This paper gives an overview of the Green Belt Movement’s (GBM) grassroots experiences working with community groups to restore indigenous forests in Kenya. It provides insights from GBM’s community-based mitigation and adaptation programmes; identifies the challenges that rural communities, NGOs and partners are facing in the implementation process for forest carbon projects. These include lack of sufficient or upfront finance, barriers to community participation, lack of provision for biodiversity and capacity in institutional frameworks.

Community-based climate change projects

Rural communities in Africa are experiencing the impacts of climate change, including severe drought and erratic rainfall, among others. They need support and resources to build resilience. Forest incomes are a vital economic buffer for people living in and around the forests, particularly for women, children and the poorest households in a community during periods of stress, such as seasonal shortages of crops or crop failures.

As a community-led tree-planting organisation GBM’s priorities include strengthening the role communities play in protecting old growth forests, and helping to restore indigenous forests while improving livelihoods. In the 1980s, forest degradation in Kenya was at its highest due to logging of indigenous tree species and charcoal burning. After clear felling, the lands were converted to agriculture – either for housing estates, construction, tea or the shamba system¹ – which included a rotation of grazing and subsistence agriculture. Lands that were clear felled and converted to agriculture do not return to natural forest.

With this in mind, GBM initiated a pilot Afforestation Reforestation (AR) Clean Development Mechanism (CDM) project in 2005. Our aim was to learn from and experiment with how such projects could contribute towards community livelihoods through payment for ecosystem services, while mitigating against the impacts of climate change, and scaling up conservation of biodiversity in

¹ The shamba system is a method used for establishment of exotic plantations that allows non-residential cultivation in forest land in Kenya.
highly degraded areas.

The project has been rehabilitating 1,600 ha of degraded forest land in the Aberdares and Mt. Kenya – two of the five major water catchments in Kenya that provide water for food production and drinking water for millions of people in Nairobi. GBM community groups raise indigenous seedlings and plant them in degraded lands. With GBM’s support rural communities formed Community Forest Associations (CFAs), which are recognized by the Kenya Forest Service (KFS) through the 2005 Kenya Forest Act. The participatory forest management agreement provided by the Act enables CFAs to be co-managers of forest resources. CFAs are able to enter into formal agreements with KFS to rehabilitate forest land and receive forest access rights.

GBM has also been working in partnership with communities to implement a forest mitigation and adaptation project in the southern end of the Mau forest ecosystem. The main objective of the project is to restore degraded forest land and improve the livelihoods of rural communities. This project is rehabilitating more than 1,350 ha of degraded water catchment area with indigenous trees to restore its ecosystem functions and enhance the community’s resilience to climate change. In addition, more than 440,000 tons of carbon dioxide equivalent will be sequestered.

**Lessons Learnt... so far**

When GBM initiated its AR CDM project and other climate change mitigation projects in Kenya, it was done to understand and experiment with how such projects could contribute towards the improvement of community livelihoods, climate change adaptation, biodiversity conservation, and watershed restoration, as well as mitigating for climate change.

GBM’s experience has shown that unless a number of issues are addressed, these projects and other similar projects, including REDD, will not meet expected goals:

**Financial constraints:** The way most forest carbon projects are currently set up, the rules that have to be followed during implementation result in high costs for project development. In addition, lack of upfront funding and the many years that the communities have to wait before realising financial returns from the carbon credits make it impossible for the local communities to initiate and scale up such forestry projects. This essentially leaves such projects to the few who can mobilise funds from other sources to invest in the project.

Even with upfront funding, the experiences from the ground have shown that the investments needed for these projects are more than the financial returns from the carbon credits.

**Biodiversity:** Afforestation and reforestation (AR) can have positive or negative impacts on biodiversity depending on the ecosystem being rehabilitated and the management options being applied. AR activities that emphasize species selection and site location can promote the return, survival, and expansion of indigenous fauna and flora population. In contrast, clearing native forests and replacing them with a monoculture plantation of exotic species would have a highly negative impact on biodiversity.

GBM experience has shown that uncontrolled pressure to start and scale up forest carbon projects can be disastrous to biodiversity, water resources, food security and rural community livelihoods.

Lack of clear laws and national policies, zoning maps, and institutional infrastructure often lead to unfavourable competition from logging and paper industry for ‘forest land’ at the expense of highly threatened biodiversity and watershed restoration.

An increased emphasis on carbon projects can encourage the planting of exotic trees which are fast growing and give quick return on carbon credits compared to indigenous trees that grow much slower, hence have a low return on carbon credits.

