

India's Climate Change Policy and Trade Concerns: Issues, Barriers and Solutions

Introduction

The issue of combating global climate change inherently addresses the ability of economies, primarily in developing nations, to reduce emission of greenhouse gases (GHG) in industrial production. The global response to climate change, notably the United Nations Framework Convention on Climate Change (UNFCCC) and Kyoto Protocol, seek to implement this objective through voluntary GHG emission reduction targets. Compliance is often assessed through GHG inventories which measure carbon intensities of production. However, as on date, developing countries do not have any binding GHG emission reduction targets under the Kyoto Protocol.

International trade, which has become increasingly lucid and devoid of logistical barriers, may alter the course of mitigation of climate change. The primary feature of international trade is the spatial separation of the producer and consumer. This can undermine the role of environmental policies, especially of a global environmental phenomenon like climate change.

For example, a developed country faced with a binding GHG emission reduction target can seek to consume 'polluting' products (products and processes with high carbon intensities) by importing the same from developing countries. As a result the developing country has to increase its production of the product without having to worry about binding climate compliance. It is, worth noting that foundries, ship breaking and other polluting industries have shifted to the developing countries from the US and EU shores. A large part of China's industrial production seeks to meet demands of developed nations. According to the Human Development Report 2004¹, countries facing rising GHG emission levels between 1990-04 include China (103 per cent), Korea (roughly 93 per cent) and India (97 per cent). On the contrary, emissions from Germany

and UK fell roughly by 17 and 10 per cent over the same period. In this manner, international trade spurs shifts in emissions from developed to developing nations. While positive fallout is higher economic growth, carbon intensity is certainly on the rise.

The Kyoto mechanisms, sometimes used without proper adherence to the first and overriding priorities of the convention and protocol, can also have a negative impact. A case in point may be CDM (Clean Development Mechanism) projects from India and China that are clearly non-additional and, therefore, not eligible for carbon credits from the compliance market (Kyoto). Unfortunately, these include projects that avoid hydro fluorocarbons, coal and gas projects but generate millions of 'dubious' carbon credits. Interestingly enough, global refrigeration companies and MNCs with a presence in the FMCG (Fast Moving Consumer Goods) and refrigerant sectors use hydrocarbons in European models, but continue with HFC or HCFC-based coolants in their Indian models. Now, through the CDMs, they can aspire to 'sell' carbon credits for a project that generates them through the back door. Similar examples can be cited for other industries as well.

So what are the critical issues in climate change and trade from India's perspective? As a non-annex I Party, India can seek to avoid any voluntary (read compelling) GHG emission reduction targets. However, the planning process, contained in the Five-Year Plans (FYP) and manifest through budgetary regulations is a key indicator of the country's response mechanism towards the threat of anthropogenic climate change.

Climate change affects almost every sector of the economy - agriculture, forestry, power, manufacturing industries and even defence, shipping and marine resources. Some policies that have significant overlap with climate change include India's Integrated Energy Policy²

¹ http://hdrstats.undp.org/countries/country_fact_sheets/cty_fs_KOR.html

² http://planningcommission.nic.in/reports/genrep/rep_intengy.pdf

(June 2006), the yet-to-be-released Climate Change Policy and of course, the FYP documents⁴.

This study assesses the FYPs and relevant government policies adopted to garner India's climate change goals and priorities. It attempts to highlight key climate change concerns from a brief sector-specific analysis: examining its impact on trade. Finally, the paper also looks at how India's policy and regulatory framework is addressing trade and climate change, and the expectations from the Union Budget 2008-09.

Addressing Climate Change in India: The Planning Process

Since the 1980s, issues such as environment and climate change have found mention in the FYPs. The duration of the Eleventh FYP (2007-12) coincides with the first commitment period of the Kyoto Protocol of the UNFCCC and therefore assumes greater importance in terms of India's longer-term position on climate change.

However, the approach paper to the Eleventh FYP pays no more than lip service to the issue of climate change. It is merely accorded cursory reference in outlining India's challenges, in the section on 'Protecting the Environment'.

