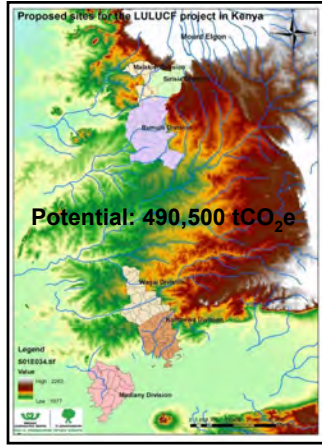
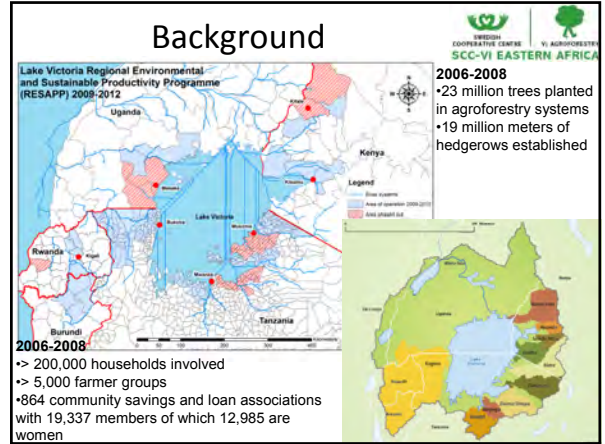
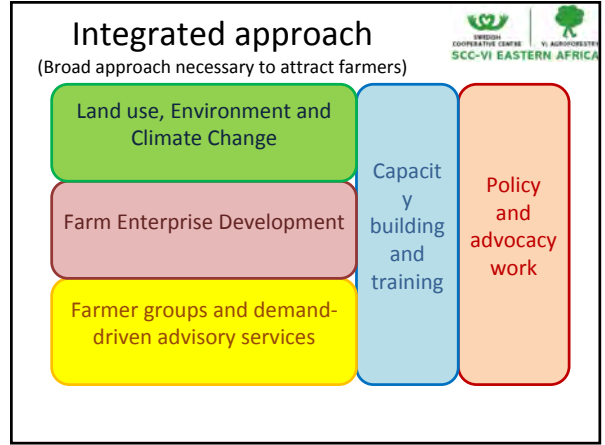





Carbon Finance Opportunities in the Agriculture Sector – How Can We Create the “Carbon Asset” to the Benefit of Smallholder Farmers?
 By
 Bo Lager





Western Kenya Smallholder Agriculture Carbon Finance project
 Adoption of Sustainable Land Management practices on small-holder farms in Kenya to increase staple food production and generate carbon revenues




- ### Activities
- PIN (Aug 2007)
 - Carbon Finance Document (June 2008)
 - Carbon baseline
 - Paramount to success is sensitization of communities, government officials and stakeholders
 - Capacity building of staff, farmers and stakeholders (WKEIMP, KARI, KEFRI, NEMA, sector ministries and Moi University) in carbon finance and climate adaptation is crucial.
 - Farmers self assessment (recruitment of farmer groups)
 - SALM practices manual and training

- ### SALM practices
- **Agronomy**
 - Improved crop varieties
 - Cover crops and green manure
 - Multiple cropping, crop rotations
 - Multiple cropping, intercropping (strip, alley, relay and contour strip cropping)
 - **Nutrient management**
 - Mulching
 - Improved fallow
 - Manure management
 - Composting
 - Improving fertilizer use efficiency
 - **Tillage and Residue Management**
 - Reduced tillage
 - Residue management
 - **Water management**
 - Terracing
 - Water harvesting structures
 - **Agroforestry**
 - **Restoration and rehabilitation of Degraded Land - Set-aside land**
 - **Livestock management**




Distribution of benefits

- Farmers has to understand what is being sold/bought.
- Transparent system of benefit sharing must be in place securing accountability at all levels.
- Group enters into contracts stipulating carbon benefits, based on changes in land use over time.
- Monetary benefits paid to groups and the group decides if it should be distributed to individual farmers or common projects.
- Advice on investment/savings opportunities is important
- Farmers used to late payments, years (sugarcane)
- Development of standard database for the support of revenue distribution would be helpful for other organizations embarking on this process.




Risk assessment

- Long time commitment (10-20 years)
- Changes in government policies
 - Subsidies (fertilizer and seeds)
- Vi Agroforestry loses funding with withdrawal from the carbon areas as a result.
- During contracting farming it must be clear on land rights/tenure.
- Natural calamities, farmers bearing the risk of losing future income/livelihood.
- High transaction costs before 1st payment



Co benefits

- Co benefits more significant than the carbon benefits (Bonus) especially for low carbon value projects (agriculture and soil carbon).
- Extension services provided by SCC-Vi Agroforestry.
 - Increased production
 - Environment
 - Improved livelihood
 - Financial services
- Engage other service providers in the carbon area providing demand driven services.



Funding arrangements - challenges

- Intimate link between carbon finance and climate adaptation
- Funding available for carbon sequestration
- How access funding for climate adaptation
- Tie up adaptation funds to Bio Carbon Fund to cater for high initial transaction costs.
- Capitalize on synergies between climate adaptation and carbon finance.

