Climate Policy
Publication details, including instructions for authors and subscription information:
http://www.tandfonline.com/loi/tcpo20

REDD+ projects and national-level Readiness processes: a case study from Kenya

Florence Bernard[a], Peter A. Minang[a], Bryan Adkins[b] & Jeremy T. Freund[c]

[a] ASB Partnership for the Tropical Forest Margins, World Agroforestry Centre, United Nations Avenue, Gigiri, Nairobi, Kenya

[b] Wildlife Works Carbon, PO Box 310, Voi, Kenya 80300

[c] Wildlife Works Carbon, 242 Redwood Highway, Mill Valley, CA 94941, USA

Published online: 08 May 2014.

To cite this article: Florence Bernard, Peter A. Minang, Bryan Adkins & Jeremy T. Freund (2014): REDD+ projects and national-level Readiness processes: a case study from Kenya, Climate Policy, DOI: 10.1080/14693062.2014.905440

To link to this article: http://dx.doi.org/10.1080/14693062.2014.905440

http://dx.doi.org/10.1080/14693062.2014.905440

climate policy

research article

REDD+ projects and national-level Readiness processes: a case study from Kenya

FLORENCE BERNARD[1]*, PETER A. MINANG[1], BRYAN ADKINS[2], JEREMY T. FREUND[3]

[1] ASB Partnership for the Tropical Forest Margins, World Agroforestry Centre, United Nations Avenue, Gigiri, Nairobi, Kenya
[2] Wildlife Works Carbon, PO Box 310, Voi, Kenya 80300
[3] Wildlife Works Carbon, 242 Redwood Highway, Mill Valley, CA 94941, USA

The Bali Action Plan and Cancun agreements on Reducing Emissions from Deforestation and forest Degradation, plus forest conservation, sustainable management of forests and enhancement of forest carbon stocks (REDD+) have encouraged demonstration activities as part of Readiness and a step towards national approaches. This has enabled important growth in pilot and demonstration projects. Yet an understanding about how these projects are connected and contribute to national-level technical, policy, and institutional preparedness (Readiness) for REDD+ is lacking. This article examines the linkages between national processes and the private-sector-driven Kasigau Corridor REDD+ project in Kenya. The study reveals interesting cross-scale interactions that have increased over time and have high potential for harnessing national-level processes through lessons from the project level. Key innovations from the Kasigau Corridor Project include the implementation of REDD+ in dry forests, operationalization of conservation easements in the context of REDD+, and demonstration of potential ways of obtaining upfront finance for REDD+. The study also provides a number of key recommendations for Kenya and REDD+ in general, including official endorsement of stand-alone REDD+ projects under national Readiness schemes and exploring jurisdictional and nested REDD+ approaches. Additionally, more accommodating national-level frameworks for attracting private-sector engagement and investments, and for integrating, scaling-out, or scaling-up lessons from such projects, would be needed to enhance national REDD+ Readiness.

Keywords: jurisdiction; Kasigau Corridor project; Kenya; national programmes; private sector; REDD+ Readiness

1. Introduction

Reducing Emissions from Deforestation and forest Degradation, plus forest conservation, sustainable management of forests and enhancement of forest carbon stocks (REDD+) is emerging as a critical international policy and finance mechanism to halt land-use-related GHG emissions in developing countries and to mitigate global climate change (Angelsen et al., 2009). Essentially, REDD+ is expected to enable forested developing countries to engage in the reduction of emissions from forests against an agreed baseline and receive payments, compensations, or rewards (market- and/or fund-based) upon verification (Minang & van Noordwijk, 2013). Demonstration activities for REDD+ have been encouraged as part of a phased approach to REDD+ implementation in both the Bali Action Plan (UNFCCC, 2007, Decision 2/CP.13) and within the Cancun agreements – i.e. 'results-based demonstration' (UNFCCC, 2010, Decision 1/CP.16). This has enabled important expansion of REDD+ demonstration

*Corresponding author. *E-mail:* f.bernard@cgiar.org

Taylor & Francis
Taylor & Francis Group

activities, including hundreds of planned 'first generation REDD+ projects' (Sills, Madeira, Underlin, & Wertz-Kanounnikoff, 2009).

REDD+ demonstration activities can be led by individuals, communities, NGOs, the private sector, or national or local governments duly authorized by the host country to implement REDD+ project activities (Angelsen, Streck, Peskett, Brown, & Luttrell, 2008). In the Readiness phase of REDD+, demonstration projects can contribute to the design of national REDD+ strategies in a number of ways. First, they attempt to trial all elements of REDD+ as a practical proof of concept and provide important on-the-ground information about the application of REDD+ design components, such as measuring, reporting, and verification (MRV), implementation strategies, participation and rights of indigenous people and local communities, financial structures to share carbon revenues, co-benefits, tenure issues, and drivers of deforestation and forest degradation (Sills et al., 2009). Second, they serve as a springboard for the international REDD+ debate by providing innovative methodologies and scientific lessons for how to structure and implement national REDD+ policies.

