

**Policy options for REDD benefit-sharing at the site level in Cambodia:
a conceptual overview and early recommendations for the
Seima Protection Forest Demonstration Project site**

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Acronyms used in the text

CCBA	Climate, Community and Biodiversity Alliance (also sometimes ‘CCB’)
CFMCs	Community Forestry Management Committees
CNRMCS	Commune Natural Resource Management Committees
FA	Forestry Administration
GDANCP	General Department for Administration of Nature Conservation and Protection
ICC	Indigenous Community Commissions
PES	Payment for Environmental Services
REDD	Reduced Emissions from avoided Deforestation and Degradation
SPF	Seima Protection Forest
TGC	Terra Global Capital
TWG F&E	Technical Working Group on Forestry and Environment
VCS	Verified Carbon Standard
WCS	Wildlife Conservation Society

Executive Summary

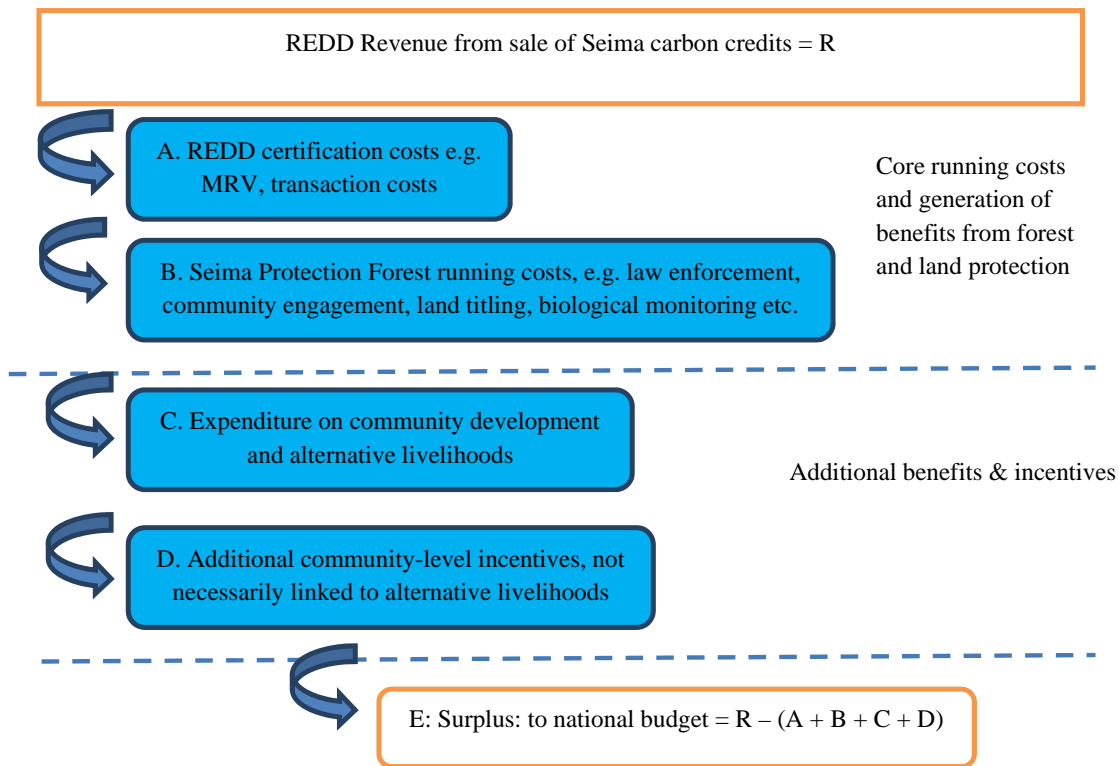
The purpose of this report is to examine and summarise international literature on benefit-sharing in REDD (Reduced Emissions from avoided Deforestation and Degradation) in order to develop a set of recommendations and ideas for the design of project-level benefit-sharing in the Seima Protection Forest (SPF) Core Area REDD Demonstration Project.

This report begins with a review of requirements and best practices specified by the Climate, Community and Biodiversity Alliance (CCBA) Standards. We then explore the emerging literature on REDD benefit sharing. Although there is little practical experience with REDD benefit-sharing to date, the literature does provide key insights and design principles derived from other sectors such as biodiversity conservation, community forestry and extractive industries.

Through the literature review, we define a set of five 'Key Areas' for design, to guide development of the benefit-sharing system in Seima, and potentially elsewhere. The key areas are: (1) Identification of key actors, institutions and stakeholder engagement processes; (2) Selection of benefit types and amounts; (3) Development of processes and rules for benefit distribution; (4) Provisions for transparency and accountability; and (5) Establishment of dispute settlement procedures. For each of these key design areas we make a set of recommendations that are specific to the SPF REDD project. These recommendations should serve as a starting point for discussion and review among key stakeholders.

