Voices of the Vulnerable:
Speaking Climate Change & Development
to Durban and Beyond

An Indian Network on Ethics and Climate Change (INECC) Consultation

***at* Fireflies, Bangalore. Nov 13- 15, 2011**

WORKSHOP REPORT

Compiled by

CENTRE FOR EDUCATION AND DOCUMENTATION
Information in the Public Domain for a Participative Society

February 2012

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Climate Change has brought to the fore the discourse and practice of sustainable development. But the discourse itself is diverse, and often hides the Business As Usual paradigm. Some swearing by the Market, others hoping to reform it, and still others, seeking to turn it "bottoms up" in more ways than one.


INECC Convenor, Nafiza DSouza started the proceedings

In its pre-COP consultation, this time before Durban (COP17), INECC took note of the Climate Crisis and the nature of response from the International to the National and the State level and considered policy options and Civil Society's role in bringing this about. In the next segment, INECC looked at the learnings from the vulnerability studies that it has conducted in the different eco-regions and examined the indicators for such vulnerability and the manifestation of climate vulnerability at the local level. In all cases INECC confirmed that the poor are the most vulnerable to climate and climate vulnerability sits on top of and exacerbates their existing vulnerability. This led on to a series of discussions on the development threshold that these vulnerable communities need to achieve, carbon or no carbon, and then examine the policies and programmes which work against such a threshold and those which will enable us to achieve this within a low carbon path paradigm.


Inauguration initiated by Siddhartha with traditional mandala by participants

The Climate Crisis

Human society has always impacted environment and vice-versa but there seemed to be a dynamic equilibrium between the two. The 'climate crisis' is primarily a result of the disruption of the dynamic equilibrium between society and environment. And climate crisis is not the only crisis. Other crises include desertification, deforestation, depletion of water, esp. groundwater, depletion of fish stocks and loss of bio-diversity.

These crises will only be exacerbated by the climate crisis. If emissions continue at present levels, we will reach the tipping point, or a point of no return, in the next five years. The IPCC has predicted that there is 50 per cent chance of a rise in global average temperature of more than 4^{o}C by 2100.

Dr D Raghunandan's keynote address on the Climate Crisis

While science has explained and increased our understanding of climate, it is the technological solutions that we choose that will make the difference. Each solution that is available has deep social, political and cultural ramifications. (DR)

The Carbon Budgets Approach

The atmosphere has a finite limited carbon space beyond which possibly climate change is inevitable. Thus the atmospheric carbon space is a "global commons" which needs to be shared fairly and equitably. The main problem today is over-occupation of atmospheric carbon space by Industrialised Countries (ICs), as a result of which developing countries are left with little carbon space required for development.

A group of scientists have suggested a re-distribution of available carbon space, rather than the current method of asking for reduction from current levels of emission, based on a judicious mix of historical responsibility, opportunity and capacity. (DR)

Good COP, Bad COP

The '*common but differentiated responsibilities*' was enshrined in the Kyoto Protocol. After the Copenhagen 'fiasco' and Cancun that legitimated the Copenhagen Accord, we are practically back to issues that were central in the beginning at Rio in 1992. The pledge and review system is back on the agenda. Second, there is now agreement that one single frame work for all countries –which will jeopardize the twin track approach of the Kyoto Protocol and LCA which was the underlying basis for negotiations since Kyoto. Third, responsibility for historical emissions has been totally sidelined, equity and justice concerned are missing. Allocation of funds is conditional and tied to 'good behavior'.

Meanwhile, India had chosen to abandon its natural and long-term allies (G-70 and island states) and opted to sit with the Major Economic Forum and G8+.

Durban is expected to take us further in this direction. (DR)

Climate Justice, NOW

While the IPCC has opined that the market led mechanisms will not provide solutions to the climate crisis, the ongoing negotiations (at the International level) are still within the liberal `Washington Consensus' framework. A simple indicator of this is that carbon trade has resulted in a lot of cash changing hands, but little in terms of bringing down carbon dioxide in the atmosphere. (DR).

Climate Justice Now was formed a little before Copenhagen, in order to counter such market based solutions to the climate crisis, which are false solutions (WD)

It created peoples spaces outside the COP process to find real solutions to climate change. It called for system change at Copenhagen. It said that the general lifestyle reforms profile of the current climate change regime – like reducing water usage, or changing to energy saving devices would not solve the problem. The solution has to address the issue as to who and what are the emitters.

At Copenhagen, it became clear that the international negotiations will not lead to solutions that are socially just and equitable. Dismantling capitalism and corporate led liberalisation was seen as necessary to combat climate change.

The Rights of Mothers Earth Charter that was created at the Cochabamba Conference in 2010 (see Box) contains the basic tenets of an alternate justice oriented approach to finding solutions to problems of climate change.

What is Climate Justice?
Principles and demands articulated at
Rights of Mother Earth conference, Cochabamba, 2010

- *50 percent reduction of greenhouse gas emissions by 2017*
- *stabilising temperature rises to 1C and 300 Parts Per Million*
- *acknowledging the climate debt owed by developed countries*
- *full respect for Human Rights and the inherent rights of indigenous people*
- *universal declaration of rights of Mother Earth to ensure harmony with nature*
- *establishment of an International Court of Climate Justice*
- *rejection of carbon markets and commodification of nature & forests through REDD*
- *promotion of measures that change the consumption patterns of developed countries*
- *end of intellectual property rights for technologies useful for mitigating climate change*
- *payment of 6 percent of developed countries' GDP to addressing climate change*

The occupy movement and the resurgence of social movements for equity and justice offer the world hope and a possible direction for climate friendly social transformation.(WD)

