

Inside

Bali to Poznan and beyond	2
Declaration - Peoples' Voices in the Domestic and International Climate Change Agenda	3
Emissions up in Developed Nations	7
View From Britain - One Shot Left	10
Crisis and Opportunity	13
<i>Living Religion</i> : Ethics, Religions and Climate Change	14

Bali to Poznan and beyond *There are only two worlds.*

It is as if the world is waiting with bated breath. There is a lull in the media-frenzy on Climate Change, the fires in California notwithstanding.

What brings about this pause? Well, for one, Poznan is a comma on the way to Copenhagen in 2009. It is not expected that much headway will be made on a post-Kyoto Climate Change regime until December next year. For another, there is this crisis, the financial mess created over the past few decades - a surreal mess in a speculative universe that has severely impacted the real economy. What impact this will have on the efforts to deal with runaway Climate Change is uncertain.

Into this pause, enters Civil Society.

Civil Society played a key role in the run up to the Earth Summit; then on to the Berlin Declaration and the Kyoto Protocol. Business and class interests took over in the post-Kyoto bargaining, leading to the complete corruption of the Clean Development Mechanism.

It is now time for Civil Society to galvanise itself again. And the lessons of Kyoto must be learnt: The bar must not be set too low - more than ten years ago, 20% reduction in emissions became 5.2% at the Americans' behest; they walked out of Kyoto anyway. Lesson no 2 - the principles of equity and fairness need to be defined in concrete. Flexible mechanisms in flexible language caused runaway carbon credits, with little reductions in actual emissions in situ, in the Annexe 1 countries.

Today science tells us that we need at least a 50% reduction in global emissions by 2050, about 80% for the Annexe 1 group. What does this signify for 2020 ? 30% for Annexe 1 ? And what of the developing countries, in which runaway emissions especially from China, and to an extent from India too, threaten to undermine the whole process? What does common but differential responsibility mean in today's context, that is the challenge before us - Civil Society.

Far removed from all this is another world - the real world. The California fires make no heat here - California? Never heard of it! What is it? A flower? A bird? a type of grain? This is the world where 80% of the world's population lives, survives; this is a world apart. And when you are in that world, the cacophony of emissions targets, Annexe I vs emerging countries, Wall Street and Dalai Street, even the District Collector, seem to be in a different Universe - for the real world all this is a make believe Universe, where real estate, rivers, forests, ocean sides are bought and sold, and resold twice, thrice, a hundred times.

Local communities carry on with their business of production, exchange, sharing and laughter so far removed from the frenzied cycles of growth and recession.

But there is no laughter where these two worlds collide - then there is mayhem. There is also creativity and mutual learning. But mostly it is mayhem.

Which of these two worlds will survive? Which of these two is the real world? This is the challenge facing Civil Society today. There is no more a Third World. There are only two worlds.

Declaration of the Consultation on Peoples' Voices in the Domestic and International Climate Change Agenda

November 5-7, 2008, Visakhapatnam

The Consultation on "Peoples' Voices in the Domestic and International Climate Change Agenda" was jointly organized by Indian Network on Ethics and Climate Change (INECC) and Forum for Collective Form of Cooperation (FCFC). Its 49 participants comprising scientists, engineers, academicians, researchers, entrepreneurs, NGO leaders and people's representatives from different parts of India deliberated on:

- the current realities of the phenomenon of climate change with particular reference to the ecosystem communities, adaptive and mitigative strategies at the grassroots level,
- the role of advocacy related to the National Action Plan on Climate Change (NAPCC), and
- the global and ethical perspectives.

For INECC the engagement with the Climate Change issue has been a long journey. INECC has been focusing on Climate Change impacts from an ethical perspective since the past 15 years. During these years INECC has interacted with Social Action Groups, technical persons and official bodies like the ministries in its efforts to present the grassroots perspective to the official decision makers. FCFC with its huge outreach through its partner networks has prioritised Climate Change as an emerging agenda. The present Consultation is a result of mutual core concern of INECC and FCFC related to climate justice.

The NAPCC

The Consultation examined the NAPCC in which the Government of India presents the challenges of a low carbon pathway through its eight missions

in the national plan: Solar Mission, Mission for Enhanced Energy Efficiency, Mission on Sustainable Habitat, Water Mission, Mission for Sustaining the Himalayan Ecosystem, Mission for a "Green India", Mission for Sustainable Agriculture and Mission on Strategic Knowledge for Climate Change. Yet it states unequivocally that this issue should not be in conflict with the objective of fast economic growth. The participants found this stand contradictory. While power and transport sectors account for around 40% of GHG emissions, these are the sectors to which the government is giving priority in the name of economic growth. The concept of economic growth, development and prosperity needs to be reviewed with a rationale long-term perspective. Climate Change is not yet one of the components of the environmental impact assessment (EIA). 687 mining projects and 316 Special Economic Zones (SEZs) and other projects like Coastal Corridors have been sanctioned without taking the impacts of Climate Change into account.

