These key lessons are from a set of five policy briefs considering themes and issues relating to REDD+ (reduced emissions from deforestation and forest degradation, plus the conservation, sustainable management and enhancement of forests and forest carbon stocks) and to community approaches to payments for ecosystem services (PES). The briefs form one of the outputs from a pilot project in Cameroon, the Community PES Project (C-PES), which was funded by the UK Department for International Development to coincide with the launch of the Congo Basin Forest Fund.

The project was developed between 2009 and 2012 by Bioclimate and the Centre pour l’Environnement et le Développement (CED). It tested an approach to community forest management by supporting two forest communities to earn PES for protecting their forests. Cameroon was chosen as the pilot country for the project approach because at the time it was the only Congo Basin country with a legal framework for recognising community forests.

Policy Brief 1: Lessons and opportunities for REDD+

1. Potential social and environmental benefits of REDD+. If community forestry is put at the centre of the REDD+ strategy in Cameroon, it could be a way of improving the livelihoods of forest-dependent communities. Otherwise, REDD+ could be counter-productive for communities and a lost opportunity for social development.

2. Community forestry legislation gaps and REDD+. Important legislative gaps need to be addressed in Cameroon, including uncertainty about community ownership of forest carbon and communities’ rights to benefit from voluntary markets for carbon and ecosystem services.

3. Implementation of REDD+ at a local scale. REDD+ actions ultimately have to happen at a local level, and community REDD+ can reinforce the social and environmental goals of decentralised resource management.

4. Institutional development and capacity building. Bringing about lasting change in impoverished rural community settings is always a long-term process. Community REDD+ projects and initiatives need to recognise this. Institutional capacity strengthening needs to happen at both community and local government levels.

5. Merits of PES approaches to community REDD+. PES can provide an alternative to logging for local communities. It can also act as a catalyst for greater community control over forest resources and improved local institutions and livelihood opportunities.

6. PES incentives and participation. Conventional economic opportunity cost analysis may not be useful for gauging community interest in participating in PES projects and may overstate the importance of monetary incentives. The overall package of livelihood and capacity benefits may be as important as the outright financial incentives.
Carbon as a metric for community REDD+ performance. Carbon is expensive to measure repeatedly and doing so can divert attention and resources away from activities that directly support community livelihoods. Nor does its use as an ecosystem metric lead to better monitoring and outcomes – hence it may not be the most appropriate metric for community REDD+ performance.

Scaling up community REDD+. Community REDD+ projects can be scaled up by applying a successful basic project model and making adjustments for the context in which it is to be applied.

Supporting community action on REDD+. It would be beneficial to establish a platform to support community REDD+ actions in Cameroon. This could be a forum for promoting legal reform and environmental and social safeguards, and for sharing project experiences, methods, technical tools and data.

Relationship between REDD+ policy and practice. The lack of a fully developed REDD+ policy is not a reason to pull back from experimentation, especially in the area of community REDD+. On the contrary, pilot projects are vital for seeing what works and what fails and will provide insights and innovations that can inform REDD+ policy.

Policy Brief 2: Lessons and opportunities for community forestry

PES as an alternative to logging. PES is a potentially viable alternative to logging in community forests, through forest conservation and sustainable forest management.

Links between PES and food security. Attempting to limit agricultural expansion through PES is extremely challenging and could undermine local food security. However, the development of cocoa agroforestry has the potential to improve both ecosystem services and local income.

Technical complexity of PES and community forestry. The current technical requirements for PES add an additional layer of complexity to already complicated community forest procedures. PES methods and processes can, and should, be greatly simplified.

Livelihoods and local development back on the community forestry agenda. The PES approach can support local livelihoods through stimulating enterprise and financing village-level infrastructure. However, maintaining community infrastructure over the long-term requires investment in local institutions.

Governance challenges remain. The participatory approach and governance mechanisms adopted in the C-PES project have shown signs of success. However, it is imperative to build the capacity of community institutions and to ensure that other local institutions, particularly the forestry administration, are fully engaged and play a supportive role.

Investment in community forestry. This PES experience highlights the need for further investment in community forests in Cameroon. PES funds should be channelled directly to communities, but this should be coupled with investment in coordination, capacity development, facilitation of benefit-sharing, conflict resolution, and ensuring that Cameroon’s forest code is properly applied. This could be achieved through medium to long-term support for C-PES in a number of community forests.
Policy Brief 3: Equity of community PES

1. Before the start of the C-PES pilot project, the social and economic status of members of both communities in Cameroon varied widely with regard to land and asset distribution; wealth and wellbeing; inter-generational, gender and ethnic relations; and roles in decision-making about the community forests.

2. A PES project such as this could easily reinforce existing inequalities or, indeed, introduce new ones. Safeguarding equity is the responsibility of the institutions involved in developing the PES approach and, in our view, it is unlikely that management entities on their own will promote equitable outcomes.

3. The PES mechanism procedures were more equitable than those typically established by logging companies and neighbouring commercial timber companies.

4. The distribution of PES payments according to a benefit-sharing arrangement is far more equitable than occurs with timber extraction and other community forest management activities. Our project has set a precedent in Cameroon for PES and REDD+ type projects, by delivering over 80% of funds directly to the communities.

5. The distribution of costs is not so clear. The C-PES project focuses on payments for outputs (e.g. forest cover) rather than inputs (e.g. land and labour), meaning that there are opportunity and transaction costs at various levels, and these were not fully assessed.

6. Households with lower levels of wellbeing are less likely to participate in community activity groups and are therefore less likely to receive PES payments, but those groups identified by the community as vulnerable early on in the project (elderly, women, Baka) are more likely to participate.

7. Trade-offs between equity and efficiency. The 20% of funds being used for coordination is unlikely to be sufficient in the coming years to provide the monitoring, coordination and support required in both communities.

Policy Brief 4: Efficiency of community PES forest monitoring

1. Monitoring deforestation. The C-PES project has demonstrated that community field workers who are properly trained and well coordinated can carry out accurate mapping of land use and land cover change.

2. Cost implications. Mapping patch-scale forest clearance using a local monitoring team is a cost-effective approach to assessing deforestation rates in community forest areas of up to 5,000 ha.

3. Combating deforestation. Community field workers provide qualitative information on the drivers and agents of deforestation, which means that efforts to prevent deforestation can be tailored to the causes.

4. Community benefits. Using local field teams to carry out monitoring offers community members the chance to acquire skills and earn small but significant amounts of money, and also to gain an understanding of changes in their forests.

5. Links with national REDD+ MRV. Monitoring community forest areas using locally recruited teams can provide an accurate and affordable means of cross-checking and verifying national MRV data.
Policy Brief 5: Effectiveness of community PES

1 Issues of poor governance. Community REDD+ and PES interventions will not be effective if they overlook the socioeconomic and governance problems that have led to forest degradation in the past.

2 Livelihood development and carbon benefits. Projects that benefit the livelihoods of communities and their capacity to manage forests will sustainably generate carbon benefits – not the other way round.

3 Building institutional capacity. Strengthening community institutions and governance capacity should take precedence over the technical aspects of PES, such as carbon assessment.

4 Collaborative working. Groups doing projects should identify local NGOs and resource personnel with relevant skills and experiences, and find ways to collaborate and strengthen mutual capacity to support communities.

5 Benefits of participatory methods. Using participatory methods helps to foster community ownership of projects and improves the representation and involvement of vulnerable and marginalised groups in decision-making.

6 Monitoring requirements. Simple, low-cost monitoring systems are needed to assess changes in forest cover (technical effectiveness), the livelihoods and wellbeing of communities (social effectiveness), and governance of community forests (institutional effectiveness).

7 Development for the long-term. Community PES projects need time and adequate funding if they are to develop the local institutional capacity needed for this approach to be sustainable.

8 Strong in-country coordinating group. Like all development projects, community PES cannot succeed without a capable in-country coordinating group committed to supporting communities beyond the life of the project.

9 Costs of community PES. Once in-country capacity to develop and manage community PES projects has been built, it needs to be well utilised to justify the costs involved.

These policy briefs, written by Rob Harley (Policy Briefs 1 and 5), Mike Riddell (Policy Briefs 2 and 3) and Willie McGhee (Policy Brief 4), are based on practical experiences and insights gained during and since the development of the C-PES project. We hope these insights are relevant to the ongoing development of policies on community forestry and REDD+ both in Cameroon and the wider Congo Basin region. Thanks are due to Dr Ed Mitchard and Dr Nicholas Berry for their input to Policy Brief 4. We also thank the quoted individuals who took time to discuss the lessons from the project, and Samuel Nnah Ndobe for facilitating these discussions. Adam Campbell served as overall editor for the series and Shirley Lochhead as the designer.

For more information on the issues raised in these briefs, please contact Bioclimate using the following details:

Contact:  Mike Riddell, Bioclimate, Tower Mains Studios, 18B Liberton Brae, Edinburgh EH16 6AE, Scotland

Email:  mike.riddell@brdt.org
Office:  +44 (0)131 664 3700
Web:  www.bioclimate.net

This material has been funded by UK aid from the UK Government; however, the views expressed do not necessarily reflect the UK Government’s official policies.
Key lessons

1. **Potential social and environmental benefits of REDD+**. If community forestry is put at the centre of the REDD+ strategy in Cameroon, it could be a way of improving the livelihoods of forest-dependent communities. Otherwise, REDD+ could be counter-productive for communities and a lost opportunity for social development.

2. **Community forestry legislation gaps and REDD+**. Important legislative gaps need to be addressed in Cameroon, including uncertainty about community ownership of forest carbon and communities’ rights to benefit from voluntary markets for carbon and ecosystem services.

3. **Implementation of REDD+ at a local scale**. REDD+ actions ultimately have to happen at a local level, and community REDD+ can reinforce the social and environmental goals of decentralised resource management.

4. **Institutional development and capacity building**. Bringing about lasting change in impoverished rural community settings is always a long-term process. Community REDD+ projects and initiatives need to recognise this. Institutional capacity strengthening needs to happen at both community and local government levels.

5. **Merits of PES approaches to community REDD+**. PES can provide an alternative to logging for local communities. It can also act as a catalyst for greater community control over forest resources and improved local institutions and livelihood opportunities.

6. **PES incentives and participation**. Conventional economic opportunity cost analysis may not be useful for gauging community interest in participating in PES projects and may overstate the importance of monetary incentives. The overall package of livelihood and capacity benefits may be as important as the outright financial incentives.

7. **Carbon as a metric for community REDD+ performance**. Carbon is expensive to measure repeatedly and doing so can divert attention and resources away from activities that directly support community livelihoods. Nor does its use as an ecosystem metric lead to better monitoring and outcomes – hence it may not be the most appropriate metric for community REDD+ performance.

8. **Scaling up community REDD+**. Community REDD+ projects can be scaled up by applying a successful basic project model and making adjustments for the context in which it is to be applied.

9. **Supporting community action on REDD+**. It would be beneficial to establish a platform to support community REDD+ actions in Cameroon. This could be a forum for promoting legal reform and environmental and social safeguards, and for sharing project experiences, methods, technical tools and data.

10. **Relationship between REDD+ policy and practice**. The lack of a fully developed REDD+ policy is not a reason to pull back from experimentation, especially in the area of community REDD+. On the contrary, pilot projects are vital for seeing what works and what fails and will provide insights and innovations that can inform REDD+ policy.
Background

The role of REDD+ in limiting the rate and magnitude of climate change, and in encouraging adaptation measures to reduce its impact, is widely accepted, including by Parties to the United Nations Framework Convention on Climate Change (UNFCCC). But a failure to reach an international agreement on binding emission reduction targets has made it difficult to design a single global REDD+ mechanism. Instead, there is a consensus that REDD+ activities should be designed and put in place in accordance with the needs, circumstances and capabilities of individual countries.

In this way, the focus of the REDD+ debate has shifted towards national (country), sub-national and local levels. At the same time, the whole idea of REDD+ (what it is, how it should be applied and what it means to those who participate in and are affected by it) has been increasingly called into question by those involved in designing and implementing REDD+ policies and strategies, at all levels.

In Cameroon, as in most other countries, the national REDD+ strategy is being developed amid concerns and disagreement about how it should be implemented – e.g. the scale, the types of activities, the financing – and the consequences of doing so. Some commentators question whether REDD+ will be any more successful than previous conservation and development interventions in tackling pervasive problems, such as weak institutions and poor governance in the forest sector; uncertain land and carbon rights; lack of data and skills for monitoring, reporting and verification (MRV); increasing international and local demand for food, timber and minerals; and high levels of poverty in rural areas.1

Cameroon’s REDD+ strategy has been conceived and developed as part of The World Bank Forest Carbon Partnership Facility (FCPF) process. As part of this process, a REDD Readiness Plan Idea Note (R-PIN) was prepared and approved in 2008. In June 2011 work started on a Readiness Preparation Proposal (R-PP) and the latest version of this was completed in January 2013.2

The R-PP makes it clear that Cameroon considers REDD+ to be a development tool and a means of achieving the government’s sustainable development objective, as outlined in the Document de Stratégie pour la Croissance et l’Emploi.* The R-PP also states that the country’s REDD+ strategy must benefit vulnerable groups, including local communities, indigenous people and women. It recognises the potential role of payments for ecosystem services (PES) and the need for the REDD+ readiness process to include further pilot projects and initiatives.

