Current state of play: climate change, human rights, sustainable development

Civil Society Workshop on Sustainable Development & Future Climate Politics in India 7-9 October 2014, Mumbai, Maharashtra, India

Human Induced Runaway Emissions: unsustainable planet

IPCC Chair at UN Summit: *The cost of inaction will be 'incredibly higher' than the cost of action*



Global mean temperature should stay below or stabilize at 2 degrees Celsius above pre industrial levels

Issues of Global Concern

- Negotiations trajectory: moving backward
- <u>The History of Climate Change Negotiations in</u> <u>83 seconds (HD).mp4</u>
- Historical vs. Future Emissions Deadlock
- Country self interest vs global interest
- Disconnect between civil society demands and international decisions

India's stand

- Reduce energy intensity by 20-25% by 2020 based on 2005 levels
- No shift: other BASIC countries are showing flexibility esp. China and South Africa
- Unacceptable because of double speak: equity

WHY SHOULD INDIA BE CONCERNERNED ABOUT THE CLIMATE CRISIS?

Manifestations of Climate Change in India

• 2002 drought

- May 2003: 20 day heat wave during in Andhra Pradesh
- 2002-03: Extreme **cold winter** in the year
- July 2004: Drought like situation in India in
- March 2004 and Jan 2005: Abnormal temperatures
- 2005: Floods
- 2005 06: Cold wave
- 2006: Floods in arid Rajasthan & AP and drought in NE regions
- 2007: Abnormal temperatures during 3rd week Jan 1st week Feb
- 2009: 2nd India Severe drought
- 2010 One of the warmest years
- 2011 Failure of September rains in AP
- 2012 Drought in Punjab, Haryana, Gujarat and Karnataka. Floods in Assam; Neelam cyclone, AP floods
- June 2013: Uttarkhand heavy rainfall leading to devastation
- Sept. 2014: Kashmir: worst floods in living memory of people due to torrential rain

Climate Change violates the human right to live with dignity of eco-system communities

- Marginalised are dependent on eco-systems for their survival: Coastal, forests, arid, mountainous, urban.
- Infringement of socio-economic and cultural rights



The farming community: semi arid/arid

- Two third of our area is rain fed (CRIDA)
- Rainfall: greater variability
- More frequent and severe weather extremes: more risk of flooding or drought:_concern to small farmers
- Average temperature predicted to rise by at least 1.7°C from a 1970s baseline (Gol study prediction for 2030s) leading to a lower yield per unit area, especially for India's wheat and paddy crops.







Impacts on Wheat and Rice-2030 scenario WHEAT RICE





OVERALL IMPACTS

-1

-2

-3 -4 -5 -6 -7 -8 -9

Change in yield (%)

- Negative impact on rice, wheat and horticulture
- Neutral or positive on some crops like soybean, groundnut, coconut, potato in some zones

State

 Impact on livestock and fisheries still to be better understood

Source: ICAR

Bihaı

Coastal communities

- India has a large coastline of 7512 kms
- Mean sea-level-rise trends along the Indian coasts are about 1.30 mm/yr
- higher flood risks associated with storm surges along the southern part of the east coast of India, where tidal ranges are low
- one metre rise in sea level would displace over 7 million people,



Net sea-level-rise trends from past tide- gauge data

Station	No of years of data	Trends (mm/year)	GIA (Glacial Isostatic Adjustment) corrections	Net sea level rise (mm/yr)
Mumbai	113	0.77	-0.43	1.20
Kochi	54	1.31	-0.44	1.75
Vishakhapatnam	53	0.70	-0.39	1.09
Diamond Harbour (Kolkata)	55	5.22	-0.52	5.74 5.74 sinking of delta

National Institute of Oceanography, Goa

Case of Ghoramara in the Sunderbans

- Rising sea levels are real: the case of Ghoramara island has been reduced in size by 42% since 1969.
- 7,000 people displaced in the last 30 years...just a tip of the iceberg.
- Ghoramara may not exist beyond 2020.
- In another decade the sea will claim a dozen islands and will render about 70,000 people homeless