Going beyond that, some countries wish to incorporate such project-based approaches into their national frameworks. They have adopted the principle of a 'nested approach' where projects and/or subnational programmes are integrated into higher-level accounting, allowing 'countries to start REDD+ efforts through sub-national activities and gradually move to a national approach or for the coexistence of the two approaches' (Angelsen et al., 2008). This nested approach would enable the creation of incentives for action at multiple scales.

Thus far, the literature on demonstration and pilot projects focuses on cataloguing the number of REDD+ demonstration and pilot projects, examining their distribution across the world's forests (Cerbu, Swallow, & Thompson, 2011) and their main characteristics (Wertz-Kanounnikoff & Kongphan-Apirak, 2009). Some studies examining project-level REDD+ efforts have highlighted lessons for future policy design and implementation by analysing projects' main strengths, weaknesses, opportunities, and threats (Dulal, Shah, & Sapkota, 2012). An understanding about how these demonstration and pilot projects are connected to and contribute to national-level technical, policy, and institutional preparedness (Readiness) for REDD+ is, however, lacking.

This article draws on the example of a case study from Kenya – the Kasigau Corridor REDD+ project (hereafter referred to as the KC project) – and attempts to shed light on how this subnational-level private-sector-driven REDD+ project interacts with and contributes to REDD+ Readiness. Two main research questions are addressed: (1) have there been cross-scale interactions between the KC project and the national level, and if so, how?; (2) how can lessons from the project be used to enhance national-level REDD+ Readiness processes?

The KC project was chosen from among many projects in Kenya and Africa because it is the world's first registered REDD+ project issued with Verified Carbon Units (VCU) under the Verified Carbon Standard (VCS) and is one of the few REDD+ projects currently selling REDD+ credits on the voluntary market.

2. Context and study area

2.1. REDD+ in Kenya

With support from the Forest Carbon Partnership Facility (FCPF) and the United Nations Programme on REDD (UN-REDD), the Government of Kenya (GoK) has established a national REDD+ Readiness

process. The Kenya Forest Service (KFS) under the Ministry of Environment, Water and Natural Resources (ex-Ministry of Forestry and Wildlife) is designated as the government body responsible for REDD+ in the country. Towards Readiness, in 2010 Kenya approved a Readiness Preparation Proposal (R-PP), which provides a road map for assessing the deforestation and forest degradation status within the country and an overview of how the country intends to address this. As part of the R-PP implementation phase, Kenya is currently preparing and designing a suite of REDD+ programme elements such as directives on how to calculate Reference Emission Levels (RELs). These will precede the formulation of a national REDD+ strategy (KFS, 2010). Further critical steps for Kenya include clarifying and regulating land tenure and key governance issues, particularly anti-corruption, carbon rights, and benefit-sharing arrangements (FCPF, 2012a), and leading legal preparedness for REDD+. Establishment of a national REL/forest Reference Level (RL), national forest monitoring, and carbon accounting systems are also required.

2.2. The KC REDD+ Project

Table 1 provides an overview of the KC project implemented by the private company Wildlife Works Carbon (WWC).

3. Methods

3.1. Data collection and analysis

Information about REDD+ Readiness in Kenya was gained by reviewing FCPF documents (Readiness-Preparation Idea Note (R-PIN), R-PP), the latest country progress fact sheet, and the REDD+ Desk country and project database (http://www.theredddesk.org/countries). A review of the KC project was based on available website information and internal project documents, including Project Design Documents (PDDs) for the two phases of the project. Semi-structured interviews with key informants involved in the national REDD+ process in Kenya and in the KC project provided insights about the interactions involved in the various processes and the KC project's potential contribution to overall REDD+ Readiness at the national level. Interviews were transcribed, with relevant statements and quotes extracted. Further insights were gained during a field visit to the project site.

3.2. Analytical framework

This article looks at both the project level and REDD+ Readiness at the national level, as shown in Figure 1. First, interactions between the KC project and the national-level processes in Kenya in terms of key participation in REDD+ dialogues as well as interactions with other relevant stakeholders are examined. Second, the REDD+ Readiness framework suggested by Minang et al. (2014) (with the functions Planning and Coordination; Policies, Laws and Institutions; Measuringg, Reporting, Verification (MRV) and Audit; Benefit Sharing; Financing) is used to guide analysis on what and how Readiness functions at the national level can be informed by the KC project.

