CDM Potential of Agriculture in Africa: a Carbon Buyer’s Perspective

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Agenda

1. Introduction
2. Current Status of Agricultural CDM Projects
3. Present vs. Future Project Types
4. Reality Check: What is compatible with CDM today?
5. Conclusions

Introduction to Natixis

- 37 million customers
- 7 million cooperative shareholders
- 120,000 employees
- 8,200 bank branches

BPCE

Capital Tier 1:	€36.5bn
Tier1 Ratio :	8.7%
NBI FY08:	€16.5bn
Total Assets:	€1,144bn
Ratings:	A+/Aa3/A+

71%

Public

29%

NATIXIS

Capital Tier 1:	€14.9bn
Tier 1 Ratio:	9.4%
Ratings:	A+/Aa3/A+

- 22,000 employees
- €495bn of AuM
- Present in 68 countries

100%

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AuM : €969m
Regulated by the AMF
6 funds under management
35 specialized professionals

N.B. key figures as of March 31st 2009 and ratings as of January 10th 2010 by Standard & Poor's, Moody's and Fitch.

Manager of ECF, 1st Private Carbon Fund

The European Carbon Fund (ECF), designed and operated by major EU financial institutions, is dedicated to purchasing Carbon Credits (CERs) worldwide and has raised €142.7m.

It has been managed by Natixis E&I since 2005

www.europeancarbonfund.com

- **67 million CERs originated**
- **26 CDM projects worldwide:**
  - – Registered with the UNFCCC: 22
  - – Requesting registration: 1
  - – Under validation: 3

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Agricultural projects in CDM today (UNFCCC pipeline)

Today, "agricultural" CDM projects exist only as:

- **Utilization of agricultural waste (biomass) for energy generation**
- **Methane avoidance from manure and biomass residues (composting)**

Total CDM pipeline:

- **10.2bn tCO2e reductions up to 2020 (PDD values)**

Agricultural projects:

- **About 780m tCO2e reductions up to 2020 (PDD values), of which:**
  - Agricultural residues: 364m
  - Manure: 170m
  - Bagasse power: 125m
  - Palm oil solid waste: 61m
  - Composting: 45m

Agriculture projects in Africa:

- **About 16.5m tCO2e reductions up to 2020 (PDD values)**
- **Total of 19 projects**
  - 17 biomass energy
  - 2 methane avoidance

Current vs. Future Agriculture Project Types in CDM

Project Type	CDM methodology	CDM Track Record	Africa CDM Experience
Biomass energy (combustion of agricultural residues)	Yes	Yes	Yes
Composting of biomass residues	Yes	Yes	No
Methane avoidance from animal waste/biomass residues	Yes	Yes	limited
Methane avoidance from wastewater treatment in agriculture	Yes	Yes	limited
Biofuel from dedicated crops (*jatropha curcas*)	Yes	No	No
Reduced fertilizer use in agriculture (energy savings)	Yes	No	No
Soil tillage techniques (methane/N2O emissions)	No	No	No
Improved water management in rice cultivation (methane emissions)	No	No	No
Livestock feed management (methane emissions)	No	No	No

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Carbon Buyer Perspective: what makes agriculture CDM project marketable?

CDM track record:
- project risk assessment based on past experiences
- CER performance estimate possible

Existence of CDM methodology

Monitoring / verification clearly defined

Project transaction costs (project size, technical complexity)

Project development lead time

Additionality:
- Impact of carbon finance can be clearly demonstrated

Regulatory risk
- EU ETS eligibility post 2012 (no forestry)
- Eligibility in other cap and trade schemes

Carbon Ownership
- No double counting of CERs between up- and downstream
- Single counterparty usually preferred

Biomass energy: still untapped potential in Africa

Potential for carbon finance in soft commodity sector still unexploited

Example of bagasse (sugar production):

- EIA (2004) estimates bagasse co-generation potential at about 1,300MW in Ethiopia, Kenya, Tanzania, Uganda, Malawi, Swaziland, Sudan
- By comparison: current CDM pipeline of <u>all</u> biomass projects in Africa at about 150MW

Other sectors: rice, cotton, corn, wheat, oil palm

Carbon finance provides clear boost to project's financial return

- IRR increases by +3% to up to +10% if combined with methane avoidance (e.g. composting or biodigestors)

Conclusions

Important potential of agriculture in CDM beyond dispute

CDM at a crossroads: current vs. future project types

However, biomass energy and methane avoidance potential may not yet be fully exploited and CDM can be clear project driver

Question: to what extent is current CDM structure adapted to future project types in agriculture?

Increased role for public funding (methodologies, verification etc.) and adapted CDM in future

In current cash-constrained and uncertain world of carbon, private sector carbon buyers are in search of proven experience and wary of experiments

Thank you.

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