However, the R-PP process has been criticised – by civil society groups, in particular – for not doing enough to ensure the participation of indigenous people and local communities, for not paying enough attention to the real causes of deforestation, and for overlooking critical issues of land tenure, carbon rights, benefit-sharing and social safeguards.3

While the R-PP process has been under way, various pilot projects and initiatives have been launched in Cameroon. Many of these involve or directly affect local communities. Some, including our Community Payments for Ecosystem Services (C-PES)† project, assign an important role to PES. These initiatives can provide valuable practical insights that inform the often theoretical process of developing a REDD+ strategy. The question that now arises is how these insights can be incorporated into the REDD+ process to ensure that policy is being properly informed by practice.

‘The focus of the REDD+ debate has shifted towards national, sub-national and local levels’

---

* Strategic Document for Growth and Employment.
† The DFID AIRES code for the C-PES project is 113889-112.
This policy brief

In this policy brief, we highlight constraints and opportunities for REDD+ in Cameroon. The insights and recommendations are based on our experiences of developing the C-PES project. They are considered under three main themes, reflecting areas of particular interest to the development of REDD+ policy in Cameroon and more widely:

1. **Social and environmental benefits.** Can community REDD+ activities improve participation and social and environmental benefits, especially for marginalised forest communities and indigenous people?

2. **Community REDD+ in practice.** What policy gaps and practical challenges must be addressed for community REDD+ to have a real chance of success?

3. **Performance-based incentives.** Can PES or similar performance-based incentives help to support community REDD+ actions, and what methods and metrics are appropriate for linking payments to performance?

**Social and environmental benefits**

The livelihoods of the poorest communities in Cameroon depend directly on the resources and services provided by their forests. REDD+ could be a valuable opportunity to improve the livelihoods of these communities and to enhance their rights and control over forest resources. But for a number of reasons to do with the scale on which it is being conceived, REDD+ could just as easily end up undermining the goals of decentralised forest management in Cameroon:

- The idea of compensating REDD+ countries for protecting standing forests creates an incentive for central government to adopt the role of ‘principal forest stakeholder’, becoming the main conduit for funds associated with REDD+ activities.\(^4\)
- A national approach is considered necessary for permanence, the avoidance of leakage, and effective MRV of REDD+ projects.\(^4\)
- Most Parties to the UNFCCC currently advocate accounting for emission reductions and removals on a national (or sometimes sub-national) rather than a project scale.

Whatever the arguments about the scale of REDD+ accounting, it is clear that when dealing with communities that are dependent on forests, REDD+ actions will have to be focused at the local level.\(^5\)

Community forests in Cameroon offer an accepted tenure regime within which to define REDD+ project sites that are manageable and familiar to communities. However, the community forest tenure regime also presents a complex set of legal, institutional, economic and practical challenges, as we were to discover (see **Policy Brief 2**).

Our C-PES project was a vehicle for securing community forest status for the community of Nomedjoh. We also worked with the community of Nkolenyeng to revise their Simple Management Plan (SMP), so that they could earn PES for forest management. We took steps to improve community cocoa production, agricultural practices and income from non-timber forest product (NFTP) enterprises. Benefit-sharing arrangements were put in place in both communities. In short, the project allowed the communities to exercise greater control over their forest resources, livelihoods and local institutions.

It would be wrong to assume that community REDD+ projects like ours automatically lead to greater social and ecological resilience. Much depends on how they are undertaken and on specific community histories, economies, and experiences of local development and forest management. But our experience suggests that such projects do at least offer the opportunity to understand the difficulties faced by marginalised forest-dependent communities and to take steps to address these.

‘The Community PES project has created many technological advances and an advance in knowledge that wasn’t present here in Cameroon before’

*Joseph Mougou, Advisor for SNV Netherlands Development Organisation*
Community REDD+ will not overcome the many challenges facing forest communities in Cameroon. At the same time, community forestry will not thrive without a renewed effort to further the social and environmental goals of decentralised resource management. It is our belief, therefore, that community forestry should be at the centre of Cameroon’s REDD+ strategy. In the process, every effort should be made to prioritise pro-poor REDD+ actions that empower forest communities to develop their own ideas for improving local governance, forest management and livelihoods.

Recommendations

- Community forestry should be put at the centre of Cameroon’s REDD+ strategy.
- REDD+ actions should be pro-poor and empower forest communities to develop their own ideas for improving local governance, forest management and livelihoods.
- Community REDD+ projects should be developed taking into account communities’ specific histories, economies and experiences.

Community REDD+ in practice

Policy gaps and uncertainties

Community REDD+ interventions in Cameroon will only ever be effective if they tackle the underlying problems of poverty and poor governance that have played an important part in forest degradation in the past. It is also important to accept that the formulation of REDD+ policy is part of an ongoing process. Many questions about its implementation remain unanswered – not least in relation to community REDD+ projects – and where policymakers do attempt to address practical challenges, the results will understandably be less than perfect.

Our C-PES project was without precedent in Cameroon. When we developed it, there were a number of key issues about PES in relation to community forestry we were uncertain about, including:

1. How to reconcile the idea of PES with the model of community timber exploitation that has been the historical template for the SMP.
2. An absence of community rights to forest carbon and provisions for valorising forest protection.
3. The ability of communities to participate in voluntary markets for carbon and ecosystem services.

These policy gaps and uncertainties made the project more complicated and expensive to develop. They urgently need to be addressed, as part of both REDD+ strategy development and reform of the 1994 forestry law. It is instructive that, in spite of these challenges, the C-PES project was able to pilot an incentive-based approach to improving community forest management and monitoring.

Practice to inform policy

The lack of a fully developed policy should not be considered a reason to pull back from action and experimentation in the area of community REDD+. On the contrary, by testing different ideas and approaches and seeing what works and what fails, pilot projects can provide insights and innovations that inform REDD+ policy, rather than the other way around.

‡ This achievement was greatly facilitated by the UK Department for International Development’s flexibility and willingness to allow ODA money to be used to pilot performance-related incentives.
However, the C-PES project experience also highlights a tension between, on the one hand, an urgent need for evidence-based insights into the efficacy of incentives and new approaches to forest management and, on the other, the time it takes to develop projects and obtain meaningful data on their social and environmental impacts.

Bringing about lasting change in impoverished rural communities is a complex, long-term process. It requires an understanding of evolving community, political and institutional constraints and opportunities. Weak community forest management structures, poor local governance and inadequate enforcement of forest laws are probably the biggest obstacles to the effective practice of community forestry in Cameroon. Making gains at the community level is only a first step. The process of institutional development and capacity building also needs to be extended to the local government level. This is usually a messy process that involves setbacks and takes time – the thing that is often most lacking in traditional development projects.

There should be less pressure on community REDD+ projects to deliver short-term changes, and more emphasis on building capacity and putting in place foundations for a process of institutional development, so that communities have a real chance of success in the longer-term.

‘Bringing about lasting change in impoverished rural communities is a complex, long-term process. It requires an understanding of evolving community, political and institutional constraints and opportunities’

Scaling up community REDD+

Getting a successful community REDD+ project to work in another community or at another scale is challenging, because no two communities are alike and ready-made solutions do not work in complex community settings. However, it is possible to replicate a basic project model, while making adjustments for the context in which it is to be applied. The basic project model would include standardised but flexible approaches and methods for:

- engaging communities and promoting livelihood resilience and wellbeing;
- monitoring socioeconomic and livelihood impacts;
- technical development and monitoring;
- supporting agroforestry and improved agricultural production;
- strengthening C-PES governance and ensuring sound financial management;
- developing equitable benefit-sharing;
- securing and deploying PES funding from a number of potential funding sources.

Support for community REDD+

It would be helpful to create a platform to support community action on REDD+ in Cameroon and the wider region. This could be used to promote legal and institutional reform and environmental and social safeguards. It could also act as a forum for sharing experiences and knowledge gained from pilot projects, including methods for encouraging greater community participation, livelihood diversification and resilience, and technical tools, systems and MRV data.

Recommendations

- Policy gaps need to be addressed urgently, as part of both REDD+ strategy development and reform of the 1994 forestry law.
- Experimentation and pilot initiatives should be encouraged to provide insights and innovations that can inform REDD+ policy.
- Community REDD+ projects should focus on long-term institutional development and capacity building at the community level, and these efforts should be extended upwards to local government level.
- A platform should be created to support community action on REDD+ in Cameroon and the wider region.
Performance-based incentives and REDD+

Payments for ecosystem services schemes involve performance-based incentives for reducing forest conversion or achieving some other measurable environmental benefit. PES is often seen as integral to – and sometimes even synonymous with – REDD+. There is growing international interest in community approaches to both REDD+ and PES, and in the relationships between livelihoods, forest carbon storage and payments for improved forest management in different sociopolitical and economic settings.

Our C-PES project experience suggests that PES can be a useful catalyst for improving community control over forests and forest resources, local institutions and livelihood opportunities. PES provides an alternative source of revenue to the default commercial model of logging, which seldom works for community forests because of the difficulty of achieving economies of scale.

The financial incentives offered by the C-PES project were relatively low compared with, for example, revenue from cocoa, but they were sufficient for communities to choose to take part. This suggests that conventional economic opportunity cost analysis may not be useful for gauging community interest in participating and for defining the monetary incentive thresholds for sustainable community forest management. The possible reasons are that communities may:

- Consider even relatively low payments for stopping timber exploitation preferable to dealing with corrupt logging companies and risking the possibility of receiving no timber revenues at all.
- Value their forests highly for provisioning ecosystem services and regard income from PES as a bonus.
- Be attracted to the overall project package, including livelihood opportunities, agricultural improvement measures, capacity development and support, and equitable benefit-sharing, rather than the financial incentive alone.

Is carbon the best metric?

The C-PES project suggests that quantification of emission reductions can provide a link to performance-related finance in REDD+ projects, but carbon is of little direct relevance to rural poor communities. The C-PES project assessed forest carbon stocks and estimated the carbon benefits of project activities. The project is also set up to monitor changes in forest carbon stocks. In the end, though, performance-based payments were linked to observable monitoring indicators, such as the presence, absence and size of trees, and performance thresholds that are only indirectly linked with carbon savings.

Using carbon as an ecosystem metric does not lead to better monitoring and outcomes, and carbon is expensive to measure repeatedly. Doing so diverts attention and resources away from activities that directly support community livelihoods. This casts doubt over the assumption that carbon is the appropriate metric to use for tracking project performance.

Recommendations

- PES projects should be considered useful vehicles for improving community control over forests and forest resources, local institutions and livelihood opportunities.
- PES could be a viable alternative to logging.
- Do not assume that conventional economic opportunity cost analysis will accurately gauge interest in participation in PES projects.
- Ecosystem metrics other than carbon should be sought for use in REDD+ and PES projects.
Glossary

CAG  Community activity group
CBFF  Congo Basin Forest Fund
CED  Centre pour l’Environnement et le Développement
CIFOR  Center for International Forestry Research
COMIFAC  Central African Forests Commission
C-PES  Community Payments for Ecosystem Services (PES) Project (in Cameroon)
DFID  Department for International Development (UK)
FCPF  Forest Carbon Partnership Facility (of The World Bank)
GIS  Geographic Information Systems
IPCC  Intergovernmental Panel on Climate Change
MINAS  Ministère des Affaires Sociales (Ministry of Social Affairs)
MINEPAT  Ministère de l’Économie de la Planification et de l’Aménagement du Territoire (Ministry of Economy, Planning and Regional Development)
MININFO  Ministère des Forêts et de la Faune (Ministry of Forestry and Wildlife)
MRV  Monitoring, reporting and verification
NTFP  Non-timber forest products
PES  Payments for ecosystem services
REDD+  Reduced emissions from deforestation and forest degradation in developing countries. (The + sign attached to the end of the REDD acronym in 2009 expanded the scope to include the forest conservation, sustainable forest management and the enhancement of forests and forest carbon stocks in developing countries.)
R-PP  Readiness Preparation Proposal
SMP  Simple Management Plan
UNFCCC  United Nations Framework Convention on Climate Change

References


This policy brief is one of five briefs considering key themes and issues relating to reduced emissions from deforestation and forest degradation (REDD+) and to community approaches to payments for ecosystem services (PES). The briefs form one of the outputs from a pilot project in Cameroon, the Community PES Project (C-PES), which was funded by the UK Department for International Development (DFID) to coincide with the launch of the Congo Basin Forest Fund (CBFF).

The project was developed between 2009 and 2012 by Bioclimate and the Centre pour l’Environnement et le Développement (CED). It tested an approach to community forest management by supporting two forest communities to earn PES for protecting their forests. Cameroon was chosen as the pilot country for the project approach because at the time it was the only Congo Basin country with a legal framework for recognising community forests.