Table 1 Overview of the Kasigau Corridor REDD+ project

Project name, proponents and investments	Location, social issues, and ownership	Land type, extension and design elements	Baseline and project interventions
Name: Kasigau Corridor REDD+ Project	*Location*: Coast province, southeastern Kenya; high-conservation-value area securing wildlife migration corridor between Tsavo East and Tsavo West national parks	*Land type*: Dryland ecosystem	*Baseline or 'without-project' scenario*: Rapid deforestation of roughly 7000 ha per annum due to unplanned slash-and-burn agriculture expansion, illegal commercial poaching, charcoal and fuelwood, overgrazing
Proponents: Wildlife Works Carbon (WWC); American company with Kenyan subsidiary operating on the ground	*Social context*: Project's land privately owned by 14 directed agricultural companies (DACs) and uninhabited; Taita and Duruma communities live around the project's area in six locations	*Extension*: Kasigau Phase I – 30,166 ha Kasigau Phase II – 169,741 ha	*Project community-based initiatives*: • Agricultural intensification activities and organic tree nursery • Reforestation at Mt Kasigau • Eco-clothing factory • Ecotourism • Soap factory • Community development fund and bursary scheme • Eco-charcoal production • Jojoba production • Establishment of ranger groups and wildlife scouts
Launch date: Phase I – 2008 Phase II – 2010		*Design elements*: Validation and verification under the VCS and Climate, Community and Biodiversity (CCB) standards; gold level status by the CCB for exceptional biodiversity and climate benefits	*Projected emissions impact*: Avoidance of over 1 million tons of CO_2e emissions per year for the next 30 years

Investment and benefit sharing:

- Initial investment of between $10 and $12 per ha funded 100% from external private investors.
- Generation of $20–50 per ha per year in REDD+ gross revenues.
- The KC project proposes a model where the project's profits from the sale of carbon credits are split evenly between the project implementer (WWC), the landowners in the project area, and the local communities adjacent to the project area.

Source: WWC (2008, 2011).

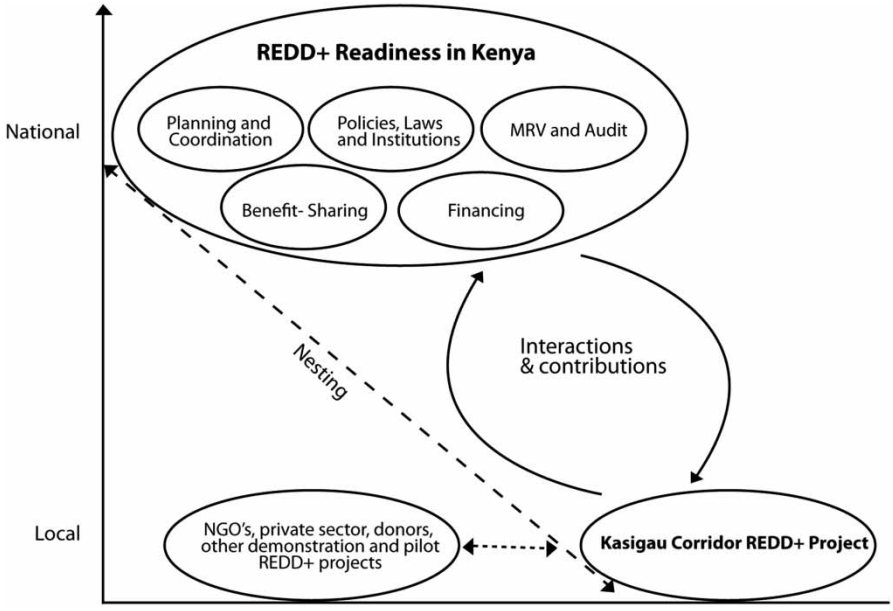

Figure 1 Analytical framework

4. Results

4.1. Project interactions with national-level processes

The official start of the KC project coincided with Kenya's submission of its R-PIN in 2008. Hosted by the GoK, the KC project initially required the GoK's approval, leading to an open line of communication on its developments between WWC, KFS, and the Ministry of Environment, Water and Natural Resources through the REDD+ national coordinator. WWC was not part of the R-PP discussions between 2008 and 2010, but between 2010 and 2012 there were numerous cross-institutional interactions and exchange visits from the national level with delegations of KFS, Ministry of Environment, Water and Natural Resource, Kenya Wildlife Service (KWS), Kenya Agricultural Research Institute (KARI), and the Kenya Forests Working Group visiting the project. In addition, there were visits from several international and national NGOs, the private sector, donors, and research institutions. Substantive participation by WWC in national-level dialogues only occurred after a field visit from national officials to the KC project in 2012. WWC is currently involved in a Food and Agriculture Organization (FAO) funded review of national legislation and gap analysis and in drafting new legislation for the REDD+ national programme. WWC is also involved in the United Nations Development Programme (UNDP) forum on governance and benefit sharing. Furthermore, WWC is a key technical partner on several technical working groups in the national stakeholder consultative fora led by the National REDD Coordination Office and has participated internationally as part of the Kenya delegation to the UN Forum on Forests. As the proponent of a flagship project, WWC was also asked to be part of a UNFCCC delegation from Kenya going to Vietnam to give a positive account of steps to engage the private sector in REDD+ project development. Eventually, Kenya's National Climate

Change Action Plan (NCCAP), which proposes a comprehensive national climate change policy and law to address all aspects of climate change, including REDD+ activities, cites the Kasigau project as one of the ongoing private initiatives to address climate change mitigation with co-benefits in adaptation (Government of Kenya, 2013).