Forest Eco System Distribution of forest vulnerability index for 2085



Red is most Vulnerable and green is least vulnerable

- The Himalayan Forest Eco-region are the most vulnerable to climate change
- The coastal and Western Ghats regions (esp. the northern part of Western ghats are more vulnerable) and others are moderately vulnerable to climate change
- The north-east region is minimally projected to be impacted by climate change (as there are predictions of increase in rainfall)

Indian Institute of Science

Mountainous region

- Source region for India's three major rivers.
- 75% of the Himalayan glaciers are thinning (ISRO)
- An increase in water run-off in the Himalayan region of 5%-20% anticipated.
- Beyond the 2030s, the 500 million people living in the catchments of the Ganges and Indus rivers are likely to experience diminishing water availability in summer.





Urban eco system

 Cities subjected to multiple climate hazards depending upon their geographical location and climatic conditions

• Direct and Indirect Impacts

 Human rights perspective: subsystem within the larger urban eco-system Climate impacts contribute to Human Rights violations

- Threat of life from increasing disasters
- Physical **displacement** of the most vulnerable
- Food Insecurity: staple crops will be affected, degradation of resources
- Acute water shortages: 4AR-per cap availability of water will decline between 2001-2050
- Health Vulnerability: nutritional deficiency, water stress resulting in diarrhea, spread of malaria, extreme events related mortality
- Gender inequity

India's emissions rising!

Carbon Emissions Of India



The poor are low carbon users

Residential Sector Energy Use and Poverty



Energy and Development - Equity

Distribution of Electricity Consumption by Income Class



Source: National Sample Survey Data, 2004-05

Prayas Energy Group

Energy distribution and access: key sectors

- Galloping emission pathway yet no access to electricity for half the population:
- Transport sector: second largest consumer of energy yet poor road and public transport systems
- Construction sector: huge consumer of energy
- ✓ 70 percent of buildings in India that will exist by 2030 have yet to be built
- ✓ More than half of our population does not reside in permanent homes,

Challenges for India

- How to cope with impacts of CC?
- How to address issues of standard of living: HDI 136/186?
- How to ensure ecological soundness?
- How to ensure equity?
- How to stay within the carbon budget?

Underlying Challenges

- Revisiting perspective of development: Equity is perceived as a by product of growth
- Including social well being in the radar of development goals
- Prioritizing importance of natural capital (ecological services)
- Addressing problems of good Governance

Signs of Hope: Global Context

- UN discourse on sustainable development goals
- Climate Summit at New York in September 2014
- Civil Society has not given up on advocacy efforts
- Business entities more forthcoming with commitments
- Multiple actions outside the negotiation framework

Signs of Hope: Indian Context

Green National Accounts in India-A National Framework, March 13

Measurement of Social Well Being

- Constituents: health, happiness, autonomy, security and the fulfillment of desires
- Determinants: food clothing, potable water, shelter, access to knowledge and information

Sustainability Analysis:

 National Accounts should include the use and depletion of the natural environment (natural capital)

Civil Society Discourse: Alternatives

Pillars of alternative framework

- Ecological sustainability
- Social Wellbeing and Justice
- Direct and delegated democracy
- Economic democracy
- Cultural diversity and knowledge democracy

Alternatives in various sectors

- Society, culture and peace
- Alternative economies & technologies
- Livelihoods
- Food and Water
- Settlements and Transportation
- Alternative Politics
- Knowledge and media
- Environment and Ecology
- Energy
- Learning and Education
- Health and Hygiene

Values and Principles expressed in alternatives

- Ecological integrity and the rights of nature
- Equity and justice
- Right to and responsibility of meaningful participation
- Diversity and pluralism
- Collective Commons and Solidarity
- Resilience and Adaptability
- Subsidiarity and Ecoregionalism
- Simplicity and Sufficiency
- Dignity of Labour and Work