits on emissions reduction, were conditioned on other parties making firm commitments. Moreover, the developing countries expect financing from industrialised countries for at least some of their efforts to reduce emissions, as well as for adapting to climate change. The Copenhagen Accord established some suggested amounts of this financing, but many more details need to be worked out, on who would pay for what, and who would receive how much. Nor is it clear how much of these funds would be for mitigating climate change, i.e., reducing emissions (or increasing sinks), versus funds for adapting to climate change. Of particular concern is the fate of low-lying island nations that are already shrinking as the sea level rises, and may disappear altogether. While the 20 or so parties make up most of the emissions, and could, in principle, agree on reducing or limiting their own emissions, an agreement that excludes other countries cannot address these other issues. And, indeed, Prime Minister Manmohan Singh put it very eloquently on 5 February (Singh 2010):

... the United Nations Framework Convention on Climate Change (UNFCCC) has to be the centrepiece of global cooperation on climate issues. The purpose of the Copenhagen Accord is to contribute to the negotiations on the Kyoto Protocol and on Long Term Cooperation. It is not a substitute but a complement to these core international agreements. There is much in the Copenhagen Accord that can bring consensus on the two-track negotiating process.

Given that virtually all industrialised countries and 47 developing countries have accepted the accord in principle, the first step has been taken.

Let us look next at what the pledges mean in terms of mitigating climate change.

Impact of Pledges on Stabilising Climate Change

Although most Annex 1 countries (industrialised countries) maintain annual inventories of their GHG emissions (and sinks), in order to meet with the terms of the Kyoto Protocol, there are large uncertainties in these inventories, for reasons I explained in Dutt (2009). Developing countries are also required to undertake GHG inventories, under the UNFCCC and submit so-called National Communications. Most countries have only submitted one such report to the UN, 20 have submitted two reports, and only one country (Mexico) has submitted three. The reports are available at http://unfccc.int/national_reports/non-annex_i_natcom/items/2979.php.
Most developing country pledges are referenced to year 2005 (Table 3), while most GHG inventories submitted correspond to earlier years. For instance, India’s only National Communication was submitted in 2004 with emissions from 1994. Moreover, unlike industrialised countries, rates of deforestation in many developing countries are large, and since forestry is one area where GHG balances are specifically uncertain, the inventories that do exist are likely to be imprecise.

Therefore, any evaluation of the potential impact of the pledges has to be based on estimates of year-2005 GHG emissions, as well as projections of future emissions according to a BAU scenario of emissions growth or future GDP growth, adding to the uncertainty. Two organisations appear to have estimated the impact of the pledges in stabilising the earth’s climate. This author has no way of verifying if the models or their results are accurate.

One of these analyses is from the United Nations Environment Programme (UNEP) published in their Climate Pledges site (http://www.unep.org/climatepledges/Default.aspx). They note that world GHG emissions for 2020 in a BAU scenario would be 50 gigatonnes (Gt) CO₂-equivalent, and indicate a goal of 44 Gt for that year, in order to (eventually) stabilise global temperature increase to 2 C. They estimate that the low-end of the pledges made so far would reduce emissions by about 6.1 Gt with respect to the BAU scenario, while the upper end of the pledges would allow another 1.9 Gt, leaving a gap of 4.0 Gt CO₂.

The other study is by the non-governmental organisation (NGO), Climate Interactive and they summarise their results as shown in Figure 1. They suggest that in a BAU scenario, global temperature would rise 4.8 C (supposedly above pre-industrial levels) by 2100.

Note that on several occasions during 2009, e.g., in the G-8 summit at L’Aquila (Italy), a goal of limiting global temperature increase to 2 C was stated. This was also the basis of discussions at Copenhagen, where vulnerable countries indicate an even lower limit of 1.5 C. Many country statements affirming the Copenhagen Accord also mention the 2 C value. For global temperature not to exceed 2 C by 2010 (the lowest of the curves in Figure 1), CO₂ emissions would reach 470 ppm, and the concentration of all GHGs in the atmosphere, expressed as equivalent CO₂ concentration, would be 520 ppm in year 2100. Considering the current pledges (called confirmed proposals in Figure 1), CO₂ concentration would soar to 775 ppm and temperature rise would be 3.9 C by the end of the century.