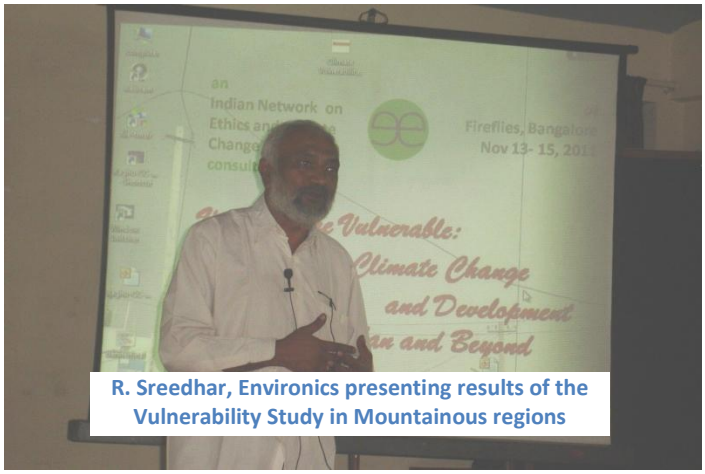
Vulnerability of Ecosystem Communities

INECC has so far completed four vulnerability studies in four different eco-systems in which its partners have been working with a view to understand what makes people/communities vulnerable to climate change.

1. What are the manifestations of climate change that impact vulnerable communities?
2. In what ways do these impact the communities and how are they coping with these changes?
3. What are the factors/processes/developments that contribute to increase the vulnerability of these communities to climate change?
4. What are the policy implications and interim adaptive strategies that arise out of these experiences?

The Vulnerability that emerged from the case studies, presented at the consultation were:

Mountainous regions of the Himalayas – impacted by events induced by overall climate change changes in temperatures like glacial retreat and changes triggered by developmental activities and seismic activity like earthquakes.



R. Sreedhar, Environics presenting results of the Vulnerability Study in Mountainous regions

Semi-Arid regions in the Deccan – Erratic and unpredictable rainfall, increase in periods of heavy or dry spells and heating impacting pastoralists and small farmer communities.

Coastal Eco-Regions in eastern and western Coast – Sea level rise and rise in sea temperatures adversely affecting livelihood of small scale artisanal fisher folk.

Forest Eco-systems in the Eastern Ghats - livelihood practices at present almost fully dependent on the different components of a forest ecosystem itself have become vulnerable to climate change and socio economic factors.

Urban Settlements in Bangalore City – subjected to higher temperatures and heat waves, erratic and intense rainfall and ghettoized squalid settlements for marginalized communities. Increased incidence of flooding, spread of vector borne diseases like Chikungunya and dengue

The researchers shared their findings on the climate induced vulnerabilities and the impact of climate change on their livelihoods and other economy.

Summarising the outcomes of the study, Sanjay Khatua said the manifestations of climate fluctuations, climate change, when listed out are as follows:

- excess rainfall, deficit rainfall, uneven distribution- including very sudden downpour, long dry-spells in between rains, absence of spring rain, very late monsoon, early exit of monsoon, frequency of flooding, frequency of cyclone, and
- temp rise, decrease in number of days of winter, glaciers melting, rise in surface temperature,
- increase in occurrence of lightning and number of deaths due to lightning,
- sea level rise , increase in salinity of water etc.

Variables in Vulnerability

A key variable of Vulnerability to climate is **location.** High altitude areas , low areas, hilly region, coastal, arid region, forest region, all have differing vulnerability and a specific default vulnerability. Similarly, another variable is related to **occupation** - shifting cultivators, hill cultivators, marginal farmers, large farmers, pastoralist, fishing communities all have occupation specific vulnerabilities. Finally there is vulnerability which relates to **regeneration**, most of it which can be related directly to rainfall fluctuation, temperature fluctuations etc. These include sprouting of seeds, reproductive growth, growth of trees or fish spawning etc.

Another variable of vulnerability is **secondary impacts or chain effects.** This refers to vulnerabilities not directly due to climate, but because of down the chain effects. One example of this was given in the coastal study, where the preference for a particular fish, which was depleting in one area due to temperature rise, increases in price, which makes it attractive for non-traditional fishermen, which may then be the main cause of depletion. Many of the impacts of modernisation are exacerbated by climate change e.g., increasing temperatures necessitates more frequent irrigation. Or the chain impact by chemicals from agriculture leach into the ground water, and reaching the coastal regions impacting mangroves, which then increase vulnerability in these areas.

Vulnerability is also based on **socio-cultural practices** – types of clothes one wears, whether one eats millet or rice, whether you go for cash crops or subsistence farming, the level and kind of aspiration. These determine the coping mechanisms. Traditionally one would go to the tamarind trees and pluck some leaves or forage for tubers and live for a day. But now the skill of traditional coping methods is lost, and in times of distress, one borrows money.

Vulnerability of increasing **tipping points** is another variable. For example the increase in pollution or climate change may have small effects on the fish production, but they reach a tipping point and then any

incident like a leak, or a sudden effluent from a industry, can destroy marine life or habitat dramatically, or when the crop fail the lower production of fish cannot sustain the lower reverine population, leading to large scale migration.

Disaster proneness is another variable as some areas are prone to cyclones, cloud burst etc. (KA)