4.2. Scaling-up the project's key achievements for REDD+ Readiness in Kenya

The KC project model has led the way in a number of important, innovative, and proof-of-concept domains. Multiple, potentially scalable lessons have been drawn from the KC that may have application for REDD+ at both the national and global levels. Table 2 summarizes the key areas where potential for the KC to contribute to REDD+ Readiness processes exists.

4.2.1. Demonstration of REDD+ potential in dryland forests

Under the FAO definition, the Kasigau Corridor qualifies as a forest, with an average canopy of 39% and a mature tree height of 5–10 m (FAO, 2010). The average levels of carbon stock per ha in Kasigau I and Kasigau II (Table 1) are 89.3 tCO_2e per ha and 77.2 tCO_2e per ha, respectively (compare this with the average carbon stock in the humid forest zone of Cameroon, which is 1100 tCO_2e per ha; Kotto-Same, Woomer, Moukam, & Zapfack, 1997). The mean net CO_2e emissions avoided in the 200,000 ha project area (Kasigau I + Kasigau II) are 1,514,718 tCO_2e per year. Even though REDD+ focuses mainly on countries with high forest cover and/or high deforestation rates (e.g. Indonesia and Brazil), the KC project, located in a semi-arid tropical region, has demonstrated that REDD+ can be implemented successfully in dryland forests. The REDD+ national coordinator indicated that the KC project has strong potential for acting as one of the demonstration projects for dryland systems under the national Readiness scheme. Such proof of success of the implementation of REDD+ in dryland forests is likely to be a strong incentive for other project developers to initiate projects in other dryland forest ecosystems.

4.2.2. Operationalization of conservation easements on private lands

The KC project area encompasses 14 ranches with no residents, given the little permanent water and the wilderness of the area. Those ranches are each governed on a private, long-term, leasehold basis between the GoK and a Directed Agricultural Company (DAC), whose shareholders are predominantly (although not all) community members from locations adjacent to the project area. One ranch (Kasigau ranch) is not governed by a DAC and has an open membership (freehold land) of roughly 2500 community members who collectively hold the title on a similar long-term private lease. In Kenya, private forests are not generally subject to state regulation, giving landowners the power to determine the use of their lands. A conservation easement is power vested on private land to constrain the exercise of rights otherwise held by the landowner so as to set aside land for non-consumptive utilization. In Kenya, such instruments are included in the Environmental Management and Co-ordination Act of 1999, Section 112. The conservation easement legislative tool was adapted and applied in the project area to enter agreements with the DACs. The proposed easement was presented to the Board of DACs Directors Annual General Meeting and included a direct, contractual agreement that WWC would manage the land for REDD+ purposes and that the DACs would receive one-third of

Table 2 Project's key achievements and implications for REDD+ Readiness in Kenya

REDD+ Readiness functions	Critical elements of the project	Implications for REDD+ Readiness in Kenya
Planning and coordination	Demonstration of REDD+ potential in dryland forests	Inclusion of the KC project as a pilot project for dryland forests under national Readiness scheme
		Expansion of REDD+ projects in dryland forests
Policies, laws, and institutions	Adaptation and application of conservation easements in private lands	Implementation of long-term protection of forest assets in private lands for REDD+
	Innovative schemes for addressing deforestation and forest degradation based on job creation and alternative livelihood options	Strategy options for addressing drivers of deforestation and forest degradation, strengthening community engagement, and designing appropriate national policies that prioritize 'pro-poor' REDD+ activities and integrate REDD+ into national development strategies
MRV and audit	Innovative methodologies for monitoring carbon stock change, developing RELs and remote sensing strategies in dry woodlands	Development of jurisdictional/subnational RELs for use in a proposed national programme structure, based on lessons learned in the KC project
Benefit-sharing mechanism	Set-up of a transparent benefit distribution disbursement process	Capitalization on the consultative approach to benefit-sharing methods for distribution of carbon-derived revenues
Financing	Leverage of private sector investment through a combination of business and conservation skills	Lessons for overcoming insufficient funding by unlocking and scaling up private-sector investment and incentives to attract further private-sector involvement in Kenya for demonstration and pilot projects

the carbon revenue from future sales in return for granting the conservation easement. As is the practice, shareholders in the DAC may then receive a dividend. The minutes of the meeting were disseminated to all shareholders who voted on whether or not to include their land unit in the project, as required under Kenyan law. The same agreement was made with the Kasigau group ranch.

