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Beyond Kyoto: Global Responsibilities of India

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Introduction

The recent tsunami disaster of 26 December 2004 has demonstrated to the world that India can look after itself and also give a helping hand to its neighbours. India is no longer a country with a begging bowl asking for alms from the rich to tide over disasters. Fortunately for our standing armed forces, the naval, coast guard, army and air assets the military expectedly played an important role in the initial phases. The initial disaster management is over. Much needs to be done by the state machinery and civil administration by way of good governance to help the people tide over the episode. This needs sustainable post disaster governance.

Some analysts have linked India's self help as a signal to the world at large that it deserves to be in the United Nations Security Council as a rightful member with veto power. At the same time it has been brought out by a number of studies and reports that soon India is going to be an economic power third in the order of rating in the next decade or so overtaking Japan with the USA and China in the lead. It also may be invited to join the G8 group of industrialised countries.

With these geopolitical and economic realities we need also to understand what are some of the related demands from us as a growing power by the industrialised countries and how are we to deal with them in the politics over climate change.

The Kyoto Protocol

The protocol could have entered into force if it were ratified by at least 55 countries accounting for about 55 per cent of emissions in 1990. However, with the Russian ratification on November 4, 2004, the treaty entered into force on February 16, 2005. The protocol was negotiated during the third conference of parties (COP) of the United Nations Framework Convention of Climate Change (UNFCC) at Kyoto, Japan in 1997. The Kyoto Protocol sets emission targets for the industrialised and developed countries(called Annex I countries) for the year 2008-2012 with initial targets to reduce the emission by about 5.2 per cent below the 1990 levels.

The Annex-I countries account for roughly half of global green house gas emissions. In 2001 the USA (having a share of 20 per cent of world's emissions although it contains only 4 per cent of the world's population) withdrew from the Kyoto Protocol as it considered the treaty as being fatally flawed. Australia is the other industrialised country yet to ratify it. Pakistan

acceded to the Protocol on January 11, 2005. Out of the oil rich Gulf countries only Saudi Arabia and United Arab Emirates(UAE) have declared accession in January 2005. Iran, Iraq and Kuwait are not even parties to it as yet.[1]

As per recent reports in December 2004 the global emissions had reached 60 per cent over the 1990 levels.[2] In another report it has been estimated the carbon dioxide and the green house gases from Europe, Japan, US and other industrial countries would grow by 17 per cent from 2000 to 2010.[3] The Pew Center has estimated that 60 per cent or greater reduction will ultimately be needed to avert serious climate change impacts.[4]

It seems that reducing emissions by about 5 per cent over 1990 levels by Annex I countries in the first commitment period (2008 to 2012) remains an ambitious target as most of the economies are executing their economic practices in the "business as usual mode". The flexible mechanisms of emission trading, joint implementation and clean development mechanism (CDM) are now fully operational. India as a developing country is only entitled CDM projects which had commenced in 2001.[5] As of February 2005, 54 projects stand approved and another 200 are being processed.[6] While this process has now set in with market and business forces in full control, the new challenge is the Meeting of the Parties (MOPs) which the UNFCC would be holding in 2005. It is here that negotiations beyond 2012 would take place.

The Kyoto Protocol and the UN's High Level Panel

The report of the UN high level panel on threats, challenges and change which was convened by the UN Secretary General has urged member states to "reflect on the gap between the promise of the Kyoto Protocol and its performance, re-engage on the problem of global warming and begin new negotiations to produce a new long-term strategy for reducing global warning beyond the period covered by the Protocol".[7]

The Kyoto protocol has been accorded legal status till 2012. This means that 2013 onwards a new architecture of capping and reducing green house gases would need to be worked out. It is in this field that many of the industrialised countries would demand capping of emissions by the developing countries which were rightly exempt during the first phase to reduce emissions. Even the UN panel has noted that the industrialised countries "are likely to be more resistant to accept costly reductions without increased developing country participation".[8]

In fact one reason for the US rejecting the protocol in 2001 was that India and China though substantial emitters are without any obligations to reduce emissions.

India Beyond Kyoto

"Beyond Kyoto" negotiations and politics (which have already begun) are going to be the real challenge which would be faced by India. The Indian electricity demand is expected to increase by 3.5 times over the next two decades.[9] India would need to burn its indigenous coal. Coal is considered the dirtiest due to its highest carbon contents followed by oil and then gas. Not all coal fired plants would have the financial assets or the technological know-how to use clean coal technologies. Nor the emerging technology for carbon sequestration at source will be

in place at each facility. Thus coal with all its carbon would continue as a work horse for electricity generation besides relying on a mix of gas, nuclear and renewable sources. Similarly China is planning to build over 500 coal fired plants by 2030.[10] The demand for fossil fuel for transport and other sectors is also to multiply and a number of projections indicate our oil-need in the next two decades will be around 300 million tones(mt) per annum from about over 100mt today.

