Agriculture in post-2012 climate change agreement – priorities for Copenhagen

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Objective

To feed an increasing global population while contributing significantly to overall efforts in preventing dangerous anthropogenic interference with Earth’s climate system.
What is agriculture/LULUCF?

- Agriculture (non-CO2 gases) incorporated into Annex I targets

- LULUCF - land use, land use change and forestry (carbon stocks in agriculture soils) voluntary component of Annex I mitigation actions
Global context for agriculture

- Agriculture is significant source of GHGs
  - Agriculture is approx 14% of global emissions - comparable to transport
  - LULUCF (agricultural soils) – net emissions flux thought to be close to zero globally

- Growing source of GHGs
  - Emissions from agriculture increased 17 percent from 1990 to 2005 projected increase a further 30 or 40 percent above 2005 levels by 2030
  - Future growth will occur almost entirely in developing countries

- On average, agriculture is large share of developing country emissions – approx 27-30%, also many of the world’s degraded lands are in developing countries

- Significant technical potential for mitigation
  - Direct mitigation through improved efficiency in agriculture production
  - Can act as an offset:
    - Biomass for energy
    - Carbon storage in degraded agriculture soils – 89% of technical mitigation potential
Unlike other sectors: top 20 emitters include: most industrialised, emerging, least developed, and most vulnerable countries.
Current treatment of agriculture/LULUCF

- **Convention**
  - “...to ensure that food production is not threatened...”
  - “...cover all relevant sources, sinks and reservoirs of greenhouse gases and adaptation, and comprise all economic sectors...”
  - “Promote and cooperate in the development...technologies....in all relevant sectors....including agriculture...”

- **Kyoto Protocol**
  - Agriculture (non-CO2 gases) incorporated into Annex I targets
  - LULUCF - land use, land use change and forestry (carbon stocks in agriculture soils) voluntary component of Annex I mitigation actions
  - CDM – agriculture is eligible, LULUCF limited to afforestation only
Negotiations on agriculture/LULUCF

- Kyoto Protocol (AWG KP)
  - Part of targets discussion – agriculture (non-CO2 GHGs)
  - Part of LULUCF discussion
    - CDM – will soil carbon become eligible?

- Bali Action Plan (AWG LCA)
  - Nationally appropriate mitigation commitments or actions in developed countries
  - Nationally appropriate mitigation actions by developing countries
  - Cooperation on research
  - Finance and technology

- REDD
Why does agriculture need to be part of Copenhagen outcomes

- Need an explicit reference to agriculture in agreement rather than implicitly assumed to be part of overall mitigation effort

- Need policy framework that provides incentives for mitigation in the agriculture sector – adoption of existing technologies/practices

- Need to scale up investment in research and development of new mitigation technologies/practices
Agriculture in Copenhagen outcomes

- Shape of overall agreement unclear at this point

- Components could be:
  - Kyoto Protocol (AWG KP)
    - CDM – will soil carbon be eligible post-2012?
  - Convention (AWG LCA)
    - NAMAs
      - Sectoral cap and trade?
      - Sectoral crediting/CDM?
      - Low carbon development strategies?
      - Registry of voluntary actions?
  - Measurement, Reporting and Verification
    - Need better estimates – GHG inventories, capacity building
  - Research and Development - commitment to international cooperation
  - Finance?
Given time available...

- How to guarantee agriculture is dealt with adequately?
- Lessons from REDD
  - Decision 1/CP.13 – Bali Action Plan:
    “Policy approaches and positive 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 enhancement of forest carbon stocks in developing countries”
  - Decision 2/CP.13 – Reducing emissions from deforestation in developing countries: approaches to stimulate action
    - Acknowledged importance of issue
    - Encouraged capacity building
    - Explore pilot projects
    - Mobilization of financial resources
    - SBSTA work programme
      - Methodological issues – baselines, MRV, implications of different approaches, leakage, report back to COP
Work programme on agriculture?

- **MRV**
  - need disaggregated estimates or mitigation will be in direct competition with food production
  - Need better estimates of magnitude of challenge
- **Mitigation potential**
  - analysis of system differences
  - LCA
- **Identify effectiveness of existing technologies/practices**
- **Identify future technologies/practices**
- **Cost of mitigation – prioritisation**
- **Possible policy approaches?**
- **Etc...**