

### 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:

Biochar 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. It 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 land 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 in 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 the agro fuel production in 2003-04 the amount of land under conflict, and the number 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 crises for these already threatened societies. In India, we have often violent conflicts on this in the states of Chhattisgarh, Uttarakhand, Jharkhand and even the eco-fragile North-East. On top of that, agro fuels have large water foot prints aggravating an already serious water crisis due to the changing climate.

### What do we demand

- Small holders' agriculture which is sustainable, ecological and agro biodiversity based, can only provide food to the world. UNFCCC needs to distinguish between ecological agriculture and industrial agriculture in the developed countries and encourage, respect and support to agricultural adaptation in developing and least developed countries.
- SBSTA should have a work programme on agricultural adaptation to identify the impacts and recommend firm actions and support. A certain proportion of the Green Climate Fund should be allocated for agricultural adaptation in developing and least developed countries (without any recourse to market based measures).
- No commodification of agriculture and forests.
- Complete recognition of the human rights and rights of peasants, indigenous and forest dwelling populations.
- All countries should be held accountable for actions of its companies, in their own land and abroad.
- Market based mechanisms and off sets are incapable of bringing reduction in emission. They are rather, an excuse for emissions. All emissions must be addressed at the source.
- Respect for the Rights of Mother Earth as articulated by the Peoples Conference on Climate Change and Rights of Mother Earth in Bolivia.
- International Tribunal on Climate Justice, based on the premise that climate and environmental justice form **jus cogens** (peremptory norms) in international law and where actions can be brought against all nations irrespective of the fact that whether they are a party to the UNFCCC, Kyoto Protocol or any other Climate Convention.

Beyond Copenhagen is a collective of Indian CSOs working with a range of stakeholders, farmers, policymakers, grassroots organizations, and networks on issues of agriculture, food security and environment and sustainable development. The Collective aims at bringing focus on agriculture and food security in climate change negotiations.

### Secretariat:

CECOEDECON, Swaraj, F-159-160, Sitapura  
Industrial Area, Jaipur-302022 (Rajasthan)  
INDIA. Ph: +91 141 2771488  
Email: cecoedecon@gmail.com  
Web: www.cecoedecon.org



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## Agriculture in Climate Negotiations a Developing Country Perspective

### Speakers

- **Alka Awasthi**  
(Co-director, CECOEDECON)
- **Anette Englund Friis**  
(Advisor, Danish Agriculture and Food Council)
- **Soumya Dutta**  
(National Secretary, All India Peoples Science Forum)
- **Susanne Gura**  
(ECONEXUS)

### Moderator

**Anja Mertineit**  
(Officer for Rural Development, Asia Department,  
MISEREOR)

**Wed, 08 Jun 2011  
20:00 - 21:30**

### Venue:

**TRAM**  
Ministry of Transport, Opp. Hotel Maritim

## Climate Change and Agriculture

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 and 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 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 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 12% of total GHG emissions. The low land agriculture and deforestation of upland terrain, lands slash and burn shifting cultivation are major contributors of GHGs. 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.

In India, almost 60% of the population depends on farming & related activities and of the total cultivable land of about 142 million hectares, nearly 60% are non- irrigated / rain- fed a( with only the better off having some access to ground water). In over 70% of the land, nearly 74% of the rain- fall occurs in the four months of the south-west monsoon, and this life-line of south-Asian farming is getting disturbed due to climate change. These are farmed by small- holder families, in a comparatively low input, livelihood centric way, with an average land holding of just above 1.16 ha. It is these farmers who are getting hugely impacted by the already evident signs of the climate changing beyond their known norms. Abnormal rises in night temperatures during the growing seasons, warm winters, rain-fall being

concentrated in fewer heavy pouring, ground-frost in warm areas which never experienced them before, weeklong spells of rain in late October all are putting these small farmers on the brink of disaster. In the winter cropping season of 2010, the crop yields suffered by over 2% due to high night temperatures, as per the country's agriculture ministry itself. This was preceded by a bad drought in 2009-10, partly contributed by the El Nino effect, and in spite of the plentiful rains in 2010 monsoon; three large-population eastern states faced an in-explicable drought again. Thus, climate change, (along with other structural problems) which these farmers have no contribution to in creating- is pushing them onto the path of extinction. Redressal is urgently needed, and responses beyond national boundaries are called for.

## 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 replacing it with Agriculture, Forestry and Land Use (AFOLU) and 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. The 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 this, 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 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 UDS 300 billion market) and cannot in any way can be solution to the crisis either in agriculture or climate.

**GE Crops:** GE 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.

*We will be happy to see you at our Exhibit Booth  
CECOEDECON (1st week) and  
PAIRVI (2nd week)*

*For more information on the side event  
please write to k.ajay.j@gmail.com*