To aid this discussion, the final section of the report reviews and compares two possible modalities for local-level benefit sharing, namely village-level services and household-level performance payments. In practice a combination of these two approaches will probably be required, alongside strong project implementation to clarify resource rights and establish and maintain forest boundaries.

The following diagram was developed to show the suggested hierarchy of expenditure categories for REDD revenues to the Seima project.



Recommendations

Key Area 1: Key actors and stakeholder engagement

Recommendation 1 - A site-level, multi-stakeholder benefit-sharing board should be created for oversight of benefit-sharing activities, with clear links to existing institutions.

Recommendation 2 - At least during the early years of the project, REDD revenue should not be channelled through the commune councils, or mainstreamed into the Commune Development Funds. This is because of the challenges associated with achieving equitable distribution, transparency and conditionality and also the problem of overlap with other mandates of the Commune Councils.

Local community stakeholders, participants and organisational structures

Recommendation 3 - members of the 20 participating villages should be considered as the main *legitimate beneficiaries* of REDD benefits from the project. If benefit-sharing is considered necessary beyond these 20 villages (e.g. to other villages in the same commune) it should be at a much lower level, to ensure that benefits are focused where they can have the greatest positive impacts on users of the target forest area and on forest management.

Recommendation 4 – Village level representative bodies or community-based organisations should govern benefit distribution within the village, as far as possible given their capacity and the needs for good financial governance.

Community participation in the design of benefit-sharing system

Recommendation 5 - Community consultation and consent, through village-level bodies and wider village discussions, will be required to decide upon appropriate benefit types and benefit distribution at the village level. As a result, some parts of the benefit-sharing arrangements may need to vary between villages, depending upon what is perceived to be fair, desirable and practicable.

Recommendation 6 - Community consultation, involving representatives from all 20 participating villages, will also occur at the 'project level' through the multi-stakeholder board (see above) in order to decide upon benefit distribution arrangements between villages.

Key Area 2: Benefit types and sizes

Recommendation 7 - The highest priority for use of REDD revenue at the site level should be to cover categories A and B in the diagram above (REDD administration and SPF core protection/community management activities). The next priority should be categories C and D (alternative livelihoods and other benefits/incentives). Beyond a defined maximum level of local benefits any surplus funds should be used for REDD-related activities elsewhere.

Recommendation 8 - Even at low revenue levels some proportion of funds should be spent on local benefits and incentives, both to show commitment to this goal and to allow for procedures to be tested.

Basis for setting the level of benefits

Recommendation 9 - Benefit-sharing calculations in SPF should not be based on the opportunity cost of foregoing categories of deforestation or logging that are clearly illegal. However, there should be fair consideration of legitimate opportunity costs, which are expected to be quite low.

Recommendation 10 - Benefit delivered to communities should be set at a level that people are collectively willing to accept. At a minimum, benefits will need to be valued enough by local communities to influence their behaviour and to be perceived as fair given the levels of funding available. Further analysis, consultation and negotiation will be required to assess what these levels are.

Recommendation 11 - Benefits should be delivered as a combination of different types, including strengthened resource rights, alternative livelihood projects, and additional bonus incentives (see Table). Input and ideas from villagers will be required, along with further analysis of livelihoods and local priorities, in order to make final decisions. Provisions for benefit types to be adjusted over time, if required, should also be made since the social context of the REDD project is rapidly evolving.

Table: Examples of likely benefit types to local community members from REDD in Seima

Category of REDD expenditure	Benefit type for communities
A. REDD implementation	N/A
B. Management of Seima Protection Forest	<ul style="list-style-type: none"> - Continued and secure access to natural resources, including non-timber forest resources such as resin, that may otherwise be destroyed - Secure and formal property rights to land and forest resources, such as indigenous communal land title - An equitable zoning and access system for communities with rights to use the SPF Core Zone - Improved forest quality in some areas - Employment in community-based patrolling and monitoring
C. Alternative livelihood projects	<ul style="list-style-type: none"> - Alternative livelihood benefits, e.g. livestock raising, vegetable gardens, savings groups and/or access to micro-finance for enterprise development - These benefits will most likely be administered through a 'community development fund' administered at the village or project level. Some benefits could be awarded at the household level though. - Increased community empowerment, capacity and organisation
D. Other benefits	<ul style="list-style-type: none"> - Additional incentives payments for 'conservation services' - This might be a bonus payment for exceptional performance, awarded to households or villages - Support for public services that are not 'alternative livelihoods' per se, for example road, health clinic, school, other infrastructure

Key Area 3: Benefit distribution rules

Recommendation 12– Social benefits derived from the protection and management of SPF will be considered as communal, and derived automatically from land-use planning and titling processes. However, careful attention to social inequalities and power relations during the participatory process will be required to ensure equitable outcomes.