These policy briefs, written by Rob Harley (Policy Briefs 1 and 5), Mike Riddell (Policy Briefs 2 and 3) and Willie McGhee (Policy Brief 4), are based on practical experiences and insights gained during and since the development of the C-PES project. We hope these insights are relevant to the ongoing development of policies on community forestry and REDD+ both in Cameroon and the wider Congo Basin region. Thanks are due to Dr Ed Mitchard and Dr Nicholas Berry for their input to Policy Brief 4. We also thank the quoted individuals who took time to discuss the lessons from the project, and Samuel Nnah Ndobe for facilitating these discussions. Adam Campbell served as overall editor for the series and Shirley Lochhead as the designer.

For more information on the issues raised in these briefs, please contact Bioclimate using the following details:

**Contact:** Mike Riddell, Bioclimate, Tower Mains Studios, 18B Liberton Brae, Edinburgh EH16 6AE, Scotland

**Email:** mike.riddell@brdt.org

**Office:** +44 (0)131 664 3700

**Web:** www.bioclimate.net

---

§This material has been funded by UK aid from the UK Government; however, the views expressed do not necessarily reflect the UK Government’s official policies.
Key lessons

1. **PES as an alternative to logging.** PES is a potentially viable alternative to logging in community forests, through forest conservation and sustainable forest management.

2. **Links between PES and food security.** Attempting to limit agricultural expansion through PES is extremely challenging and could undermine local food security. However, the development of cocoa agroforestry has the potential to improve both ecosystem services and local income.

3. **Technical complexity of PES and community forestry.** The current technical requirements for PES add an additional layer of complexity to already complicated community forest procedures. PES methods and processes can, and should, be greatly simplified.

4. **Livelihoods and local development back on the community forestry agenda.** The PES approach can support local livelihoods through stimulating enterprise and financing village-level infrastructure. However, maintaining community infrastructure over the long-term requires investment in local institutions.

5. **Governance challenges remain.** The participatory approach and governance mechanisms adopted in the C-PES project have shown signs of success. However, it is imperative to build the capacity of community institutions and to ensure that other local institutions, particularly the forestry administration, are fully engaged and play a supportive role.

6. **Investment in community forestry.** This PES experience highlights the need for further investment in community forests in Cameroon. PES funds should be channelled directly to communities, but this should be coupled with investment in coordination, capacity development, facilitation of benefit-sharing, conflict resolution, and ensuring that Cameroon’s forest code is properly applied. This could be achieved through medium to long-term support for C-PES in a number of community forests.

Background

**What are community forests and why are they important?**

There are many definitions of community forestry, but in our context the term refers to areas of forested land over which communities have formally recognised management rights. In Africa, communities have always managed the forest and lands they live on, and over 90% of the rural population have access to land through some form of customary institution. However, the coverage of community forests is currently very low, and communities are estimated to formally manage only 0.5% of land on the continent. The majority of forested land (around 97.9%) is controlled, or ‘administered’, by national governments.

On a worldwide basis, community forests cover a larger area – communities exercise formal use and management rights over 10% of forested land, approximately 400 million hectares (ha). In Central Africa there is increasing
A recognition that, despite the small percentage of land area occupied by community forests, they have the potential, alongside other forms of community land management, to facilitate the management of forests, improve community tenure security and benefit people’s lives. This potential has already been acknowledged by several COMIFAC (Commission des Forêts d’Afrique Centrale) countries, such as the Democratic Republic of Congo, Gabon and Central African Republic.\(^4\)

**Community forestry in Cameroon**

Cameroon is a leader in community forestry among Central African countries (Box 1). It was chosen for this pilot Community Payments for Ecosystem Services (C-PES)* project because at the time it was the only Congo Basin country with a legal framework (its forest law of 1994) providing the tenure and management arrangements necessary for community forests to be established. Community forests are important for C-PES because, in order to benefit from this process, communities require formal and legal rights to manage forests and lands. Although community forests in Cameroon represent less than 4% of dense forest, they are a key component of Cameroon’s REDD Readiness Preparation Proposal (R-PP).\(^5\)

In the 1990s there was huge amount of enthusiasm about what could be achieved through community forestry.\(^9\) Today, in Cameroon, the general consensus is that community forestry has failed in almost all respects. There is very little evidence of improvements in ecologically sustainable forest management, increased participation in forestry decision-making, or improvements in the rural economy and basic village infrastructure.\(^10\) This is the context in which our C-PES project was launched.

**Community Payments for Ecosystem Services**

This policy brief summarises the lessons learned as we piloted PES in two community forests in Cameroon. The brief explores where PES can help to overcome existing challenges of community forestry, where it might compound current difficulties, and where its impact is minimal. Our aim is to define the potential of PES to contribute to community forests in Cameroon, and possibly further afield in other COMIFAC countries. The key project premises, which are based on our initial project ideas combined with general thinking about PES at the time, are compared with practical experiences under three themes:

1. Sustainability of community forest management
2. Socioeconomic development through community forest management
3. Governance of community forests.

**Box 1 Cameroon’s commitment to community forestry**

Cameroon has shown a long-term commitment to community forestry. Communities have formal, state-recognised rights to manage these areas of non-permanent forest land for 25 years on a renewable basis.\(^6\) In 2012 there were 147 community forests in Cameroon, covering an estimated 637,000 ha of humid forest.\(^7\) According to the Cameroonian forest zoning plan, the surface area of non-permanent forest estate is 4,475,437 ha. As at 2011, the 637,000 ha already attributed to community forests represented 12% of the non-permanent forest domain.\(^8\)

---

\(*\) The DFID AIRES code for the C-PES project is 113889-112.
and therefore costly for communities. Communities now also need to comply with EU timber trade policies, adding an estimated $5,000 to the cost per community.11

The initial evidence from the C-PES project (Table 1) suggests that, rather than solving this problem, quantification of ecosystem services (in this case, carbon) can actually compound it, providing an additional burden to communities. The requirements for ecosystem service quantification were not compatible with existing community forest timber inventories. This meant that significant additional time and resources were needed and that ‘experts’ from outside the community had to be brought in to help.

Despite the complexities involved, there is little evidence that community forest management in Cameroon is ecologically sustainable.13 The reasons for this appear to be three-fold: (i) a lack of enforcement with regard to procedures; (ii) the tenuous link between timber exploitation and sustainability; and (iii) a lack of alternative activities in community forests. In one example in a recent study, 62% of all harvested trees were not included in the annual logging unit.8

Evidence from our pilot project suggests that PES could offer a viable alternative use of community forests (Table 1). Of all the PES activities initiated, the development of cocoa agroforestry plantations is the clearest way of balancing ecosystem service production with communities’ livelihood needs.14 There are also opportunities to either reduce or replace timber exploitation with PES, although this will require that problems to do with the governance of logging are confronted.

The biggest challenge is to reduce deforestation by restricting agricultural expansion, as this will cut the amount of land available for slash-and-burn agriculture and potentially reduce food production. For this to be successful, there will have to be greater investment and experimentation in agricultural intensification and development.

‘This type of project represents an opportunity to revitalise the rural economy’

Moise Niassan, MINFOF

Recommendations

- Forest protection backed by PES should be legally recognised in the new Cameroonian forest code as a form of forest/land use in community forests.
- Methods of ecosystem service quantification should be compatible with existing forest inventory methods.
- Participatory land use planning should be employed to ensure that PES activities do not undermine food security.

Putting livelihood development back on the community forest agenda

Community forest management and the revenue it generates have rarely been shown to have a meaningful, positive impact on local development or wellbeing.10 This is because communities have limited capacity to carry out timber extraction and processing themselves, their relationships with timber companies tend to be poor and often lead to in-fighting, and there is a lack of emphasis on livelihood development activities (particularly agricultural ones).

Our C-PES project aimed to overcome these factors by placing socioeconomic development at the centre of community forest management. Through a participatory process, the decision was taken to establish a civic project in each community and to channel the remaining PES funds (over 50%) to livelihood development activities. In both cases, this was the first time that funds were available to the broader community, as logging revenue often flows to individuals (Table 1). A benefit-sharing agreement was also drawn up between the management entity (the group legally empowered to manage the community forest) and community activity groups, to ensure that vulnerable groups – women, young people and the Baka – profited from PES (see Policy Brief 3).
Table 1 Practical lessons from C-PES in relation to community forests

<table>
<thead>
<tr>
<th>Project premises</th>
<th>Practical lessons</th>
</tr>
</thead>
</table>
| **Community forest management**                                                   | • Paying to keep forests intact rather than logging them appears to be a viable land use to conserve forest areas in community forests.  
• The existing community forestry law of 1994 does not yet recognise forest protection backed by PES.                                                 |
| Methods for quantifying ecosystem services should be able to use existing community forest inventory information. | • Methods for carbon stock analysis were not compatible with existing forest inventories.                                                                                                                                 |
| PES projects can increase carbon in existing agricultural areas in community forests and need not compromise food security. | • Implementing cocoa agroforestry systems appears to be a win-win (income and carbon) in both communities.  
• PES that aims to reduce loss caused by agricultural expansion can easily conflict with food security needs if appropriate zoning is not undertaken. |
| **Local development**                                                            |                                                                                                                                                                                                                     |
| PES can contribute to village-level infrastructure development and livelihoods through enterprise development. | • Almost £20,000 was provided to each community up front to finance civic projects (electricity network and a community freshwater system). However, both civic projects have suffered high maintenance costs and difficulties with initial contractors.  
• Community members, including vulnerable groups such as young people, Baka and women, have direct access to over 50% of PES funds through the Forest Management Committee or community activity groups. Successful examples of enterprises include a women’s moabi (*Baillonella toxisperma*) oil NTFP group and an improved cocoa agroforestry group.  
• The concept of accessing PES money through groups has become conflated with carrying out all activities in groups, which is not practical or socially appropriate, e.g. communal fields. |
| PES can support the land tenure status of rural communities.                      | • The PES requirement that communities have secure land tenure meant that the Nomdedjoh community forest was created. However, PES does not have the ability to secure land tenure outside the community forest area, and issues of customary family land and formal community forest can lead to intra-community disputes. |
| **Governance**                                                                   |                                                                                                                                                                                                                     |
| PES can increase the transparency of exchanges.                                   | • PES systems are neither fail-safe nor watertight and can lead to disputes between communities and ecosystem service companies. However, the clear financial mechanisms established in this project (e.g. community bank accounts) are more transparent than cash payments for timber, which are rarely traceable. |
| PES activities can increase the capacity of local institutions to manage their community forests in a self-sufficient way. | • The management entities now have more capacity for community forest management. The Nkalenyeng entity is self-sufficient, although the Nomdedjoh entity continues to require support for community forest management. |
| Community PES can increase the participation of a wide range of community members in decision-making. | • In both communities, a broad cross-section of people were involved in forest mapping and monitoring, committees and livelihood groups, all of which are rare in community forests in Cameroon. However, participation did not always lead to involvement in major decisions about forest use or benefit-sharing. |
| The creation of a PES Trust Committee and PES monitoring system to oversee the use of PES funds will improve the governance of PES in the two community forests. | • Illegal timber extraction still took place in the Nomdedjoh community forest, contravening their SMP and PES contract, but no legal action has been taken against the perpetrators. In Nomdedjoh there was a lot of pressure from loggers, in collusion with local forestry officials, to log the abundant moabi.  
• The national-level Trust Committee is a useful mechanism for lesson-learning by national institutions, but it does not have a role in conflict resolution or governance, as national actors are too far removed from the local context. |
Although some of the livelihood activities have been successful, many have failed. The concept of ‘community activity groups’ was problematic – although these groups were organised to facilitate benefit-sharing and access to PES funds, the groups led to shared labour activities, which are at odds with the customs of rural communities in east and south Cameroon. This aspect of the project therefore needs to be revised and offered further support.

Finally, while it is clear that the requirements of C-PES concerning land tenure can improve communities’ security in this regard, PES is limited in its ability to settle ongoing conflicts arising from differences between customary and legal land rights.15

Community forest governance

Community forestry in Cameroon faces a number of important governance challenges. At the village level, the management entities often lack the technical, financial and organisational capacity to manage a community forest. Decision-making is complicated by tensions between the traditional decision-makers and the new community forest institutions, which often do not include the former and are rarely locally legitimate.16 Pressure from external actors such as timber operators adds to these tensions and can lead to the ‘elite capture’ of benefits meant for the wider community by these operators and other powerful individuals.

To overcome these problems, the C-PES project placed great emphasis on developing the capacity of local institutions and designing protective mechanisms both for the payment of PES funds and for their use. Both community management entities now have more skills and capacity to manage their community forest, but they require ongoing help with implementing their SMP activities, facilitating the use of PES payments and interpreting logging contracts (Table 1).

Transparent financial mechanisms and contractual arrangements were set up. The PES monitoring system (see Policy Brief 4) and the PES Trust Committee† are good examples of mechanisms to improve community forest governance that could be widely applied. Despite this, there were still instances of illegal logging in Nomedjoh community forest (Table 1). There is an urgent need to involve more local and provincial actors (particularly in the Ministry of Forests and Wildlife, MINFOF) to ensure that community forest law is respected and upheld. Otherwise, efforts for improving decision-making at the community level will be undermined.