Table: Vulnerability across eco-systems

Eco-system	Climate Change induced Vulnerabilities	Impact on marginalized communities	
		Livelihoods	Others factors
Himalayan mountainous region	**Higher Altitude** • Glacial Retreat **Mid Altitude** • Carbon neutral settlements reducing • Change in pattern of precipitation • disturbance of sowing-harvest cycles **Low Altitude** • Changes in micro-climate	• communities dependent on natural resources effected • Valley agriculture and horticulture affected • Grasslands/graze lands reduced • Agriculture predominant are highly vulnerable • Increased pest attacks in cereals • More urbanization and physical development • Hydro project tunnels • Quick Chilling • Exotic fruits- Kiwi • Citrus fruits replaced apple	• Has more higher density forests & Low density populations changing in dynamics • Protected areas in higher altitude vulnerable • Rapid urbanization (63 urban settlements) • Protected area • Poor forests • Monoculture • Invasive Species- Lantana Camara • Reduced cattle population
Semi-arid region with specific reference to livestock and small ruminants	• Higher run off and erosion in black soil due to high intense rainfall • Prolonged dry spells resulting in crop failure • Grazing areas shrinking • Loss of biodiversity • Changes in migratory routes	• Agro pastoralists more vulnerable • Traditional pastoralists shifting to other livelihood options • Other communities opting for pastoralism	• Soil moisture stress in alluvial soil • Over exploitation • Imperfect drainage ⇨Soil salinity and sodic Soil moisture stress in alluvial soil • poor access to drinking water
Coastal eco-system	• Increase in sea temperatures • rise in sea level • increase in flooding and cyclones in the eastern coast	• decrease in fish catch and expensive fishing trips • loss of beach space for auxiliary fishing activities • shifting to other forms of livelihood options • at risk due to cyclones and related disturbances	• industrial pollution • loss of mangroves • development of coastal infrastructure
Forest eco-system	• erratic and seasonal fluctuations in monsoon pattern	• loss of access to forest resources • shifting agricultural cycle	• faulty forest development
Urban eco-system (Bangalore)	• Flooding, water logging • spread of vector borne diseases like Chikungunya and dengue	• Living in low lying areas • poor quality housing - mud (dampened) floors	• skewed urban development policy • reckless urbanisation

Adaptation & response

Many of the coping mechanisms listed by the studies like expanding land under cultivation, changing of cropping pattern are short term fixes. These need to be continually updated, as after some time circumstances change. The farmers response is currently based on the Almanac. He develops his practice around festivals which are based on the seasons. But with increasing variability, the knowledge system would have to be adapted.

Village level institutions, which are more tuned to other activities like cultural activities, organising functions, and running schemes for poverty alleviation or distributing land will also need to develop capabilities to assist knowledge and capacity development in changing climate and adaptation options. Culturally disaster preparedness calls for other skills like drills of evacuation, skills for swimming, climbing, survival etc.

We need to look at the livelihoods of people in each region and how they will be impacted and then what would be the adaptive options. The other area is health impacts**.**

Most adaptation options seem to look at the pastoral traditional system. Will it be future proof? What would be the livelihoods of the future that we need to bring into the adaptation programme. What would the policy have to look like? What are the short term urgent measures that we need to get going on? In the long term we need to consider future scenarios of increased population, increased migration to cities, shift of livelihood from land to services, urban areas etc (RP)

Having outlined the vulnerabilities, policy measures and adaptive measures, we need to examine the mandate for reflecting peoples' perceptions and voices. What are the fora that represent the vulnerabilities for example the National Fishworkers Federation would represent the traditional fishers. How would we then get them to incorporate the climate perspective in their actions and in their representations at the Policy level? (DD)

We need to disseminate the insights, some of which are decisive and others - work in progress. So besides working with these representative groups, we need to relate with academicians, researchers people who could add value to the insights. (ND)

In the assessment studies we are going from the micro to the macro and policy recommendation. We need to take some intermediate steps. We need to work further at the micro level, look at it more carefully, by looking at the anecdotal evidence and cross check it with what is known scientifically. Second thing is look out for gaps in our own field work, or gaps in geographical agro-climatic areas that we have left out. Lastly, when engaging with policy, we must highlight where the contradictions lie. For example: 60 to 70% of agriculture is rainfed and clearly the rainfed agriculture will be the most vulnerable especially since 60 to 70% of the land held in the area are by small and marginal farmers. Yet when it comes to policy, the Prime Minister keeps talking about a second green revolution. We all know that the second green revolution will come in the irrigated areas. We need to highlight the second brown revolution in the drought areas. We need to work with water resource conservation and rejuvenation, this is one area we know is going to be impacted by climate change - a problem we have caused by over exploitation, and lastly since urbanisation is going on regardless, we need an action plan for the cities. What would we do for heat islands and for water? (DR)

While accepting that vulnerability is eco-specific (due to location in a particular eco-system), it is important to understand vulnerability caused due to non-climatic factors (like the dominant development paradigm) and those caused by climate change as distinct, but at the same acting upon each other. The danger inherent in bundling vulnerability (both climatic and non-climatic) as climate change induced will take us away from questioning the dominant development paradigm, which is the root of causing both climate change and increasing the vulnerability of communities already greatly affected by the dominant development model.

The studies also revealed adaptive measures already being taken by the community, even if they were not consciously climate-change inspired. They then connected the learning from the vulnerability studies to the broader level of policy making, as well to empower the vulnerable to strengthen their adaptive capabilities.

Eco-system	**Adaptive measures practiced**	**Policy implications**	**Way forward**
Himalayan mountain region	Shifting of crops to higher levels, change in crops and migration to semi-urban settlements.	Early warning systems	Climate proofing of highly sensitive Himalayan region
Semi-arid – livestock and small ruminant system	Shifting away from pastoralism	A shift away from dairy centric livestock policy	Local production geared to local consumption pattern, local breeds
Coastal eco-system	Movement towards deep sea fishing, which small fisherman cannot do	Close working relationship between fishing community and fishery scientists	Developing sustainable fishing practices
Forest eco-system	Moving away from forest-based livelihood strategies	Re-design forest development programmes to take into account livelihood needs and community rights under Forest Act.	Low carbon farming and community regulated resource usage.
Urban eco-system (Bangalore)	Short term adaptation techniques to minimise climate risk	Housing rights and urban redesign and infrastructure	Image the metropolis and urban space differently

This has some fundamental implications in connecting vulnerability and adaptation strategies to the overall policy and long term strategies for a low carbon path.

Development Threshold and Low Carbon Pathways

A sustainable business is one that actively seeks to reduce the amount of resources it uses, whether energy, water or land, and manufactures goods that are not hazardous to the people who make, consume or dispose them; that minimizes its environmental and social impact; that designs products with a view of their complete lifecycle. Energy audits, lifecycle analysis, water recycling and creating safe work environments are becoming standard operating practices for the most enlightened companies. The logic for creating such a business model isn't compassion or charity but sustainability.