Besides, the section on environment (Environmental Sustainability, page 53), does not even allude to it highlighting the inability of the Planning Commission to grapple with the most pressing and cross-cutting issue affecting mankind at large and developing economies in particular. In fact, the Eleventh FYP has adopted an aggressive electricity generation target of 60,000 MW with coal as the dominant fuel. While as a

The Government Position: Policy Documents on Climate Change

The various Government Policies on Climate Change and their salient features are:

1. India: Addressing Energy Security and Climate Change
 - It discusses climate change mitigation & adaptation options for the nation
 - Mitigation options - energy conservation, renewable energy, CDM measures etc
 - Adaptation measures - crop improvement, drought proofing, health care, risk financing etc which take over 2 percent of the GDP
2. India's National Environment Policy
 - Absolves India of any 'significant responsibility' on issue of climate change
 - Express concerns on trans-boundary pollution issues endorses polluter pays rationale for distorting trade and investment
3. India's Integrated Energy Policy

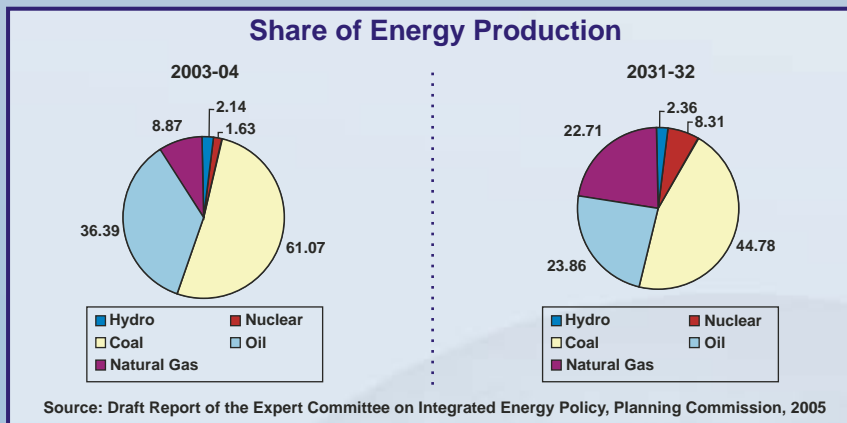
- Focuses on sale of GHG emission reductions & carbon credits
- 4. Apart from the specific policy documents, various Plan Documents of the Indian Government has observed to
 - Concentrate on economic opportunities of CDM projects
 - Supports India's position against voluntary GHG emission reduction targets
 - No effort of addressing the trade and climate change linkages

India's insistence on 'common but differentiated responsibilities' across developing and developed nations ignores that the low capita emissions are a result of the fact the majority of the population does not have access to energy. Domestic policies should address the existence of widespread climate injustice in the country existing in the form of a small section of people enjoying and exploiting the resources and a vast majority having no access to it.

major producer of coal India may not have access to low-cost energy sources, the country's carbon intensity is definitely expected to shoot up. The FYP should have placed commensurate, if not equal, emphasis on climate protection and thereby contributed to the 'first and overriding priority' of the UN framework convention, i.e. the stabilisation of anthropogenic GHG emissions in the atmosphere.

³Planning Commission, 'Towards Faster and More Inclusive Growth: An Approach to the 11th Five Year Plan', December 2006.

⁴Ibid., "Coal will remain the dominant primary source of commercial energy and total demand for coal is projected to increase from 432 million tonnes in 2005-06 to 670 million in 2011-12. The need for the power sector itself would increase by 180 million tonnes taking the total to about 500 million tonnes in 2011-12". The report of the working group on energy for the 11th Five Year Plan, clearly talks of about 50,000 MW of thermal power plants as feasible in the 11th plan period.



without having to compensate for the damages caused by GHG emission simply by relocating industries to the developing countries raises the question of whether carbon taxes or any other penal measures should be imposed on the importing country, or a separate set of regulations introduced to tackle GHG emissions arising out of international trade.

In the absence of a government policy, this section attempts to highlight critical sectors that will bear the brunt of climate change.

The Tenth FYP discusses climate change and the UNFCCC under the section 'Forests and Environment' (volume 2, chapter 9). The focus is also on international donors and donor-driven programmes (under 'New Initiatives for Tenth Plan', volume 2, chapter 9; page 1074) and CDM projects as mechanisms for developed countries to 'earn' carbon credits from developing nations. It further discusses climate change impacts and although factually incorrect³, is a beginning in outlining the government's stand on the matter. However, the issue is discussed from the point of view of new and emerging programmes and schemes (thus the highlight on CDM projects) and hence, failing in most part to address the essence of climate change impact variability. Elsewhere in the FYP document, the section titled, 'Perspectives, Objectives and Strategy' makes considered observations on climate change impacts on extreme events, a pointer in the right direction. But the section on agriculture almost ignores the subject, merely mentioning the issue in passing.

In contrast, the approach paper to the Eleventh FYP is a retrograde step. Climate change, which has now assumed a significant position in trans-national discussions and is of critical importance in an agro-dominant nation such as India, does not feature in the approach paper. To what extent the FYP deliberates on the subject is a matter of conjecture.