The NAPCC mentions biodiversity as a national priority but the government is planning to build at least 168 major dams in Northeast India for example which is one of the 25 mega biodiversity zones of the world. More than 80 major thermal power plants are being planned in the coastal areas which too are rich in biodiversity. These projects will cause massive destruction of bio-diversity: forests, rivers, ecosystems of tribal and other societies. Hence, there is a need for a critical response from civil society on the NAPCC.

The marginalised - not only victims, also the creators of alternatives

The traditionally-rooted communities, usually the marginalised rural communities, have preserved

the environment for centuries and they continue to do so. Many countries in the west are now recognising and imbibing the traditional south-eastern wisdom in pursuit of sustainability, while we still seem to be treading the conventional path of destruction-based development. In any case, the poor hardly contribute to climate change, due to their low consumption lifestyles. The country needs to find ways of responding to the issues of the ecosystem communities because they are the first to suffer the ill-effects of climate change. For example, according to the IPCC 4th Assessment report more than one million people will be affected by 2050 by coastal erosion and land loss in India. Besides, various researchers indicate that India's cereal production is expected to decline by 18% of the country's rain fed production in the future.

Thus Climate Change is an issue of inequity which leads to food insecurity among the poor and crop uncertainty among the dry-land and other farmers. This insecurity is manifested in bio-diversity, water, food, livestock, energy, health, livelihood and threat to gender equity.

The communities and many more civil society groups have therefore to be involved in the search for alternatives, with a focus on the poor and vulnerable groups. Adaptation to and mitigation of Climate Change is possible by preserving/protecting bio-diversity, forests, using agricultural waste for bio-fuels and through livestock improvement, organic farming better governance of electric power production and distribution, undertaking renewable decentralised energy options such as micro or 'nano' hydro, photovoltaic solar based home lighting systems and bio-mass based initiatives.

In order to arrive at viable alternatives based on these imperatives many participants shared their engagement in micro studies and projects at the grassroots level because that is where adaption of the ill effects of Climate Change and mitigation for a new carbon pathway make the real

difference. The participants commit themselves to strengthen their involvement in mainstreaming the adaptive mechanisms and further support search for mitigation processes.

Key Issues, Concerns and Suggestions to Government of India for Policy Action:

Water

- Imminent need to increase ground water, to store water through aquifers and to protect rivers, dams, lakes, tanks etc
- Focus on small projects rather than large inefficient hydro projects which involve massive displacement of the poor.
- System of rice intensification(SRI) is welcome and should be introduced in more areas and extended to beet and sugarcane also
- Need for a transparent, accountable governance structure especially in relation to dams and irrigation projects
- Need to make optimum use of existing infrastructure taking relevant measures to reduce siltation of reservoirs and providing resources for proper upkeep and maintenance of water power infrastructure (with a participatory process, including Environment Impact Assessments (EIAs) in local languages and public hearings for all hydro projects above 500 KW).

Energy:

- The integrated energy policy of the Government of India based largely on current sources of energy: coal and petroleum is inconsistent with the policy of reducing GHG emissions.
- In view of the huge potential available in our country the energy security on a sustainable basis is feasible only if we base our energy policy largely on renewable and decentralised energy sources;

- A holistic look at meeting the legitimate demand for energy consisting of maximum possible energy efficiency, effective demand side management (DSM), optimum level of energy conservation and wide spread use of renewable energy sources is essential for a sustainable future;
- Effective and mandatory participation of the local communities in all decisions regarding their overall needs should be a primary plank of our national energy policy;
- As long as our energy policy emulates the energy profligacy of the developed countries, which is based on consumerism, we cannot hope to meet the unabated energy needs of the burgeoning population.

Forests and Biodiversity

There is a need to protect biodiversity by:

- Installing water harvesting systems
- Promoting seed banks, grain banks and community forests
- Enforcing rigid regulations of harvesting of biomass
- Strengthen various committees like committee on drinking water, seed bank, grain bank, and community forest and a committee for monitoring of long term climatic changes.

In view of the dangers to biodiversity involved with the current CDMs there is a need to:

- Review legal framework for implementation of CDM projects: CDM projects impact the land use pattern and also leads to loss of ownership and control of common property resources like community forests. Such initiatives are defeating the very purpose of CDMs as tool for ensuring sustainable development.
- Enforce tribal protective laws in the scheduled

areas: Giant firms are diverting food crops/ forest land for monoculture of fast growing trees like eucalyptus to earn carbon credits without sharing the benefits with the farmers

- Empower local bodies: Mandatory requirement of local bodies like the gram sabhas and panchayats for clearing CDM projects in their areas.