Smart money has found opportunity in clean technology. In 2007, renewable energy alone attracted $148 billion in private equity worldwide. Hydrocarbon-based energy systems have reached the end of their life due to their tremendous cost constraints. At the same time it's amazing how much oil has been discovered since the price crossed $100 – shale gas, tar sands etc. But even if a lot more oil comes onto the market, the price will not go down because the cost of extraction and replacement has rocketed.

Huge investments, involving hundreds of millions of dollars are going into wind, micro-hydel and, biomass in India. But we are tapping a fraction of the potential. In wind we have reached 22% of the capacity, in micro-hydel it would be 18%; in bio-mass it is tiny at 8%, so we are just scratching the surface. By 2030, projected investment in renewables alone will reach $20 billion a year and all of that will come from the private sector.

Private equity investors see another huge opportunity in water and waste-water engineering because of the mismanagement of public services, especially in the urban areas. There is a solution to water within the private sector. It can be funded and can answer the problem of urban water supply. Equally important is treating waste water. There is no reason why industry can't recycle its own water.

The third issue is waste. India has a very good system of collecting waste and most cities have an efficient collection, segregation and recycling model in the informal sector. That can easily be organised, upgraded, capitalised and made into viable cooperatives. (AS)

Business as Usual

Businesses, though primarily concerned with business models that ensure sustainable profits today are now talking about 'responsible corporate behaviour'.

However this seems to be regular *Business as Usual* as they have invested in solar, wind energy, waste management and water are seen as the sectors for the future. Renewable energy, for example has attracted enormous amount of money, especially private equity.

India meanwhile is the fastest growing CER market.

One reason why solar energy has not taken off in India is that the intensity of solar power is not matching the intensity of fossil fuel. Second, companies like Moserbaer export their solar panels to Germany as they get positive subsidies. In India, water desalination will consume more energy to produce more water. Unless our IITs, IIScs come out with local solutions, we have fancy view of solutions which are more in theory and academic papers than in practice. Otherwise there is limited substrate water, and equity in distribution becomes the issue.

Writer Lester brown has suggested carbon tax which takes into account the climate change ramifications of energy sources. Is this a feasible suggestion? (S) One of the criticisms of carbon tax is the problem of manipulation. You get the same kind of lobbying by industry for exemptions or subsidies with firms

claiming exemption on some ground or the other. The Kyoto protocol sets absolute limits on carbon emissions for each signatory country, and based on reductions, receives credits that can be bought and sold. The price of carbon is calculated on the volumes of what can be bought and sold. It is not that "the invisible hand" of the market will solve the carbon problem. But compared to the completely arbitrary government-run tax system, which will likely base its calculations on extraneous factors, cap and trade is the best option. The second problem with a carbon tax is there is no incentive to cut carbon; polluters just pass the cost to the customer and continue polluting. (AS)

The Occupy Wall Street campaign is clearly saying that the 1% cannot continue ruling the world and hold 99% of the world wealth. It seeks to bring together the grassroots groups: dalit rights, adivasis rights whether land issues or human rights. A whole range of people from NGOs to lawyers, activists are involved. Yet we see the kind of globalisation and a development path which is destroying the earth. In terms of time, if the life of the earth is taken as one year, humans have emerged only in the last 24 hours, and belief systems over which we fight so much only in the last half hour and science and technology to which all the climate change can be attributed, only in the last two minutes. We are therefore at a point where humans must decide if we have come to this point only to falloff, or move on and continue.

A couple of thinkers, like Thomas Perry and Bryan Swain have said that nothing in the theme of evolution indicates a hierarchy in the universe. If at all there is a reason to give the Human a special place is that it is through the human that the Earth has attained consciousness of itself. This places a serious responsibility on the human to be true to the consciousness of the Earth, which means there is an ontological vocation of the human to enhance the journey of the universe through time. Conversely, by polluting and violating the biosphere, the human is going against the unfolding of the universe which includes the Earth and its human and non-human offspring. (S)

In the whole climate discourse there is a lot of discussion on low carbon pathways, not so much on the development threshold, upto which growth is non-negotiable and in this growth what are the indicators we need to ensure for a low carbon path. (ND)

The low development pathway is not just tinkering at the margins but transformative systems and ways of doing and transformative process. (DR)

In the absence of any international agreed emission agreements or carbon budgets in place that will determine India's share in global carbon space it is difficult to chart a unilateral and autonomous low carbon path.

Rural Industrialization: a suggested transformative strategy

- distributed, networked rural enterprises
- localized/decentralized production and distribution systems (with DDG power if required)
- adding value to rural resources (plant/animal/ mineral) for finished/semi-processed products
- local/regional markets
- create rural jobs, improve rural incomes, improve rural-urban terms of trade
- new skills and knowledge base in rural areas

However, in the backdrop of Governments commitment to reduce emissions by 20-25 percent from 2005 levels by 2050, certain possibilities are open in key sectors like energy, industry, transport, forests and urban design.

The principle underlying alternate low carbon pathway is not only to do different things, but do things differently. A focus on Rural Industrialisation is the key to this. One needs to focus on the vast pool of literate youth who are no longer looking to their farms for livelihoods. Creating decentralized hubs of

production centres that create value addition at the local level for local distribution and consumption is the key. There are enough of examples of successful ventures at the local level.

