

Good Practice Guidelines for Community Carbon Projects



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Introduction

Throughout Africa and indeed globally, there is growing interest in community and smallholder-based carbon projects. These projects promote tree planting, sustainable agriculture and land-management activities to enhance carbon sequestration and storage in vegetation and soils. Such projects are viewed as having the ability to provide 'multiple wins', delivering local development in the form of direct and indirect livelihood benefits to rural communities and smallholders in a way that is compatible with climate change mitigation and adaptation.

Many carbon projects are linked to the rapidly growing and evolving Voluntary Carbon Market (VCM). Projects that operate under the VCM can offer the prospect of poverty alleviation through a diversity of alternative livelihood options (e.g. Perez *et al.*, 2007) and co-benefits derived from enhanced carbon storage in soils and vegetation (e.g. Stringer *et al.*, 2012a), in addition to direct benefits from carbon payments.

Due to the recognised need for market assurance, carbon projects that operate under the VCM seek verification through a range of accreditation standards. Some of these standards focus purely on implementing carbon sequestration and storage activities (e.g. *Voluntary Carbon Standard (VCS)*). Other standards developed by organisations such as the *Plan Vivo Foundation* or the *Climate, Community and Biodiversity Alliance (CCB)*, place greater emphasis on the socio-economic and institutional aspects of projects, in addition to delivering both direct and indirect co-benefits that go beyond carbon storage (Marion-Suisseya & Caplow, 2013). Projects accredited with these standards require more meaningful and extensive community engagement and involvement (CCBA, 2008, Plan Vivo Foundation, 2008). The development of these standards is increasingly influencing sound project level designs and can provide valuable lessons to inform good practice guidelines for those seeking to develop successful community carbon projects.

This publication highlights a number of good practices drawn from an analysis of case study community carbon projects from the African context that have received accreditation under the more holistic standards (see Table 1). It also draws on more detailed analyses presented by Blomley & Richards (2011); Shames *et al.*, (2012); Dougill *et al.*, (2012); Stringer *et al.*, (2012a,b; 2013) & Dyer *et al.*, (2013).

The guidelines developed here seek to highlight good practices for community carbon projects in:

1. Building local trust and understanding through process of Free, Prior & Informed Consent;
2. Working with local and national institutional capacity;
3. Resolving land and natural resource tenure;
4. Ensuring equality and benefit-sharing; and
5. Managing costs and risks.

Recommendations on achieving good practices are identified after each section.

1. Building Local Trust and Understanding through process of Free, Prior & Informed Consent

It is essential for carbon projects to engage with communities and smallholders from project inception, implementation and throughout the project lifetime in a fair and transparent manner (Stringer *et al.*, 2013). This can lead to: (1) a greater understanding of project concepts & goals, (2) trust between project co-ordinators & communities, & (3) greater acceptance, commitment & participation (Blomley & Richards, 2011).

1.1 BUILDING LOCAL UNDERSTANDING AND TRUST

In carbon projects where communities and smallholders are key stakeholders, the process of Free, Prior, and Informed Consent (FPIC) is an important first step. FPIC plays a critical role in establishing project designs and management structures. It refers to the right of communities to give or withhold their free, prior, and informed consent to project participation, only after gaining a full understanding of project concepts, goals, risks, costs and benefits (Blomley & Richards, 2011).

The most important aspect and challenge of the FPIC process is to provide clear information about project concepts, goals, risks, costs and benefits, so communities make an informed and independent decision as to whether to participate. For example:

Table 1 Case study project analysed to develop these best practice guidelines

| Project name | Carbon Standard | Location | Project coordinator | Project size (ha) | Project activities |
|--|-----------------|--|---|-------------------|--|
| Sofala Community Carbon Project | Plan Vivo & CCB | Buffer zone of the Gorongosa and Marromeu National Parks, in central Mozambique | Envirotrade Carbon Limited | 11 744 | Reducing Emissions from Deforestation and forest Degradation (REDD), Agroforestry & Woodlots |
| Trees for Global Benefits | Plan Vivo | Hoima, Bushenyi and Masindi, Uganda | ECOTRUST | 1210 | Agroforestry & Woodlots |
| Trees of Hope | Plan Vivo | Dowa district, central Malawi | Clinton Development Initiative | 488 | Agroforestry & Woodlots |
| Emiti Nibwo Bulora "Trees Sustain Life" | Plan Vivo | Kagera region, north-western Tanzania | Vi Agroforestry | 130 | Agroforestry & Woodlots |
| International Small Group and Tree Planting Program (TIST) | CCB | Meru, Kenya | Clean Air Action Corporation | 4,597 | Agroforestry & Woodlots |
| The Sustaining Agriculture through Climate Change (SACC) | CCB | Middle and lower Nyando river basin, Kenya | CARE Kenya | 100,000 | Agroforestry & Woodlots |
| Mai Ndombe REDD | CCB | province of Bandundu, District of Lake Mai Ndombe, and the territory of Inongo, Democratic Republic of Congo | Ecosystem Restoration Associates | 299,645 | REDD |
| The Western Kenya Smallholder Kenya Agricultural Carbon Project (WKSACP) | CCB | Kisumu and Kitale, Kenya | Vi Agroforestry | 45,000 | Sustainable Agricultural Management |
| The Humbo Project | CCB | Humbo, Ethiopia | World Vision Ethiopia & World Vision Australia. | 2,728 | Farmer Managed Natural Regeneration (FMNR) |
| The Cocoa Carbon Initiative (CCI) | CCB | Bosambepo, Ghana | Nature Conservation Resources Centre (NCRC), Katoomba Incubator; Ghana Forestry Commission (FC); Traditional Councils | 110,000 | Improving tree cover while enhancing sustainability of cocoa production |

