

AGRICULTURE IN CLIMATE CHANGE NEGOTIATIONS

Why it is important to talk about agriculture in climate change

Climate change is not only an environmental issue but a defining problem for generations to come which can slow down the pace of progress towards sustainable development either directly through increased exposure to adverse impact or indirectly through erosion of the capacity to adapt. The increasingly erratic climate variability & unpredictable extremes of weather are already having adverse impacts on agriculture & food security, which will increase - as it may alter the balance between food demand and supply. South Asia and Africa are projected to be particularly vulnerable to these changes due to their large populations and great dependence on agriculture for livelihoods. Majority of the developing countries and small island states are most likely to be affected by climate-change impacts. Even with a temperature rise of 1–2°C, the IPCC predicts serious effects, including reduced crop yields in tropical areas leading to increased risk of hunger, spread of climate-sensitive diseases such as malaria, water stress in Africa, increased risk of floods followed by drought and water scarcity for millions of people, inundation of coasts and threat of stronger tropical cyclones, complete submergence of some small island states and an increased risk of extinction of 20–30% of all plant and animal species. With impact on life and livelihoods, climate change will have far-reaching effects on the sustainable development of developing countries, including their ability to attain Millennium Development Goals (MDGs) by 2015.

Globally, 1.7 billion farmers depend on agriculture, the proportion of which is substantially large in developing and least developed countries. It is alleged that Agriculture (excluding land use changes and deforestation) contributes to around 12% of total GHG emissions. The low land agriculture and deforestation of upland terrain, cattle rearing – particularly stall-fed practices (but also from its enteric fermentation) are major contributors to GHG emission along with shifting cultivation to a small extent. Methane emission depends on components like water regime, organic inputs, soil type, weather, tillage management, residues, fertilizers, and type of rice cultivation. The GHGs are also emitted by poor keeping of livestock. However, there is a need to make a distinction between highly mechanized high input industrial agriculture in developed countries and subsistence small or family farming in developing and least developed countries.

Agriculture in climate change negotiations

In the climate change negotiations of the UNFCCC, the discussion on agriculture increased in the run up to Copenhagen. UNFCCC organized a workshop on Agriculture during Bonn climate change conference (May, 2009). The outcomes of the workshop were inserted in the form of a separate chapter in mitigation in the LCA Text. The entire focus in agriculture remained on mitigation and the LCA adaptation chapter had only a footnote reference to agriculture linking the sector to projects and programmes. The push was provided by countries like New Zealand (50% of total emissions from agriculture) and Uruguay (80% of total emissions from agriculture). LULUCF accounting principles allow the developed countries to leave emissions from agriculture in their reporting, (are voluntary in nature). The COP 15 at Copenhagen remained embroiled in power politics and the three page outcome text of Copenhagen did not have any reference to agriculture. Post CPH, responding to the call of Copenhagen Accord (CA) to inform UNFCCC of their quantified economy wise emission targets, 35 developing

countries included agriculture in their NAMAs. Subsequent meetings (at Tianjin and Bonn) further included texts in LCA (mitigation in agriculture) on the proposals of G-77, Argentina and Bolivia, and requested Subsidiary Body on Scientific and Technological Advice (SBSTA) of the UNFCCC to develop a Work Programme on Agriculture to study the impacts of climate change in agriculture and come up with firm proposals on mitigation. In the meantime a Global Research Alliance on Agricultural GHGs was launched led by NZ, US and Japan also. The Cancun Cop failed to push work programme on agriculture and all the text from mitigation chapter in the LCA was dropped.

However, there is intense pressure on the negotiations to include agriculture in the REDD placing it as Agriculture, Forestry and Land Use (AFOLU) and include soil carbon sequestration in CDM projects. The developing countries have been asking to close the gap in the LULUCF, which allowed the developed countries not to report emissions from agriculture. There is no consensus as yet. Agriculture was once more included in the provisional agenda of the Bonn Conference (2011) on the request of Canada, Switzerland and New Zealand; however, the final agenda has no mention of agriculture. In all these, the actual experience & voice of the farming communities facing the impacts is strangely absent.