GBM places great emphasis on the difference between a plantation of exotic trees and a native forest. A plantation is a monoculture farm of exotic trees. We cannot afford to reduce natural forests

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2 Partners on this project include Clinton Climate Initiative, Narok County Council, Enoosupukia Community Forest Association
and replace them with exotic plantations that eliminate the multiple benefits that forests provide such as water catchment, climate regulation, biodiversity and use of non-forest products like medicine and food.

In addition, some of the rules in these carbon projects, such as the 1990 eligibility criteria for degraded forest for AR CDM projects, further discourages conservation efforts and biodiversity restoration in rural areas. This is because only sites that were deforested before 1990 are eligible for rehabilitation without any regard to the general health of the ecosystem as a whole. Such rules have been forcing the communities to prioritize sites based on year of deforestation at the expense of the prevailing biodiversity threats and watershed restoration needs in the critical water catchment areas therefore undermining the goals of livelihoods improvement.

**Local community participation:** Projects should respect communities rights, culture and livelihoods. GBM experience has been that this can be achieved if the project allows for full and effective participation of rural communities.

This requires sufficient investments in education and empowering communities, and developing grassroots governance structures so as to ensure free prior informed consent, enforcement of agreements, safeguards, clear and equitable benefit sharing and conflict resolution guidelines. In the absence of these, the project can fuel community conflict.

**Leakage:** Planting and protecting trees in one forest without addressing the drivers of deforestation in the country as a whole would merely transfer deforestation to other parts of the forest, if not lead to worse damage elsewhere. While it is possible to address leakage, this can only be achieved in countries where governance issues have been well addressed and solutions provided for the actual drivers of deforestation and forest degradation. This requires planned investments from the start of the project in capacity building at both grassroots and national level to develop such structures.

GBM has been mobilising and empowering communities to introduce zero grazing and agroforestry programs on their private farms to address needs for firewood and fodder for livestock and reduce pressure on forest resources.

**Institutional Framework:** GBM experience has been that well established and strong institutional frameworks play an integral role in the success of forest carbon projects. The office of the Designated National Authority (DNA) plays one of these critical roles in the approval and registration of carbon finance projects in a country. While this is extremely important so as to ensure that the projects are aligned to the sustainable development goals of the country, and also to avoid bogus projects, such institutions also have contributed to delays in project registration and in some cases, failure of these projects. Despite the willingness to support rural communities, the offices of the DNA have been hampered by lack of skills, policies and finances to adequately handle these projects. Unfortunately, in the few cases where these skills are developed, change in staffing adversely affects efforts made.

The National Forest Authority is another critical player in the implementation of carbon projects. National Forest Authorities in most countries in Africa have the mandate of providing technical guidance on matters related to forestry as well as being the custodians of state forests. Unfortunately, these institutions often lack sufficient finances and staff to adequately provide the highly required advice to rural communities during the implementation process as well as to protect the forest.
Carbon Trading is the buying and selling of carbon quotas that allow the holder of the quota to emit the equivalent of one tonne of CO₂. Carbon trading in a derivative market would be to generate wealth for others, not for those living on the frontline of climate change. As a tool to reduce GHGs and the impact of climate change, carbon trading will not be sufficient to deliver the outcome needed, which is to keep global temperatures at a level scientists recommend to prevent catastrophic climate change (1.5 degrees Celsius).

GBM experience showed that in the absence of a strong National Forest Authority, the survival of planted seedlings cannot be guaranteed due to lack of forest policies, laws and enforcement strategies to ensure that such trees are protected from uncontrolled grazing, fire hazards and illegal cultivation in the forest. Even though GBM has invested heavily in employing Green Rangers to support rural communities in protecting their trees, it would still be a challenge for the Green Rangers and rural communities to enforce the law without the support of the National Forest Authority.

Until governments put in places strong national forest authorities, these AR carbon projects and REDD projects cannot work in Africa.

Complex methodologies: Rural communities are required to demonstrate that their project area is eligible for a carbon project before they can start the project. This means huge investments in satellite imagery, software, GIS skills, and extensive baseline surveys, among others. Such costly investments lock out rural communities from engaging in such projects or create dependency on external support for project development.