- For the SACC project in Kenya, potential project stakeholders were identified and meetings were held through traditional structures to inform them of the new project and what it would mean for them. These meetings informed communities of the benefits of carbon markets as well as the costs and risks, such as price volatility of carbon prices. These meetings also identified co-benefits such as tree products & improved agricultural production.
- In addition, engagement regarding project concepts, goals, design and specifications as well as identifying roles and responsibilities among the stakeholders were also discussed.
- The project coordinators, *CARE Kenya* recorded attendance at meetings and documented suggestions from the community to make amendments to the project implementation plan.

It is important that such meetings continue regularly throughout a project's lifetime for on-going community

engagement. *CARE Kenya* hold regular meetings with communities as well as having an open door policy so community members can learn more, ask questions and air grievances.



Community engagement meeting as part of *Trees of Hope*, Malawi. Photo courtesy of the Clinton Development Initiative.

Experience suggests that when project co-ordinators have a history of collaboration with communities, the projects they implement are more likely to be successful due to local trust (Harvey *et al.*, 2010). NGOs are well placed to implement or support carbon projects because they often have a longstanding presence and experience with rural development within project areas. Drawing on the positives of past local experiences and clearly addressing community

concerns with past projects is vital to establishing successful project partnerships (Dyer *et al.*, 2013) NGOs that implement carbon projects as an extension to on-going development work will not only reap the benefits of local trust but will likely experience lower initial costs (Shames *et al.*, 2012).

For example, the *Humbo* project was built on the foundation of 18 years of development work conducted by the project coordinator, *World Vision Ethiopia* (WVE) within the Humbo District. The trust established and built between WVE and communities provided a platform for the project to be presented, and was essential in facilitating community engagement.



Project coordinator, *Ecotrust* leads a community meeting as part of the *Trees for Global Benefits*, Uganda. Photo courtesy of *Ecotrust*.

Section 1 Emerging Good Practices

- Projects coordinators should have a long-standing successful history with targeted communities to ensure trust can be reinforced. If this is not possible, projects should seek collaboration and support from trusted organisations (e.g., NGOs, community institutions etc.) and individuals (e.g. community representatives, extension workers etc.) working in partnership.
- Projects should approach communities through local leaders. This can enable meetings to be held to clearly define project concepts and goals with potential stakeholders at the earliest opportunity. This should increase understanding of the project's benefits, risks and costs, in addition to offering community members the opportunity to participate in the project and its design or whether to opt out.

2. Working with local and national institutional capacity

Common to all our voluntary carbon market case study projects was the need for projects to work with the existing institutional capacity in strengthening acceptance, channelling information, reducing costs and building multi-level connections between institutions and actors. This matches regional analysis of climate compatible development initiatives from across the regulatory sector (Stringer *et al.*, 2013).

2.1 INSTITUTIONAL ORGANISATION, FUNCTIONS & FORMATION

Success of carbon projects in the short to long term will depend on local institutional structures and their links to project and policy support. Many of our case study projects (see also Box 1) have highlighted the benefits of working with and through existing local institutional capacity. For example:

- Partnering with government departments, *Trees of Hope* in Malawi built on existing extension systems already put in place by the departments of Forestry and Agriculture. These were supported by a network of community elected local program monitors (LPMs), which further supplemented an existing Village Natural Resources Management Committees (VNRMCS) (Stringer *et al.*, 2012b). The VNRMCS' involvement was essential because they were recognised by government departments and allowed the project to develop multi-level partnerships (see section 2.2) as well acting as an interface through which information could be transferred between the project, community and other stakeholders (Dougill *et al.*, 2012).
- The *Humbo* project in Ethiopia established Community Forest Protection and Development Cooperative Societies to reduce the cost of contracting individual landowners (Brown *et al.*, 2010). Participating smallholders were responsible for implementing agreed reforestation activities, as well as designing benefit-sharing mechanisms. The formation of an umbrella organisation brought the societies together and became the primary communication link between cooperative societies, government departments and the project coordinator, and ultimately it gained management responsibility (Shames *et al.*, 2012).

2.2 DEVELOPING PARTNERSHIPS

Many of our case study projects highlight the need for projects to build connections between multi-level institutions and actors in achieving partnerships for shared and mutual goals. For example:

- The Malawian Ministry of Natural Resources, Energy and the Environment, and the Ministry of Agriculture, Irrigation and Water Development, are formal partners of the *Trees of Hope* project, and the Departments of Forestry and Agriculture already have extension systems and staff operating within the project areas. This meant that the project was able to build on these structures that were already in place. Developing these links was made easier through the relationship between the project coordinator and the established Village Natural Resource Management Committee.
- The SACC project in Kenya involved many stakeholders including government, VIRED International (which provide research on social economic and environmental impact assessment), *VI-Agroforestry*, the WRUA (Water Resource Users Association) and Farmers' Association. The Farmers' Association, community forest association, provincial administration, and the WRUAs, were the entry point of the project into the project areas and will collectively manage the project after *CARE Kenya* devolves responsibility.