‘The C-PES project placed great emphasis on developing the capacity of local institutions’

Recommendations

- Transfer positive lessons of benefit-sharing agreements and livelihood development activities to other community forests.
- Establish local institutions to maintain the infrastructure and ensure there are sufficient funds for this purpose.
- Develop and test payment mechanisms that are in keeping with communities’ established customs.
- Provide longer-term support for the coordination of livelihood activities and benefit-sharing for communities receiving PES.

† The objective of the committee is to provide oversight of the PES funds. The committee meets once a year to assess reports from the communities and project coordinator. Members include MINFOF, MINEPDEP, MINEPAT, CIFOR, independent community forestry consultants and gender specialists, presidents of the community forest management entities, and MINAS.
Glossary

CAG  Community activity group
CBFF  Congo Basin Forest Fund
CED  Centre pour l’Environnement et le Développement
CIFOR  Center for International Forestry Research
COMIFAC  Central African Forests Commission
C-PES  Community Payments for Ecosystem Services (PES) Project (in Cameroon)
DFID  Department for International Development (UK)
FCPF  Forest Carbon Partnership Facility (of The World Bank)
GIS  Geographic Information Systems
IPCC  Intergovernmental Panel on Climate Change
MINAS  Ministère des Affaires Sociales (Ministry of Social Affairs)
MINFOF  Ministère des Forêts et de la Faune (Ministry of Forestry and Wildlife)
MRV  Monitoring, reporting and verification
NTFP  Non-timber forest products
PES  Payments for ecosystem services
REDD+  Reduced emissions from deforestation and forest degradation in developing countries. (The + sign attached to the end of the REDD acronym in 2009 expanded the scope to include the forest conservation, sustainable forest management and the enhancement of forests and forest carbon stocks in developing countries.)
R-PP  Readiness Preparation Proposal
SMP  Simple Management Plan
UNFCCC  United Nations Framework Convention on Climate Change

References


    Netherlands: Tropenbos International Programme du basin du Congo.


    Research & Development.

    from southern Cameroon. *Environmental Science and Policy* 35: 76–86.


This policy brief is one of five briefs considering key themes and issues relating to reduced emissions from deforestation 
and forest degradation (REDD+) and to community approaches to payments for ecosystem services (PES). The briefs form 
one of the outputs from a pilot project in Cameroon, the Community PES Project (C-PES), which was funded by the UK 
Department for International Development (DFID) to coincide with the launch of the Congo Basin Forest Fund (CBFF).³

The project was developed between 2009 and 2012 by Bioclimate and the Centre pour l’Environnement et le 
Développement (CED). It tested an approach to community forest management by supporting two forest communities 
to earn PES for protecting their forests. Cameroon was chosen as the pilot country for the project approach because at 
the time it was the only Congo Basin country with a legal framework for recognising community forests.

These policy briefs, written by Rob Harley (Policy Briefs 1 and 5), Mike Riddell (Policy Briefs 2 and 3) and Willie McGhee 
(Policy Brief 4), are based on practical experiences and insights gained during and since the development of the C-PES 
project. We hope these insights are relevant to the ongoing development of policies on community forestry and REDD+ 
both in Cameroon and the wider Congo Basin region. Thanks are due to Dr Ed Mitchard and Dr Nicholas Berry for their 
input to Policy Brief 4. We also thank the quoted individuals who took time to discuss the lessons from the project, and 
Samuel Nnah Ndobe for facilitating these discussions. Adam Campbell served as overall editor for the series and Shirley 
Lochhead as the designer.

For more information on the issues raised in these briefs, please contact Bioclimate using the following details:

**Contact:** Mike Riddell, Bioclimate, Tower Mains Studios, 
18B Liberton Brae, Edinburgh EH16 6AE, Scotland

**Email:** mike.riddell@brdt.org 
**Office:** +44 (0)131 664 3700 
**Web:** www.bioclimate.net

³This material has been funded by UK aid from the 
UK Government; however, the views expressed do not 
necessarily reflect the UK Government’s official policies.
Policy Brief 3
Equity of community PES

Key lessons

1. Before the start of the C-PES pilot project, the social and economic status of members of both communities in Cameroon varied widely with regard to land and asset distribution; wealth and wellbeing; inter-generational, gender and ethnic relations; and roles in decision-making about the community forests.

2. A PES project such as this could easily reinforce existing inequalities or, indeed, introduce new ones. Safeguarding equity is the responsibility of the institutions involved in developing the PES approach and, in our view, it is unlikely that management entities on their own will promote equitable outcomes.

3. The PES mechanism procedures were more equitable than those typically established by logging companies and neighbouring commercial timber companies.

4. The distribution of PES payments according to a benefit-sharing arrangement is far more equitable than occurs with timber extraction and other community forest management activities. Our project has set a precedent in Cameroon for PES and REDD+ type projects, by delivering over 80% of funds directly to the communities.

5. The distribution of costs is not so clear. The C-PES project focuses on payments for outputs (e.g. forest cover) rather than inputs (e.g. land and labour), meaning that there are opportunity and transaction costs at various levels, and these were not fully assessed.

6. Households with lower levels of wellbeing are less likely to participate in community activity groups and are therefore less likely to receive PES payments, but those groups identified by the community as vulnerable early on in the project (elderly, women, Baka) are more likely to participate.

7. Trade-offs between equity and efficiency. The 20% of funds being used for coordination is unlikely to be sufficient in the coming years to provide the monitoring, coordination and support required in both communities.

Background

Equity

Equity, along with justice and fairness, refers to a "principle that demands fair treatment or due reward". Previously within equity theory there was a focus on ‘distributive justice’ supported by an egalitarian vision – all participants receive an equal share. More recently, equity theory has incorporated two additional components: the principle of accountability (the distribution of rewards and punishments should be based on people’s contributions) and the needs rule (the people with the greatest needs should receive the greatest reward) (see Box 1).

In the context of community payments for ecosystem services (PES) in Cameroon, we consider equity to consist of three elements: equality (equal share), equity (due reward) and need (the most needy receive more). This idea of need is central to pro-poor schemes such ‘pro-poor REDD+’ that aim to ensure a positive net benefit to the poor in absolute and relative terms.
Box 1 Some definitions of equity

1. 'Equity relates to the distribution of socioeconomic factors and goods in a society according to an agreed set of principals or criteria.'

2. 'Equity is a principle that demands fair treatment or due reward.'

An equity framework comprises ‘three parameters (the parameter-setting process, goals, and targets of equity) that frame the stage for defining a fourth (the content of equity) along three dimensions (distributive, procedural, contextual).'

Equity in community PES schemes

It is important to incorporate equity into PES projects. The acceptability of a PES intervention among local people usually depends on the degree to which they perceive it as fair and legitimate. The ability of the intervention to meet the needs of the most resource-dependent people, often the most vulnerable members of society, will influence its effectiveness. Forest conservation policies with negative impacts on poorer people are unlikely to be acceptable to national governments, project developers, buyers of ecosystem services and society as a whole.

Assessing equity in PES projects is extremely challenging, as there are a multitude of factors thought to affect it. This is complicated by the fact that different people rank the components of equity differently. For example, proponents of PES see it as a way of improving economic efficiency, as a market-based instrument that internalises externalities. In this case, the gains and losses by different agents in the competitive market, and therefore equity as due reward, are seen as more important than the way these gains and losses are distributed in society.

However, critics of market-based PES argue that introducing market mechanisms to rural communities exacerbates existing inequalities and reinforces power relations, further marginalising the vulnerable. These critics argue that need and equality, in addition to equity (due reward), need to be considered in order that the wellbeing of the overall group is taken into account.

Equity in community forests in Cameroon

The decentralisation of decision-making with regard to forestry in Cameroon, including the introduction of community forests, has not been an equitable process. Although new income streams are now available to rural communities, there are serious issues over the legitimacy of new ‘hybrid’ institutions: the management entities (groups legally empowered to manage the community forest). There has been a failure in benefit-sharing, both vertically (from the national to the local level) and horizontally (between local councils and communities). Decentralisation has led to conflicts over community forest income, elite capture of resources by powerful people, a lack of accountability, and unequal access to benefits according to generation and gender.

According to Cameroon’s community forest law, the income from the community forest is ‘communal’ and the management entity is responsible for its use. But there is very little guidance on how the revenue should be spent and management entities are under few obligations in this respect, although funds are generally used for community-level development activities linked to education and health, such as community houses, classrooms, health centres and wells. The income is rarely invested in productive activities, such as credit unions and small-scale agriculture, which means that there is typically no lasting economic benefit from community forest revenue.

‘The added value of the PES project is the ability to help communities access a new market, ensure food security, and support the micro-economy’

Jean-Claude Stone Njomkap,
Réseau Africain de Forêts Modèles
This policy brief assesses equity in relation to our Community PES (C-PES) project.* The brief focuses on the community level; it does not assess the equity of PES transactions on an international level or contribute to the climate justice debate. Equity was considered important in this project because of our belief that basing payments purely on due reward – without taking into account need or equality – would not lead to successful long-term forest management or improved livelihoods for the communities involved. Three areas of equity are assessed:

1. **Contextual equity** – the starting context for the project, e.g. land distribution and wellbeing.
2. **Procedural equity** – the fairness of processes adopted during the development of the project.
3. **Distributive equity** – the outcomes of the distribution of benefits, costs and risks.

### Contextual equity

The starting conditions for community PES in a rural community are unlikely to be equal or equitable. As a result, in those community PES schemes that are based on existing land distribution and resource rights and use, where payments are related solely to land ownership, unequal outcomes are to be expected. In these contexts, it is impossible to divorce these equity outcomes from the local institutions that structure how resources are accessed, allocated and owned in rural communities.

### Socioeconomic context

The two communities involved in our C-PES project had very different socioeconomic contexts. Nkolenyeng is an agricultural community of approximately 57 households (2011). The majority are Fang (47), and there is a small Baka community around 1 km from the main village (10 households). Within the Fang community there were clear differences in wealth, and many of the wealthiest families were located in the chefferie (village chief and committee), the customary institution representing the state in the village. Families linked to the chefferie were the primary landowners of agricultural land within the community forest, although this forest only incorporated some of the communities’ agricultural land. The Baka community was marginal to community forest decision-making, and conflicts and discrimination against them were commonplace.

Nomedjoh is a Baka community with over 150 households, fewer than 10 of which are from outside the community (Bamileke, Batouri). The differences in wealth were less evident among the Baka due to lack of asset accumulation, but a participatory wellbeing assessment highlighted clear differences between households. Those families from outside the community who were now resident had the largest land holdings, as most Baka farms were small (less than 0.5 ha) in comparison, although all agricultural land was situated within the community forest.

### Local institutions

In both Nkolenyeng and Nomedjoh there was a chefferie. However, while the chefferie in Nkolenyeng was locally a legitimate institution, people in Nomedjoh were less familiar with the hierarchal nature of the chefferie, it was not seen as legitimate, and it was wrought with problems.\(^\text{14}\) Nkolenyeng already had a management entity, whereas Nomedjoh’s was created during the project to register the community forest.

### Recommendations

- **Community PES should be developed on a case-by-case basis.** Time needs to be taken in project development to understand the socioeconomic context, particularly land distribution and institutional context.
- **Because communities differ greatly in terms of context, the community PES approach should be developed more widely in order to reach meaningful conclusions about how PES can link to livelihoods, equity and reducing deforestation in community forests.**
- **It is essential to identify which institutions – both informal and formal – can support equity outcomes and to work with these institutions.** It is not advisable to rely solely on formal introduced community forest management entities for benefit-sharing and equitable outcomes.

---

*The DFID AIRES code for the C-PES project is 113889-112.*
In reality, decisions about land and natural resource use in Nkolenyeng are made at the family level, and this community is composed of two unrelated clans who came together just prior to the 1940s. In Nomedjoh, decision-making is made on the level of the bala (a compound with several households linked by kinship). The Baka are an egalitarian society, where women, young people and men have the right to speak and contribute to decision-making, and elders (kobo) are highly respected in decision-making.

Procedural equity

Community participation is essential to ensure that people are involved in the design of – and support – environmental interventions, although participation means different things to different people. In the C-PES project, based on our understanding of the socioeconomic context, we put in place a participatory design and implementation process in order to reach and work with a broad cross-section of each community at different stages of the project design. This process took into account ideas of needs and equality, rather than just equity, and included:

- community meetings to present and discuss initial results of forest mapping;
- participatory rural appraisal methods to understand local needs and potential livelihood activities that could reduce threats to forest cover and meet development needs;
- the identification of vulnerable groups;
- the documentation of agreements on what activities would be funded and how PES funds would be accessed by different constituents, culminating in a benefit-sharing agreement (see Box 2);
- verbal PES contract sessions with the community;
- formation of a PES trust fund to ensure transparency of transactions.

Throughout the process, although there was a constant effort to involve a broad cross-section of the community, there was an overall reliance on the management entities, and informally on the chefferie (in Nkolenyeng) in order to lend legitimacy to the project. Despite our understanding of the importance of informal institutions, there was some elite capture of project activities due to a lack of consistent targeting. In addition, a two-tiered participation of ‘earlier adopters’ and ‘laggers’ emerged in both communities. In Nomedjoh, young men gravitated towards and captured project activities and assumed control of the project, and in Nkolenyeng this occurred with the chefferie. To overcome issues with the management entities, elections were held to ensure that committees were representative of the broader community, including Baka and women in Nkolenyeng, and elders (kobos) in Nomedjoh.