These agreements span at least 30 years, as required by the Climate, Community and Biodiversity Standard and the Verified Carbon Standard to secure and demonstrate permanence of a REDD+ project. This also avoids the need to purchase the land and the resulting potential land-grabbing conflicts. Hence, the KC project has demonstrated the potential of 'conservation easements' to ensure long-term protection of forest assets on private land for REDD+ in Kenya through early application and testing.

4.2.3. Innovative schemes for addressing deforestation and forest degradation

Unplanned slash-and-burn agriculture expansion, illegal commercial poaching, charcoal and fuelwood activities, and overgrazing represent some major threats to the project area. In order to address these drivers of deforestation and forest degradation , WWC developed a series of innovative community-oriented initiatives, all based upon job creation: jobs helping farmers (sustainable eco-charcoal production, and dryland crop production such as jojoba), jobs making eco-friendly services and products (ecotourism, soap bio-factory, and eco-clothing factory), jobs protecting wildlife (creation of community rangers and wildlife scouts), jobs supporting education (children's education and conservation education), and jobs growing trees (about 600 ha being reforested at Mt Kasigau). Direct employment and benefits therein in 2012 amounted to approximately US$1,000,000. Providing economic alternatives and employment opportunities as part of a conservation strategy enabled additional benefits to flow into communities to address poverty, which has been identified as an underlying cause of deforestation and forest degradation. Additional community benefits were derived indirectly through access to improved services, including bursary programmes, school infrastructure, water catchments, and water distribution infrastructure, paid for by the community portion of the carbon revenue. In 2012 this amounted to approximately $586,000, which was spread across five locations with roughly 10,000–12,000 people in each. At the national level, REDD+ can also include growth effects such as economic diversification and infrastructure improvements. According to the REDD+ national coordinator, there is great interest in learning from the successes of the KC project-level community-based activities to help design appropriate national policies that prioritize 'pro-poor' REDD+ activities and integrate REDD+ into national development strategies.

4.2.4. Knowledge generation regarding MRV and REL establishment

WWC has invested in developing innovative methodologies to monitor carbon stock change, and develop RELs and remote sensing strategies in dry woodlands. WWC first started out at the KC-project level by developing a pioneering methodology for Avoided Unplanned Mosaic Deforestation of Tropical Forests (VM0009). However, in response to explicit interest from the Kenyan government, WWC is currently working to develop a model based on experience and lessons learned from the KC project that is appropriate for larger national/subnational scales for application in a proposed national programme structure. This model essentially calls for stratification of the jurisdiction by land-use, with each of these strata evaluated based on their own unique characteristics. Each land-use stratum is further broken down by land cover, to support the use of emission factors. The actual REL model applied to each land-use category would differ according to the characteristics of the strata. All of these individually tailored RELs (one model for each land-use stratum) would then be aggregated to form the traditional singular REL at the jurisdictional/subnational level. This model relies only on specific pieces of the project-level model described in VM0009 and is outlined in detail in a White Paper (Freund, Korchinsky, & Bird, 2013). The entire process has been accepted by the Group on Earth Observations, the University of Maryland's Matt Hansen laboratory, the FCPF, and the Government of Norway. It has also been presented to national-level decision makers in multiple fora, including the System for Land-based Emissions for Kenya (SLEEK) process and the National REDD+ Strategy development.