Why focus on mitigation in agriculture is dangerous for small farmers

Some agricultural practices (mostly being reducing emissions from meat production) have been a part of CDM funding in a small way and represents less than 3% of the approved methodologies and less than 4.5% of all approved projects. However, soil carbon sequestration being considered for approval - will open the floodgates for projects driven by agribusiness TNCs

There is a clear design of the developed countries and agri-business TNCs to bring agriculture in CDM projects. The soil carbon sequestration projects will allow developed countries having extremely large carbon footprint, industrial-scale agriculture to set off their emissions rather than actually reducing it, and also earn carbon credits in developing countries. The proposal to include soil carbon sequestration has an inherent danger of allowing private participation in projects, which will ensure the entry of agribusiness TNCs like Monsanto, Du Pont and Cargill, which control more than 70% agribusiness. It has a number of dangers associated with it. While they are sure to encourage agricultural land grabbing to have sequestration projects; they will also earn through promoting agro-technologies (read false solutions) like biochar, agrofuels, no till agriculture, GM crops etc.

Of false solutions and agribusiness profits

Let us have a look at some of the proposals on the table, which have been proposed on the behest of big agribusiness firms. All of these proposals have been motivated by the urge of profiteering (carbon transactions are today a US \$ 300 billion market) and cannot in any way be a solution to the crisis either in agriculture or climate.

GM Crops: GM crops are not only dangerous for human and animal health and environment but also greatest threats to the seed sovereignty of small farmers. They are also increasing the danger of depleting the world's seed-diversity, crucially important in a climate-challenged world. Only Du Pont has more than 40% of the patents registered for climate ready crops between 2008 to 2009. Together with Monsanto and BASF, it controls more than 66% of the patents registered.

No till or conservation agriculture: Monsanto has been lobbying since 1998 to get no till agriculture approved as CDM methodology. It claims that its round up ready products help tackle climate change, as they do not require tilling and control weeding by heavy dousing of round up herbicides. Approval to no till agriculture methodology will enable it to lure farmers with the dreams of accessing carbon credits

and sale of its chemicals will result in unimaginable profits. However, it will be a sure disaster for small holders and poor farmers, with companies falling over one another to control larger tracts of lands.

Biochar: Bio char methodology is based on the premise that applying charcoal to soils will create permanent carbon sinks and increase soil fertility and water retention. The concept originated from the discovery of organic carbon rich soil, or 'terra preta', in the Amazons, from shifting cultivation of long gone periods. However, it entails huge tracts of lands being kept fallow for centuries, requires ½ to 1 billion ha for carbon sequestration, which would have to be uncultivated for long times to come. To have any significant contribution in reducing agricultural emissions, the land required is 1.5 to 3 times the area of India. Whether land can be available at such a scale, can be taken out of critically needed food production - are huge questions? The UN Convention for Combating Desertification has already proposed bio-char, however, it did not find favor with many countries as it has serious impacts on fertility of the soil, food security for the present and significant contribution to acid rains. No biochar methodology has been approved by the CDM board yet, but a charcoal methodology has been approved which can be easily used by TNCs for biochar. Besides Plantar (Brazil) which initiated the proposed methodology and has extensive Eucalyptus plantations in Brazil, and Arborgen (South Carolina, USA), which develops genetically-engineered eucalyptus, are likely to benefit from it in a huge way.

Agrofuels: The CDM Board has approved (2009) a methodology for biodiesel production from dedicated plantations on 'degraded or degrading land'. The definition of "degrading land" is so ambiguous that it covers almost all agricultural land and all ecosystems. Archer Daniels Midland and Cargill have benefitted directly and earned carbon credits. Other big biotech companies are also eyeing benefits from this methodology. It also needs to be noted that, with the spike in agro-fuel production in 2003-04, the amount of land under conflict, and the no of land conflicts – have also sharply increased. It is mostly the land belonging to the indigenous communities and the village commons which are being targeted for agro fuel plantations, leading to serious existential crisis for these already threatened societies. On top of that, agro-fuels have large water foot-prints, aggravating an already serious water crisis due to the changing climate.

Concerns related to forestry and REDD Plus

REDD (Reduced Emission from deforestation and forest degradation in developing countries) is one of the most contentious issues in the climate change debate. The programme is premised on providing recognition and financial assistance to developing countries for reducing deforestation. It is alleged that more than 17% of CO₂ emission comes due to deforestation and subsequent release of carbon. Quantum of CO₂ emission is more than emission of transport all over the world and second only to industries. The idea of making payments to reduce deforestation emerged in the run up to Kyoto Protocol only to be rejected by the Conference. However, a group of countries (known as Coalition for Rainforest Nations) made a proposal in 2005 again to rekindle the debate on REDD. The proposal was considered at Bali (COP 13, 2007) and included it in the Bali Action Plan. Bali Action Plan calls for "Policy approaches and policy incentives on issues relating to reducing emissions from deforestation and forest degradation in developing countries; and the role of conservation, sustainable management of forests and enhancements of forest carbon stocks in developing countries." The words "sustainable management of forests and enhancements of forest carbon stocks", was added on the proposal of some countries including India who also want to include afforestation and reforestation (A&R) in REDD and call it REDD PLUS.

