

TREES OF HOPE: SETTING THE PACE OF CLIMATE-COMPATIBLE DEVELOPMENT IN MALAWI?

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LIVELIHOODS AND THE ECOSYSTEM IN MALAWI

- Over 14 million people growing at 3% per annum.
- About 80% is rural and dependent on rain-fed subsistence farming as a livelihood.
- Characterized by low maize yields and declining soil fertility.
- Agriculture contributes 80% of Malawi's export earnings.
- 74% of the population living below the poverty line of \$1.25/day with 39% living in severe poverty.
- Among the world's 48 poorest countries.
- Livelihoods among the most vulnerable to climate change in the world.

DEVELOPMENT STRATEGIES IN MALAWI



- Strategies are pro-poor primarily targeting provision of basic needs of life and reducing poverty.
- Promoting agriculture tops the agenda because of its importance to livelihoods.
- Development strategies highlighted in key documents:
 - ❖ Malawi vision 2020 (launched in 2000).
 - ❖ Malawi Growth and Development Strategy (2006-2011).
 - ❖ Agriculture Sector Wide Approach (2010).
 - ❖ Malawi Growth and Development Strategy II (2011-2016).

IMPACTS OF THE DEVELOPMENT STRATEGIES AND CLIMATE CHANGE

- Strategies largely silent on climate change.
- They have achieved less than desired.
- Under-achievement partly due to climate change effects more so in the agriculture sector through:
 - ▣ Floods and dry spells.
 - ▣ Declining soil fertility and increased soil water stress.
 - ▣ Unpredictable growing seasons.
 - ▣ Declining crop yields and increased food insecurity.
 - ▣ Reduced household incomes.
 - ▣ Increased rural-urban migration.
 - ▣ Increased pressure on the already small national budget.

GOVERNMENT RECOGNITION OF AND RESPONSE TO CLIMATE CHANGE EFFECTS



- Aware of climate change and signatory to UNFCCC and other treaties.
- Developed several local strategies related to climate change, keys ones being:
 - ▣ National Adaptation Programmes of Action (NAPA).
 - ▣ Nationally Appropriate Mitigation Actions (NAMA).
 - ▣ Disaster Risk Reduction Strategy.

DEVELOPMENT, MITIGATION AND ADAPATATION STRATEGIES IN PRACTICE

- Development strategies get a lion's share of development thinking in Malawi.
- Lack of evidence-based mainstreaming of adaptation and mitigation strategies into development projects.
- Development has been retarded as a result, requiring immediate change of course to make mitigation, adaptation and development strategies pull in one direction.
- **TREES OF HOPE** attempts leading the way in this direction in Malawi.

TREES OF HOPE-CCD attempted in Malawi?

□ **Brief profile**

- Started in 2008 coordinated by the Clinton Development Initiative (CDI).
- Active in two pilot districts in Central and Southern Malawi.
- Operates under the Plan Vivo standard.
- Achieved Plan Vivo certification in September 2011.
- Has over 150000 tons of certified carbon credits for sale.
- Over 2000 rural households are participating
- Covers over 1500 ha in total and 500km of boundary planting.

PROJECT OBJECTIVES



- ❑ To coordinate community-led effort in establishing tree-based land use systems for carbon sequestration.
- ❑ To sensitize the targeted communities in climate change, carbon trading and adaptive mechanisms.
- ❑ To facilitate access of participating communities to carbon finance from carbon markets.
- ❑ To promote improvement and resilience of community livelihoods in the face of climate change.
- ❑ To build capacity in rural communities in management of carbon finance programs.

PROJECT DELIVERY METHODOLOGY

- **Feasibility study and PDD development**
 - Feasibility study done by Edinburgh Centre for Carbon Management (ECCM) with positive outcome in 2007.
 - PDD developed and accepted by Plan Vivo Foundation.
- **Community sensitization and capacity building**
 - Raise project and climate change awareness.
 - To instill sense of community ownership.
 - To lower cost operations.
 - System of local program monitors established.
- **Choice of tree species and land use systems**
 - Indigenous or naturalized tree species chosen by communities.
 - With inherent known livelihood benefits.
 - LUS compatible with traditional land-use practices.

DELIVERY METHODOLOGY CONT'D

- **Technical specifications and carbon accounting**
 - Technical specs to guide management of land-use systems.
 - To elaborate carbon accounting procedures.
 - Carbon offsetting potential for each land use system was calculated.
- **Key partner collaboration.**
 - Ministry of Agriculture and Water Development
 - Ministry of the Environment and Climate Change
 - Vital for sustainability and efficiency through use of existing government extension machinery.

EMERGING AND POTENTIAL OUTCOMES

□ Carbon storage in land-use systems (mitigation)

Land use system	Baseline C values (tCO ₂)	Carbon sink (50yr crediting period (tCO ₂))	Net carbon offsetting potential (tCO ₂)
Woodlot	5.41	192.78	187
DSI	4.30	94.50	90
Boundary planting	0.02	10.30	10.28
Mango orchard	4.30	110.4	106
Citrus orchard	4.30	73.2	69

EMERGING AND POTENTIAL OUTCOMES CONT'D.

- **Adaptation-related outcomes**
 - **Soil fertility improvement.**
 - Addition of soil organic matter
 - Nitrogen fixation
 - Nutrient cycling
 - Improved physical and biological properties
 - **Soil and water conservation.**
 - Reduced soil erosion
 - Reduced run-off
 - Increased soil water holding capacity
 - **Sustainable soil productivity.**
 - **Reduced risk of crop failure due to degrading soils.**

ADAPTATION OUTCOMES CONTINUED

- **Availability at household level of tree products (poles, firewood, medicines etc)**
- **Increased household income:**
 - ▣ Sale of tree products (firewood poles) and income saving on purchase of the same.
 - ▣ Sale of mango and citrus fruits.
 - ▣ Potential direct income from sale of carbon credits.
- **Productive time liberated from search of tree products particularly firewood.**
- **Valuable climate change knowledge for further adaptation.**

LESSONS LEARNT

- Such carbon finance projects have huge potential for bringing mitigation, adaptation and livelihood resilience under one roof and provide a learning platform for moving CCD forward.
- Land use systems with a clear bearing on community's livelihoods and particularly related to adaptation than mitigation are preferred by communities
- Wider community participation and encouragement of use of local resources and decisions in project operations is critical for success of such programs.
- Effective multi-stakeholder collaboration improves efficiency in the delivery of such projects provided the cooperation is guided by clear terms of reference.

CHALLENGES



- ❑ Weak technical capacity at local level to competently handle all components of such projects. Carbon accounting is one such area requiring development of home-grown expertise.
- ❑ Lack of information vital to access carbon finance for investment into carbon projects or outright lack of such funding.
- ❑ Prohibitive initial investment requirement to deliver a carbon project to the level of certification.
- ❑ Weak harmonization at policy level of mitigation and adaptation strategies with the development strategies.

RECOMMENDATIONS



- At national level, **development** strategies need to incorporate core values of **adaptation** and **mitigation** strategies into a comprehensive development planning and screening tool.
- Availability of buyers of carbon credits ought to trigger start of projects and not producing credits and starting worrying about markets later.
- Handling of funding for CCD-compliant projects should preferably be removed from government hands as most African governments deliberately choose to fail. Save CCD from this disease.

OUR PEOPLE, OUR WORK



OUR PEOPLE, OUR WORK



OUR PEOPLE, OUR WORK



Mainstream ...

**... adaptation
and mitigation**



**... into the
development
agenda!!**