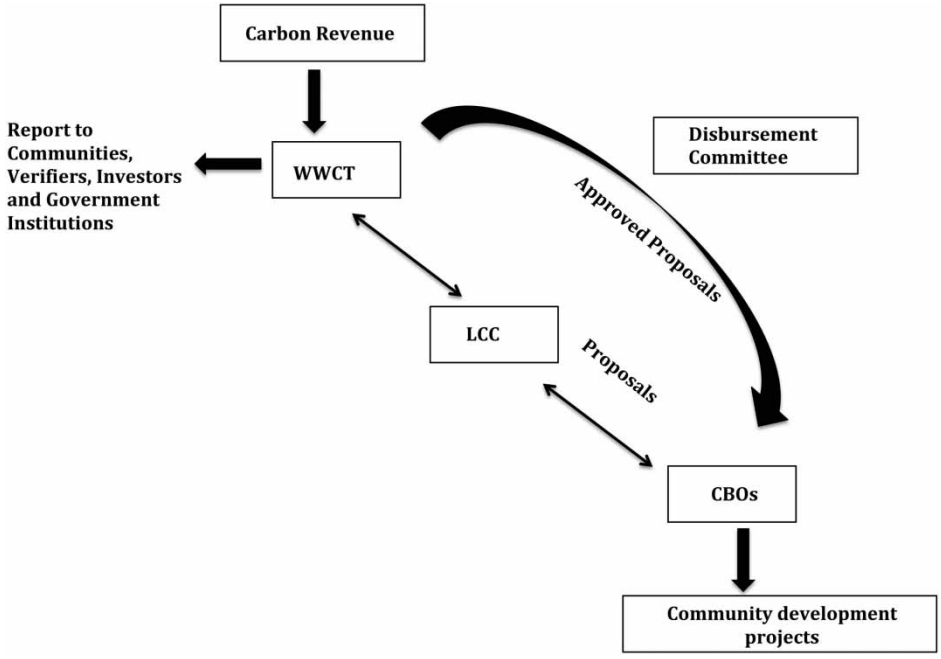

Figure 2 The KC disbursement process for community dividends from carbon revenue

4.2.5. Set-up of a transparent benefit distribution disbursement process

After WWC's operating costs and the contractual obligations to the DACs are covered, the balance (which, in practice, is approximately one-third of the overall revenue) is deposited into a Trust Fund – the Wildlife Works Carbon Trust (WWCT) – which is used as a vehicle for dispersing the share of the revenue generated by the Verified Carbon Units sales, allocated to the communities adjacent to the REDD+ project, to support environmental and social community projects as opposed to direct individual cash transfers. The Locational Carbon Committee (LCC), a group of independent, elected community members from varied backgrounds, receives proposals from community groups and approves relevant proposals following a standard operation procedure developed through a consultative process. The LCC does not handle funds, but rather sets an independent development agenda and refers projects to the WWCT for funding. Funds flow directly to community-based organizations (CBOs), which oversee implementation of the projects approved by the WWCT. There are six locations in which the LCCs and CBOs work to ensure fair distribution of funds and specialized application of funds based on local needs. The consultative approach to benefit-sharing has proven to be a successful method on which the national level could capitalize. Figure 2 illustrates this process.

4.2.6. Leverage of private-sector investment

A key successful feature of the KC project was the ability of WWC to make a business case for the project and to secure external private-sector investment at the beginning of the project process. WWC benefits from a full-time marketing team of six people, based in the US and Europe, who market the project's

credits. For the KC project, the key strategy was to obtain funding through an agreement with a South African bank, Nedbank, who provided the start-up capital in return for an 'option', buying the resulting credits at a concessionary rate. Such upfront investments provided the full financial support needed for project implementation, operational costs, and project interventions. In the medium to long term, the KC project has catalysed the market for REDD+ by connecting institutional champions with project activities through a platform called Code REDD (www.coderedd.com), which is a platform for credit buyers from private institutions that promotes REDD+ projects that create exceptional benefits. WWC's experience, both with the KC project and its partner, Code REDD, demonstrates the potential of private-sector investment in REDD+ activities to promote scalable changes. While this private-sector finance model might be of further interest at the project level, it might be important to understand this at the national level and promote it at the Readiness phase as a means of funding further private-sector investments in REDD+ pilots and demonstrations, given the current shortage in funding flows for Readiness and REDD+ in general. The REDD+ national coordinator expressed willingness at the national level to attempt to engage more private-sector actors to take the lead in some of the future selected projects, based on the example of WWC. Additionally, such private-sector investment could potentially be leveraged at the national level through nesting project-level credits into subnational and national programmes. This follows recent announcements by Sovereign funds of a desire to purchase offsets through bilateral agreements with national-level programmes. Although the credits would be created with private investment, they could access markets created by bilateral purchase agreements such as those with countries like Norway.

5. Discussion

Analysis of the KC project interactions with national-level Readiness processes provides a number of recommendations for Kenya, and REDD+ in general. These include the enhancement of dialogue between REDD+ projects at the national level; the need for endorsing stand-alone REDD+ projects under national Readiness schemes; exploring jurisdictional and nested REDD+ approaches; and the enhancement of private-sector participation and investments in REDD+ . These are briefly discussed in the following paragraphs.

5.1. From independence to interdependence

The KC project and REDD+ national-level activities have run rather independently of one another, with minimum interactions, as evidenced by the absence of WWC during stakeholder consultations for the R-PP until mid-2012, when a field visit from national officials to the KC project triggered an increase in interactions. Discussions are ongoing about the need for two-way, cross-scale interactions, with lessons learned from the project level being communicated to the national level and captured in the future REDD+ strategy. More interactions are also needed with larger national policies such as NCCAP. REDD+ is an evolving process, and the recognition of the need for project and national levels to work together developed at a later stage after significant developments were achieved by the KC project. However, it is important for dialogue with and between partners to commence at the earliest opportunity in order not to miss out on potential benefits from interactions with subnational-level actors. Frameworks and modalities for stakeholder participation should be developed,

including meaningful engagement of the private sector as early as possible, with appropriate platforms for exchanges linking the different levels.