The civil society world over is alarmed at this proposal and see it as garb for taking control over the forests by governments and private companies. There are few important issues that organizations

working with indigenous people and global civil society have been raising since beginning. The REDD PLUS does not recognize the rights of indigenous people. At Poznan (COP 14, 2008) a group of countries including US, Canada, New Zealand and Australia strongly opposed any reference to indigenous people rights in the negotiating text. The COP 16 at Copenhagen (COP 15, 2009) approved the text without any reference to indigenous people's rights. At Cancun (COP 16, 2010) the approved text made nominal reference to indigenous peoples rights. In annexure 1 it says safeguards for indigenous peoples should be "promoted and supported". The UN Declaration on the Rights of the Indigenous People (UNDRIP) is mentioned in the annexure but does not make it obligators for the countries to comply with it.

As per the global experience the afforestation and reforestation activities are carried out in the village commons and therefore commons, which are already under huge pressure will be the first casualty to this programme. However, the most dangerous aspect of the REDD PLUS programme is participation of private parties and companies. A lot of TNCs world over are already making huge investment in forests and afforestation and these companies are well known for their scant regard for the rights of forest people. The problem also exists with the definition of forests in the UNFCCC terminology, according to which monoculture or even jatropha plantations are also deemed forests. The loss of bio-diversity caused by government, companies and forest owners will be irreparable, one a programme of this nature rolls out.

The next arena of controversy is funding of the REDD PLUS, while few countries want it to be supported by a fund, many also favour carbon trading or mix of both. The carbon trading of forests will open a new mad rush for spoils of the forests. World Bank is the most active promoter of the REDD through a scheme launched in Bali 2007 known as the Forest Carbon Partnership Facility (FCPF). Under the FCPF, countries produce R-PINS (Readiness Plan Idea Notes). The Bank has accepted 25 of these RPINs and countries are now producing R-Plans (Readiness Plans), which provide the framework of REDD in these countries. World Bank is also supporting three REDD type projects through its Bio Carbon Fund. Another initiative called UN-REDD started in Sept. 2008 by UNDP, UNEP, FAO along with EC, had more than 20 countries as partners by Oct. 2009. The UN_REDD is running pilot projects in Bolivia, DRC, Indonesia, Panama, PNG, Paraguay, Tanzania, Vietnam and Zambia. Several governments including Norway, Australia, Germany, Brazil, and Japan are also involved in REDD activities. The government of India has also declared a 3 billion dollar initiative for forest preservation, afforestation and reforestation. Besides, multilateral and bilateral projects, there are many involving private companies including power companies, banking and hospitality industry. Several carbon traders are looking forward to profiting from carbon derivatives and increased trade in the market.

The text on REDD+ has many flaws. There is no mandate for agencies at national and international levels to ensure that the minimal safeguards are observed. Countries like Brazil, Indonesia and China which are using aid from European countries have no commitments to improve forest governance through participation of indigenous people.

In India forest rights Act was passed in 2006 after a protracted struggle of the indigenous and forest dwelling populations and the civil society. The Act not only recognizes these communities contribution in protection of forests but also provides them right to residence and minor forest produce. Though the Act is not being followed in letter and spirit, and indigenous populations witness continued displacement and ouster from their habitats, it provides rights based approach in forest governance and management with indigenous population as equal stakeholder. The government of India also intends to participate in the REDD PLUS programme and has made this clear in their National Communication (2009) and at many other occasions. The forest people fear that what they have gained through Forest Rights Act, 2006 will be taken away by the REDD PLUS programme. In the governments REDD PLUS

programme there is no provisions for consultation, participation and free prior consent of forest dwelling populations. The participation of private companies is another major threat. Environmentalists believe that afforestation and reforestation activities might replace rich highly bio-diverse forests by monoculture. The loss of village commons is another most likely impact of programme. The government and private companies blinded by the lure of forest money are out to oust indigenous people and forest dwelling populations from the forest in the name of protecting and preserving forests. There is a strong need to generate more voices in international negotiations and REDD PLUS Partnership programme, which brings these aspects before the global community.