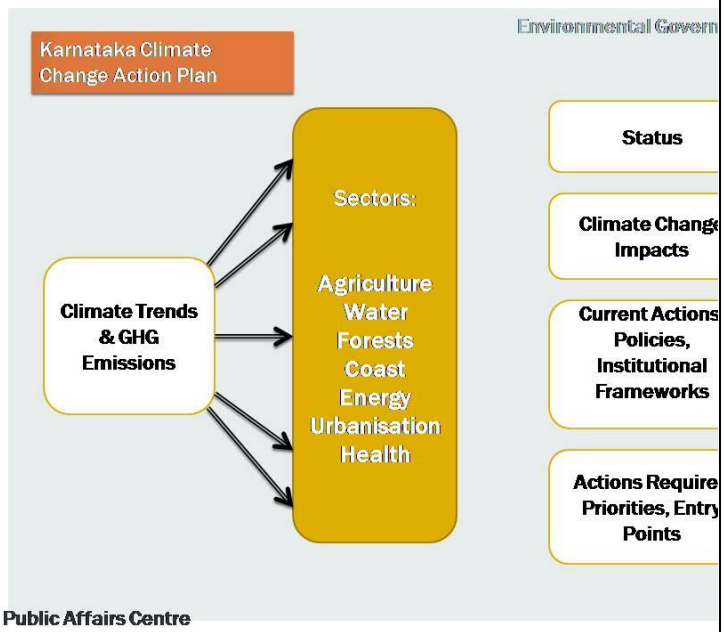
Large projects are the result of centralized decision making, far removed from the arena where the competing demands for resources are played out. These naturally result in disastrous large projects that play havoc with local communities, local economies and local cultures.

Focussing on the needs, rights and aspirations of the marginalised majority will mean to do things differently to make accessible energy, infrastructure and capacity building to have this happen. This makes the low carbon path possible and sustainable, but within a context of connectedness with larger realities of consumption and resource allocations.

Doing different things implies understanding the interconnectedness of things, and acting according to such interconnectedness – whether it be of resources, livelihoods and technologies; whether it be of economics, culture and politics; or whether it be of spirituality, ecology or cosmology.

State Climate Change Action Plans

Like the preparation of the National Action Plan for Climate Change (NAPCC), the making of the state actions plans (SAPCC) has been a top down process led by scientists and bureaucrats with no participation of civil society or local communities. More importantly the task of drawing up the plans seems to have been sub-contracted as a desk study. It should be recalled that the National Action Plan itself is more a response to International pressures to show that we are doing something rather than a Plan for positive or well thought off climate action.



The Karnataka State Action Plan for example seems to be an exercise in claiming quotas in different plans announced in the NAPCC. Since several policies are already in place,

Karnataka State Action Plan

<u>Claiming quotas & money for existing schemes?</u>

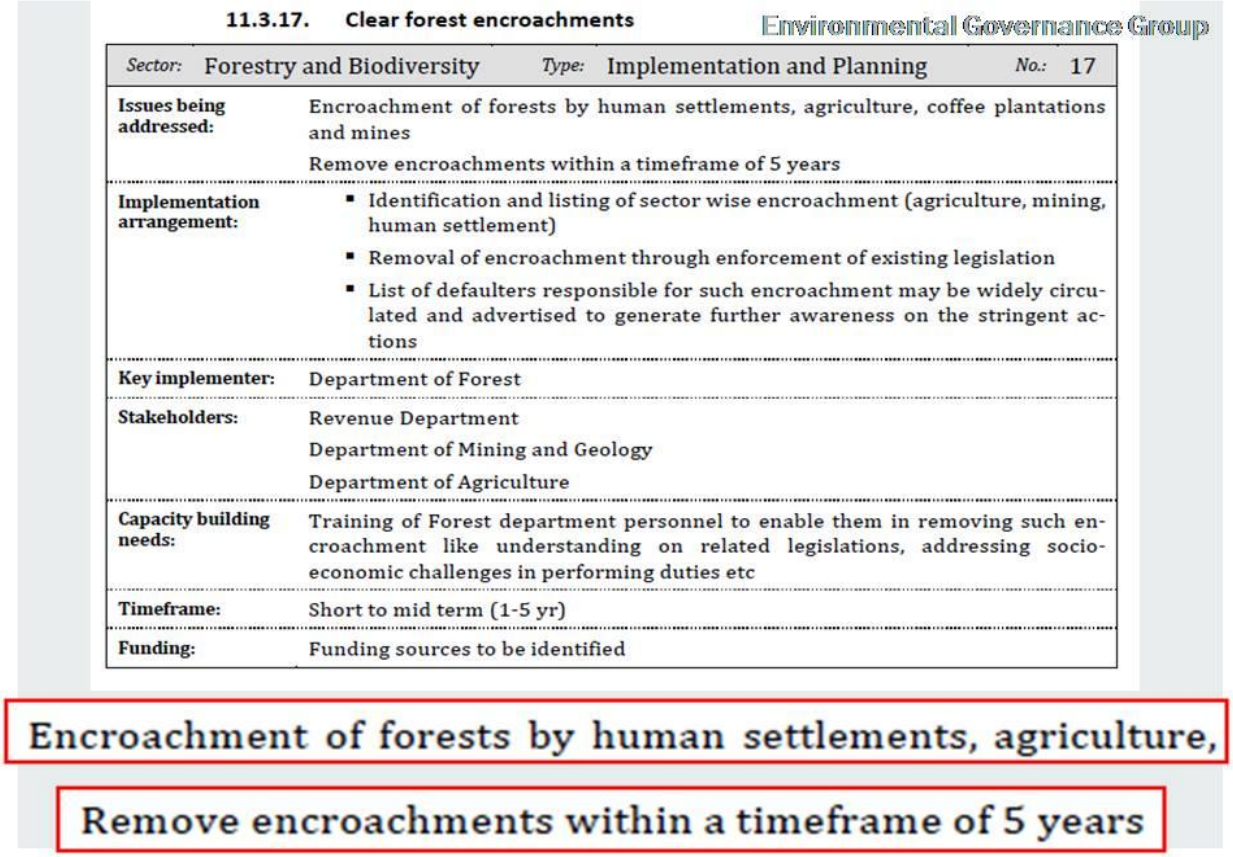
- Various agricultural schemes, including organic farming, micro irrigation, etc
- Water: RWH compulsory, watershed development, artificial recharge, etc
- Forestry: lots of planting
- Energy: SWH incentives continue, new building CFL mandatory, green energy cess, biofuel board, Solar PV gen, CNG pipeline

<u>Core issues not addressed</u>

- Why mitigate? How much? Who should mitigate? At how much cost?
- Why adapt? To what? Who needs help to adapt? What kind of help?
- What are the synergies and tensions with other Sustainable Development issues?
- How effective are we so far, and why not?

the plan has the effect of the State trying to ensure that more of its regular expenditure get covered by the Central Schemes. Thus the temptation to simply fit into Central strategies and funding schemes is very strong. Primarily the document lacks vision. Since the average GHG emission for Karnataka is equivalent to 1.5 degree rise in temperature, the nature of need and purpose of mitigation needs to be stated so that the vision for climate action is clear. There is also a lot of confusion between adaptation and mitigation.

