



INSTITUTE FOR AGRICULTURE AND TRADE POLICY

# Market-based Mechanisms and Agriculture soil carbon offsets

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# WB/BioCarbon Fund: Kenya Agricultural Carbon Project

- Publicized already as a “triple win” for increased food production, carbon payments, climate resilience
- First soil carbon project in Africa—financed by carbon market (Emissions Reduction Purchase Agreement signed between WB, Scc-ViAgroforestry and Kenyan government)

- 20 year project (2009-2019) with roll out plan of 9 years to aggregate 60,000 farmers
- Close examination of project methodology, WB documents and Vi-agroforestry figures shows limitations of methodology, no carbon payments for farmers

# Carbon Payments

- WB estimates 2.48 million USD revenue, but transaction costs \$1.046 million \*
- Total Actual Payment \$1.43 million to be divided amongst 60,000 farmers over 20 years and covering 45,000 hectares\*
- =\$23.83/farmer over 20 years or ~\$1 USD/farmer/year (assuming stable carbon price of \$4/tco<sub>2</sub>) \*\*
- 60% of carbon payment is supposed to go to farmers; 30% for implementation/advisory services and 10% for Swedish International Transaction Costs\*\*\*

# Environmental Integrity

- 60% of estimated emissions reductions (1.2million tCO<sub>2</sub> over 20 years) discounted for impermanence and leakage
- So actual VCUs = 618,000
- Carbon Methodology will not actually measure soil carbon (too expensive) and therefore impermanence and leakage could be much higher

# Environmental Integrity

- Uncertainty in accounting of Annex 1 countries emissions on cropland and grazing land has been anywhere from 13-100%\*
- Inherent variability, fluctuation in soil carbon stocks, easily lost due to natural (storm, fire, drought) and human activity (land management), lack of data
- Extremely costly to measure with more accuracy and even then permanent limited capacity to measure in developing countries
- High level of uncertainty makes soil carbon an unappealing tradeable commodity (drives down price)

# Co-Benefits?

- Increased food production and climate resilience?
  - Questions to ask and monitor: which practices geared towards climate resilience and how food production increase achieved?
- (Environmental and Social Impact Assessment mentions that use of herbicides not included in project)
- Are there tradeoffs between MRV for carbon and extension for increased food production and climate adaptation?
  - Why spend over 40% of total project cost towards development of carbon offset when it could go directly towards climate adaptation and food security?

# Social Implications

- Currently, the project documents state that land tenure is not an issue as each farmer has land titles
- Yet not all farmers in project area incorporated yet
- Moreover, soil carbon projects require aggregation of thousands of farmers—land tenure a key issue, ripe for conflict, exclusion, denial of rights to resources

Thank you

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