The result of this process was the creation of a PES mechanism (Figure 1). PES funds are held in a secure

---

**Box 2 Sample extracts from benefit-sharing agreements (internal to community)**

**Examples of management entity responsibilities**

- Encourage community members to join a community activity group (CAG) and to support these CAGs.
- Ensure PES payments to the CAGs are never made to, or captured by, individuals within groups.
- Ensure that those people identified as most marginalised and vulnerable (including the Baka and women) have priority access to CAGs and associated training.

**Examples of CAGs’ responsibilities**

- Make annual applications (can be verbal) to the management entity to receive PES monies.
- Make collective decisions by taking the views of all members into account using a show of hands.
- Oblige the treasurer to give regular (minimum six-monthly) updates on money and expenditure to the management entity.

---

**Recommendations**

- Calculate opportunity and transaction costs as part of the project development process in projects where reducing agricultural expansion is a project activity.
- Adopt a participatory design process that includes identification of vulnerable groups, landowners and the creation of a benefit-sharing agreement.
- When payments are made to communities, ensure sufficient time and resources are available to follow up on the benefit-sharing agreement and to revise as necessary.
account and released once the trust fund committee has received the project coordinator’s (Centre pour l’Environnement et le Développement, CED) report. The coordinator then delivers funds to the villages’ bank accounts. Funds are disbursed annually to community bank accounts based on reporting. The payments used in this project are pilot funds and are not earmarked specifically for any particular ecosystem service.

**Distributive equity**

Distributive equity refers to the distribution of benefits and costs across a given society or group. In our C-PES project, the payment system was based on measuring and monitoring forest carbon (an output), rather than on assessing inputs, such as land, labour, opportunity and transaction costs.

**Costs**

The communal opportunity costs of not exploiting timber in both community forests are low, as communities rarely receive anything close to the full value of their timber. However, the opportunity costs of limiting agricultural expansion were never formally calculated, and ownership of these opportunity costs is unclear: while income from existing agricultural land in community forests belongs to the landowners, formally agricultural expansion occurs in community-owned forest, but in reality and customary law landowners in Nkolenyeng and Nomédjoh felt that they were individually burdened with these opportunity costs. Throughout the project, transaction costs were high due to the participatory process, but these were never formally quantified. As the project went on, those who participated most felt more and more entitled to a benefit compared with non-participants.
Vertical benefit distribution

Benefits can also hard be hard to define, as they include training, increased social capital due to participation in community activities and improved land tenure status. Assessing only the payments, it is clear that the vertical distribution of benefits was favourable to communities who received over 80% of PES funds. Less than 20% of funds were reserved for coordination, although it is becoming evident that this is not sustainable. Compared with funds from land fees and annual forest fees in Cameroon, which are marked by corruption and embezzlement, the PES approach adopted here is, however, a model for how to deliver funds directly to rural communities in Cameroon.

Horizontal benefit distribution

Horizontal benefits in the community included an in-kind payment of a civic project accessible to all community members, and annual cash payments accessible to community activity groups (CAGs), including groups for the most vulnerable.

Although there was no formal assessment of local perceptions of fairness, the concepts of need and equality became very popular early on in discussions with the community. People felt that those who were not directly involved in community forest management and PES livelihood and management activities should still receive a benefit from the community forest (equality), and those unable to work or who were disadvantaged should be involved (need). The idea of equity was also important. For example, people felt that the management entity should pay community forest monitors for the number of days they monitored the community forest.

Access to cash funds

Our error in the benefit-sharing process was to introduce new institutions in the form of CAGs. These are inappropriate forms of social organisation. These groups were conceived by the project as a practical solution to allow equitable access to funds, incorporate ideas of need (vulnerable people have their own groups) and equality (everyone can join a group), and prevent elite capture and meaningless small payments to individuals. The majority of these groups do not work in the current form (see Policy Brief 2) and there was no assessment of the problems with existing groups (e.g. associations and cooperatives) or consideration given to transferring funds to the level of informal institutions initially identified, including families in Nkolenyeng and bala in Nomedjoh.

Figure 2 Household participation in community activity groups according to wellbeing for the two villages.
### Recommendations

- Improve the means by which individuals and households can access cash from PES arising from community forests.
- Community-level civic projects accessible by all are popular and should be an option when PES is generated from a communal resource like a community forest.
- Access to payments at the household level is important when there are opportunity costs associated with reduced agricultural expansion: assessment of these costs is essential.
- Identifying vulnerable groups early on in the project can ensure they benefit from the approach. However, more specific targeting is required to identify people with lower levels of wellbeing.
- Equality should not be forced on people – the introduction of new institutions and groups, such as CAGs, is not recommended unless the concept comes from the community members themselves.

Over 50% and 80% of households in Nomdjo and Nkolenyeng, respectively, had members in CAGs. Although barriers to entry to CAGs were thought to be low, Figure 2 and Table 1 show that households in lower wellbeing categories among the major ethnic groups (Fang in Nkolenyeng, and Baka in Nomdjo) were less likely to become CAG members and therefore less likely to receive PES funds. This was especially true in Nkolenyeng when analysed on the sub-household level (households including single mothers still living at home). However, those groups initially identified as vulnerable, such as the Baka in Nkolenyeng and elderly people, had 100% access to benefits, as specific CAGs had been formed for them.

‘There are also significant questions of equity – if people in Europe keep on polluting, and people here protect their forests, then what is the net benefit for the climate and environment? Are these polluters not just social washing their emissions?’

*Joseph Mougou, Advisor for SNV Netherlands Development Organisation*
Glossary

CAG Community activity group
CBFF Congo Basin Forest Fund
CED Centre pour l’Environnement et le Développement
CIFOR Center for International Forestry Research
COMIFAC Central African Forests Commission
C-PES Community Payments for Ecosystem Services (PES) Project (in Cameroon)
DFID Department for International Development (UK)
FCPF Forest Carbon Partnership Facility (of The World Bank)
GIS Geographic Information Systems
IPCC Intergovernmental Panel on Climate Change
MINAS Ministère des Affaires Sociales (Ministry of Social Affairs)
MINEPAT Ministère de l’Economie de la Planification et de l’Aménagement du Territoire (Ministry of Economy, Planning and Regional Development)
MININFO Ministère des Forêts et de la Faune (Ministry of Forestry and Wildlife)
MRV Monitoring, reporting and verification
NTFP Non-timber forest products
PES Payments for ecosystem services
REDD+ Reduced emissions from deforestation and forest degradation in developing countries. (The + sign attached to the end of the REDD acronym in 2009 expanded the scope to include the forest conservation, sustainable forest management and the enhancement of forests and forest carbon stocks in developing countries.)
R-PP Readiness Preparation Proposal
SMP Simple Management Plan
UNFCCC United Nations Framework Convention on Climate Change

References

This policy brief is one of five briefs considering key themes and issues relating to reduced emissions from deforestation and forest degradation (REDD+) and to community approaches to payments for ecosystem services (PES). The briefs form one of the outputs from a pilot project in Cameroon, the Community PES Project (C-PES), which was funded by the UK Department for International Development (DFID) to coincide with the launch of the Congo Basin Forest Fund (CBFF).†

The project was developed between 2009 and 2012 by Bioclimate and the Centre pour l’Environnement et le Développement (CED). It tested an approach to community forest management by supporting two forest communities to earn PES for protecting their forests. Cameroon was chosen as the pilot country for the project approach because at the time it was the only Congo Basin country with a legal framework for recognising community forests.

These policy briefs, written by Rob Harley (Policy Briefs 1 and 5), Mike Riddell (Policy Briefs 2 and 3) and Willie McGhee (Policy Brief 4), are based on practical experiences and insights gained during and since the development of the C-PES project. We hope these insights are relevant to the ongoing development of policies on community forestry and REDD+ both in Cameroon and the wider Congo Basin region. Thanks are due to Dr Ed Mitchard and Dr Nicholas Berry for their input to Policy Brief 4. We also thank the quoted individuals who took time to discuss the lessons from the project, and Samuel Nnah Ndobe for facilitating these discussions. Adam Campbell served as overall editor for the series and Shirley Lochhead as the designer.

For more information on the issues raised in these briefs, please contact Bioclimate using the following details:

**Contact:** Mike Riddell, Bioclimate, Tower Mains Studios, 18B Liberton Brae, Edinburgh EH16 6AE, Scotland

**Email:** mike.riddell@brdt.org

**Office:** +44 (0)131 664 3700

**Web:** www.bioclimate.net

†This material has been funded by UK aid from the UK Government; however, the views expressed do not necessarily reflect the UK Government’s official policies.
Key lessons

1 Monitoring deforestation. The C-PES project has demonstrated that community field workers who are properly trained and well coordinated can carry out accurate mapping of land use and land cover change.

2 Cost implications. Mapping patch-scale forest clearance using a local monitoring team is a cost-effective approach to assessing deforestation rates in community forest areas of up to 5,000 ha.

3 Combating deforestation. Community field workers provide qualitative information on the drivers and agents of deforestation, which means that efforts to prevent deforestation can be tailored to the causes.

4 Community benefits. Using local field teams to carry out monitoring offers community members the chance to acquire skills and earn small but significant amounts of money, and also to gain an understanding of changes in their forests.

5 Links with national REDD+ MRV. Monitoring community forest areas using locally recruited teams can provide an accurate and affordable means of cross-checking and verifying national MRV data.

Background

Forest monitoring in REDD+ projects – no relationship between cost and value

REDD+ monitoring in the context of a country’s REDD+ readiness falls into the category of measurement, reporting and verification (MRV), with the costs and efficiency of monitoring considered at both national and regional levels.¹²

Establishing functional MRV systems is one of the major goals of the UN-REDD+ Readiness Programme, and the aspiration to apply MRV at the country level, in order to obtain accurate measurements of carbon, is so that countries that reduce greenhouse gas emissions can be properly compensated.

The intensity, cost and precision of forest inventory and monitoring are usually related to the value of the forest product, such as timber. In REDD+ projects, however, this relationship does not apply. The value of emission reductions in the compliance and voluntary carbon markets is volatile and uncertain, and in many REDD+ type projects the intensity and precision of forest monitoring are determined by the funds available during the development stage of the project. In these projects, inventory and monitoring can be very expensive, consuming much of the available carbon credit revenue and reducing the amount of money that can be channelled into local communities for avoided deforestation activities.

MRV can be carried out at a number of levels: global, regional (e.g. the Congo Basin), national, sub-national (e.g.
the district level) and project (local or landscape level). Generally speaking, the smaller the scale, the more accurate the measurements of forest carbon stocks and flows. The results of one REDD+ MRV study in 2012 concluded that ‘projects are better [than a national approach] at producing local measurements of carbon stock … but rely more on external technological expertise for remote sensing and GIS [geographic information system]’. It is our belief that existing ways of thinking about and designing national MRV programmes are unnecessarily complex, prohibitively costly, offer poor value for money and provide little or no benefits to local communities.

Is there a role for community forest monitoring in REDD+?

There is a growing awareness that communities can play a positive role in monitoring forests for REDD+ projects operating at a sub-national level. The benefits of this community role include cost efficiency, good-quality data, an improved local economy and local ownership. Recent work has shown that communities are able, if properly trained and equipped, to monitor forests as accurately and precisely as international experts. Berry et al. highlighted that it was possible for communities to measure carbon stocks and biomass removals, and pointed out the desirability of reducing the costs of estimating carbon benefits when this money could instead be used to fund activities that improve the livelihoods of poor communities.

Some researchers consider that REDD+, being worldwide in vision and scale, cannot afford MRV in its conventional form, as ‘it is expensive, expert, expatriate and consultant led’, and suggest that monitoring should be locally based.

REDD+ forest monitoring in Cameroon – a new model of MRV?

The Cameroon Government’s REDD+ Readiness Preparation Proposal (R-PP) contains an MRV budget ‘wish list’ of nearly $6 million, plus a requirement for $1.59 million for calculating reference levels. In January 2013 the R-PP was awarded $3.16 million from the Forest Carbon Partnership Facility (FCPF). One reason for requesting such a sizeable MRV budget from the FCPF may be the technical and administrative challenges for a country like Cameroon to gather, process, store and update the information required to report emission reductions/releases from forests to the United Nations Framework Convention on Climate Change (UNFCC). The Cameroonian Government now has an opportunity to use this FCPF funding to trial project-level community-based MRV and to assess and track deforestation in a way that involves and benefits local communities.

How good is project monitoring in Cameroon?

A recent assessment of REDD+ MRV in 20 sub-national projects, including two in Cameroon (one of which was our Community Payments for Ecosystem Services [C-PES] project), suggested that the capacity and readiness in respect of MRV are ‘somewhat lower’ in Cameroon than in comparator countries, such as Brazil and Peru. This finding presupposes that carbon is the most important metric in a REDD+ programme and suggests that high levels of technical expertise and data are required to conduct MRV in tropical forests. However, we contend that, to measure and track (over time) deforestation and forest degradation, establishing the presence or absence of trees using local field teams is sufficient for a REDD+ project to be credible. The convention in REDD+ projects of attempting to monitor carbon or carbon dioxide accurately over time is complex, unnecessary and of questionable benefit.