Thus we would have to argue convincingly about our need to increase emissions and not be expected to cap emissions. India's per capita CO2 emission as communicated to the UNFCC in 2004 as base year 1994 was 0.87 tons. This is just 4% of US, 8 %of Germany, 9 % f UK, 10 % f Japan and 23% of global average.[11] At the same time we would also have to advertise and sell to the world community at large what measures we have taken to mitigate the effects of reducing emissions though not bound by the Kyoto Treaty. These include increase in use of renewables for energy, a forestation, switch to cleaner compressed natural gas(CNG) and measures to reduce energy, power and carbon intensities due to factors such as increased share of service sector in GDP and energy improvements. Some other areas which would need to be argued for and defended are:

(a) *The Asian Brown Haze Controversy.* Just prior to the World Summit on Sustainable Develop-ment in 2002 a report by the United Nations Environmental Programme (UNEP) was released over a supposedly Asian Brown cloud.[12] The report was a political tool to manipulate science and an attempt to blame developing countries for the global warming due to biomass use and soot emissions. It was rightly criticized [13] and was then withdrawn by the UNEP later.[14] During the winter of 2004-2005 a similar strategy was adopted and in the print media NASA imagery of a haze over Indo Gangetic plains was splashed on the headlines implying it to be a greater worry for climate change that the massive historic and current fossil fuel burning by the industrialised countries.

To sustain this strategy of making an issues of our rural poverty as a global warming threat, in March 2005, a team of Indian and American researchers published in Science their findings and blamed the black soot due to burning of wood, agricultural waste and animal manure to be 10 times greater than the other green house gases.[15] The concern for respiratory related diseases due to biomass burning is well understood by the India planners. The day when kerosene or cooking gas is within easy reach of the poor is still a few decades away. Therefore the reality would be that such biomass burning cannot be capped or controlled. Sustainable biomass burning is carbon neutral. More importantly Indian forest cover has stabilized [16] and efforts are on to increase it to 33 per cent.

We need scientific and economic arguments in order not be cornered by the industrialised countries. The arguments by the some of the developed and oil exporting countries would attempt to try and shift the base of argument or give an equal or more weightage to soot emissions due to biomass burning as a cause of global warming than carbon emissions due to oil, coal and gas use.

(b) *Methane and Nitrous Oxide Emissions* from Agricultural Soils/ Paddy Fields and Methane Emissions from Cattle. The methane and nitrous oxide emissions from our agricultural soils and

methane from our cattle population is another arena of combat. The livestock census of 1987 showed that India had the largest bovine population in the world. It had 20% of cows(195.87 million cattle), 60 % of buffalos (76.77 million), 20 % of goats(99.41 million) and 44.84 million sheep.[17] Animal husbandry supports five per cent of the mostly landless population. It contributes nearly one fourth of the out put of the agricultural sector. Livestock products are about 8% of the GNP. India is a leading producer of milk, and leather is a foreign exchange earner. Livestock also provides eco- friendly draught power, manure, wool, meat and skin for leather industry. Unlike the resource intensive meat-eating and producing countries of the West our livestock is not fed on grain, rather it survives on the commons and agricultural residue. Much hullabaloo had been made by some vested Western interests which blame our methane emissions for most of the ills of climate change.

It has been shown that the global warming potential(GWP)of Indian agriculture as estimated by Inter Governmental Panel of Climate Change(IPCC) is considerably higher and needs a revision.[18] Methane and nitrous oxide from Indian agricultural soils are responsible for only about 0.23% and 0.1 % respectively, of the global warming caused by the world's CO2 emission.[19] As regards methane from cattle, the pioneering work of the Centre of Science and Environment (CSE) had exposed the nexus between studies done by the US based World Resource Institute (WRI) in collaboration with the UN in what the CSE called "environmental colonialism".[20] Kunal Ghosh also has exposed a similar case of colonialism recently. A foreign team from the International Crop Research Institute for Semi-Arid Tropics had suggested that India and China should change the cattle feed of her millions of cows, buffaloes and goats to reduce emissions of methane.[21]

Such impractical and absurd arguments are only a tool to create a groundswell of misguided and wrong public perceptions. The media unfortunately jumps to provide such news without a deeper understanding of our rural economy and ground realities. In a lighter vein, the author also warns that even the per capita human emission(as a result of breathing) of CO2 by the populations of China and India likely to be used as an argument (by the vested interests of the industrialised countries) to levy tax in combination with CO2 emission due to the burning of fossil fuel.[22]

Conclusion

The geopolitical reasoning for the rightful place of India as a future global manager would need to be balanced with the arguments of a developing economy and an economy which has not contributed to the emissions due to which adverse climate change has set in. Scientific evidence and developmental models need to be evolved for our point of view to be honoured and accepted. The global responsibility of India is to be in the lead in negotiations on behalf of the developing countries.

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