Climate Change Impacts and Priorities: Key Sectors

Since India does not have to adhere to voluntary commitment on climate change, it is a net gainer at least till the first commitment period (2008-12). However, the fact that developed countries can consume products

Agriculture

The agricultural sector is a priority, both from the point of view of climate change and our overall economic development. Shifts in temperature and pressure zones may have strong repercussions on the overall productivity of Indian agriculture.

Temperature shifts lead to shift in the vegetation patterns. This means farmers have to change either their crops or cropping patterns. These uncertainties are compounded by limitations of knowledge on weather and agro markets. As a net exporter of agricultural products, any drop in productivity adversely affects India's exports and the balance of trade. Worse, it affects livelihoods of several agro-based communities across the country.

Aviation

While admitting that it is a significant source of employment and growth, air travel's share in GHG emissions is steadily increasing.

Annex I countries facing voluntary GHG emission reduction targets are likely to impose carbon taxes on airlines, as some already have. For commercial reasons, airline companies will aim to transfer the financial liability on passengers leading to an escalation in ticket prices. Airlines in non-Annex I countries but sharing the same airspace do not face the same taxes will thus enjoy a price advantage.

Manufacturing Industries

Climate change impacts on manufacturing industries are felt solely on the Annex I nations in terms of their binding commitments under the Kyoto Protocol. It is in this sector

³Factual inaccuracies are present in several instances: For instance, it mentions that the Kyoto Protocol implies a cut in emissions by 20% (!) for developing countries in the first commitment period, whereas developing countries have no binding commitments in the period. It also states that the objective of UNFCCC is to 'bring the GHGs level...back to the pre-industrial era (!).'

that widespread and long-term impacts of leakage of GHG emissions due to international trade is evident. Experts estimate a total of almost 5.3 giga tonnes of CO₂, resembling 20 per cent of the total global emissions arising out of trade among the Annex I and non-Annex I nations⁶. Hence, international trade, is a major cause of anthropogenic climate change, whereby the Annex I nations are able to successfully import substances with a high carbon intensity of production. Some argue on the practicability of carbon tax on consumption especially in the case of products that are highly carbon intensive in production. In the absence of quantified emission reduction targets for developing countries, a consumer tax may be a workable solution. In the long run, however, specific 'carbon taxation' both on production and consumption can be an option.

Perspectives from Budget 2008-09

An assessment of FYPs reveal that no dedicated action plans are afoot to develop an institutional framework for action, both in mitigation and adaptation climate change is. In fact, the government intended to set up this institutional framework as part of the Budget 2008-09 exercise.

Other results expected out of the budget but contrary to India's commitment on climate change, includes sops and custom duty cuts for small cars and two wheelers. This increases the ability of the consumer to own vehicular assets, but it also means more pollution by the presence of their sheer numbers on the Indian roads⁸.

Climate change mitigation is largely addressed through the market-based mechanism called CDM⁹. Apart from the official policy of aggressively encouraging CDM projects, the country's overall mitigation efforts are

primarily directed at ensuring energy security, through measures such as substitution of (imported) petroleum fuels by natural gas. Hence, GHG emission reductions are fallouts of this primary goal of ensuring energy security.

The government claims more than 2 per cent of GDP has been spent on climate change adaptation. However, an analysis of the schemes shows this was not the primary motive, and most of the projects were 'routine and regular' government programmes.

Thus, overall, Budget 2008-09 failed to focus on climate change. The government, however, intends to release an official document on the issue later in 2008.

Conclusion

It is therefore evident that India's climate change policy is in its nascent stages. The linkages between climate change and trade are not defined in the existing or proposed policy primarily because of India's status as a non-Annex I nation. In fact, its policies are likely to emphasise the low per capita GHG emissions.

However, combating climate change is a global responsibility and factors like deforestation, rampant in India and Asia, are as much responsible for global warming as industrial activities. Further, it is well known that a large part of India's population does not contribute to climate change due to poverty and low access to means that can generate GHG emissions. Finally, India, with a large and diverse agricultural and allied services sector should seriously consider a strategy for adaptation to climate change.

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⁶See <http://pubs.acs.org/journals/esthag/js/esthag.js>

⁷The PM indicated at the Delhi Sustainable Development Summit (January 2008) that small and 'efficient' cars were to cost less.

⁸Clean Development Mechanism is contained in Article 12 of the Kyoto Protocol, which enables developed countries to provide financial assistance and technology transfer for developing countries to invest in climate-friendly technologies and processes.

The views, analysis and conclusions are those of the author only and may not necessarily reflect the views or the position of Centad.

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