2.3 ENSURING TWO-WAY COMMUNICATION

There is a need to initiate two-way communication throughout the project by ensuring community members have access to the project coordinator at all times. Further successes in this domain can be enabled by project coordinators employing community representatives (ideally elected from the community) or work with extension officers and capacity building exercises to facilitate communication between communities and the project, as seen in the *Sofala Community Carbon Project* in Mozambique (Dougill *et al.*, 2012) and successes noted in DRC from the private sector-led Kamoja Sustainable Livelihoods Project (Stringer *et al.*, 2013).

2.4 ENSURING SOUND INSTITUTIONAL STRUCTURES

While institutional analysis can help identify the accountability and effectiveness of formal and informal institutions, a greater challenge is to assess how

BOX 1: THE BENEFITS OF WORKING WITH LOCAL INSTITUTIONAL CAPACITY

- Projects developers can gain greater legitimacy and local trust, in contrast to mistrust, delays and resistance if local institutions and governance structures are bypassed or undermined.
- Community engagement and communication is more efficient as local leaders and institutions can act as intermediaries, whereby information can be fed back through existing channels.
- The capacity of local institutions and communities are strengthened, which can help them influence project decision-making and handle management responsibilities.
- Working with and formulating groups or clusters of groups can reduce costs (e.g., in administration, monitoring of compliance etc.) as well as providing opportunities for marginalised groups (e.g., women (see section 3)), especially in the smallholder context.
- Local institutional structures can help projects build connections between multi-level institutions and actors such as NGOs and government departments, developing partnerships to reach shared and mutual goals. Strengths can be harnessed from different actors leading to outcomes that are not otherwise possible when actors work alone.

Source: Blomley & Richards, 2011 & Shames *et al.* 2012; Stringer *et al.* 2012b & Pinkse and Kolk, 2012

institutional structures/groups are dominated by narrow interest groups, who may not represent the views and voices of all in a community – especially vulnerable groups (e.g., women, elderly or the poor etc.).

Transparency, accountability and ethics to ensure institutional structures/groups represent the views and interests of all, as well as ensuring communities can hold local leaders and management committees to account, is essential. Case study projects provide evidence of institutional structures being

democratically elected, while some even required gender balance in leadership positions. For example, *TIST* in Tanzania requires that each cluster (of 40 groups or 300 farmers) has a leader, a co-leader and an accountability officer, all of which are elected on a rotational basis. Smallholder groups (6-12 farmers) are encouraged to meet regularly and attend cluster meetings, whereby a speaker is elected to represent the interests of the farmers (Shames *et al.*, 2012). The Village Management Committees created for the SACC project in Kenya are also responsible for management activities, including benefit-sharing. They make a particular effort to represent women, marginalised and vulnerable groups.



Extension worker in the *Sofala Community Carbon*, Mozambique. Photo courtesy of Jen Dyer.

2.5 DEVOLVING RESPONSIBILITY TO THE LOCAL LEVEL & BUILDING CAPACITY

Long-term success of a community carbon project will rely on the ability to effectively devolve management responsibility to local level actors (Shames *et al.*, 2012). Where institutions are weak, capacity building will need to be provided by the project coordinator, external consultants or through established partnerships (see section 2.2). For example:

- The *Humbo* project in Ethiopia is transitioning responsibility to the local level Farmers' Forest Cooperative Union, which is made up of smaller community forest development cooperative societies that *World Vision* has been training since the beginning of the project. *World Vision* still continues to play an advisory role. Support from local government will strengthen the management arrangement further. Government involvement was instrumental in establishing the bylaws that

governed the co-operative societies, as well as training them in institutional governance and financial management (Shames *et al.*, 2012).

- The *CCI* project in Ghana is devolving project responsibility to a national organization of cocoa producers that co-ordinates activities and information-sharing between local farmer groups.
- For *Trees of Hope* in Malawi, management will be handed to Local Program Monitors, whose responsibilities include farmer registration, development of land-use specifications, distribution and production of seedlings, the establishment and monitoring of activities, as well as all extension services.
- The *Sofala Community Carbon Project* in Mozambique worked with fractured communities to reconstruct and build local institutional capacity

after years of devastating conflict. The project established elected community associations to manage community resources and regional institutions, including the management of carbon assets and administrating the project's activities.



Field coordinator explains to farmers how to design their land-management plans, *Trees for Global Benefits*, Uganda. Photo courtesy of Ecotrust.

Section 2 Emerging Good Practices

- Projects need to build connections between multi-level institutions and actors such as NGOs and government departments in achieving partnerships for shared and mutual goals. This can be most effectively achieved through existing local institutional capacity.
- Projects should work with and through local institutional capacity (e.g. village committees, farmers groups etc.) in order to leverage benefits including broad participation, efficient contracting, good communication, provision of extension services, marketing and financial services, as well as developing equitable benefit-sharing mechanisms.
- Some of our project case studies deal with smallholders or households only if they are part of a collective cooperative group, while other projects signed contracts with individual producers or smallholders. Both models can work, however, dealing with and contracting groups is beneficial for reducing costs and offering opportunities for marginalised groups.
- Initiate two-way communications throughout the project by ensuring community members have access to the project coordinators at all times, potentially through committees/group meetings, community extension workers and capacity building activities.
- Projects need to implement methods and procedures of instilling transparency, accountability and ethics so institutional structures/groups represent the views and interests of all project participants. Building the capacity of marginalised groups and enabling their views to be heard, and ensuring that communities and smallholders can hold local leaders and management committees to account, is essential.
- Carbon projects need to pass overall management responsibility to local level actors to ensure long-term success. Moreover, capacity building will need to be provided by the project coordinator, external consultants or established partnerships, in, for example, institutional governance and financial and carbon assets management, or other areas where local capacity is weak.