Further, there is nothing to acknowledge local knowledge, the role of the commons, common property rights, or the rights of the local communities and indigenous peoples. In fact alarmingly, the State Plan speaks about encroachments and removing people from forests. The issue of equity is also completely missing. (SL)



11.3.17. Clear forest encroachments

Environmental Governance Group

Sector: Forestry and Biodiversity	*Type:* Implementation and Planning	*No.:* 17
Issues being addressed:	Encroachment of forests by human settlements, agriculture, coffee plantations and mines Remove encroachments within a timeframe of 5 years	
Implementation arrangement:	▪ Identification and listing of sector wise encroachment (agriculture, mining, human settlement) ▪ Removal of encroachment through enforcement of existing legislation ▪ List of defaulters responsible for such encroachment may be widely circulated and advertised to generate further awareness on the stringent actions	
Key implementer:	Department of Forest	
Stakeholders:	Revenue Department Department of Mining and Geology Department of Agriculture	
Capacity building needs:	Training of Forest department personnel to enable them in removing such encroachment like understanding on related legislations, addressing socio-economic challenges in performing duties etc	
Timeframe:	Short to mid term (1-5 yr)	
Funding:	Funding sources to be identified	

Encroachment of forests by human settlements, agriculture,

Remove encroachments within a timeframe of 5 years

There is no determination of the stakeholders in the plans, nor is there mentions of communities, women or livelihoods. Also there is no mention of capacity building of stakeholders in the Plan and NGO involvement is limited and confined to knowledge dissemination in some sectors.

Vulnerability is broken mechanically into sectors and districts and there is no cohesion in the recommendations which are in bits and pieces. The recommendation does not relate to existing policies and schemes already in place that appear to be climate friendly and therefore seem to be made in isolation from the existing. (KG & PS)

We need to have more discussion on this plan and this being among the first few; there is a need to come out with alternate/complementary/supplement documents on vulnerability and adaptation.

REDD+: Myths and Forests

What can possible be wrong with a grand global mitigation initiative under which the North compensates the South for preventing deforestation, forest degradation, and forest preservation? Everything!

Reducing Emissions from Deforestation and Forest Degradation (REDD) and protecting forests (REDD+) gained prominence with the Copenhagen Accord, which saw these initiatives as important in reducing the 17 percent of global emissions that come from deforestation.

India is keen on REDD+ and wants to be paid for forest conservation will result in US$ 3 billion, which the government proposes will go towards poverty alleviation of forest communities.

Impact of biodiversity conservation and other environmental benefits

- Carbon forestry is not intrinsically biodiversity friendly: fast growing tree plantations are best for carbon
- Carbon forestry can also have mixed effects on hydrological cycle
- If one adopts mixed forestry or native species, biodiversity increases, but sequestration rates go down, dollars will go down
- Mono species carbon forestry also negatively affects the hydro cycle. One single species in the landscape will lose a lot of water due to transpiration.

Evaluating REDD in terms of climate effectiveness, bio-diversity conservation, justice concerns and impact of forest people's rights and governance and transaction costs, it appears to be a negative programme.

In terms of directly benefiting forest dwelling communities, in the light of JFM experience, it appears that REDD will further erode access to forest resources and benefit large landowners (elite capture) and strengthen the role of the forest department over forests.

REDD will pave the way for incursion of market based climate solutions and monetize large chunks of forest resources.

Green India Mission

It just seems to be a new term for the National Afforestation Progamme where there is lip service to decentralization, revamping the JFM programme etc.

The Government puts two different faces on the same activity.
While presenting the GIM to the International community, they speak of it as India's own programme backed by one thousand crore investments and not necessarily REDD+.
Yet the Green India mission document says it expects a significant amount of money to come from the carbon market..

Getting into REDD+ is questionable, because it is not going to benefit climate, it is not going to benefit people, when there is no Global climate agreement in place where is the need to spend so much energy on this. Without having a global climate agreement we cannot expect billions of dollars coming. What you are seeing now is just a small trickle form the AID agencies to facilitate this process. Recently the USAID has put in money in India to make it REDD+ ready. The reason, if tomorrow there is any agreement in the future they can just buy their way out paying us a pittance and getting us to doing carbon sequestration on their behalf. This is what we need to really watch out for before even talking about REDD+. In short, in the absence of binding international agreements on emission reduction and carbon budgets, implementing REDD+ initiatives will be counterproductive.

Prof. Sharad Lele, ATREE on REDD+

Even if money is coming in free from the AID agencies, for the plantation, the question is where will the money go, as in the case of Joint Forest Management and in the context of social forestry, as we have seen in all AID based afforestation programs, the money ends up in the forest department, in the village elite; the landless labour or the tribal is back to wages. There is really no gain unless there is change in governance, and the capacity to do democratic business at the local level and to engage them meaningfully in the market before any of these financial based carbon sequestration programmes are taken up.

REDD+ as it stands today, has very little to do with climate change mitigation and everything to do with promoting carbon markets in the name of climate change.

The Way forward

Environmentally sustainable development can only be achieved with equitable development. Therefore just as the debate on the global level is focusing on the fact that one cannot address the climate crisis without addressing the question of equity, same thing applies within the country. We cannot address the issue of low carbon pathway without addressing the question of equitable development. Therefore movements cannot just be talking about sustainable development, cannot just be talking about social justice, climate but must be interlinked to bring about the transformations.