While the analyses by UNEP and Climate Interactive are necessarily based on inaccurate emissions inventories, nevertheless the basic conclusions appear to be sound: that with current pledges we would be far short of stabilising the climate. But, as stated above, the Copenhagen Accord is a start, where countries present their starting negotiating position (which in the case of India is no more than its BAU scenario).

In fact, the actual impact of the pledges could be even less than suggested by the two analyses presented above, depending on how the pledges are to be interpreted. We will discuss this in the following section.

**The Copenhagen Pledges**

In analysing the emissions limitation pledges within the Copenhagen Accord, we must not lose sight of the fact that there is already a climate agreement in place, namely, the KP. There are qualitative differences between the KP, ratified by virtually all parties to the UNFCCC, and any future agreement derived from the Copenhagen Accord. Some were mentioned in my previous article. Somewhat alarmingly, there was little or no discussion on these issues, in the months leading up to, during or since the Copenhagen meeting. The rest of the paper will focus on the subject, and while I do not propose solutions to the problems, hopefully I will be able to formulate the main problems.

Since the KP remains in place, we have to examine the key differences and possible areas of contradictions. Most notably, the KP included no obligations for developing countries to limit their emissions. The KP also included the Clean Development Mechanism (CDM), whereby industrialised countries could meet a part of their emissions reduction commitments through emissions reductions in developing countries. In other words, industrialised countries could emit more than their KP commitments provided they had achieved a similar reduction in a developing country. The reduction in the developing country would have to be a “certified emission reduction (CER)”, involving procedures developed for the CDM.

Here the industrialised country commitments are based on their national GHG inventories. Since developing countries have no national obligations under the KP, and therefore no formal inventories, the emissions reductions for a given CDM project are determined with respect to a project-specific baseline. Once the CER is transferred to the industrialised country, in effect the net emissions of that country goes down, and the net emissions of the developing country goes up. This is true even though there are no national GHG inventories for developing countries.

---

**Permission for Reproduction of Articles Published in EPW**

No article published in *EPW* or part thereof should be reproduced in any form without prior permission of the author(s). A soft/hard copy of the author(s)'s approval should be sent to *EPW*. In cases where the email address of the author has not been published along with the articles, *EPW* can be contacted for help.
Thus, there are two sets of GHG emissions for each country: one based on the actual emissions (less sinks) within the country, and another taking into account emissions trading (through CERS and other KP mechanisms).

This leads to the first two questions about the Copenhagen Accord or any agreement to be reached from the accord (let us call this the ARCA):

(i) Are the pledges based on actual emissions or do they include any emissions reductions (CERS and others) acquired through the KP? (ii) In either case, how do the CERS affect the ARCA?

In answering these questions negotiators should keep in mind the following:

- Annex 1 parties to the Kyoto Protocol can offset some of their emissions reductions through CERS (and other ERS) for the years 2008-12, inclusive. (The CERS could have been generated before 2008, but this is not important here.)
- CDM projects can accumulate CERS for up to 21 years. The first commitment period for the KP ends in 2012.

This brings us to a third question: (3) If the KP is to be replaced by another agreement, or a second commitment period is not defined, what happens to CERS issued after 2012?

Some industrialised countries (Table 5) would like the option of meeting some of their emissions reduction commitments for 2020, as stated in their Copenhagen Accord statements, through CERS acquired in developing countries (e.g., through something like CERS). The latter may be less expensive than domestic actions to reduce emissions. Though the US does not explicitly mention a continuation of KP type options for acquiring emissions reductions abroad, such options are included in proposed legislation on climate change.

Other industrialised countries propose that they will only reduce their emissions if developing countries take active measures to reduce emissions. Many do not make any comment, one way or another on the KP or emissions trading in general. This brings us to a fourth question: (4) Would industrialised countries want a continuation of the KP or not?

In the Copenhagen Accord, major developing countries have offered to reduce their emissions (Table 3). If we focus on this list, many countries mention the need for financial assistance in meeting the reduction targets. The KP is mentioned and the continuation of the work of the Ad Hoc Working Group on the KP is urged by many. Armenia mentions the KP three times in its one page statement. Brazil notes that “The use of the Clean Development Mechanism established under the Kyoto Protocol is not excluded.” On the other hand, Papua New Guinea presents a strong critique of the KP approach.