3. Resolving land and natural resource tenure

Security of land and natural resource tenure is essential for implementing successful carbon projects. Vague or weak tenure rights can lead to risks for communities and smallholders.

Without clear and defined rights to land and the resources / ecosystem services that reside on it, projects will be unable to supply credible carbon offsets. In addition, tenure rights determine who has ownership over natural resources such that projects with unclear tenure run the risk of elite capture.

3.1 THE COMPLEXITIES OF LAND & NATURAL RESOURCE TENURE

Many African countries have multiple and complex land tenure systems whereby several users may have access to the same piece of land (Toulmin & Quan, 2000). For example, in Malawi, customary or community land is the most common form of tenure but individual smallholders may use it as though it were their own land (Nothale, 1982; Government of Malawi, 2001). In Ghana, communities and smallholders can hold tenure over the land, but rights over trees and carbon remain in state control (Asare, 2010). It is therefore critical for projects to identify ways to strengthen and resolve complexities of ownership rights (Blomley & Richards, 2011). Box 2 outlines the initial steps to be taken to identify land tenure.

3.2 INVESTIGATING CLAIMS

All carbon standards require evidence of ownership of land. This is normally achieved through supporting documentation (purchase agreement for smallholders and certificates of customary ownership for communal land) and through the local institutions that regulate tenure arrangements. For *Trees for Global Benefits* in Uganda, *ECOTRUST* ensures each smallholder is able to demonstrate long-term ownership/rights to land. Evidence is provided by documents of purchase and consent from local village heads. For state-owned land, *ECOTRUST* works with community groups that have acquired land rights through collaborative forest management agreements with the National Forest Authority. Undertaking detailed checking of land tenure rights is therefore an important role for NGO / project developers.

3.3 STRENGTHENING TENURE & RESOLVING CONFLICTS

In many cases, carbon projects can play a key role in strengthening or formalizing property rights, which can lead to local community empowerment.

The *Sofala Community Carbon Project* worked closely with a recognised NGO and communities to register community land tenure in accordance with Mozambique land laws. Eventually a formal agreement over forest land use was negotiated through a donor-funded project involving a local land-rights organization (Dougill *et al.*, 2012).

On some occasions the formalization of land rights can lead to new conflicts, as competition can develop where it did not exist previously. Our cases studies highlighted the use of community decision-making processes and traditional conflict resolution to resolve such risks. For example, for the *WKSACP* in Kenya, most land conflict was resolved through the local provincial governments, whereby clan elders dealt with disputes. This type of traditional system was said to resolve some 70% of all land conflict cases (Shames *et al.*, 2012). In other cases, rights formalisation and conflict resolution, or the use of local legal agreements

BOX 2: LAND TENURE ARRANGEMENTS

A good exercise for project developers is to identify if one or more of the tenure situations below are present:

- Statutory tenure system, whereby, local individuals have private ownership of rights through legal titles;
- Customary tenure system which is recognised as being equivalent to legal rights; or
- Prevailing legislation, which provides long-term access, use, and management rights to natural resources.

Such an assessment provides clarity on land tenure and natural resource rights (including carbon) and will also help design and implement benefit-sharing mechanisms and flows (see section 4)

Developed from: Blomley & Richards, 2011

or court processes can be useful. Traditional or customary resolution mechanisms are preferred (Blomley & Richards, 2011).

3.4 PARTICIPATORY MAPPING

In some cases, community participatory mapping exercises are an appropriate tool to resolve conflicts and identify ownership claims. For example, for the *Mai Ndombe* REDD project in DRC, chefs de terres (chiefs of the land) undertook participatory territorial mapping and applied their traditional knowledge of territorial boundaries. This initially began as crude drawings on the ground. However, once the boundaries were agreed on, the information was transferred to a GIS map and projected onto a wall for review and modification. The map was then circulated throughout the community for further verification. This process met with a lot of community interest because it was the first time they had been able to review their forest boundaries and then discuss land management issues on a landscape-scale.

4. Ensuring Equality & Benefit Sharing

Project equality depends on the participation of all representative community groups (e.g. men, women, ethnic or religious minorities, the elderly, the young or the poor), as well as the quality and efficiency of local institutional governance structures in ensuring project benefits are distributed equitably. Projects also need to consider the equality differences between community groups as a means to avoid significant problems of elite capture (Blomley & Richards, 2011; Dougill *et al.*, 2012).



Community participants stand in front of their agroforestry activities as part of *Trees for Hope*, Malawi. Photo courtesy of the Clinton Development Initiative

4.1 IDENTIFYING VULNERABILITY AS A MEANS OF MEASURING EQUALITY

Projects need to firstly identify vulnerability within communities through participatory wealth or well-being ranking to enable equitable impacts from project outcomes to be measured. Moreover, such a distinction will allow project actors to identify who is vulnerable and most in need of project support.