5.2. Endorsement of stand-alone REDD+ projects under national Readiness scheme

The evolution of the relationship between the KC project and national-level processes raises a more general question about how stand-alone projects developed out of their own volition relate to national systems, compared to pilot and demonstration projects selected under national Readiness schemes. For countries such as Kenya, which have not yet selected their pilot and demonstration projects as part of the Readiness process, a challenge lies in developing modalities for retrofitting or accommodating the current stand-alone projects into the national system. The Democratic Republic of Congo's (DRC) experience can be useful in this respect. The DRC has set up a national registry for all REDD+ projects serving as a database of ongoing REDD+ activities in the country (FCPF, 2012b). Replicating such a registry in Kenya would ensure that the most experienced and effective practitioners, including the private sector, are part of the national process, sending a clear signal to the private sector of early action recognition through official endorsement. This would also clarify domestic approval requirements such as defining the entities entitled to participate in subnational REDD+ activities and their rights and responsibilities.

5.3. Towards a jurisdictional and nested approach

Although Kenya has endorsed the idea of stand-alone projects and a registry of projects may be a first step, a bigger question is how the KC project could potentially be integrated into a national accounting and crediting framework. The idea of a jurisdictional and nested REDD+ approach has been considered as a possible way forward for REDD+ in Kenya. However, such a nesting framework still faces a number of important design challenges (Minang & van Noordwijk, 2013), including the development of a consistent and credible framework of RELs across all scales; standardized MRV protocols to ensure consistency across space and time; the need for transparent book-keeping to prevent double or multiple counting of emission reductions; addressing issues around project underperformance and permanence; and within-country leakage, especially during the interim phase in which countries are still developing their national RELs and MRV. Further clarification is also required to define carbon rights, benefit distribution schemes (e.g. whether subnational REDD+ actions would be allowed to be credited directly or whether international incentives would be captured at the level of the national government), and revenue-sharing agreements (e.g. the existence of a tax applied by the government on REDD+ project activities). All of these are still at very early stages of development in Kenya. However, based on the current work of WWC in developing RELs at the subnational/national level and guidelines such as the jurisdictional and nested REDD+ requirements developed by VCS, which present three explicit scenarios for crediting under a jurisdictional and nested scenario, there might be opportunities to overcome some of the existing design challenges.

5.4. Stimulating private-sector involvement

Private-sector involvement will be absolutely critical to scaling up investment in REDD+, as there is growing evidence that public finance alone is unlikely to meet emission reduction investment

requirements (Simula Ardo, 2010). Accordingly, there should be some specific policies and incentives for private-sector involvement with the aim to create an attractive 'investment climate' for REDD+ initiatives. This requires having an open and constructive dialogue to identify, define, and implement policies and actions that will encourage private-sector involvement. These rules could include, among others, (1) transparent rules on the allocation of carbon rights; (2) effective risk-sharing and risk-mitigation mechanisms that create a more supportive investment environment for the private sector; (3) appropriate dispute settlement arrangements; and (4) clear and fair benefit-sharing mechanisms (Bernard, McFatridge, & Minang, 2012).

6. Conclusion

The aim of this study was to examine how subnational-level projects are linked to and contribute to national-level Readiness planning through a case study of the Kasigau Corridor (KC) project in Kenya. The KC project has developed many key innovations that are relevant to national activities and schemes, including demonstrating the REDD+ potential in dryland forests, adaptation and application of conservation easements in the context of REDD+, the development of a methodology for developing jurisdictional/subnational RELs, bundling REDD+ implementation with community-level employment opportunities, and demonstrating potential ways of negotiating and obtaining upfront finance for REDD+. As a result of these many successes, the national REDD+ Readiness process in Kenya is beginning to learn and draw from those innovations. However, more accommodating national-level frameworks for engaging private-sector initiatives and investments and for integrating, scaling out, or scaling up lessons from such projects will be needed in order to fully benefit from the potential of early projects, which can then contribute to national-level REDD+ Readiness.

References

Angelsen, A., Brockhaus, M., Kanninen, M., Sills, E., Sunderlin, W. D., & Wertz-Kanounnikoff, S. (Eds.). (2009). *Realising REDD+ : National strategy and policy options*. Bogor: CIFOR.

Angelsen, A., Streck, C., Peskett, L., Brown, J., & Luttrell, C. (2008). What is the right scale for REDD. In A. Angelsen (Ed.), *Moving ahead with REDD* (pp. 31–40). Bogor: CIFOR.

Bernard, F., McFatridge, S., & Minang, P. A. (2012). *The private sector in the REDD+ supply chain: Trends, challenges and opportunities*. Nairobi: International Institute for Sustainable Development.

