



PROTESTS AGAINST GLOBAL WARMING
Demonstrators from 50 countries gathered in London at the same time as the UN climate talks in Bali

THE GREAT CLIMATE CHANGE DEBATE

WILL INDIA BE A DEALMAKER OR A DEAL-BREAKER AT THE FORTHCOMING COPENHAGEN UN SUMMIT ON CLIMATE CHANGE? INDICATIONS ARE THAT NEW DELHI IS SOFTENING ITS STAND. SUSTAINABLE DEVELOPMENT, USE OF RENEWABLE ENERGY RESOURCES AND GHG EMISSION CUTS ARE THE BUZZWORDS IN DELHI'S POWER CORRIDORS THESE DAYS **BY DEEPALI NANDWANI**



MELTING GLACIERS

The alarming rate at which glaciers are melting indicates a rise in global temperature that could lead to several perennial rivers drying up

India is already noticing the effects. J Jayaraman, researcher with the Centre for Science and Technology, TISS, Mumbai, says that around 1.5 billion people currently live in water-stressed regions. Climate change and population growth could increase this to seven billion by 2050, intensifying competition for this life-giving resource. Some areas could become more fertile; others, more barren. This may lead to regional food shortages, mass migration and poverty. Malnutrition is expected to increase in developing countries.

SO WHY IS INDIA HOLDING OUT?

At the heart of the climate change debate is the Western world's insistence that India and its neighbour, China, agree to stringent commitments on reducing Greenhouse Gas Emissions (GHG) by 2020. The world is looking at phasing out the Kyoto Protocol (see box) and bringing in a new climate change policy.

The insistence of developed countries, led by the United States, has brought India and China – right now caught in a diplomatic war of words over border disputes – together. The two recently agreed to stand together against the developed world in December's crucial climate change negotiations. New Delhi has also rejected the possibility of phasing out subsidies on energy pricing, again a demand made by the US and Britain. Prime Minister's Special Envoy on Climate Change, Shyam Saran, says, "Nearly 200 million people live on less than one dollar a day and nearly

500 million do not have access to modern sources of energy. Our overriding priority, therefore, is eradication of poverty for which we must use all sources of energy, including fossil fuels."

Besides which, New Delhi insists that the trade-off between the developed and the developing has to be fair. In this, they are backed by India's environmentalists. As Magsaysay award winner Rajendra Singh, a water conservationist who runs Tarun Bharat Sangh, an NGO in Alwar, Rajasthan, says, "India's emission levels are among the lowest in the world - 1.2 tonnes compared to say, US's 20 tonnes. The difference is rather stark. Trading off our economic development would harm India. Right now, we can only stabilise our GHG emissions and not reduce it drastically. We can't barter away our future."

Both India and China want the developed countries to pay for the transfer of green technology to developing nations, and implement 40 per cent cut in emission levels by 2020. In other words, put the money on the table for your sins. In the past, cheap transfer of clean technologies has repeatedly come unstuck due to the cost of buying patents.

Our 'stubborn stance' is based on the fact that the developed world is responsible for 70 per cent of GHG emissions. Also, India's per capita energy consumption is about 150 units a year as compared to around 10,000 units of the developed countries. If India has "to progress and get out of its poverty" then its per capita consumption would have to go up dramatically.



SHOULD INDIA COMPROMISE?

A slew of environment ministers from Europe have been coming to Delhi, trying to push India to compromise. The United Kingdom, for instance, has agreed that the developed world must "carry the bulk of the burden", but wants India to look "beyond Kyoto". British High Commissioner Richard Stagg said in an earlier interview, "We don't expect India to have targets at the moment but in the aftermath of Bali [where the United Nations hosted a climate change conference in 2007, as a run-up to Copenhagen] a way must be found to collectively reach an agreement on how emission reductions are shared over time."

As the countdown to the Copenhagen summit begins, the Indian government is increasingly softening its stand. Dr Manmohan Singh, at a two-day meet co-hosting India's environment ministry and the UN Department of Economic and Social Affairs last month, indicated that New Delhi will back a "comprehensive, balanced and equitable outcome at Copenhagen". There are several reasons for the change of heart. One, the growing realisation about what global warming would actually do to India. According to the Centre for Science and Technology, the current CO₂ concentration in the atmosphere is around 385 parts per million. If this rises to about 400 parts per million, global temperatures could rise between 2 to 3 degrees centigrade, which will play havoc with the climate around the world. Countries like India and China with larger, poorer population and limited infrastructure for emergency services to handle floods and drought, would be far more at risk than the developed countries.

