The Kyoto Protocol

Background

Climate change is a major challenge of the twenty-first century for the entire world, but more so for the Asia-Pacific region, given its high vulnerability due to relatively large/poor populations with low adaptive capacity. Indeed, 90% of global climate-related disasters affected the region and contributed to over a half a million deaths since the1950s (DFID, 2004). Current evidence thus suggests that the key drivers of both social and economic developments are adversely affected by climate change, there by jeopardizing sustainability in the region. The international community has begun to address the issue of climate change through the United Nations Framework Convention on Climate Change (UNFCCC) and its Kyoto Protocol. The Kyoto Protocol is a multilateral treaty made under the United Nations Framework Convention on Climate Change (UNFCCC), which became open for governments to sign on 9 May 1992 at the UN Conference on Environment and Development, more commonly known as the Earth Summit, held in Rio de Janeiro, Brazil, that year. Upon ratification, the UNFCCC committed the signatory governments to a voluntary non-binding effort to reduce GHG in the atmosphere with the goal of .preventing dangerous anthropogenic interference with earth's climate system.

Entry into force of the Kyoto Protocol

The Kyoto Protocol shall enter into force on the 90th day after the date on which not less than 55 Parties to the UNFCCC, incorporating Annex I Parties which accounted in total for at least 55% of the total CO_2 emissions for 1990, have deposited their instruments of ratification, acceptance, approval or accession.

- As of 14 February 2007, 169 countries and one regional economic integration organization (the EEC) have deposited instruments of ratifications, accessions, approvals or acceptances.
- 61.6% of the total CO_2 emissions for 1990 of the Annex I Parties have ratified the Protocol.
- The Protocol entered into force on 16 February 2005.

As of 16 September 2005, the Convention has 189 parties while the Protocol has 156 parties. Subsequent to the Russian ratification in November 2004, the Kyoto Protocol finally entered into force on 16 February 2005. As the first commitment period of the Kyoto Protocol runs only up to 2012, it was agreed at the time of enacting the Kyoto Protocol in December 1997 that the global community would initiate negotiations in 2005 on a future climate regime beyond 2012.

The objectives of the Protocol

The Kyoto Protocol is a binding agreement to regulate CO_2 and five other GHG- methane (CH_4), nitrous oxide (N_2O), per fluorocarbons (PFCs), hex fluorocarbons (HFCs), and sulphur hexafluoride (SF_6). These emissions originate principally from the generation and use of energy, industrial processes, municipal wastes and land-use activities, such as deforestation.

Basics of the Kyoto Protocol

GHGs defined by the Protocol are carbon dioxide (CO_2), methane (CH_4), nitrous oxide (N_2O), HFCs, PFCs, and SF_6
Annex I Parties means those listed in Annex I of the UNFCCC.They are developed countries including Economies in Transitions, e.g. Russia and Eastern Europe.

Annex I Parties have different GHG emission ceilings for the 5 year period of 2008-2012 (1st commitment period).

- Emission ceiling which is called 'assigned amounts' for each Party is calculated as "The base-year emissions" x "emission reduction target" x five.
- The base-year emissions are basically a Party's aggregate GHG emissions in 1990 (whereas, countries may use 1995 as its base year for HFCs, PFCs, and SF6).

For reporting and tracking purposes, the global-warming potential (GWP) in the atmosphere of each gas is converted into a CO_2 equivalent. Methane, for example, has a GWP that is 23 times that of CO_2.

The Kyoto Protocol sets individual GHG emission-reduction targets for Annex I countries under the UNFCCC. These individual targets are specified in Non Annex I of the Kyoto Protocol. For the Annex I countries that had ratified the Kyoto Protocol (all except Australia and the US), their assigned GHG amounts act as a legally binding cap on emissions between 2008 and 2012. All countries with specific emission-reduction commitments are listed in Annex B. Their average emissions reduction is 5.2% below the 1990 levels, and this must be achieved by 2012.

This division between Annex I and non-Annex I countries was made because the signatories to the UNFCCC agreed to set *'common but differentiated responsibilities'* on the basis that the largest share of historical and current global GHG emissions were originated in the industrialized countries; per capita emissions in developing countries are still relatively low. Also, the share of global emissions originating in developing countries will need to grow to meet their social and development needs. Since the UNFCCC entered into force, the parties have been meeting at the annual Conference of the Parties (COP) to assess implementation and progress in dealing with climate change. The COP is the only entity with the authority to adopt new member states or global commitments through amendments of the UNFCCC and entering into protocols to the convention.

Kyoto Protocol and GHG Reduction

The United Nations Framework Convention on Climate Change (UNFCCC) attempts to respond to global warming by mitigating the concentration of greenhouse gases in the atmosphere. Its approach is to make the most industrialized countries responsible for taking the initial steps towards a better carbon balance. Within the UNFCCC's Clean Development Mechanism (CDM) framework, mitigation of greenhouse gas concentrations is addressed through sequestration of carbon currently in the atmosphere, as well as further reduction of carbon emissions from current sources.

The concentration of carbon dioxide in the atmosphere can be mitigated in two ways. First, it can be captured for underground storage or removed through the increased photosynthetic action of additional biomass on the ground, known as bio-sequestration. In this case, plants constitute "carbon sinks". Second, industrial, engine or forest related carbon dioxide emissions from any kind of fire can be

>> read more

Evolution of Adaptation and Development in the UNFCCC and Kyoto Protocol Negotiations

COP6 in Bonn,Germany (July 2001) established three new funds: the Special Climate Change Fund (SCCF), the Least Developed Countries Fund and the Adaptation Fund.