Recommendation 13 – Benefits derived from local employment opportunities in project activities should be distributed as widely and fairly as possible (e.g. through a rotation system that includes all households), depending upon the skill, willingness, and performance of participants.

Recommendation 14- Full-scale benefit-sharing should ideally not occur in any village before an agreed forest boundary has been established and mapped, as a benchmark against which to assess performance. In highly dynamic areas, physical demarcation of the forest boundary is also desirable before benefit-sharing begins.

Recommendation 15- A set of benefit-sharing criteria will need to be developed in consultation with project stakeholders and local communities. A wide range of criteria should be considered including: village size and area; village performance in emissions reductions and conservation; village effort in project implementation; and village poverty levels. A list of potential criteria is provided in the text of the report.

Recommendation 16- Priority criteria which could form a starting point for the benefit allocation system could be: (i) Number of families in the village; and (ii) the degree to which villagers adhered to agreed forest boundaries. If forest clearing occurs that was beyond villagers' control (e.g. by outsiders) then special provisions may need to be made.

Key Area 4: Transparency and accountability

Recommendation 17- Processes and decisions for benefit-sharing within villages should be transparent and monitored or at least witnessed by either an external third party or by a representative of SPF management team. The village structures or community-based organisations that are engaged in the benefit-sharing should be accountable for decision-making about village-level benefit-sharing.

Recommendation 18- Transparency provisions should be established that include clear monitoring protocols (social and environmental); regular public reporting procedures from the village level up to higher levels; and an annual review that involves the Seima multi-stakeholder management committee, which should allow for discussion and adaptive management.

Recommendation 19- At the village level, benefit-sharing decisions and allocations must be presented periodically for feedback at village meetings. The local community-based organisations responsible for benefit-sharing (e.g. the ICCs) must be responsible for recording all financial transactions, and reporting these to the Seima multi-stakeholder management committee and villagers. These records should also be available to auditors, if necessary.

Key Area 5: Conflict resolution

Recommendation 20- Clear procedures for receiving complaints and resolving disputes must be established from the outset. A third party facilitator should be available to all parties and awareness-raising about the complaint or dispute settlement process will be required as part of village consultations.

1. Introduction

International payments for Reduced Emissions from avoided Deforestation and Degradation (REDD¹) are expected to generate substantial financial revenue for developing countries. The distribution and utilisation of these revenues, generally referred to as ‘benefit-sharing’, is now considered to be a core component of REDD design and implementation, as seen in the Readiness Preparation Proposals of the World Bank, National Program Documents of UN-REDD, and the growing consensus over the need for social safeguards within the United National Framework Convention on Climate Change (UNFCCC; PROFOR 2011; PwC 2012). Benefit-sharing can mean many things, but it essentially deals with how REDD revenues and costs are distributed, in what form, and to whom (Peskett 2011).

This report is about the design of a REDD benefit-sharing system for the Cambodian context, with special attention to the distribution of costs and benefits at the sub-national or site level. The report, commissioned through a small grant from the Cambodian UN-REDD program², has two main aims: (i) to establish conceptual foundations and design principles for REDD benefit-sharing in the Cambodian context, through a review of international literature and policy guidance; and (ii) to outline design options for benefit-sharing at one of Cambodia’s official REDD Demonstration Activities, the Seima Protection Forest (SPF) in Mondulkiri Province. The Seima REDD project is currently managed by the Royal Government of Cambodia’s Forestry Administration (FA), with technical and financial support from the Wildlife Conservation Society (WCS).

The report has three major components: an overview of literature and experience relevant to REDD benefit-sharing, including relevant international standards; a discussion of the Cambodian context; and the specific details of the SPF demonstration activity.

This report is conceptual in nature because it represents only ‘phase one’ of the design process for the REDD benefit-sharing system in Seima. Ultimate decision-making regarding the benefit-share system is the responsibility of the Royal Government of Cambodia but support from participating communities will be essential if the system is to work in the long-term, and to maintain the consent of these communities for the implementation of the project. Therefore it is important to get wide stakeholder input during the design stages. We expect that this report will be reviewed first by the Forestry Administration, followed by a broader participatory process that invites input from other project stakeholders, including local communities in Seima. Specific design decisions will then be made and implemented, in keeping with the national and international requirements outlined in the first section of this report. It is anticipated that this report will be useful for the development of REDD benefit-sharing in other parts of Cambodia, and perhaps elsewhere.