Thus, a reading of the Copenhagen Accord statements of non-Annex 1 (developing) countries suggests that they would generally accept other financial mechanisms.

Clearly the CDM generates CERS that, if transferred to industrialised countries, allowing them to emit more, would effectively increase the emissions of the developing countries. If the latter countries have emissions limits, then they would not want projects (or programmes) within their borders to sell these CERS, since this would make it harder to meet their obligations. This situation is already known within the Joint Implementation process, which applies to Annex 1 countries. The only countries that have allowed JI projects are in eastern Europe and that because their emissions fell so sharply after the end of communism that they have emissions reductions to spare, far beyond what they need to meet their KP commitments. No developing country is in this situation today.

If developing countries propose to meet their emissions limits, ignoring CERS transfers, then the CERS would have no value to potential purchasers in industrialised countries, since they would not allow
them to emit more since the CERs were in fact not reducing emissions elsewhere. Otherwise there would be double counting of emissions reductions.

Financing Mitigation

This brings us to the final question: (5) What would be the best way to finance mitigation activities in developing countries?

Before looking for alternatives, let us recall that the CDM has incorporated thousands of climate change mitigation projects and certified emissions reductions of 377 million tonnes of CO₂ equivalent have already been issued with several billion more in the CDM pipeline. A substantial portion of these emissions reductions have been very cost effective, indeed too cost effective according to the detractors of the CDM. Ingenious mitigation options involving all GHGs have been identified and implemented. In some cases, achievements have exceeded those of industrialised countries that have focused on regulations and more limited market mechanisms (e.g., the EU-ETS considers only certain sectors and only CO₂).

Developing countries have often received considerable local environmental benefits as well, e.g., landfill gas recovery, clean power generation, etc. In the process, hundreds of baseline and monitoring methodologies have been developed and these, as well as detailed project documentation are available on line, allowing others to learn from and replicate successful projects. The CDM monitoring and verification procedures assure a high level of certainty with respect to emissions reductions actually achieved.

Previous models for supporting climate change mitigation in developing countries appear to be much less efficient. Consider the Global Environment Facility (GEF) as an example. While the GEF supported many enabling activities and capacity building, none of the experience is easily available if, at all documented. Thus, successful GEF projects in the same area often have to start from scratch in project design and implementation. The prescriptive approach of the GEF determines project types by fashions, and may not lead to the identification of the most cost effective opportunities. Thus, few of the highly cost effective CDM project opportunities were selected within the GEF. Moreover, GEF funds are assigned at the start of the project, and are disbursed independent of emissions reductions actually achieved. Finally, evaluations generally do not provide reliable measures of emissions reductions actually achieved through the projects. Multilateral and bilateral support for climate change mitigation could learn from the CDM experience, and avoid the pitfalls identified here.

Besides the syndromes listed above are the broader issues. The CDM has demonstrated the advantages of a market mechanism, providing incentives to initiate and execute many climate change mitigation projects. The Copenhagen Accord seems to suggest that the CDM may no longer be applicable. It should be kept in mind that the mitigation opportunities do not depend on the nature of the global agreement nor on how they are to be financed. The CDM has created a large number of tools, and it would be beneficial to build on these rather than seek something completely new. Reverting to bilateral or multilateral assistance where financing is not linked to emissions reduction actually achieved would be a major step backwards.

This article does not propose to suggest answers to the questions listed here, but these need to be answered if the Copenhagen Accord is to lead the way to a meaningful global agreement on climate change mitigation.