COP7 in Marrakech, Morocco (October-November 2001) prompted the formation of the LDC Expert Group.The COP also laid out the objectives of the three new funds. The SCCF will finance activities relating to climate change in the areas of adaptation, technology transfer, energy, transport, industry, agriculture, forestry and waste management. The LDC Fund will support the preparation of National Adaptation Programmes of Action (NAPAs) for LDCs. Lastly; the Adaptation Fund will be financed from the 2% charged on all Clean Development Mechanism projects and other sources of funding to fund adaptation initiatives.

COP8 in Delhi, India (October-November 2002) produced the Delhi Declaration, which reaffirms the importance of development and poverty eradication. It calls for policies and measures specific to national circumstances, and integration of climate change objectives into national sustainable development strategies. The COP proceedings also refuted the perceived divide between environment and development agendas.

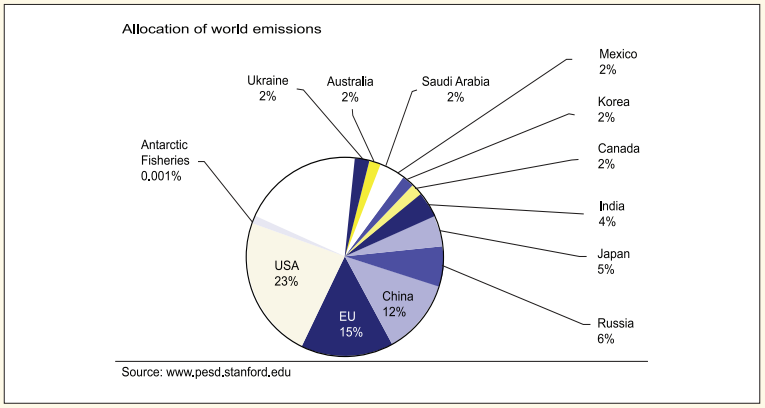
COP10 in Buenos Aires, Argentina (December 2004) brought to light the difficulties of funding adaptation projects in the context of development. At present, the Global Environment Facility (which administers UNFCCC funds) will only finance projects with a core focus on adaptation. Adaptation projects with additional development benefits will not receive full-cost funding, even though in practice most adaptation projects are built on or embedded in larger national or local development projects. Co-financing from development and donor agencies would therefore be required, which puts an additional burden on poor countries seeking funds.

COP11 in Montreal, Canada (November-December 2005) finally adopted the Marrakech Accords, which enable the operation of the different international funds for adaptation (the LDC Fund and SCCF under the UNFCCC, and the Adaptation Fund under the Kyoto Protocol).The Montreal meeting was also the first Meeting of the Parties (MOP1) after the coming into force of the Kyoto Protocol. One important new element of discussion was the issue of raising funds for the Adaptation Fund from other flexible mechanisms besides the adaptation levy on the Clean Development Mechanism alone.

COP12 6-17 November, Nairobi, Kenya, the opening statement by outgoing UN Secretary-General Kofi Annan, who lamented a "frightening" lack of leadership from governments and announced the "Nairobi Framework," an initiative to help spread the benefits of Kyoto's Clean Development Mechanism (CDM) among more developing countries.

reduced through measurable remedial actions: induced combustion efficiencies, conversion to kinetic (in some cases, nuclear) and solar energy sources.

Though the Kyoto Protocol came into force on 16 February 2005, it took so long because the Kyoto Protocol was not ratified by many states until the 'flexible mechanisms' were negotiated and put into place at one of the COP sessions. Therefore the discussions on a future climate regime may include, inter alia, at least four components:



a) Deeper and broader efforts of GHG mitigation than are currently prescribed under the Kyoto Protocol, which may be interpreted as further deep emission cuts by Annex I countries, and emission control pledges by major developing countries. It is now widely believed that the Kyoto Protocol is an important first step in global efforts to tackle climate change but its environmental effectiveness is rather marginal, because of (i) the decision to withdraw by major Annex I countries such as the USA and Australia, (ii) the "environmental integrity" issues such as "hot air" and (iii) the absence of linkages with the other environmental and developmental actions.

b) New and/or restructured market mechanisms that take into account sustainable development needs of the developing countries.

c) Enhanced focus on adaptation, and its mainstreaming in development planning and international assistance.

d) More specific agreements on technology development and transfer, financial assistance and capacity building.

What needs next at national level?

a) Research on optimal economic solutions for climate change mitigation and adaptation in sectors such as water and energy supply, the beverage and food sector, agriculture etc.

b) Research on the potentials, costs and necessary incentives for energy systems with low GHG intensity.

c) Methodology for optimizing climate strategies while accounting for other environmental benefits, energy security, and economic growth objectives.

participates in survival strategies of coastal poor

COAST Trust: House 9/4, Road 2, Shamoli, Dhaka 1207
Tel: +88 02 812 5181, 815 4673, Fax: +88 02 912 9395
Email: info@coastbd.org, Web: www.coastbd.org

Equity and Justice Working Group - EJWG
House 9/4, Road 2, Shamoli, Dhaka 1207
Tel: +88 02 812 5181, 815 4673, Fax: +88 02 912 9395
Email: info@equitybd.org, URL: http://www.equitybd.org

Editor : Md. Shamsuddoha
Research Team : Rezaul Karim Chowdhury, Barkat Ullah Maruf, Atiqul Islam Chowdhury