Agriculture and Food Sovereignty:

- Develop crop/plant materials resistant to adverse climatic situation
- Repair and renovate water harvesting systems, promote crop insurance and other support mechanisms
- Policy change required for promoting organic farming in lieu of farmers being bulldozed with subsidized HY/HB variety, chemical fertilizers to promote the interest of the companies
- Ensure budgetary allocations for adaptation measures after dialogue with farmers
- Promote the huge potential for ethanol generation through bagasse to meet transportation and electricity demands
- Bio fuels to be used primarily for local consumption
- Identify appropriate adaptation measures and mechanisms in geo-specific areas.

The ethical dimensions

The type of destruction caused by the phenomenon of Climate Change reflects the need to underscore the missing ethical dimension in Climate Change negotiations. Ethics, equity and burden sharing are the underlying principles on which the future negotiations should be based. In this context the participants felt the need not only to be advocates of equity but also recognise the paradigm shift in the current economic growth model that is

required as well as address personal lifestyle contradictions. That requires questioning of the development paradigm and consumerism. The concept of 'good life' and 'celebration' has to be re-interpreted from an ethical perspective. The middle and upper classes that tend to benefit from the present form of economic growth at the cost of further marginalising the poor have to consciously commit to a more positive and responsible lifestyle.

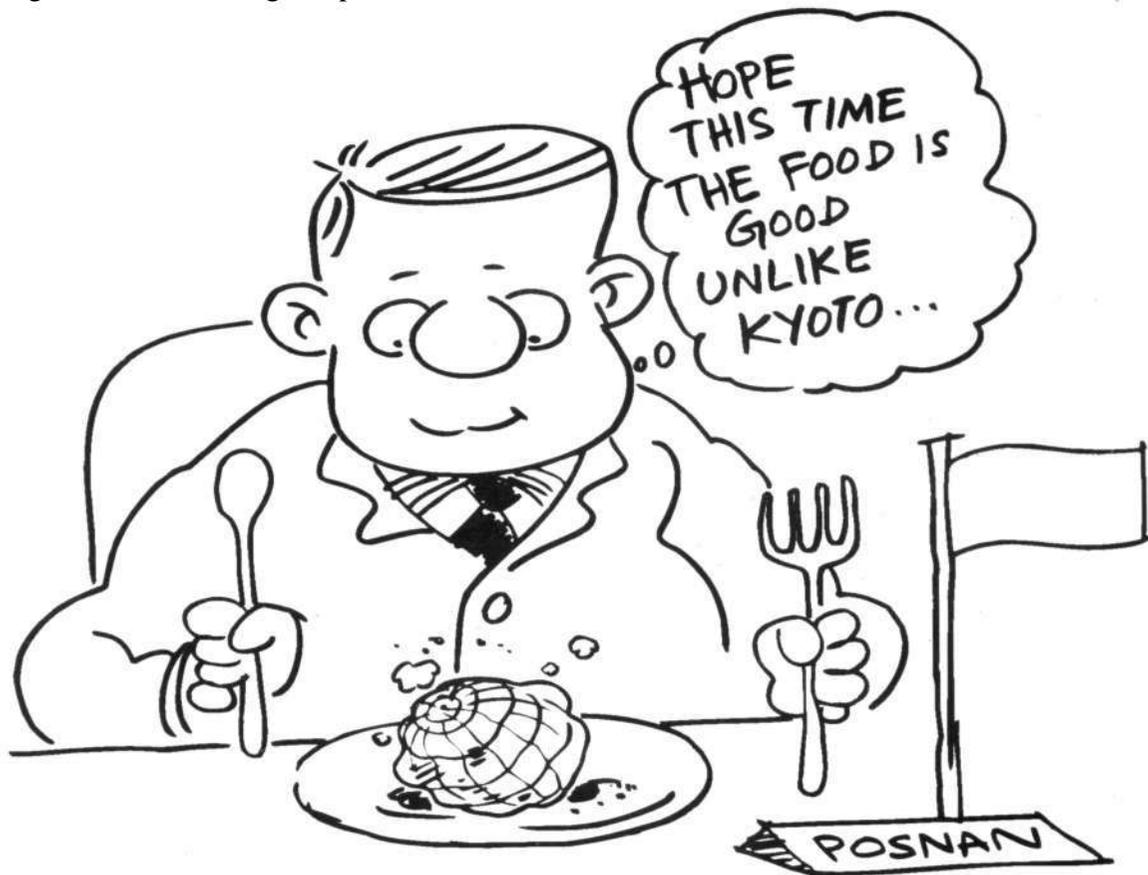
Neither uncontrolled growth nor the government-promoted intensive technologies holds solutions to long-term sustainability. The participants do not consider nuclear power a clean technology due to its 'unclean' production processes involving uranium mining and health hazards due to dumping of uranium waste. The search for a solution has to be in the direction of environmentally and socially conducive lifestyles, organic materials and green products.