Section 3 Emerging Good Practices

- All carbon standards require supporting evidence for ownership of land. This should be achieved through supporting documentation and the local institutions that regulate tenure arrangements.
- Land rights formalisation and conflict resolution should be conducted through local legal and informal agreements or court processes, but traditional or customary resolution mechanisms are much preferred.
- Community participatory mapping exercises may be an appropriate tool to resolve conflicts and identify local ownership claims. They have added benefits of enabling a more holistic, landscape-scale discussion of community land management issues.

The *Mai Ndombe REDD* project in DRC has shown good practice here through two types of participatory rural appraisals (PRAs).

- The first PRA was conducted to gain information on the population living in targeted villages, on their poverty level, resource use, demographic information, and access to education and health care. Community workshops were held with each of the three tribal groups and were convened separately for women and men.
- During community workshops, issues to do with cultural importance and resource value were identified. Therefore, project coordinators came to the conclusion that this first PRA was unable to capture socioeconomic conditions, and could not be used as a baseline to measure future equitable benefits from project outcomes.
- The project therefore revised the PRA to stratify location and wealth ranking, which was much better at establishing socioeconomic baselines. The project also highlights that this kind of stakeholder process is to continue throughout the project's lifetime in order to inform all stages of project development, helping to ensure that all project benefits and outcomes are equitable.

4.2 BENEFIT-SHARING

Carbon revenue benefit-sharing refers to direct financial payments to communities and smallholders. Payments should be based on performance and on achievement of targets specified in the contracts that communities, smallholders or groups sign with project coordinators. Non-financial benefits may refer to a range of co-benefits as the result of project activities and carbon revenues (Stringer *et al.*, 2012a). These may include community development funds for local development and the establishment of alternative livelihoods and training (see also section 5). It is vital that community-level discussions are facilitated by project managers to discuss the arrangements for economic benefit-sharing so that all can see the process agreed in establishing community funds etc.

Trees for Global Benefits in Uganda provide good practices for benefit sharing mechanisms. For instance, financial benefits are based on targets and delivered through microfinance schemes or institutions. Indirect benefits include learning events that provide opportunities to share experiences, help

manage expectations and provide training in improved land management:



Community monitoring as part of the *Trees for Global Benefit* project. Photo courtesy of Ecotrust

- *Inclusive decision-making & community monitoring:*
Smallholders are organised into groups who meet regularly and conduct carbon monitoring jointly with ECOTRUST. This has been essential in creating a sense of local ownership as well as reducing costs.
- *Openness and transparency in carbon transactions and managing expectations:*
ECOTRUST negotiates with smallholders regarding the price at which carbon is sold (which in turn, depends on the current global price of carbon). A minimum price is agreed which defines the expected size of financial benefits that smallholder can expect to receive. To avoid mistrust, ECOTRUST arranges events, often organised by buyers, to share knowledge and experiences.
- *Payment distribution*
One of the major indirect benefits of the ECOTRUST project was that it required smallholders to open bank accounts to give them the opportunity to invest money and access credit. The bank even accepted the project's carbon finance contracts as security for loans. Savings clubs or informal credit institutions were popular, especially for women, and were often more

accessible than formal banks. Moreover, ECOTRUST planned to start a bank to pay for carbon credits in advance (see section 5.3)

Source: Mwayafu & Kimbowa 2011 & Shames *et al.*, 2012



Women's tree planting as part of *Emiti Nibwo Bulora*, Tanzania.
Photo courtesy of Vi-agroforestry.

Trees for Global Benefits uses a benefit-sharing mechanism typical of *Plan Vivo Standard* projects. Contracts are signed by individual smallholders and so carbon payments are distributed to each smallholder based on how much carbon they have stored on their land holdings. However, projects that sign contracts with groups will need to ensure that benefits are shared equitably within groups. For example, the village management committee (VMC) for the SACC project in Kenya comprises representatives of existing farmers' groups and ensures representation of women and marginalised and vulnerable groups. This puts it in a good position to manage benefit-sharing. Our case studies suggest that the distribution of carbon payments is simplified when carbon projects contract with groups rather than individuals.

Some projects have shown good practices in establishing community development funds where carbon finance (donated or shared from producers) is put towards development projects (e.g. for improving infrastructure including schools, health outreach etc), or livelihood projects (e.g. agroforestry). Such practices can deliver broader social benefits and

permit the community to identify who is poor, vulnerable and most in need of support. In the *Sofala Community Carbon Project*, community organisations invested carbon revenues in building a new school and a health post. Similar findings have been shown from CSR-funded initiatives around mines in Zambia (Dyer *et al.*, 2013).

A further challenge for carbon projects to share benefits is related to land tenure, as unclear rights lead to elite capture of carbon revenues at the expense of others (Dougill *et al.*, 2012). For example, in the *Sofala Community Carbon Project*, new land laws allowed communities to gain ownership of land which provided a direct mechanism to deliver payments to the community. The land was registered in the name of the village chief and benefits were equitably distributed through group payments (Jindal *et al.*, 2008).