Cerbu, G. A., Swallow, B. M., & Thompson, Y. (2011). Locating REDD: A global survey and analysis of REDD readiness and demonstration activities. *Environmental Science and Policy*, *14*, 168–180. doi:10.1016/j.envsci.2010.09.007#sthash.v9eZIj1N.dpuf

Dulal, H. B., Shah, K. U., & Sapkota, C. (2012). Reducing emissions from deforestation and forest degradation (REDD) projects: Lessons for future policy design and implementation. *International Journal of Sustainable Development & World Ecology*, *19*, 116–129. doi:10.1080/13504509.2012.654410

FAO. (2010). *Global forest resources assessment 2010. Main report* (FAO Forestry Paper 163). Rome: FAO.

FCPF. (2012a). *REDD readiness fact sheet – Kenya*. June 2012. Retrieved from http://www.forestcarbonpartnership.org/kenya-0

FCPF. (2012b). *REDD readiness fact sheet – Democratic Republic of Congo*. June 2012. Retrieved from http://www.forestcarbonpartnership.org/democratic-republic-congo

Freund, J. T., Korchinsky, M., & Bird, S. (2013). *Approach to establishing jurisdictional-scale reference emission level (REL) for the future Mai Ndombe Province as an important example of a high-forest/low-deforestation (HFLD) jurisdiction* (White Paper). Wildlife Works Carbon. Washington, DC: The Forest Carbon Partnership Facility.

Government of Kenya. (2013). *National Climate Change Action Plan 2013–2017. Vision 2030*. Nairobi: Government Press.

KFS (Kenya Forest Service). (2010). *Revised REDD readiness preparation proposal. Kenya*. Submitted to the Forest Carbon Partnership Facility. October 2012. Retrieved from http://www.forestcarbonpartnership.org/fcp/sites/forestcarbonpartnership.org/files/Documents/PDF/Oct2010/Revised%20RPP%20for%20Kenya.pdf

Kotto-Same, J., Woomer, P. L., Moukam, A., & Zapfack, L. (1997). Carbon dynamics in slash-and-bum agriculture and land use alternatives of the humid forest zone in Cameroon. *Agriculture, Ecosystems and Environment*, *65*, 245–256.

Minang, P. A., & van Noordwijk, M. (2013). Design challenges for achieving reduced emissions from deforestation and forest degradation through conservation: Leveraging multiple paradigms at the tropical forest margins. *Land Use Policy, 31*, 61–70. doi:http://dx.doi.org/10.1016/j.landusepol.2012.04.025

Minang, P. A., van Noordwijk, M., Duguma, L. A., Alemagi, D., Do, T. H., Agung, P., … Leimona, B. (2014). REDD+ Readiness progress across countries: Time for reconsideration. *Climate Policy*. doi: 10.1080/14693062.2014.905822

Sills, E. O., Madeira, E. M., Underlin, W. D., & Wertz-Kanounnikoff, S. (2009). The evolving landscape of REDD+ projects. In A. Angelsen (Ed.), *Realising REDD+ : National strategy and policy options* (pp. 265–279). Bogor: Center for International Forestry Research.

Simula Ardo, M. (2010). *Analysis of REDD+ financing gaps and overlaps* (REDD+ Partnership Report). Retrieved from http://reddpluspartnership.org/25159-09eb378a8444ec149e8ab32e2f5671b11.pdf

UNFCCC (United Nations Framework Convention on Climate Change). (2007). *Decision 2/CP. 13 FCCC. CP/2007/6/Add. 1*. Bonn: UNFCCC. Retrieved from http://unfccc.int/resource/docs/2007/cop13/eng/06a01.pdf

UNFCCC (United Nations Framework Convention on Climate Change). (2010). *Addendum - Part Two: Action taken by the Conference of the Parties at its sixteenth session.' Report of the Conference of the Parties on its sixteenth session, held in Cancún from 29 November to 10 December 2010*. Bonn: UNFCCC Retrieved from http://unfccc.int/resource/docs/2010/cop16/eng/07a01.pdf#page=2

Wertz-Kanounnikoff, S., & Kongphan-Apirak, M. (2009). *Emerging REDD+ : A preliminary survey of demonstration and readiness activities* (Working Paper No. 46). Bogor: CIFOR.

WWC (Wildlife Works Carbon LLC). (2008). *The Kasigau Corridor REDD Project PhaseI–Rukinga Sanctuary. Project Design Document for Validation Using the Climate, Community and Biodiversity Project Design Standards* (2nd edition, December 2008. Retrieved from http://www.wildlifeworks.com/redd/Rukinga_CCB_PDD_Ver_2_0.pdf

WWC (Wildlife Works Carbon LLC). (2011). *The Kasigau Corridor REDD Project Phase II – The Community Ranches. Project Document (PD) for Validation Using the Voluntary Carbon Standard (VCS) 2007.1/Sectoral Scope 14 VM0009 Methodology for Avoided Mosaic Deforestation of Tropical Forests. Version 14. April 19th, 2011*. Retrieved from http://www.wildlifeworks.com/redd/The_Kasigau_Corridor_REDD_Project_Phase_II_VCS_PD_v14.pdf