Our Commitment

In this context the participants commit themselves to search for such democratic processes and alternatives often rooted in traditional wisdom, by taking into consideration the impacts of climate change on the marginalised urban and rural poor. There is an urgency to respond and the participants will join/ promote the alternatives that the ecosystem communities are attempting to cope with and address Climate Change impacts at the local level.

There is a need hence to intervene at various levels through:

- Creating awareness of the implications of the climate change issue with various target groups at various levels in urban and rural contexts



- Undertaking advocacy initiatives at the national and international levels voicing the concerns of those most impacted and neglected by climate change
- Engaging with the Government of India on NAPCC by critiquing the plan and the process of its formulation on the one hand, as well as providing inputs or an alternative action plan for a low carbon pathway on the other. It was recognised that the sectorised approach of the plan was an obstacle to facilitating a holistic strategy in addressing the issue of climate change. There is a need to ensure involvement of the highly aware communities and civil society at each stage of the processes of the NAPCC through a bottom up approach, without which no credible, effective and viable plan is possible. As a first step, the current plan should be translated into the recognised languages and a copy should be provided to panchayats, seeking the inputs of the gram sabhas to the draft plan. A credible, independent, inclusive process of hearing the people at block and district level should be instituted for seeking inputs from people.
- Developing materials and tools for climate change education especially in regional languages.
- Upscaling adaptive measures at the grassroots level based on experiences shared during the consultation
- Upscaling energy efficiency initiatives and decentralised energy options at the grassroots level based on insights gained at the consultation
- Network and collaborate with stakeholders across sectors including technical and policy related fields in search for effective solutions.
- Mobilising resources by effectively ensuring carbon credits to communities and their institutions
- And, above all, safeguarding the ethical perspective in national and international advocacy initiatives.

inecc, visakhapatnam

Emissions up in Developed Nations

Emissions of greenhouse gases by industrialised nations rose 2.3% from 2000 to 2006, according to new figures from the UN's climate change agency. The biggest increases were in the former Soviet bloc - and Canada.

A UN spokesman said countries had to work much faster to avoid the possibility of dangerous climate change. Next month the nations of the world meet in Poland for the annual negotiations on climate change.

The new figures do not offer a great deal of optimism. They show that in 2006 emissions did actually fall by 0.1 %, but the UN's climate change secretariat said that this tiny dip was statistically insignificant.

The overall underlying trend since 2000 is up,

even though the countries in question had promised to cut their emissions. The worst culprit has been Canada. Its emissions since 1990 have shot up 21.3% - they should have fallen 6%. Recently the biggest rise was recorded by the Eastern European bloc, with emissions up 7.4% since the turn of the century.

The UK is one of the few countries on track with emissions targets. But a recent report to the British government suggested that even UK emissions were heading in the wrong direction if pollution from shipping and aviation, and the carbon embedded in the imported goods coming into the country, were counted.

*Roger Harrabin Environment analyst,
BBC News 2008/11/17*

<http://news.bbc.co.uk/go/pr/fr/-/2/hi/science/nature/7734547.stm>

View From Britain - One Shot Left

Is it too late? To say so is to make it true. To suggest that there is nothing that can now be done is to ensure that nothing is done. But even a resolute optimist like me finds hope ever harder to summon. A new summary of the science published since last year's Intergovernmental Panel report suggests that - almost a century ahead of schedule - the critical climate processes might have begun.

Just a year ago the Intergovernmental Panel warned that the Arctic's "late-summer sea ice is projected to disappear almost completely towards the end of the 21st century ... in some models." But, as the new report by the Public Interest Research Centre (PIRC) shows, climate scientists are now predicting the end of late-summer sea ice within three to seven years. The trajectory of current melting plummets through the graphs like a meteorite falling to earth.

Forget the sodding polar bears: this is about all of us. As the ice disappears, the region becomes darker, which means that it absorbs more heat. A recent paper published in *Geophysical Research Letters* shows that the extra warming caused by disappearing sea ice penetrates 1500km inland, covering almost the entire region of continuous permafrost. Arctic permafrost contains twice as much carbon as the entire global atmosphere. It remains safe for as long as the ground stays frozen. But the melting has begun. Methane gushers are now gassing out of some places with such force that they keep the water open in Arctic lakes, through the winter.

The effects of melting permafrost are not incorporated into any global climate models. Runaway warming in the Arctic alone could flip the entire planet into a new climatic state. The Middle Climate could collapse faster and sooner than the grimmest forecasts proposed.