4.3 GENDER EQUALITY

It is essential for project coordinators to understand that successful carbon project implementation is not possible without women's equal representation, meaningful participation and benefit sharing. Our case study projects showed good practices relating to the need to include gender equality in project design, particularly in relation to issues of land and natural resource tenure, labour, education, benefit sharing, participation and leadership:

- Developing benefit-sharing mechanisms that consult and meet women's needs is challenging, especially to the barriers that prevent women from holding land ownership. Women were in a better position to participate and claim benefits in those projects where contracts are signed with groups (e.g., *TIST*) so the need for land ownership was not necessary. *TIST* ensured that household contracts included the names of both female and male heads so decisions and payments required joint authorization.
- Ensuring women's participation, representation and leadership in key decision-making positions as well as acknowledging the knowledge and experience of women is critical. *TIST* ensured women's participation in rotating leadership systems, which required a certain number of women to hold leadership positions within groups.
- Lack of education, information and services for women in many communities can limit their ability to adopt alternative livelihoods and take new

opportunities. Training that targeted women such as employing women community facilitators, timing visits, seminars and training explicitly to ensure women's participation, and ensuring that women receive information directly, are measures that projects have implemented to address women's ability to access benefits. A good example from SACC in Kenya was to provide seedlings of 'women's trees', which provide firewood, fodder, shade and fruits.

Source: WOCAN, 2012 & Shames *et al.*, 2012

5. Managing Costs & Risks

Communities and smallholders do not have the capacity to absorb carbon project risks, such as low or delayed returns due to market failings / variations, high

labour requirements and marginalised social positions (see Kill, 2013 for recent review of dangers). In addition, they often struggle to access the upfront capital needed to invest in inputs required to implement carbon projects (e.g. tree seedlings). Communities and smallholders may only be able to participate if carbon project activities seek to minimize their exposure to risks and improve their livelihoods (Shames *et al.*, 2012). Moreover, those projects that seek to reduce community risks and costs through improved agricultural productivity, food security, alternative livelihoods and income streams will be able to address leakage more easily than those focused directly on carbon or forest management. Moreover, projects that seek to minimize physical risks (e.g. from disease, pests, drought and livestock grazing) will be able to address permanence issues more directly.

Section 4 Emerging Good Practices

- Projects need to identify vulnerability within communities through wealth or well-being ranking as a means of measuring equitable impacts from project outcomes, and should be conducted frequently throughout a project's lifetime. Such distinctions will allow project coordinators, and more importantly, local institutions, to identify who is vulnerable and needs support.
- Distribution of carbon payments is simplified when carbon projects contract with groups rather than individuals.
- For group payments, carbon projects need to ensure that benefits are shared equitably within groups – here representation of women and marginalised vulnerable groups in group management structures or oversight institutional management and democratically elected structures are essential (see also section 2).
- Establishing community development funds financed from a proportion of carbon revenues and revenues from other project activities for development projects (e.g. for improving infrastructure including, and health outreach etc.) and livelihood projects (e.g. agroforestry etc.) will help to deliver broader social benefits for the whole community.
- Community carbon monitoring can be essential for creating a sense of local ownership as well as reducing project cost.
- Openness and transparency in carbon transactions is essential for managing community expectations.
- Helping project participants invest money as well as to access credit is important. The establishment of bank accounts as well as informal credit institutions can be major indirect benefits.
- Generally, women are in a better position to claim project benefits when projects sign contracts with groups that do not require land ownership as a prerequisite for participation.
- Participation and leadership is critical for women and measures to ensure women's participation through rotating leadership systems, targeting women leadership positions within project institutional structures and groups as well as communication efforts highlighting the importance of women's roles, were effective.
- Training that targeted women (e.g. hiring women community facilitators, tree nursery workers) and the timing of visits, meeting and training to ensure women's participation, as well as ensuring women receive information directly, were all identified as good practices.

5.1 MANAGING INITIAL COSTS

When implementing carbon projects, the initial costs to community members will require cash, especially if they have to buy their own tree seedlings. To cover such costs, *TIST* encourages smallholders to plant short-term cash crops such as potatoes, and facilitated loans for buying seedlings (Shames *et al.* 2012). In other cases, ECOTRUST in Uganda, accept initial risks and provide seedlings on credit for the *Trees for Global Benefits* project communities.

Project activities such as tree planting, can have the potential to displace existing cash crop production, which can lead to carbon leakage if tree planting dominates land-use activities. In such situations, projects need to strike a balance and ensure tree planting does not displace other cropping livelihood activities. For example, Plan Vivo projects ensure all smallholder producers have sufficient land to provide food for themselves and their families. Projects could also seek to make cropping better through improvements to old techniques through e.g. sustainable agriculture or the introduction of other, alternative livelihoods (see section 5.3)

5.2 FLEXIBILITY IN PAYMENT SYSTEMS

The timing and flexibility of carbon payments are critical for buffering the costs to communities and smallholders because of delays between action (e.g. planting trees, implementing agroforestry etc.) and benefits (e.g. carbon payments, increased agricultural yields etc.). Therefore, pre-financing through early payment or credit might be important (Shames *et al.*

2012). For example, in *Plan Vivo* projects (including *Trees for Global Benefits*, *Trees of Hope*), payments are front-loaded in year 0 (i.e. carbon is pre-sold) as soon as projects are verified. Carbon payments continue in years 1, 3, and 5 and are completed in year 10. The idea behind this time schedule (which is much shorter than other projects), is that by year 10, established alternative livelihoods will be providing much greater benefits for communities in contrast to carbon payments (Shames *et al.*, 2012). Pre-financing through early payment or credit can therefore provide financial benefits before other project benefits can be realised. Moreover, communities and smallholders will be able to participate more easily as upfront costs to them can be reduced.