To conclude, what is required is integrated movements for sustainable development, for social justice and for equity. (DR)

It was in this overall scenario of a rapidly escalating climate crisis that the consultation turned to the voices of the vulnerable emerging from four eco-regions in India – mountainous, semi-arid, coastal and urban.

We have already committed to developing the common frame with other networks, initiatives and movements; we will also get involved wherever we have a strong local presence to bring together expertise, local communities and sensitive individuals from business and government to develop key elements of local and regional climate action plans that are attuned to people's experiences, wisdom and aspirations.

We need to work much more on the conception and groundwork of the Development Threshold and the Low Carbon Path – the twin track that looks at domestic equity, but within the framework of the carbon budget, and common but differentiated responsibilities. We have responsibilities too, in the interconnectedness of equity and well-being, economic and material prosperity, as well as inner well-being.

Finally, though the UNFCCC is an inter-governmental process, it is inherently a conservative process, captive to vested interests of the rich and the powerful. We need to connect with the international community of peasants, indigenous communities, labour groups, esp. women and youth; this is where the conception of the alternative, the good-life and the people's voices can converge into an interconnected irresistible force to make the world a better place for human beings, all beings, and for future generations.

D Raghunandan's What is to be done..

Power of One? Or Power of Many?

Individual actions are very important as they promote awareness, involvement, commitment and can catalyse movements.

Lifestyle changes are an integral part of the struggle against socio-genic climate change, but policy changes have greater and more lasting impacts

Individual Actions?

Conserve energy through a) use CFLs, LEDs, electronic ballasts, switch off TV, microwave ovens etc at mains: avoid stand-by mode etc b) adopt energy-saving devices & c) use mass transport wherever possible. But it is also important is to *JOIN MASS CAMPAIGNS/MOVEMENTS to change policies*

Campaigns for Policy Changes

Promote energy access and energy equity while having energy conservation targets for high users.

Impose energy efficient equipment standards for things like pumps, motors, ACs, vehicles, heaters/geysers

Building codes to reduce cooling requirements, energy audits of buildings and energy practices including time zoning of working hours for optimum use of daylight

Public transport and urban planning for reducing energy, travel, built environment

Promote public awareness on international linkages and build pressure on decision-makers, political parties, legislators

The Consultation Summary & Outcome

International negotiations on Climate Change under the auspices of the UNFCCC - United Nations Framework Convention on Climate Change, are getting bogged down even as the Science and the Experience of Climate Change calls otherwise. The biggest polluters are trying to negotiate systems that will be the status quo of inequality. Perhaps this is due to the economic crisis that is upon them, and probably they are unable to bell the cat as far as their people are concerned. But the bell tolls, and it tolls in the form of the *Climate Justice Now* Campaign, who have now called for Occupy COP 17. While supporting such protests, INECC has committed itself to a process to enable People's Voices and Programmes.

It is an attempt to bring together the understanding of local communities on the impacts in different eco-systems, the responses, the innovations, and thus resilience. The varied contributions from the different eco-systems, that enable us to have a framework on which we can work further, and continue bringing researchers, scientists and communities together. These speak of decentralized energy options, green cities, protection if not support for traditional/low carbon fishing, low carbon farming, decentralised settlements in cities, etc. These have implications for policy and strategic responses from civil society, government and business. (ND)

This can enrich the Action Plans in the making – we need to have a common frame, one that would be enriched by the bottom-up understanding of the ground realities, to come up with what is needed, wanted, and is more likely to work and be relevant. At the heart of this process is equity, domestic equity; and well-being with dignity, much beyond mere survival. (WM)

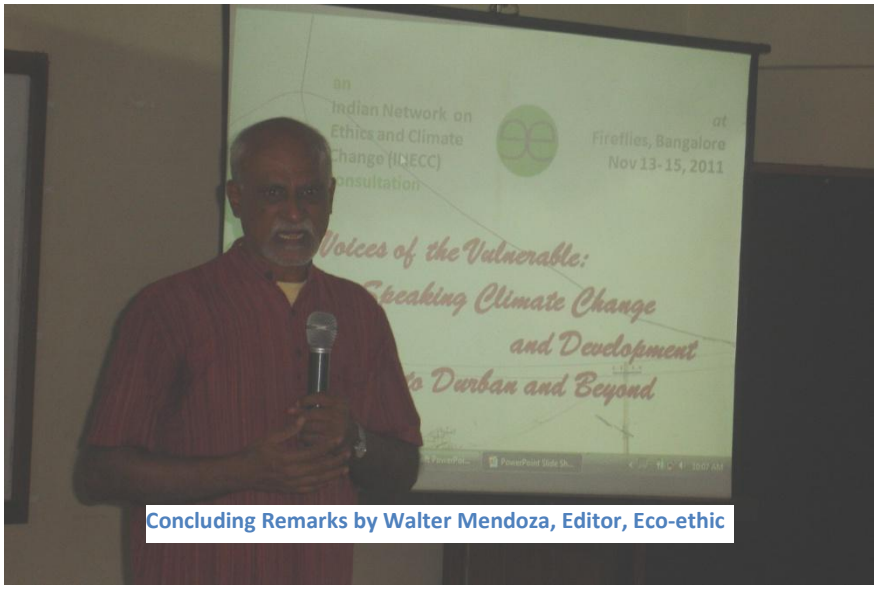
There are two things that INECC needs to take forward. First: we have been working on bringing the Voices of the Vulnerable to the fore for some time. The eco-region based vulnerability studies, though uneven, are part of that effort. They are not uneven in the sense of inadequate. They were pilot studies, and not very academic, complete or well rounded. While the mountain study gave us a macro perspective, we had micro studies of three hamlets in forests, and three in slums in urban areas.

Each of the studies gave pointers to understand the overall situation and understanding of vulnerability. So while we generally paid a lot of attention to livelihoods, the Western Himalayan study brought in the aspect of disaster.

As a result of these studies, we can follow up with the final study to include indicators highlighted in other studies like health, disaster, living conditions.

The other important effort in INECC has been to reclaim development in the climate change debate. This is not just at the COPs or international level, but also internally within the country and in our own eco-regions.