Barack Obama's speech to the US climate summit last week was an astonishing development. It shows that, in this respect at least, there really is

a prospect of profound political change in America. But while he described a workable plan for dealing with the problem perceived by the Earth Summit of 1992, the measures he proposes are now hopelessly out of date. The science has moved on. The events the Earth Summit and the Kyoto process were supposed to have prevented are already beginning. Thanks to the wrecking tactics of Bush the elder, Clinton (and Gore) and Bush the younger, steady, sensible programmes of the kind that Obama proposes are now irrelevant. As the PIRC report suggests, the years of sabotage and procrastination have left us with only one remaining shot: a crash programme of total energy replacement.

A paper by the Tyndall Centre for Climate Change Research shows that if we are to give ourselves a roughly even chance of preventing more than two degrees of warming, global emissions from energy must peak by 2015 and decline by between six and eight per cent per year from 2020 to 2040, leading to a complete decarbonisation of the global economy soon after 2050(10). Even this programme would work only if some optimistic assumptions about the response of the biosphere hold true. Delivering a high chance of preventing two degrees of warming would mean cutting global emissions by over 8% a year.

Is this possible? Is this acceptable? The Tyndall paper points out that annual emission reductions greater than one per cent have "been associated only with economic recession or upheaval." When the Soviet Union collapsed, they fell by some 5% a year. But you can answer these questions only by considering the alternatives. The trajectory both Barack Obama and Gordon Brown have proposed - an 80% cut by 2050 - means reducing emissions by an average of 2% a year. This programme, the figures in the Tyndall paper suggest, is likely to commit the world to at least four or five degrees of warming, which means the likely collapse of human civilisation across much of the planet. Is this acceptable?

A survey by the broadcasting network CNBC suggests that the US federal government has now spent \$4.2 trillion in response to the financial crisis, more than the total spending on World War Two when adjusted for inflation. Do we want to be remembered as the generation that saved the banks and let the biosphere collapse?

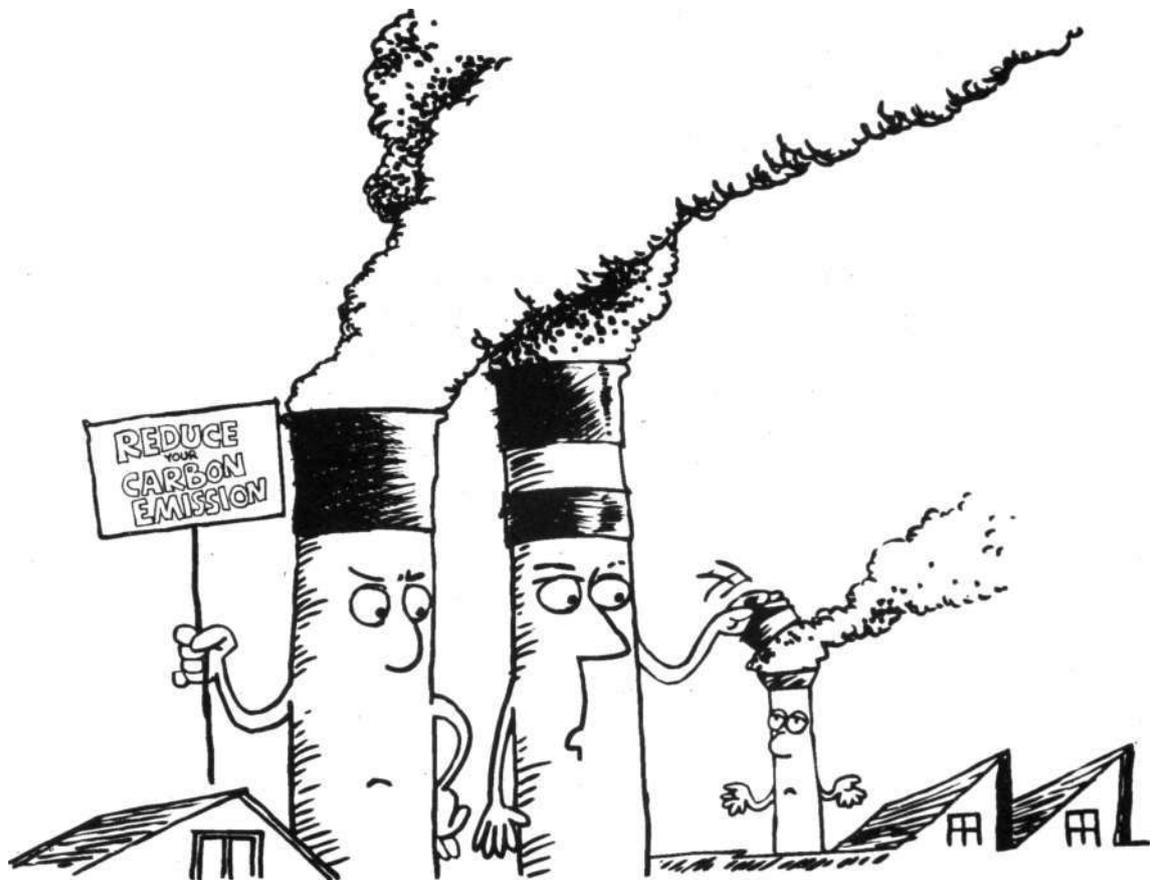
This approach is challenged by the American thinker Sharon Astyk. In an interesting new essay, she points out that replacing the world's energy infrastructure involves "an enormous front-load of fossil fuels", which are required to manufacture wind turbines, electric cars, new grid connections, insulation and all the rest. This could push us past the climate tipping point. Instead, she proposes, we must ask people "to make short term, radical sacrifices", cutting our energy consumption by 50%, with little technological assistance, in five years. There are two problems: the first is that all previous attempts show that relying on voluntary