The role of remote sensing

The use of cost-effective remote sensing during the development of our C-PES project proved challenging. This was partly because of the variability of cloud cover on Landsat imagery and partly because of the difficulty of detecting small areas of deforestation within a forest matrix using Landsat images. There is a role for cheap and freely available large-scale, low-resolution imagery in REDD+ MRV at a national level, but the cost of using high-resolution images or technology (see Table 1) to detect small-scale deforestation may make these technologies prohibitively expensive for this purpose. They are thus likely to be restricted to research projects or intermittent verification of field monitoring results. If high-resolution data were to become cheaper and more freely available, their application would be more feasible.

* The DFID AIRES code for the C-PES project is 113889-112.
Table 1 Estimates of costs for remote sensing-based land use change analysis

<table>
<thead>
<tr>
<th>Monitoring techniques</th>
<th>Resolution</th>
<th>Cost of materials (images)</th>
<th>Cost of processing and analysis</th>
<th>Total cost for 5,000 ha (50 km²)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Landsat (medium-to high-resolution optical)</td>
<td>30 m (or 15 m if pan-sharpened)</td>
<td>Free</td>
<td>Historical analysis of three dates (e.g. 2003, 2007, current): £3,500 (7 days) One-off single-year analysis: £1,500 (3 days)</td>
<td>Three dates: £3,500 One date: £2,000</td>
</tr>
<tr>
<td>High-resolution optical (e.g. SPOT or RapidEye)</td>
<td>2.5–5 m</td>
<td>£2,000–£3,000 per year (SPOT); £450 per year (RapidEye, 5 m)</td>
<td>Historical analysis of three dates (e.g. 1997, 2007, 2010): £6,000 (12 days) One-off single-year analysis: £2,500 (5 days)</td>
<td>Three dates: £7,350 (RapidEye), £15,000 (SPOT) One date: £2,950 (RapidEye)</td>
</tr>
<tr>
<td>L-band Radar (JERS-1; ALOS PALSAR)</td>
<td>10–50 m</td>
<td>Free if 50 m resolution in some locations; £200–£400 per year per 1 x 1 degree tile @ 10–25 m</td>
<td>Historical analysis of three dates (e.g. 1997, 2007, 2010): £5,000 (10 days) One-off single-year analysis: £2,000 (4 days)</td>
<td>Three dates (10 m): £6,200 One date (10 m): £2,400</td>
</tr>
<tr>
<td>LiDARf</td>
<td>1–3 m</td>
<td>£10,000–£50,000</td>
<td>One-off single year analysis: £10,000 (20 days)</td>
<td>£20,000–£50,000</td>
</tr>
</tbody>
</table>

Table and data courtesy of Dr Ed Mitchard, University of Edinburgh, Department of Geosciences.

Assuming purchase from Astrium GeoStore of 1/8 scene (20 x 20 km, smallest possible). Lower price is for 5 m colour; higher is for 2.5 m colour (http://www2.astrium-geo.com/files/pmedia/public/t146_9_pricelist_spot_en_2012.pdf).


If the site is within the ALOS PALSAR K&C mosaics for Africa and South-east Asia, then free data are available for 2007, 2008 and 2009 at 50 m resolution (http://www.eorc.jaxa.jp/ALOS/en/kc_mosaic/kc_mosaic.htm).

Assuming purchase of 1 x 1 degree Orthorectified processed tiles from ALOS-Restec (http://www.alos-restec.jp/en/static_pages/index.php/products-higher-order06). 1 x 1 degree is the smallest area sold, cost is 35,000 yen for 25 m resolution, 70,000 yen for 10 m resolution. Data available globally: 1992–1998 and 2007–2010. ALOS-2 will be launched in 2014.

Note that LiDAR gives considerable information on forest structure and biomass. It is unlikely that such data would be used only to perform a land-cover analysis (though it would do a good job at doing this). Normally LiDAR would additionally be used to produce maps of canopy height, canopy percentage cover, and above-ground biomass.

Normally no archive data are available. Costs are very uncertain for tasking Lidar data in the tropics. The cost of tasking varies hugely depending on remoteness, availability of suitable aircraft, distance to nearest airport and cloud cover. Costs per hectare would reduce markedly if a larger area was considered.

Recommendations

- Governments involved in forest monitoring as part of REDD+ should consider using locally recruited field teams to gather deforestation data.
- Monitoring of deforestation in REDD+ sub-national projects can be done simply and cheaply using methodologies similar to C-PES and should involve and benefit local people.
- Low-resolution remote sensing data are suited to national-level MRV; high-resolution remote sensing data are expensive and their use should be limited to research and cross-checking of field data.
- Communities managing forests should be given sufficient technical training and good local coordination so that they can carry out REDD+ MRV.
Can communities in Cameroon monitor their forests?
As part of the process of registering community forests with the Ministry of Forests and Wildlife (MINFOF), community/local organisations in Cameroon are obliged to prepare a Simple Management Plan (SMP). The steps require that members of a community forest group are able to perform technical tasks such as tree measurement (mensuration) and area estimation. But are they able to do this? A recent study identified a number of discrepancies in the areas and locations of logging activity in community forests between what was planned in the SMPs and what was actually happening in the forests. These discrepancies were explained in part by improper use of global positioning system (GPS) units, probably due to insufficient training, and by a lack of verification. By contrast, the C-PES project is producing good-quality monitoring data as a result of sustained technical training in forest measurement and area mapping, as well as good local coordination.

The C-PES monitoring system

What is it?
The C-PES forest monitoring system can best be described as a traffic light system, with thresholds of forest clearance (little or no clearance, partial clearance, too much clearance) related to three states of PES payments: full PES payment (green light), partial PES payment (amber light) and no PES payment (red light) (see Table 2 for an example).

‘The C-PES project is producing good quality monitoring data as a result of sustained technical training in forest measurement and mapping’

Table 2 Example of C-PES traffic light forest monitoring system for the Nkolenyeng community forest

<table>
<thead>
<tr>
<th>Sector</th>
<th>Indicator</th>
<th>Green target</th>
<th>Amber threshold</th>
<th>Red threshold</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sector 1: Messambe, 137 ha</td>
<td>Area of recent reopened fallow. Recent falls are characterised by dense stands of young trees of less than 20 cm in diameter. No fields in secondary or primary forest</td>
<td>Total area of reopened fallow is less than 1.5 ha. For every hectare of field opened, 1 ha of fields must be closed</td>
<td>Total area of reopened fallow is less than 2 ha. For every hectare of field opened, 1 ha of fields must be closed</td>
<td>Total area of reopened fallow is more than 2 ha. For every hectare of field opened, 1 ha of fields must be closed</td>
</tr>
<tr>
<td>AND</td>
<td>AND</td>
<td>AND</td>
<td>AND</td>
<td></td>
</tr>
<tr>
<td>Trees in reopened fallsows</td>
<td>When falls are reopened, more than 50% of the trees larger than 20 cm diameter are left standing. Additionally, when cocoa farms are opened up or created, they should retain 50–75% canopy cover</td>
<td>When falls are reopened, less than 40% of the trees larger than 20 cm diameter are left standing. Additionally, when cocoa farms are opened up or created, they should retain 50–75% canopy cover</td>
<td>When falls are reopened, more than 40% of the trees larger than 20 cm diameter are left standing. Additionally, when cocoa farms are opened up or created, they should retain 50–75% canopy cover</td>
<td></td>
</tr>
<tr>
<td>PES amount*</td>
<td>20% of PES amount</td>
<td>£1,000</td>
<td>£500</td>
<td>No payment</td>
</tr>
</tbody>
</table>

* £1 = $1.649 (http://www.xe.com/currencyconverter/convert/?Amount=1&From=USD&To=GBP)
Development of the C-PES monitoring system involved mapping the patterns and rates of deforestation in the community forests, training local technicians and community field workers, zoning the community forests and agreeing deforestation thresholds with the community. PES payments are released to community groups annually, depending on the results of forest monitoring, with monitoring providing actual rates of deforestation matched against pre-agreed PES payment thresholds.

The main cause of deforestation in the community forests was patch-scale forest clearance for smallholder agriculture, with a predicted annual clearance rate of 2% of the community forest area. This rate mirrors the estimated national Cameroonian deforestation rate.

Training local mapping teams
Forest monitoring requires skilled forest technicians and field workers. Much of the effort in establishing the C-PES forest inventory and baseline involved intensive sample plotting and the use of GPS units to mark plots and to map boundaries and trails. The provision of sustained training for local technicians and field workers has resulted in local field teams who are experienced and proficient at mapping areas of deforestation.

The process of producing SMPs for community forests in Cameroon requires zoning of forest management areas or sectors. The norm is for five sectors to be mapped per community forest, and the C-PES project followed the SMP zoning concept. Participatory mapping exercises with representative community groups in both community forests produced five PES forest zones within which land cover (primary forest, secondary forest) and land use (fallow, fields) types were the basis for setting monitoring thresholds.

The C-PES project coordinator, the Centre pour l’Environnement et le Développement (CED), is responsible for annual forest monitoring and coordinating PES payments. They employ a project coordinator and contract a forest technician to work with the coordinator and community members to map new areas of forest clearance and tree-felling. Newly cleared areas and opened fields are mapped using handheld GPS sets and field data are transposed into a GIS map showing the location and extent of the forest clearance. A calculation is done to determine how much deforestation – conversion from forest or fallow to agriculture – has taken place and then PES payments are made accordingly. Figure 1 illustrates the link between forest monitoring and the release of PES funding to beneficiary groups within the communities.

A cautionary note
In the first iteration of the monitoring system (as shown in Table 2), two indicator classes were included: one for deforestation areas and one for forest degradation. The forest degradation indicator was linked to thresholds of numbers of remaining trees in reopened fallows with minimum diameters at breast height. This was an attempt to detect areas of degraded forest, to encourage regeneration of these areas by lengthening fallows and to retain more tree cover when new fields were opened. This level of detail and complexity meant more time and resources were needed for monitoring. More significantly, the system was not clearly understood by community members, who found the message of retaining trees of a prescribed diameter when clearing for agriculture confusing. The C-PES monitoring method is good for detecting small-scale deforestation, but requires more work and community understanding if it is to be useful in monitoring forest degradation.
Monitoring efficiency

The C-PES project’s forest monitoring involves technicians and the field team working a total of 60 full-time-equivalent days per year. Both community forests were monitored once in 2011 and twice in 2012 and 2013.

The cost

The budget for monitoring the C-PES community forests from 2012 to 2016 (five years) was agreed between CED and Bioclimate during the implementation phase of the project and was set at £5,665.75, which is equivalent to £1,133.5 per annum (see Table 3). This is not a large sum of money and represents good value for the quality of forest monitoring information produced.

The C-PES monitoring cost of £0.37/$0.59 per hectare equates to $59.2 per km². This figure lies at the lower end of the $0.5–$550 per km² range of monitoring costs given by Böttcher et al. following an assessment of different monitoring techniques and REDD+ monitoring requirements and costs, which supports our claim that the C-PES system is cost-efficient.

How good is it?

We have assumed that the C-PES monitoring method is accurate to within ± 0.5 ha of forest clearance per community forest per annum, allowing for GPS error and under- or over-estimation of areas. The field monitoring team combines external forest technicians, who bring a degree of technical rigour and impartiality, with community field workers who have local knowledge of the forest. Local expertise makes forest mapping a speedier operation and brings with it an understanding of who is responsible for deforestation and to what extent. Having this kind of first-hand information on the drivers of deforestation means that a PES/REDD+ project can be adapted to suit the findings, for example by amending avoided deforestation payment thresholds or other elements of the scheme. Local team members earn small but significant amounts of money for participating in the annual monitoring – they tend to be drawn from the community forest patrolling team who carry out monthly patrols.

REDD+ in Cameroon – what role can C-PES monitoring play?

If, as stated in the national R-PP, Cameroon’s community forest estate is to play a role in Cameroon’s REDD+ programme, then an assessment of the applicability of the C-PES monitoring regime at a national level will be instructive. Oyono et al. estimate that 147 community forests in

<table>
<thead>
<tr>
<th>Cost of monitoring £UK/$US</th>
<th>Frequency of monitoring</th>
<th>Hectares (ha)</th>
<th>Tonnes of CO₂ equivalent (tCO₂e)</th>
</tr>
</thead>
<tbody>
<tr>
<td>£5,665.75/$9,342.82</td>
<td>Five years</td>
<td>2,984</td>
<td>84,412</td>
</tr>
<tr>
<td>£1,133.5/$1,869.14</td>
<td>One year</td>
<td>2,984</td>
<td>16,882</td>
</tr>
<tr>
<td>£1.89/$3.54</td>
<td>Five years</td>
<td>1</td>
<td>–</td>
</tr>
<tr>
<td>£0.37/$0.59</td>
<td>One year</td>
<td>1</td>
<td>–</td>
</tr>
<tr>
<td>£37/$59.2</td>
<td>One year</td>
<td>100</td>
<td>–</td>
</tr>
<tr>
<td>£0.067/$0.11</td>
<td>Five years</td>
<td>–</td>
<td>1</td>
</tr>
</tbody>
</table>

* Based on £1 = $1.649, (http://www.xe.com/currencyconverter/convert/?Amount=1&From=USD&To=GBP)
Cameroon extend to 637,000 ha (6,370 km²), giving an average forest size of 4,333 ha. Landscape-scale monitoring can be done on a percentage of forest area sampling effort basis. A community forest component of a national REDD+ programme with 10% sampling of community forest area per annum by local field teams could be monitored for less than $50,000 per annum.† This represents exceptional value for money and should provide encouragement to the government of Cameroon to put in place a new kind of national MRV system – one that is simple enough for hard-pressed and under-resourced civil servants to operate, and that provides local benefits and support to Cameroonian engaged in managing community forests.