But second and, perhaps, the more important reason is that the government believes India is considered an integral part of the all-powerful G20 block, and "give and take" is part of international negotiations. Prime Minister Manmohan Singh does not want to be seen as someone who is coming in the way of an agreement on the emission standards at Copenhagen. Two months ago, at the Major Economies Forum meeting in Italy, New Delhi agreed that all countries would work to reduce emissions in order to not let global temperatures rise more than 2 degrees above the pre-industrialisation level. India hopes that such steps will help it in overcoming its image of a deal-breaker in global negotiations.

THE ROAD AHEAD

Experts are of the view that this is India's only opportunity to put in place a sustainable model of development. Think use of renewable resources, think green industries. Nobel Prize Winner, Dr Rajendra Pachauri, director, TERI and chairman, Intergovernmental Panel on Climate Change (IPCC) and Shesh Singh, director, Climate Change and Environment Program, World Wildlife Fund, say that while India should not give up its position on voluntary emission cuts, it should also look at moving towards a more sustainable pattern of development for its own good.

The initial steps towards achieving these goals are being taken at both, the policy level and the ground level. The 2001

Energy Conservation Act imposes an energy efficiency code for new commercial buildings. The 2003 Electricity Act mandates the use of renewable energy, which has already made India the world's fourth largest wind power generator. "Besides which, we are moving towards building metro rails, considered to be more energy efficient, and have launched a major bio-diesel programme and also the world's largest forestation project covering 6 million hectares," says Singh.

The government has also put together a National Action Plan, which encompasses an extensive range of measures and focusses on eight missions to be pursued as key components of the strategy for sustainable development. These include missions on solar energy, enhanced energy efficiency, sustainable habitat, conserving water, preserving the Himalayan ecosystem, creating a "green India," sustainable agriculture and, finally, establishing a strategic knowledge platform for climate change. The mission for sustaining the Himalayan ecosystem will include measures for safeguarding the Himalayan glacier and mountain ecosystem as it is the source of key perennial rivers.

The Green India mission will enhance ecosystem services including carbon sinks. The sustainable agriculture mission intends making agriculture resilient to climate change by identifying and developing new varieties of crops that are thermal-resistant and capable of withstanding extreme weather.

The central government has also got together over 200 scientists from across 127 research organisations who will monitor climate change in an India-specific manner. The multidisciplinary team will look at all aspects of climate change and its impact.

The multidisciplinary group has a larger task of creating an indigenous methodology for studying climate change without too much reliance on Western models.

The group, however, is acutely aware that the climate change problem is of a global magnitude and local efforts are like band-aid against systemic disease. Leave alone reversal, even achieving minimal control over the effects of climate change could take up to 20 years of concerted international effort, in which the major carbon dioxide producers—the US, Europe and Japan—have to participate vigorously.

As Dr Pachauri puts it, there's more to climate change than just rising sea levels or warmer temperatures. Among its infinite complexities, there are enough immediate effects for not only governments but also people leading city-cocooned lives to start worrying, like the depleting water table levels, flooding and freak cloudbursts that leave you stranded for hours in traffic, or even take you under.

In Guiseppa Tomasi di Lampedusa's fascinating novel *The Leopard*, a universal and timeless story, aristocrat Tancredi Falconeri says to the Sicilian Prince of Salina, "If we want things to stay as they are, things will have to change." To "stay as we are" or, in simple words, to survive, even up to 2020, things will have to change and it's time India, China and the world face up to the fact that for this once, they have to go together.

THE KYOTO PROTOCOL

Under the Kyoto Protocol, signed in December 1997 at the UN climate conference in Kyoto Japan, 37 industrialised countries should have brought their Greenhouse Gas emission levels down to the 1990 levels by now. But only France, Germany and the UK have achieved this so far and that too by trading their emission numbers with those in developing countries. The US, which is the largest producer of GHG emissions, despite having signed the Protocol with a commitment to reduce emissions by 25 to 30 per cent by 2010, refused to ratify it until the developing countries, particularly India and China, were also brought on board.