Farmer George – one of the most successful project participants of the *Sofala Community Carbon Project* in Mozambique on his fruit tree plantation. Photo courtesy of Jen Dyer.

5.3 IMPLEMENTING CO-BENEFITS

Carbon payments are not enough to counteract the initial and long-term costs placed by carbon projects on participating communities. Nor are they enough to alleviate poverty, especially when carbon prices are low (Kill, 2013).

Therefore, it is essential that carbon projects implement alternative livelihood activities (conservation agriculture, agroforestry, bee-keeping, etc.), in addition to creating co-benefits such as improved ecosystem services (e.g. reduced soil erosion, increased soil fertility, restored hydrological regimes, etc.). Such projects are more likely to succeed than those that focus only carbon sequestration (Reynolds, 2012; Stringer *et al.*, 2012a). Box 3 highlights some alternative livelihoods and co-benefits from the *Emiti Nibwo Bulora* and *Trees of Hope* projects.

BOX 3 BENEFITS FROM FORESTRY AND AGROFORESTRY

For *Emiti Nibwo Bulora* and *Trees of Hope*, communities and smallholders establish forestry and agroforestry systems to deliver carbon sequestration, ecosystem services and livelihood benefits. This typically takes the form of:

- Boundary planting, which provides benefits for land demarcation, soil erosion control and extra wood for construction, income and fuel.
- Dispersed interplanting establishment, which provides benefits in improved soil fertility and nutrient cycling and thus, increased yields in agricultural production (e.g. maize, cotton etc.) and improved food security. Other benefits include soil conservation, improved water quality, enhanced biodiversity, and income diversification through firewood, medicine, bee-keeping and other NTFPs.
- Fruit orchard establishment, which provide produce for consumption, and can be sold to boost income.
- Woodlot establishment, which provides wood for fuelwood, building material, fodder, medicine, and benefits for women through less time spent collecting fuelwood.

For most of our case study projects, improvements in agricultural productivity and yields were the most valuable benefits for participating communities and smallholders, not the carbon payments. *Trees for Global Benefits* and *TIST*, report that most smallholders joined the project because of benefits linked to improved agricultural output from (e.g. via conservation agriculture and agroforestry), and restoration of, degraded lands (Shames *et al.*, 2012). Other benefits include the sale of wood from woodlots to reduce fuel and building material costs, composting

and conservation tillage systems to reduce costs of fertilizers and pesticides, sales of honey and wax from bee-keeping activities, sale and use non-timber forest products (NTFPs) and many others. The *Humbo* project in Ethiopia even looked at creating extra income through ecotourism activities (Biryahwaho *et al.*, 2012).



Community tree nursery *Trees for Global Benefits*, Uganda.
Photo courtesy of Ecotrust.

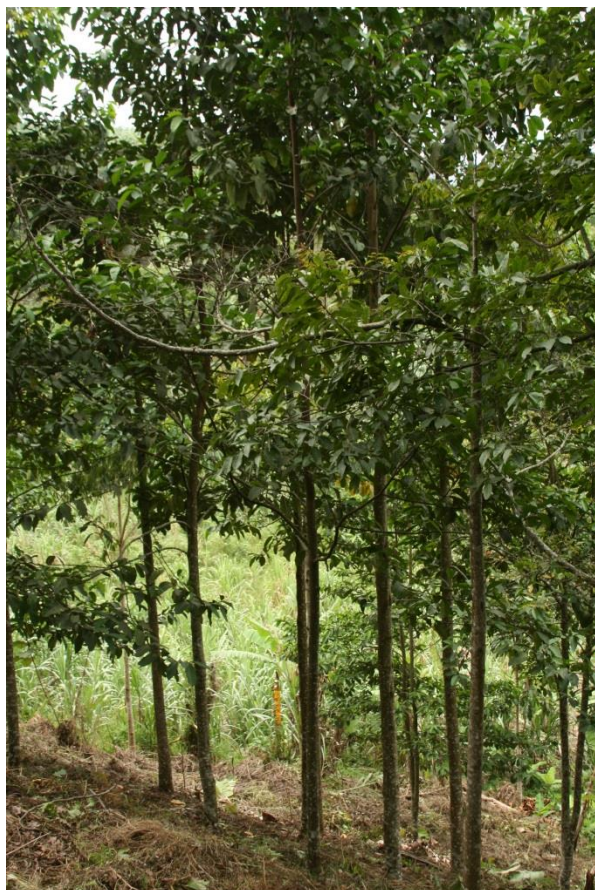
5.4 MARKET ANALYSIS

It is essential that project co-ordinators conduct market analyses to assess the feasibility of alternative livelihood options (Blomley & Richards, 2011). For example, the *Sofala Community Carbon Project*, introduced bee keeping activities as part of the forest management plans, only after project co-ordinators and communities were satisfied that there would be markets for honey, wax and other bee hive products. Furthermore, the project plans to build a shop on the road to Gorongosa National Park where tourists can buy honey and other bee related products. Organising beekeepers into groups made it possible to achieve marketing co-ordination and economies of scale.