abstinence does not work. The second is that a 10% annual cut in energy consumption while the infrastructure remains mostly unchanged means a 10% annual cut in total consumption: a deeper depression than the modern world has ever experienced. No political system - even an absolute monarchy - could survive an economic collapse on this scale.

She is right about the risks of a technological green new deal, but these are risks we have to take. Astyk's proposals travel far into the realm of wishful thinking. Even the technological solution I favour inhabits the distant margins of possibility.

Can we do it? Search me. Reviewing the new evidence, I have to admit that we might have left it too late. But there is another question I can answer more easily. Can we afford not to try? No we can't.

GEORGE MONBIOT, www.monbiot.com



UK's 80% carbon reduction target to include shipping and aviation emissions

Energy secretary pledges binding new targets to cut the UK's greenhouse gas emissions by 80% by 2050. Emissions from the shipping and aviation sectors looked set to be included in the targets for cutting greenhouse gases.

In his first statement in charge of the new Department of Energy and Climate Change, Miliband said the government would make the target binding in law by amending the Climate Change Bill currently in Parliament.

The initial exclusion of the aviation and shipping sectors from the targets was criticised by environmental campaigners and backbenchers, with over 50 Labour MPs demanding that the sectors be included. The government has now indicated that both sectors would be "taken into account." A spokesperson for the Department for Energy and Climate Change said: "The government is determined that international aviation and shipping should be part of a comprehensive approach for tackling climate change."

In response, Friends of the Earth executive director, Andy Atkins said: "The final piece of the jigsaw is in place. The world's first climate change law will also be a world class climate change law."

"The climate change law is a victory in the fight against climate change and a victory for the hundreds of thousands of people who have campaigned to make this happen."

Miliband said he plans to amend the Energy Bill, also before Parliament, to introduce a "feed-in tariff" to support small scale renewables.

28 November 2008

<http://www.bsionline.co.uk/story.asp?sectioncode=96&storycode=3126640&C=2>

On energy and global warming, Obama offers a set of forceful proposals.

He supports a cap-and-trade programme to reduce America's carbon emissions by 80 per cent by 2050 - an enormously ambitious goal, but one that many climate scientists say must be met if atmospheric carbon dioxide is to be kept below disastrous levels. Large emitters, such as utilities, would acquire carbon allowances and those which emit less carbon dioxide than their allotment could sell the resulting credits to those which emit more; over time, the available allowances would decline. Significantly, Obama wants to auction off the allowances; this would provide \$15bn a year for developing alternative energy sources and creating job-training programmes in green technologies.

He also wants to raise federal fuel-economy standards and to require that 10 per cent of America's electricity be generated from renewable sources by 2012. Taken together, his proposals represent the most coherent and far-sighted strategy ever offered by a presidential candidate for reducing the nation's reliance on fossil fuels.

Leader column, New Yorker magazine, journal of politics and culture
<http://www.guardian.co.uk/world/2008/nov/02/elections-obama-mccain-yorker-democrats>

Crisis and Opportunity

As world leaders gather, they would do well to remember that we face two crises. The global financial crisis is most immediate; the more existential is climate change. The urgency of the first is no excuse for neglecting the second. On the contrary, it is an opportunity to kill two birds with one stone.

Let us make the case purely in terms of pragmatic economics. Global growth is slowing. Budgets are tightening. We will likely have fewer resources to tackle a lengthening agenda of global problems. What steps can we take, then, to create jobs and spur growth? How can we assure energy supplies at affordable prices? What must we do to insulate the global financial system from recurring shocks and cyclical bubbles, so that people of all nations can live in economic security?

The answer is to find common solutions to the grave challenges facing us. And when it comes to two of the most serious - the financial crisis and climate change - that answer is the green economy. Scientists agree: To address climate change, we need an energy revolution, a wholesale change in how we power our societies. Economists agree as well: The hottest growth industry in the world is renewable energy. That's where the jobs of the future are already being created, and where much of the technological innovation is taking place that will usher in the next era of economic transformation.