**Glossary**

<table>
<thead>
<tr>
<th>Acronym</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>CAG</td>
<td>Community activity group</td>
</tr>
<tr>
<td>CBFF</td>
<td>Congo Basin Forest Fund</td>
</tr>
<tr>
<td>CED</td>
<td>Centre pour l’Environnement et le Développement</td>
</tr>
<tr>
<td>CIFOR</td>
<td>Center for International Forestry Research</td>
</tr>
<tr>
<td>COMIFAC</td>
<td>Central African Forests Commission</td>
</tr>
<tr>
<td>C-PES</td>
<td>Community Payments for Ecosystem Services (PES) Project (in Cameroon)</td>
</tr>
<tr>
<td>DFID</td>
<td>Department for International Development (UK)</td>
</tr>
<tr>
<td>FCPF</td>
<td>Forest Carbon Partnership Facility (of The World Bank)</td>
</tr>
<tr>
<td>GIS</td>
<td>Geographic Information Systems</td>
</tr>
<tr>
<td>IPCC</td>
<td>Intergovernmental Panel on Climate Change</td>
</tr>
<tr>
<td>MINAS</td>
<td>Ministère des Affaires Sociales (Ministry of Social Affairs)</td>
</tr>
<tr>
<td>MINFOF</td>
<td>Ministère des Forêts et de la Faune (Ministry of Forestry and Wildlife)</td>
</tr>
<tr>
<td>MRV</td>
<td>Monitoring, reporting and verification</td>
</tr>
<tr>
<td>NTFP</td>
<td>Non-timber forest products</td>
</tr>
<tr>
<td>PES</td>
<td>Payments for ecosystem services</td>
</tr>
<tr>
<td>REDD+</td>
<td>Reduced emissions from deforestation and forest degradation in developing countries. (The + sign attached to the end of the REDD acronym in 2009 expanded the scope to include the forest conservation, sustainable forest management and the enhancement of forests and forest carbon stocks in developing countries.)</td>
</tr>
<tr>
<td>R-PP</td>
<td>Readiness Preparation Proposal</td>
</tr>
<tr>
<td>SMP</td>
<td>Simple Management Plan</td>
</tr>
<tr>
<td>UNFCCC</td>
<td>United Nations Framework Convention on Climate Change</td>
</tr>
</tbody>
</table>

**References**


† This sum excludes the infrastructure and logistics of scaling up and the training of local teams and assumes that 10% of the community forest area is 63,700 hectares, comprising 25 community forests, i.e. each forest is approximately 2,548 hectares.

**Recommendations**

- The C-PES monitoring system can be used to efficiently detect small-scale deforestation but needs further adaptation before it can be used to monitor forest degradation.
- Using local teams to monitor deforestation in community forests and more widely will yield good-quality information at a reasonable cost.
- Governments participating in REDD+ and in receipt of R-PP awards from the World Bank should consider directing a portion of their awards into training and coordinating community forest MRV teams.
This policy brief is one of five briefs considering key themes and issues relating to reduced emissions from deforestation and degradation (REDD+) and to community approaches to payments for ecosystem services (PES). The briefs form one of the outputs from a pilot project in Cameroon, the Community PES Project (C-PES), which was funded by the UK Department for International Development (DFID) to coincide with the launch of the Congo Basin Forest Fund (CBFF).‡

The project was developed between 2009 and 2012 by Bioclimate and the Centre pour l’Environnement et le Développement (CED). It tested an approach to community forest management by supporting two forest communities to earn PES for protecting their forests. Cameroon was chosen as the pilot country for the project approach because at the time it was the only Congo Basin country with a legal framework for recognising community forests.

These policy briefs, written by Rob Harley (Policy Briefs 1 and 5), Mike Riddell (Policy Briefs 2 and 3) and Willie McGhee (Policy Brief 4), are based on practical experiences and insights gained during and since the development of the C-PES project. We hope these insights are relevant to the ongoing development of policies on community forestry and REDD+ both in Cameroon and the wider Congo Basin region. Thanks are due to Dr Ed Mitchard and Dr Nicholas Berry for their input to Policy Brief 4. We also thank the quoted individuals who took time to discuss the lessons from the project, and Samuel Nnah Ndobe for facilitating these discussions. Adam Campbell served as overall editor for the series and Shirley Lochhead as the designer.

For more information on the issues raised in these briefs, please contact Bioclimate using the following details:

Contact: Mike Riddell, Bioclimate, Tower Mains Studios, 18B Liberton Brae, Edinburgh EH16 6AE, Scotland

Email: mike.riddell@brdt.org
Office: +44 (0)131 664 3700
Web: www.bioclimate.net

‡This material has been funded by UK aid from the UK Government; however, the views expressed do not necessarily reflect the UK Government’s official policies.
Key lessons

1 **Issues of poor governance.** Community REDD+ and PES interventions will not be effective if they overlook the socioeconomic and governance problems that have led to forest degradation in the past.

2 **Livelihood development and carbon benefits.** Projects that benefit the livelihoods of communities and their capacity to manage forests will sustainably generate carbon benefits – not the other way round.

3 **Building institutional capacity.** Strengthening community institutions and governance capacity should take precedence over the technical aspects of PES, such as carbon assessment.

4 **Collaborative working.** Groups doing projects should identify local NGOs and resource personnel with relevant skills and experiences, and find ways to collaborate and strengthen mutual capacity to support communities.

5 **Benefits of participatory methods.** Using participatory methods helps to foster community ownership of projects and improves the representation and involvement of vulnerable and marginalised groups in decision-making.

6 **Monitoring requirements.** Simple, low-cost monitoring systems are needed to assess changes in forest cover (technical effectiveness), the livelihoods and wellbeing of communities (social effectiveness), and governance of community forests (institutional effectiveness).

7 **Development for the long-term.** Community PES projects need time and adequate funding if they are to develop the local institutional capacity needed for this approach to be sustainable.

8 **Strong in-country coordinating group.** Like all development projects, community PES cannot succeed without a capable in-country coordinating group committed to supporting communities beyond the life of the project.

9 **Costs of community PES.** Once in-country capacity to develop and manage community PES projects has been built, it needs to be well utilised to justify the costs involved.

Background

**REDD+ and the idea of effectiveness**

Much of the literature on REDD+ effectiveness focuses almost exclusively on the ability of REDD+ interventions to generate carbon benefits or the magnitude of the emission reductions achieved. But this ‘carbon-centric’ idea of effectiveness is inadequate in many country contexts, not least in Cameroon. The creation of community forests in Cameroon has not led to more sustainable forest management overall (see Policy Brief 2). This failure is primarily the result of socioeconomic and governance problems that have played an important part in forest degradation in the past. It is clear, then, that community REDD+ interventions are only ever likely to be effective if these underlying problems are tackled.
Community PES and effectiveness

Considerations of effectiveness, especially in the context of community payments for ecosystem services (PES), need to move beyond carbon, to include improved livelihood opportunities and greater institutional and local governance capacity. The potential sustainability of a project should also be taken into account. And since community PES projects are part of a strategy to overcome some of the shortcomings of community forestry, it makes sense to assess the effectiveness of these projects in relation to the stated aims of community forestry in Cameroon, which are:

- to increase the participation of rural communities in forestry decision-making;
- to reduce poverty and increase the wellbeing of forest-dependent communities;
- to ensure the sustainable use of forests.

The idea of technical (carbon) effectiveness is closely connected to the last aim, because it is only through improved forest management that the rate of forest loss and emissions can be reduced.

Institutional effectiveness

New model for community forestry

The institutional capacity of the management entities (groups legally empowered to manage the community forest) and many other community groups was generally poor when the C-PES project started. It was never going to be possible for the project to strengthen these groups to a point where they were capable of sustaining the PES approach without external support (see the later section on ‘Prospects for sustainability’), especially as the development time frame was relatively short.

But although the governance capacity of the management entities is still not strong, our C-PES project has at least introduced a different – and potentially more effective – model of community forestry. This has provided an alternative to the model of logging, which has almost invariably failed to benefit a broad base of community members.

The C-PES project was a vehicle for securing community forest status for Nomedjoh and for revising the SMP for Nkolenyeng to enable that community to earn PES for forest management (see Policy Brief 1). The communities have the option to use PES payments for a wider range of community development activities that benefit more people.

Institutional benefits

Through monitoring the communities’ perceptions of local institutions, it is clear that community members consider the management entities to be more important now than they were at the start of the project.

In Nomedjoh, for example, people appear to value the management entity for the delivery of beneficial outcomes (through the C-PES project) and for the opportunities they are being given to identify and prioritise their livelihood needs.

This policy brief

This policy brief assesses the factors determining the effectiveness of community PES approaches in Cameroon, based on our experiences of developing the Community PES (C-PES) project.* We look at four dimensions of effectiveness, the first three of which are directly related to the stated aims of community forestry in Cameroon:

1. Institutional effectiveness – improved governance and participation in community forest management
2. Social effectiveness – greater livelihood diversification and resilience
3. Technical effectiveness – reduced rate of forest loss
4. Prospects for sustainability

We end by highlighting three areas of our C-PES project development process where we see room for improvement.

* The DFID AIRES code for the C-PES project is 113889-112.
Nevertheless, the greater breadth and depth of participation in community forest management in general has not always been evident in decisions on specific matters such as benefit-sharing and forest use (see Policy Brief 2). Inclusiveness will need to be repeatedly encouraged and reinforced.

**Recommendations**

- Donors and project developers should have realistic expectations about the prospects for strengthening institutional capacity over short time frames.
- Community PES projects should promote development activities and forest uses that benefit communities as a whole, and disadvantaged groups in particular.
- Community PES projects should work with women as much as possible and use participatory methods to strengthen participation in community forest management.

**Box 1 Project development activities for which participatory methods were used**

- Mapping and stratifying the community forests
- Measuring biomass
- Assessing forest resources and threats to forest cover
- Quantifying forest degradation risks and determining carbon baseline scenarios
- Defining project activities and measures to address the threats to forest cover
- Developing technical monitoring systems that will be applied by the communities themselves
- Understanding livelihoods, forest and non-forest sources of income, community activity calendars, and decision-making processes and structures
- Defining locally relevant livelihood and wellbeing indicators
- Developing socioeconomic baselines
- Developing PES management and benefit-sharing arrangements
- Agreeing civic projects to be funded using PES monies
- Prioritising NTFP income-generating activities for support
- Strengthening capacity to intensify agricultural production

---

**Greater community participation**

The C-PES project has been effective at involving a broader cross-section of community members in activities such as forest mapping and monitoring, biomass inventories and in various new agricultural and forest-related enterprises. Participatory methods were used intensively throughout the project development process (see Box 1) in order to:

- promote greater inclusiveness and representation of vulnerable and marginalised groups in decision-making;
- allow community members to understand the project goals and how other community members view and use their forest resources;
- give communities greater ownership and control over the development process;
- enhance individual and community skills and capacities in various project activities.

This suggests that institutional capital is being enhanced, even if this is only because of a perception that the management entity can have a greater impact on community wellbeing.

‘This is the first time a project has taken into account the needs of Baka people’

*Nomdjo community member*

There are also indications that community members feel they are benefiting from the improved agricultural production methods, income-generating activities, monitoring and record-keeping skills, and communal decision-making promoted by the C-PES project. If so, there could be a gradual shift towards these activities and away from livelihood practices that degrade forests. Eventually, new and more effective formal and informal rules, norms and processes (i.e. institutions) could come to shape patterns of behaviour in relation to the management and use of community forests.