At the International level, we find that organizations like CAN (Willy has also included WWF in this category), seem to adopt unacceptable top-down view of emissions reduction. Our attempt is to bring peoples voices, and the voice of the vulnerable – which entails bringing issues of equity into the centre stage of negotiations.



Concluding Remarks by Walter Mendoza, Editor, Eco-ethic

In this, Dr. Raghunandan's approach of the right to a minimum development threshold coupled with the distribution of carbon space, is what we can pursue. It is not just a question of per capita emissions, or equity in a purely notional sense, but the right to actual development – dignity, well being and livelihood, that has to be brought into the debate of carbon emissions and climate crisis. Any centralized system that looks mainly at technology and science, will not solve the crisis, unless it is well directed to attaining the minimum development threshold for all. Thus the focus of the low carbon path must be on equity in a very practical and living sense.

The Plans for these should not be done in haste, as has been the case of the National Action Plan and now even the state action plans. We must slow down the process to include a bottom up to ensure that we bring in the concerned voices and choices of the vulnerable.

On REDD+, INECC would take in Prof. Lele's view that in any case the emissions saved is only marginal to the process, and therefore one must be wary of the industrial models of reforestation being pushed using Climate Change, and develop such programmes under previous objectives of sustainability, forest people's rights, ecological balance etc.

Thus the effort of INECC would be to reclaim equitable and sustainable development in climate change debate, and these have been incorporated in INECC's programme plans for the next three years.

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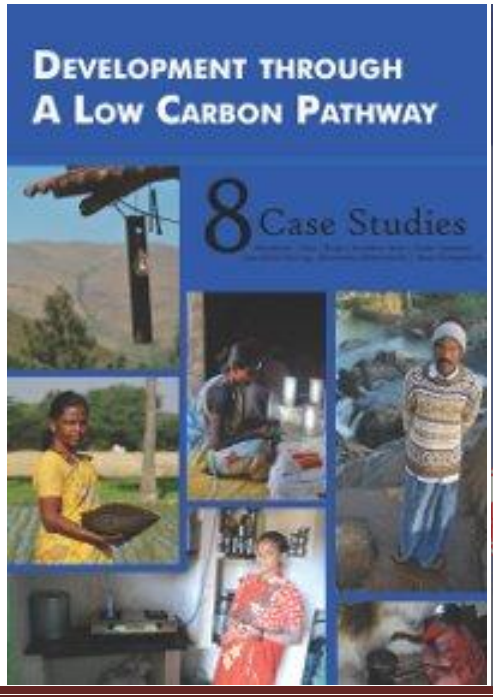
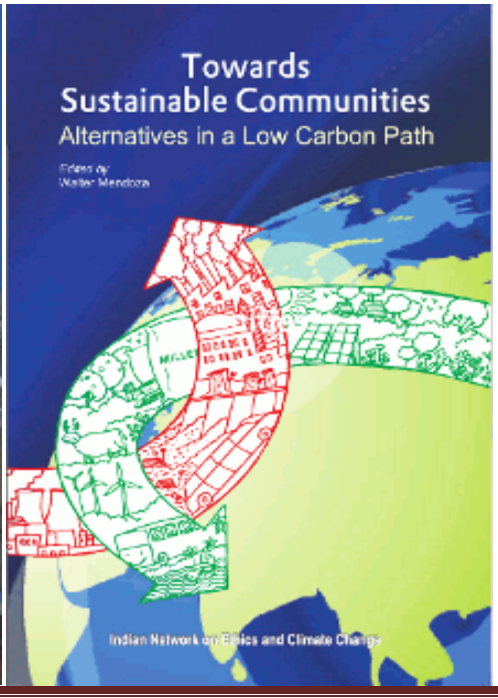
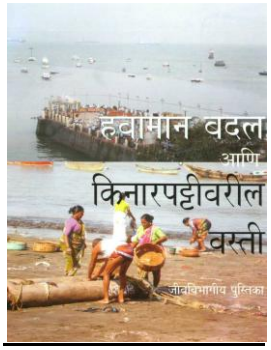
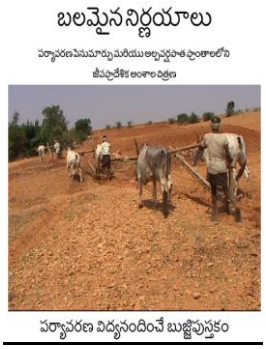
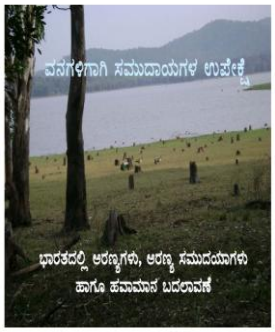




Titles in the Climate Education Series



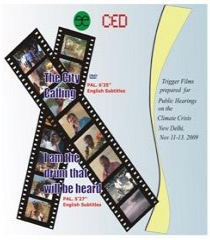




Available in English: "**Hardy Options**: Eco-regional notes on Climate Change & Semi-arid regions

Available in English: "**Missing the Community for the Woods**: Forests Communities & Climate Change in India

Trigger Films:



I am the drum that will be heard (PAL 5' 27", English Subtitles)

The City Calling (PAL 6' 35", Eng. Subtitles) -impact of rising sea levels on high tides which affect the slum communities living on the shoreline.

Films on Climate Change by Documentation Research & Training Centre:

- **Mountains**: 7min7 secs
- **Climate Change Urban**: 8.53mins **Climate Change in Orissa**: 10 min.
- **Climate Change in Andhra Pradesh** :31 mins
- **Diamond in Rust**: 10.6 min

Money for Nothing? A Peoples Perspective on CDM for Sustainable Development. by LAYA Resource Centre, Visakhapatnam. 25mins.

People, Power, Putsil
The story of the Micro Hydel Power Plant at Putsil, Orissa which was built through community initiative. 17.20 mins

INECC- Indian Network for Ethics on Climate Change

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