At Poznan, environment and climate ministers will meet for the first time to chart out a long-term vision of cooperative action. To reach a deal in Copenhagen, we need a clear work-plan with specific goals for reducing emissions and adapting to the adverse effects of climate change. We need an agreed institutional architecture, a serious commitment to an Adaptation Fund and, above all, a willingness of both developing and developed nations to do their part. Financing will be key. If developing nations lack the financial resources and technologies to "go green," we cannot effectively fight climate change.

Wishes do not automatically translate into deeds. But let us be clear: That is what businesses, investors, governments and citizens' groups want. In fact, it is already happening. The UN Environment Program estimates that global investment in zero-greenhouse energy will reach \$1.9 trillion by 2020 - a significant portion of global GDP. Worldwide, nearly two million people are employed in the new wind and solar power industries, half of them in China alone.

Brazil's biofuels program has been creating nearly a million jobs annually. In Germany, investments in environmental technology are expected to quadruple over the coming years, reaching 16 percent of manufacturing output by 2030 and employing more workers than the automobile industry.

We do not need to await the arrival of new technologies, nor need we worry excessively about the costs of taking action. Studies show that the United States could cut carbon emissions significantly at low or near-zero cost, using existing know-how. For evidence, consider how Denmark has invested heavily in green growth. Since 1980, GDP increased 78 percent with only minimal increases in energy consumption. Poland has cut emissions by a third over the past 17 years through aggressive energy-efficiency measures, even as its economy boomed. For businesses, such savings translate into profits. Today, European companies in the green tech sector enjoy substantial "first mover" advantages, accounting for one third of the world's burgeoning market in environmental technologies.

We will need leadership. The global financial crisis is a wake-up call. It requires innovative solutions that take into account the larger challenges we face. It is not an invitation to defer what needs to be done to safeguard our future. We have no more time to lose.

*Ban Ki Moon, Susilo Bambang Yudhoyono,
Donald Tusk and Anders Fogh Rasmussen
International Herald Tribune, Sunday, November 9, 2008*

Ethics, Religions and Climate Change

Al Gore, former Vice-President of the United States and the joint-winner of the 2008 Nobel Prize for Peace, is by all accounts a mainstream American politician. Yet his film on the environment crisis, 'An Inconvenient Truth', has been watched by millions of people, some of whom have since turned eco-radicals. One of the examples Gore uses in the film to describe the ecological plight of the planet is the divergent response of a frog to a pot of boiling water. The frog jumps away to safety when it is brought near a container of boiling water. If the same frog is put into a pot of luke warm water that is then progressively heated, the frog does not notice the change since the increase in the temperature is too gradual. The frog acclimatizes itself to the increasing heat. Eventually the water gets so hot that the frog either dies or is rescued.

"Are we human beings similar to the frog that is unaware of the process of slow death it is going through?" is the question the narrative wishes to drive home.

The Universal Declaration of Human Rights provides that humans have rights to life, liberty, and personal security. This, of course, enjoins duties in others to refrain from interference with these rights.

Climate Change is already interfering with the basic rights of millions of people. This has evoked the issue of Climate Justice. Can the world silently allow vulnerable and poor communities to experience floods, water and food shortages, increase in temperatures and even face the threat of extermination when these communities are not responsible for the release of massive green house emissions that have led to this dangerous impasse?

The different religious traditions have progressively become conscious about the dangers of Climate Change and the need to alert their communities and create awareness that may lead to appropriate action. Climate Change is a frightful reality, religious leaders acknowledge; they are hoping to lend their support to the chorus of growing voices that seek to explore mitigation and adaptation strategies that may make the impact of Climate Change less painful.

Religious organizations in many parts of the world are trying to bring about policy changes on Climate Change through lobbying at local, national and international levels as well as taking part in Climate Change negotiations.

One Buddhist commentator, Jose Kalapura, has said: "The Buddha taught that respect for life and the natural world is essential. By living simply one can be in harmony with other creatures and learn to appreciate the inter-connectedness of all lives. The simplicity of life involves developing openness to our environment and relating to the world with awareness and responsive perception. It also enables us to enjoy without possessing, and mutually benefit each other without manipulation."

Buddhist thinkers Sulak Sivaraksa and Aubrey Meyer have reworked the four noble truths as follows:

- *Climate change is a reality. It is the source of flooding and drought, desertification and loss of land.*
- *Climate change is caused by over-consumption of fossil fuels, loss of soil, and excessive herds of*

livestock. Individual over-consumption in the global North is an expression of greed and a fear of loss. Fear and greed are root causes of all suffering. Capitalism thrives on individual fear and greed.