The validation process in forestry carbon projects is important so as to ensure that these projects actually follow stipulated rules, procedures and methodologies. Unfortunately, validations processes have been slow, mostly due to the steep learning curve required for external validators and project developers. If professional validators struggle to catch up with changing methodologies, it is completely impractical for rural communities to understand these processes and take their project through validation and registration. Overall, the extra efforts, skills, costs and time that rural communities are required to invest in project design documentation (PDD), development and continuous monitoring of carbon projects is not practical. While it is realistic for rural communities to plant trees and keep track of the numbers of trees planted and those that survive to maturity, it is infeasible for them to package a PDD and continuously measure and monitor changes in carbon stocks.

Until these methodologies are simplified, it will remain impractical for grassroots communities to develop forestry carbon projects. Therefore these projects will only remain in the hands of private companies and consultants rather than being vested in the intended rural communities who live in and/or rely on these forests for their livelihoods.

REDD

GBM has been engaged in building the capacity of local communities to fully and effectively participate in the Reduced Emissions from Deforestation and Degradation (REDD) Readiness process in Kenya so as to ensure that REDD addresses their needs, as well as helping to promote transparency and accountability in decision making.

The Kenyan government has made a commitment to REDD to give greater value to standing forests. If implemented correctly REDD could contribute to the well-being of local communities by protecting the resources that their livelihoods depend on. However, REDD initiatives implemented without sufficient safeguards and free informed and prior consent of the local communities will surely have negative impacts. Ultimately, this would end up jeopardizing the success of the REDD intervention itself.

Over the past three decades, GBM has mobilised and supported grassroots communities to plant more than 47 million trees in forest lands, public spaces and private farms. GBM’s experience and successes in Kenya demonstrated that forests play an important role in the livelihoods of these communities. However, without environmental and social integrity, the introduction of climate finance projects could easily undermine the rights and livelihoods of rural communities.
A case in point is when governments and private enterprises support REDD, but at the same time support plantations of exotic trees like the pine and eucalyptus at the expense of indigenous forests; they are supporting practices that are incompatible. This is especially true for countries like Kenya, where indigenous forest cover is a mere 2% and is mainly located in watershed areas.

For REDD to succeed, all governments must demonstrate a real commitment to standing forests and the rehabilitation of degraded forests. This can only be done if national laws that encourage continued deforestation and forest degradation are reformed and communities are supported to respond to the challenges of climate change. Governments need to protect vulnerable communities from companies and carbon markets, motivated more by a search for profits and offsets than the long-term welfare of communities. If these do not happen, considerable financial resources will be invested without achieving the reductions in poverty and other development gains promised by REDD.³

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**About the Green Belt Movement**

The Green Belt Movement (GBM) was founded by Professor Wangari Maathai in 1977. GBM’s aim was to respond to the needs of rural Kenyan women who reported that their streams were drying up, their food supply was less secure, and they had to walk further and further to get wood from the forest for cooking and heating. GBM began by encouraging the women to work together to grow seedlings and plant trees to bind the soil, store rainwater, and provide food and firewood; they receive a small monetary token for each seedling.

Professor Maathai observed that beyond the everyday hardships faced by rural women were deeper issues of disempowerment, mis-governance, loss of ethics, and traditional practices. To address these challenges, GBM evolved a community-based empowerment approach – Civic & Environmental Education⁴ (CEE) Seminars. CEEs help individuals and communities analyze why they lacked the agency to change their circumstances and what they can do. CEEs also help communities understand that if you destroy the natural environment, you will undermine your support system. GBM’s 10-step procedure guides the work at the grassroots level, which continues to evolve - lessons learnt from one year inform the *modus operandi* in the years that follow.

From its early days, GBM advocated for greater democratic space and more accountability from national leadership. Over the years GBM has campaigned against deforestation, land grabbing and the encroachment of agriculture into forest areas. GBM joined others to call for the release of political prisoners, multi-party politics and democratic space. More recently for the new constitution in Kenya, GBM made significant contributions to the sections on land and the environment, and individual and environmental rights.

Since 2009, GBM has extended its Civic & Environmental Education⁵ (CEE) Seminars to include capacity building on climate change mitigation and adaptation. More than 70 extension officers have trained thousands of community members on climate change to enable their more effective engagement.

As a result of GBM’s programmes, there are over 4,000 community groups across Kenya and hundreds of thousands of women in rural Kenya have lifted their families out of poverty. GBM founder Wangari Maathai, who passed away in September 2011, was awarded the Nobel Peace Prize in 2004 for her work on the linkages between environment, peace and sustainable development.

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³ Excerpts from the final article *Silent Forests* by Wangari Maathai printed in the Guardian 26th November 2011

⁴ Today these seminars are called Community Education & Empowerment Seminars

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www.greenbeltmovement.org