# Africa Carbon Forum 2010

## How to implement agricultural carbon projects in Africa

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## Importance of agricultural mitigation

### Mitigation benefits

- > AFOLU accounts for 31% of total anthropogenic GHG emissions (WRI, 2007)
  - > 13% of global agricultural GHG emissions from Africa
- Sustainable agricultural production has an economic mitigation potential of 150m t CO2e/year by 2030
  - Assuming a price of US\$10/t CO2e, the resulting revenues would be higher than annual ODA flow to African agriculture between 2004-2007.
- Cost-competitive and early action (IPCC, 2007)
- ➤ Soil carbon sequestration accounts for 89% of the total agricultural GHG mitigation potential (IPCC, 2007)

## Development benefits

- ➤ Trigger for climate-smart agricultural development (agriculture accounts for 34% of GDP in SSA)
- > Strong synergies with productivity, food security and climate resilience (IPCC, 2007; FAO, 2009; Lal 2006)
  - Correlation between soil carbon and nutrient supply, soil structure, water infiltration, water storage
- From 1945-90, the productivity loss from soil degradation alone has been estimated at 25% for cropland (SSA)

#### Agriculture and climate change

### Why farms may be the new forests

Dec 30th 2009 From The Economist print edition

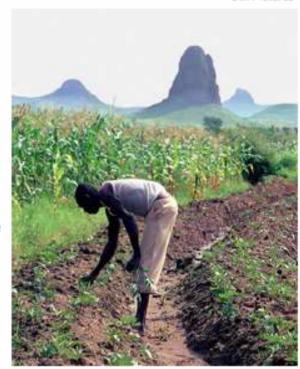
#### In the war against climate change, peasants are in the front line

FOR people who see stopping deforestation as the quickest climatechange win, Copenhagen seemed a success. Although there is still work to be done on the initiative known as REDD (Reducing Emissions from Deforestation and Forest Degradation), the deal struck in Copenhagen made it into a real thing, not just an idea. The notion of reducing net deforestation to zero was not explicitly mentioned, but it looks much more credible than it did two years ago.

As well as giving heart to the protectors of trees, this outcome is encouraging for people whose focus is not on forests but on fields. Climate and agriculture matter to each other in several ways. On the downside, farming is a cause of deforestation, and also emits greenhouse gases in its own right—perhaps 14% of the global total. On the upside, agriculture can also dispose of heat-trapping gases, by increasing the carbon content of soils.

And because farmers (unlike say, coal-producers) feel the effects of the changes their activities may be causing, they have a role in adapting to climate change. Farms, particularly marginal ones, are the first to suffer when the climate shifts; increase their resilience and you help a lot of people. Whether the aim is adaptation to climate change or slowing it,

Still Pictures



Into battle in the eco-war

there is an obvious need for more research on the benign contributions that agriculture can make. For people who are seized of this need, there was a welcome boost on December 16th when 21 countries pledged \$150 billion to a Global Research Alliance on Agricultural Greenhouse Gases.