- *The climate we have to change is the climate of greed and fear, in which consumerism and profiteering can thrive.*
- *To overcome suffering, start at home, with yourself. Ask yourself: Where can I cut down my consumption? How can I repay my carbon debt to my children's children? Plant trees. Don't fly. Eat local and organic foods.*

Islamic principles such as tawhid (unity), amana (entrustment) of the Earth, and khalifa (the stewardship of humankind) offer the potential for the development of an Islamic eco-spirituality. Muslim environmentalists claim that they are seeing the growth of a new awareness around climate change in some of their communities.

The Koran considers other living species to be "peoples or communities" (ummas; Sura 6:38). Creation itself is seen in all its diversity and the whole of creation praises God for its existence. (Sura 59:24; compare with 64:1).

"With Him are the keys (to the treasures) of the Unseen that no one knows but He. He knows whatever there is on the earth and in the sea. Not a leaf falls but with His knowledge: there is not a grain in the earth's shadows, not a thing, freshly green or withered, but it is (inscribed) in a clear record" (Sura 6:59).

In recent years climate change is beginning to be discussed in Hindu religious circles. Ancient texts like the Vedas praise the earth (bhū), the atmosphere (bhuvah), and sky (sva). We also celebrate the goddess associated with the earth (Prthivi), and the gods associated with water (Ap), with fire and heat (Agni), and the wind (Vayu). Every Indian knows about the five great elements (mahabhuta): earth (prthivi), water (jal), fire (tejas), air (vayu), and space (akasa). The ritual processes incorporate all these dimensions on a regular basis. What is, of course, necessary is the consciousness to connect these dimensions with environmental engagement. However, a few groups have begun relating sacred practices, texts and festivals to environmental concerns.

I would like to give our own example to combat climate change from the perspective of people's spirituality and religion. I live at Fireflies Ashram, surrounded by villages where the inhabitants are Hindus. We have a temple in the ashram dedicated to the Hindu goddess Sita Devi. According to popular history this well-loved goddess was found as a baby in a furrow on the earth. As a young woman she was married to the well-known Hindu deity Lord Rama. When the time for her final departure had come, the earth reverentially opened and received her. In recent times we have started the practice of celebrating Sitadevi's festival on World Earth day, on April 22nd. In the consciousness of the village people, Sitadevi is identified as Earth Mother and there are discussions taking place on how we humans can behave responsibly towards the environment.

For some years now many Christian churches see the human role on the earth as one of stewardship, and not of mastery. The theologian Paul Jewitt states that God made the world and "we live in the world as his tenants".

Leonardo Boff, the well-known Latin American theologian, attempts to situate social and political liberation within an ecological framework. Boff concerns himself with 'the oppressed sons and daughters of the earth'. The oppression and exploitation of the poor are related to the exploitation of nature.

The Catholic Bishops Conference of the Philippines stated in 1988: "We reap what we sow; the results of our attitude and activities are predictable and deadly. Our small farmers tell us that their fields are less productive and are becoming sterile. Our fishermen are finding it increasingly difficult to catch fish. Our lands, forests and rivers cry out that they are being eroded, denuded and polluted. As bishops, we have tried to listen and respond to their cry. There is urgency about this issue, which calls for widespread education and immediate action. We are convinced that the challenge which we have tried to highlight here is similar to the one which Moses put before the people of Israel before they entered their promised land: 'Today I offer you a choice of life or death, blessing or curse. Choose life and then you and your descendants will live' (Dt 30:19-20)."

Some of the important ethical issues that Climate Change activists and religious leaders raise are:

- 1.. Future generations, and unborn children, will face the brunt of the consequences of Climate Change. We are the perpetrators but our children and grandchildren will pay a huge price.*
- 2. The countries that pollute most, and contribute hugely to climate change, are not the ones who will suffer most. In other words, the rich who emit greenhouse gases are committing an injustice on the world's poor. (The per capita emission level of greenhouse gases in the USA is 22 tons while Bangladesh has a very modest per capita emission level of 200 kilograms. There is considerable fear that Bangladesh will go underwater in the next few decades as a result of sea levels rising from global warming. The rich countries, and emerging economies like China, pollute enormously and poor countries like Bangladesh may face extinction, for no fault of their own).*
- 3. Many of those who are most effected by Climate Change are the ones least able to protect themselves. It is crucial that international efforts are made to protect those in poor countries who are vulnerable to disease, water shortages, failure of agriculture, etc.*
- 4. To reduce the impact of Climate Change the wealthy countries must lead through example by cutting emissions of green house gases, fighting deforestation, promoting energy alternatives related to wind, sun, etc.*

In conclusion, we cannot arrest Climate Change without a change in our lifestyles. If lifestyles and political orientations change our growth models will also undergo transformation. Some religious leaders have described Climate Change as a fundamental failure of our market-oriented world where quick profits overtake ethical concerns concerning the health of our planet. If our present day growth models are synonymous with the creation of Climate Change then we must urgently search for other models of production and distribution.

Siddhartha, Fireflies Ashram, Bangalore