5.5 TRAINING & CAPACITY BUILDING FOR ALTERNATIVE LIVELIHOODS

Training and capacity building for implementing and promoting sustainable alternative livelihoods should be conducted by the project through locally-based extension staff in addition to external consultants, with the idea of handing overall responsibility to local institutions and groups in the medium to long term. For example, *Trees of Hope* conducts capacity building exercises and training in agroforestry through the project's technical staff and external consultants when needed. Training in developing group dynamics and building capacity and trust within these groups to take increasing responsibilities in project management is also provided (see also section 2.5). Training, knowledge transfer and capacity building in community cohesion, community organization were also cited as

substantial benefits for our other case study projects. In cases where projects lack the expertise to develop alternative livelihoods, small scale business enterprises and marketing, they may need to employ external consultants or build relationships and partner with other actors (see section 2.2).



Typical woodlot *Trees for Global Benefits*, Uganda. Photo courtesy of Ecotrust.

5.6 ENSURING PERMANENCE

Additional risks to carbon projects are those that threaten permanence of the carbon stored. When carbon offsets are generated from a project, there should be confidence that the emission offsets are permanent. Traditionally safeguards to permanence include risks to trees and agriculture from fire, pests and diseases, livestock grazing, and drought. Measures to address these risks are normally set out in carbon standard methodologies. Box 5 explains how these risks can be minimized.

Other measures, such as those used by the Plan Vivo Foundation standard include the implementation of a carbon buffer, whereby the project withholds 20% from the sale of carbon offsets as a reserve of unsold

carbon, so projects can still carry on selling credits if measures to address risks are not successful.

BOX 4: TYPICAL MEASURES TO ADDRESS PHYSICAL RISK AND ENSURING PERMANENCE

- **Managing to reduce the impacts of pests and diseases**

Native tree species are often used to secure permanence, as planting systems using indigenous and natives tree species are less susceptible and resistant to locally known pathogens (Dougill *et al.*, 2012). Many carbon standards such as the Plan Vivo (e.g., *Trees of Hope*, and *Trees for Global Benefits*, *Sofala Community Carbon Project* and *Emiti Nibwo Bulora*) limit the use of exotic species but other standards and methodologies will permit their use.

- **Managing against forest fires**

Trees of Hope have educated communities about the risks of forest fires to the project, and community-based fire monitoring committees have been established. As a result, measures have been put in place to address fires, such as establishing fire breaks around plantations.

- **Managing against livestock damage**

Trees of Hope have educated communities on livestock management practices including tethering and zero grazing during periods of vulnerability, establishing boundaries around plantations or individual trees as well as regulating the movement of livestock.

- **Managing drought**

Measures such as planting healthy seedlings, deep pitting and use of organic manure to increase soil moisture as well as promoting irrigation will help projects reduce drought risks

Conclusion

This document has highlighted a number of good practices drawn from case study community carbon projects from across sub-Saharan Africa. The analysis of the projects provides valuable lessons for informing good practice guidelines for those wanting to develop and co-ordinate successful community carbon projects. Our analysis recognises that there are important lessons and good practices in the areas of building local level understanding and trust, working with local institutional capacity, resolving land and natural resource tenure, ensuring equality and benefit-sharing, and managing costs and risks for community and smallholder project participants. If these practices are followed, it can form a solid foundation on which community carbon projects can be established if project participants adhere to transparently agreed activities. A clear monitoring process linked to national level regulatory frameworks is the final key ingredient for moving from guidelines on paper to the delivery of effective community carbon projects.



Community tree planting with the help of young people, *Trees for Global Benefits*, Uganda. Photo courtesy of Ecotrust.

Section 5 Emerging Good Practices

- Projects need to strike a balance and ensure project activities do not displace land for food and cash crop production. Similarly, balance is also needed between food and cash crop cultivation.
- To address short-term costs, projects should encourage communities and smallholders to plant cash crops and provide them with seedlings on credit. Moreover, pre-financing through early payment or credit can provide financial benefits to communities and smallholders before all project benefits are realised. This will likely lead to greater participation as upfront costs to them can be reduced.
- Carbon projects need to implement alternative livelihood options for communities and smallholders, in addition to creating other co-benefits such as improved ecosystem services. Such projects are more likely to succeed than those that focus only on carbon sequestration. Our case study projects highlight that improvements in agricultural productivity, restoration of degraded lands, sale of wood and other benefits from alternative livelihoods were the main reasons why communities and smallholders participated in project activities. Moreover, financial revenues from such activities dwarfed those from carbon payments.
- It is essential that projects conduct market analyses in order to assess the feasibility of alternative livelihoods.
- Training and capacity building for alternative livelihoods should be conducted by the project through locally-based extension staff in addition to external consultants, with the idea of handing overall responsibility to local institutions and groups. In cases where projects lack the expertise to develop alternative livelihoods, developing partnerships with other actors can be beneficial.
- Projects should seek to address physical risks from by fire, pests and diseases, livestock grazing and drought, as well as setting up carbon buffers so projects can still carry on selling credits if measures to address physical risks are not successful.

CORRECT CITATION

Butt, E., Dougill, A.J., Stringer, L.C., Tembo, D. 2013. *Good Practice Guidelines for Community Carbon Projects*. Centre for Climate Change Economics & Policy Report. Leeds, UK.

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