India: Lok Sabha Transcript of Minister Jairam Ramesh response to Lok Sabha, 3 December.
Korea (South): “Korea to Lower Carbon Emissions by 30% by 2020” http://english.president.go.kr/government/arirang/aneWS_view.php?no=2162&board_no=E09&search_key=&search_value=&search_cate_code=&cur_page_no=1

REFERENCES

UNFCCC (2009): Conference of the Parties, Fifteenth Session (COP-15) and Conference of the Parties serving as the meeting of the Parties to the Kyoto Protocol, Fifth session (CMP-5) and sessions of the Subsidiary Bodies. Held in Copenhagen, Denmark, 7 to 18 December.
Justice K.S. Hegde Institute of Management
Nitte, Karnataka, India
Organises
Second Nitte International Conference

**Redefining the Roles of Business, NGOs and Governments: A Mission for a Better Global Society.**

29-30, December, 2010

The conference aims at bringing together academicians, business leaders, policymakers and other stakeholders from around the world to deliberate on the following themes:

**Sub-Themes of the Conference**

- Economic crises and State intervention
- Policy framework for sustainable development
- Environmental sustainability and economic development
- Financial inclusion for inclusive growth
- Changing dimensions of global marketing
- Harnessing human capital for sustainable development
- New frontiers of CSR and strategic philanthropy
- State, Corporate and Third Sector partnerships
- The challenges of transparency and accountability
- Impact of globalization, liberalization and privatization
- Managing cross cultural conflicts
- Ethical issues and good governance
- Stakeholder activism
- SHGs and microfinance
- Millennium Development Goals- cross country experiences
- Social entrepreneurship and social enterprises
- Gender justice in development
- Global civil society and business policies

**Conference Partners**
School of Social Policy and Practice of University of Pennsylvania, U.S.A; Erasmus Centre for Strategic Philanthropy of Erasmus University, The Netherlands; Graduate School of Policy Science of Ritsumeikan University, Japan and Third Sector Research Resource Centre, University of Mysore.

Deadline for Submission of Abstracts (with not more than 500 words) is **30th June, 2010** and for submission of completed papers (with not more than 5000 words) is **30th November, 2010**.

For more details log on to – **www.jkshim.ac.in** or contact – Ms. Sona Rai – **sona@jkshim.ac.in**

---

**Latest books – GENDER / WOMEN STUDIES**

<table>
<thead>
<tr>
<th>Title</th>
<th>Author(s)</th>
<th>ISBN</th>
<th>Pages</th>
<th>Price</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>GENDER ISSUES</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Gender Issues in Development: Concerns for the 21st Century</strong></td>
<td>Bhawati Das and Vimal Khawas (Eds.)</td>
<td>ISBN 81-316-0191-9</td>
<td>328 pp. 2009</td>
<td>Rs. 750</td>
</tr>
<tr>
<td><strong>GENDER ISSUES IN DEVELOPMENT: Concerns for the 21st Century</strong></td>
<td>Bhawati Das and Vimal Khawas (Eds.)</td>
<td>ISBN 81-316-0191-9</td>
<td>328 pp. 2009</td>
<td>Rs. 750</td>
</tr>
<tr>
<td><strong>Women in Jainism</strong></td>
<td>Mrinal Joshi</td>
<td>ISBN 81-316-0255-9</td>
<td>208 pp. 2010</td>
<td>Rs. 495</td>
</tr>
<tr>
<td><strong>WOMEN IN JAINISM</strong></td>
<td>Mrinal Joshi</td>
<td>ISBN 81-316-0255-9</td>
<td>208 pp. 2010</td>
<td>Rs. 495</td>
</tr>
<tr>
<td><strong>WOMEN IN DHARMASTRASTRAS: A Phenomenological and Critical Analysis</strong></td>
<td>Chandrakala Padia (Ed.)</td>
<td>ISBN 81-316-0241-9</td>
<td>256 pp. 2009</td>
<td>Rs. 675</td>
</tr>
<tr>
<td><strong>UNWANTED DAUGHTERS: Gender Discrimination in Modern India</strong></td>
<td>T.V. Sekher and Neelambar Hatti (Eds.)</td>
<td>ISBN 81-316-0323-7</td>
<td>296 pp. 2010</td>
<td>Rs. 695</td>
</tr>
</tbody>
</table>

**Rawat Publications**
Satyam Apts, Sec. 3, Jawahar Nagar, Jaipur-4
Tel: 0141-2657006 Fax: 0141-2651748
E-mail: info@rawatbooks.com
Also at: New Delhi, Bangalore, Hyderabad and Guwahati