The project has also enhanced the social capital of women by focusing on women’s groups and the potential gains women can make by working collectively to generate income. It has also incorporated women’s interests into decision-making through the management entities.
Social effectiveness

The C-PES project has shown that this approach can improve the livelihoods of participating communities – at least in the short-term. Some of the initiatives that have helped to diversify livelihoods and increase sources and levels of income include:

- A women’s agriculture group in Nomerdjoh growing improved maize and cassava varieties and using improved planting and management techniques for plantain production.
- The creation of nurseries in Nomerdjoh and Nkolenyeng for propagating improved varieties of cocoa and fruit trees, including African plum, avocado, lime, tangerine, orange, wild mango and moabi (*Baillonella toxisperma*).
- A cocoa agroforestry group in Nkolenyeng that has increased production and income by improving the cocoa stock, intercropping trees with fast-growing shade crops to create multi-layered, highly productive agroecosystems, introducing the cover crop *Brachiaria brizantha* to improve soil structure and fertility and reduce farm labour and maintenance costs, and using simple improved cocoa tree management techniques.
- A women’s cassava group in Nkolenyeng that has shared and planted improved cassava stock in their fields and are fetching higher prices for their cassava by selling it collectively.
- A women’s NTFP group in Nomerdjoh that has organised the harvest, safe storage and sale of moabi and mbalaka fruits later in the season when prices are higher. The women are using the income they receive to buy essential household items and to contribute to a revolving fund that will allow them to start new enterprise activities or invest more in existing ones.
- The introduction of beekeeping and honey marketing in both Nomerdjoh and Nkolenyeng.

As well as increasing incomes and agricultural productivity, these measures reduce the dependency of community members on wage labour in outside communities and increase their self-reliance. In the process, the sense of self-worth among traditionally disadvantaged groups improves.

Finally, the civic projects in the two communities (see Policy Brief 3) have helped to address specific livelihoods needs by providing access to clean water and electricity. These measures are likely to have positive impacts on health, women’s labour and time, and children’s education, although these will be difficult to quantify.

Recommendations

- Diversifying and improving agricultural production are good ways to increase income from community forests and directly address some of the major threats to forest cover.
- Improving community cocoa production is possibly the most effective means of retaining forest cover and boosting rural incomes.

Technical effectiveness

Identifying and addressing threats to forest cover

We used a participatory threat assessment process to identify and rank the threats to forest cover in both project communities. Both communities identified agricultural expansion as the most probable and significant threat to forest cover.

The aim when deciding on project activities was to address the threats in a way that would support and not undermine community livelihoods. This meant encouraging the communities to allow areas of degraded forest to regenerate by lengthening fallow cycles and retaining more forest cover when opening fields, rather than limiting the opening of new fields. It also meant improving cocoa agroforestry and agricultural production, as well as forest-dependent livelihood activities such as beekeeping and the collection, processing and marketing of valuable NTFPs such as moabi oil.

Three activity objectives were defined. The specific activities and measures to meet these objectives are set out in Box 2.
Objective 1: Reduce tree felling
Activity: Forest protection
Measures:
1. Forest reserve zoning, boundary marking
2. Patrolling, monitoring, recording, mapping deforestation and degradation
3. Community training about protection of forest reserve, awareness raising about process to address incursions

Activity: Sustainable forest use and management
Measures:
1. Enrichment planting and tree planting in old fallows, new fallows, cocoa farms, fields
2. Reopening abandoned fallows, lengthening fallow periods
3. Reduced fallow clearance and burning, retention of forest cover when opening new fields
4. Monitoring and mapping of agricultural expansion, approval process for agricultural expansion, controls on logging, controls on raphia/palm wine production and wild honey collection

Objective 2: Intensify agricultural production
Activity: Sustainable agriculture and agroforestry
Measures:
1. Improved agriculture – crop mixtures, multi-level cropping, new crops, green manure, improved tillage and plantain propagation, agricultural intensification/permaculture training
2. Improved cocoa production – pruning of dead/diseased branches, burying of diseased cocoa pods, planting new rootstock, grafting new higher-yielding/more disease-resistant varieties, more efficient/effective crop spraying, improved drying and storing techniques
3. Improved agroforestry – fruit trees, shade trees, nitrogen fixers (could be shade trees/bushes), community nurseries for citrus and forest trees

Objective 3: Reduce agricultural expansion
Activity: NTFP enterprises
Measures:
1. Beekeeping – training in hive construction, beekeeping techniques and marketing
2. Improved collection and marketing of existing forest products – moabi, mbalaka, wild mango

Potential for significant carbon benefits
Although the C-PES project prioritised livelihood benefits, it nevertheless has the potential to deliver significant and additional carbon benefits. The crediting period is 10 years, divided into two five-year periods. If performance matches the with-project scenario, the combined carbon benefits from both community forests are expected to be 23,021 tonnes carbon (tC) – equivalent to 84,412 tonnes CO₂ (tCO₂) – in the first five-year period to September 2015, and 81,456 tC (298,744 tCO₂) over 10 years. The expected carbon benefits from the two sites over the two five-year periods are shown in Table 1.

Three annual forest monitoring exercises have been carried out since PES activities started in September 2010. The results suggest both community forests are being managed more sustainably than they were before the introduction of PES activities. Agricultural expansion has been limited to less than 10 ha per annum in Nkolenyeng and less than 15 ha in Nomędjoh. New fields have been created by reopening fallows, rather than by clearing secondary and primary forest.

Recommendations
- Community PES projects should aim to address the threats to forest cover by supporting livelihoods.
- Agricultural expansion is a significant threat to community forests – community PES is an opportunity to address the complex challenge of food security, but there are no easy solutions.
- Although community forests are small, the potential for community REDD+ actions to generate significant potential carbon benefits should not be underestimated.
It is difficult to judge in the early stages of a project whether changes in the management and use of forest resources will endure. The following measures were put in place in an effort to try and build sustainability:

1. Strengthening institutional and governance capacity, social capital and livelihood opportunities.
2. Ensuring different land use options were discussed thoroughly as part of a participatory process, so that communities were empowered to make informed decisions about how to use and manage forest resources.
3. Promoting equitable benefit-sharing arrangements – because of our view that the sustainability of PES activities depends partly on whether they promote fair access to opportunities and benefits.

Monitoring changes in forest cover and livelihoods over the next three to five years will provide more clues as to the future ecological and social sustainability of the C-PES project activities. But even if the project does help to diversify livelihoods and institutionalise certain behaviours needed to adapt to changing circumstances, its sustainability will still depend on external policy and institutional conditions (see Policy Brief 3). The introduction of a centralised management entity in Nomedjoh has, in itself, been problematic because it disrupts the more diffuse nature of customary decision-making relating to natural resource use. In Nkolenyeng, customary decision-making also happened mainly at the household and family level, rather than at the community level. It remains to be seen whether the management entities have the local legitimacy to enforce the benefit-sharing arrangements and sustain the transparent governance practices established during the C-PES project.

### Prospects for sustainability

It is difficult to judge in the early stages of a project whether changes in the management and use of forest resources will endure. The following measures were put in place in an effort to try and build sustainability:

1. Strengthening institutional and governance capacity, social capital and livelihood opportunities.
2. Ensuring different land use options were discussed thoroughly as part of a participatory process, so that communities were empowered to make informed decisions about how to use and manage forest resources.
3. Promoting equitable benefit-sharing arrangements – because of our view that the sustainability of PES activities depends partly on whether they promote fair access to opportunities and benefits.

Monitoring changes in forest cover and livelihoods over the next three to five years will provide more clues as to the future ecological and social sustainability of the C-PES project activities. But even if the project does help to diversify livelihoods and institutionalise certain behaviours needed to adapt to changing circumstances, its sustainability will still depend on external policy and institutional conditions (see Policy Brief 3). The introduction of a centralised management entity in Nomedjoh has, in itself, been problematic because it disrupts the more diffuse nature of customary decision-making relating to natural resource use. In Nkolenyeng, customary decision-making also happened mainly at the household and family level, rather than at the community level. It remains to be seen whether the management entities have the local legitimacy to enforce the benefit-sharing arrangements and sustain the transparent governance practices established during the C-PES project.

### Need for external financial support

There have been some encouraging signs that the various community activity groups are adopting strategies to strengthen their own operational capacity, such as establishing revolving funds using their initial PES revenues. This bodes well for the sustainability of project activities and suggests that some groups have the potential to reduce their reliance on PES fairly quickly.

Nonetheless, all PES projects rely – at least for some time and to some extent – on external finance so they are able to continue making performance-based payments to communities, whether in kind or in cash.

Our original hope was that the project would move from using donor funding provided by DFID for developing and
testing the C-PES approach to a market-based approach to PES. Specifically, we hoped C-PES project activities would be sustained over the longer-term using revenues from the sale of Plan Vivo Certificates in voluntary carbon markets. The CED, the coordinating group for the C-PES project, decided not to pursue this option – at least until there is progress towards a national policy on the rights of communities to commercialise carbon and other ecosystem benefits in Cameroon (see Policy Brief 1).

This means an opportunity has been lost to develop the capacity and skills needed to engage with, and benefit from, voluntary markets for ecosystem services. And unless alternative sources of funding are found, CED will lack the resources it needs to continue supporting the livelihood and governance gains made by the C-PES project (see Policy Brief 3).

**Improving C-PES project development**

Our experiences have highlighted room for improvement in three particular areas of the C-PES project development process:

1. **Strengthening community institutional capacity.** Although we spent significant resources and time trying to strengthen institutional and governance capacity in the two project communities, we did not start the process early enough. We devoted too much time initially to the many technical tasks and to training community members to undertake these tasks, at the expense of institutional capacity building.

2. **Identifying collaborators.** Our project development process would have benefited from a concerted effort to identify local NGOs and resource personnel with relevant skills and experience and then defining ways to collaborate. We only came to learn of some of the many local NGOs and resource personnel operating in the vicinity of Nomedjoh, for example, when we were more than a year into the project. Project budgets and time frames have to be able to support this kind of collaboration.

3. **Monitoring changes in governance.** Throughout the project development process, we emphasised that PES is a performance-based approach. It can only succeed where there is effective monitoring. We put a lot of effort into developing and applying participatory technical (forest) and social (livelihoods) monitoring systems. We failed to recognise early enough the importance of monitoring changes in community forest governance and did not devise appropriate governance indicators.

‘We devoted too much time initially to the many technical tasks, at the expense of institutional capacity building’

---

**Recommendations**

- Community PES projects cannot ensure sustainability by building institutional and governance capacity and encouraging equitable benefit-sharing.

- Policymakers, donors and project developers should all recognise that the sustainability of community PES projects can be undermined by external policy and institutional factors that projects cannot control.

- Community PES projects need to engage with voluntary markets for ecosystem services or find alternative sources of funding for performance-based payments beyond donor funding.
Glossary

CAG  Community activity group
CBFF  Congo Basin Forest Fund
CED  Centre pour l’Environnement et le Développement
CIFOR  Center for International Forestry Research
COMIFAC  Central African Forests Commission
C-PES  Community Payments for Ecosystem Services (PES) Project (in Cameroon)
DFID  Department for International Development (UK)
FCPF  Forest Carbon Partnership Facility (of The World Bank)
GIS  Geographic Information Systems
IPCC  Intergovernmental Panel on Climate Change
MINAS  Ministère des Affaires Sociales (Ministry of Social Affairs)
MINFOF  Ministère des Forêts et de la Faune (Ministry of Forestry and Wildlife)
MRV  Monitoring, reporting and verification
NTFP  Non-timber forest products
PES  Payments for ecosystem services
REDD+  Reduced emissions from deforestation and forest degradation in developing countries. (The + sign attached to the end of the REDD acronym in 2009 expanded the scope to include the forest conservation, sustainable forest management and the enhancement of forests and forest carbon stocks in developing countries.)
R-PP  Readiness Preparation Proposal
SMP  Simple Management Plan
UNFCCC  United Nations Framework Convention on Climate Change

References

This policy brief is one of five briefs considering key themes and issues relating to reduced emissions from deforestation and forest degradation (REDD+) and to community approaches to payments for ecosystem services (PES). The briefs form one of the outputs from a pilot project in Cameroon, the Community PES Project (C-PES), which was funded by the UK Department for International Development (DFID) to coincide with the launch of the Congo Basin Forest Fund (CBFF).†

The project was developed between 2009 and 2012 by Bioclimate and the Centre pour l’Environnement et le Développement (CED). It tested an approach to community forest management by supporting two forest communities to earn PES for protecting their forests. Cameroon was chosen as the pilot country for the project approach because at the time it was the only Congo Basin country with a legal framework for recognising community forests.

These policy briefs, written by Rob Harley (Policy Briefs 1 and 5), Mike Riddell (Policy Briefs 2 and 3) and Willie McGhee (Policy Brief 4), are based on practical experiences and insights gained during and since the development of the C-PES project. We hope these insights are relevant to the ongoing development of policies on community forestry and REDD+ both in Cameroon and the wider Congo Basin region. Thanks are due to Dr Ed Mitchard and Dr Nicholas Berry for their input to Policy Brief 4. We also thank the quoted individuals who took time to discuss the lessons from the project, and Samuel Nnah Ndobe for facilitating these discussions. Adam Campbell served as overall editor for the series and Shirley Lochhead as the designer.

For more information on the issues raised in these briefs, please contact Bioclimate using the following details:

Contact: Mike Riddell, Bioclimate, Tower Mains Studios, 18B Liberton Brae, Edinburgh EH16 6AE, Scotland
Email: mike.riddell@brdt.org
Office: +44 (0)131 664 3700
Web: www.bioclimate.net

†This material has been funded by UK aid from the UK Government; however, the views expressed do not necessarily reflect the UK Government’s official policies.