¹ For convenience we use the term REDD to include the broader and more recent concept of REDD+.

² The preparation of this report was funded by UNDP under Micro-Capital Agreement Project Number D0078446. It forms an element of the UN-REDD programme of support for Cambodia’s National REDD Readiness process. We acknowledge inputs from a number of government officials and other stakeholders. The opinions stated in this report are those of the authors alone.

2. REDD Benefit-sharing: An overview of international policy guidance

2.1 Benefit-sharing requirements and standards

REDD will eventually function under a global legal framework through the UNFCCC, but to date negotiations have produced very little practical guidance on the likely benefit-sharing requirements. Similarly, whilst various bilateral schemes are under development, none yet offers clear rules on this issue. Therefore the best guidance can be found in voluntary market standards. Since the SPF project will be validated against the Climate Community and Biodiversity (CCB) Alliance standard (CCBA 2008), this is especially relevant. Indeed, the CCB standards provide the only clearly defined rules and guidelines for benefit-sharing in REDD that are widely recognised around the world. Therefore, they serve as a key example of best practice, although the Cambodian national system will not itself be bound by exactly the same requirements.

The CCB standards give guidance on project processes and impacts under the headings: (i) general, (ii) climate, (iii) community and (iv) biodiversity. There is also a 'gold standard' category, which is optional but recognises exceptional performance beyond basic social and environmental goals (e.g. delivery of community benefits that are explicitly 'pro-poor').

The CCB requirements outlined in the 'general' and 'community' sections directly affect the design, implementation and monitoring of a benefit-sharing system. For example, the general provisions require:

- (i) Original conditions in the project site are described, including local communities and livelihoods.
- (ii) A 'baseline projection' is provided, which describes what is likely to happen in the project area if the project is not implemented, including likely land-use change and social conditions.
- (iii) Project goals and design are developed transparently; are fully documented; can be evaluated by an external evaluator; have sought community and other stakeholder input into design; minimise social risks; and deliver benefits beyond the life of the project.
- (iv) Best practices for project management are followed including: local stakeholder employment, worker rights, worker safety and a clear process for handling grievances.
- (v) The project is based on a 'solid legal framework' with appropriate contracts in place. Any disputes over property rights should be resolved, or there should be a process identified for their resolution in future.

In addition, the community provisions require:

- (i) The project delivers a net positive social impact.
- (ii) Project activities should at least 'do no harm' to the well-being of offsite stakeholders.
- (iii) Project proponents must develop a monitoring plan to quantify and document changes in social and economic well-being resulting from the project activities, for communities and other stakeholders.

Box 2 presents the relevant text from the CCB standards in full.

Box 2: Key text from the CCB standards that relates to benefit-sharing systems³

“Document and defend how communities and other stakeholders potentially affected by the project activities have been identified and have been involved in project design through **effective consultation**, particularly with a view to **optimizing community and stakeholder benefits**, respecting local customs and values and maintaining high conservation values. Project developers must document **stakeholder dialogues** and indicate if and how the project proposal was revised based on such input. A plan must be developed to continue communication and consultation between project managers and all community groups about the project and its impacts to facilitate **adaptive management** throughout the life of the project.” (G3, - Project Design and Goals, Indicator 8)

“Formalize a clear process for handling unresolved conflicts and grievances that arise during project planning and implementation. The project design must include a process for hearing, responding to and resolving community and other stakeholder grievances within a reasonable time period. This **grievance process** must be publicized to communities and other stakeholders and must be managed by a **third party or mediator** to prevent any conflict of interest. Project management must attempt to resolve all reasonable grievances raised, and provide a written response to grievances within 30 days. Grievances and project responses must be documented”. (G3, Indicator 10)

“Demonstrate that **financial mechanisms** adopted, including projected revenues from emissions reductions and other sources, are likely to provide an adequate flow of funds for project implementation and to achieve the anticipated climate, community and biodiversity benefits.” (G3, Indicator 11).

“Identify a single project proponent which is responsible for the project’s design and implementation. If multiple organizations or individuals are involved in the project’s development and implementation **the governance structure**, roles and responsibilities of each of the organizations or individuals involved must also be described.” (G4 – Management capacity and Best Practices, Indicator 1)

“Show that **people from the communities will be given an equal opportunity to fill all employment positions** (including management) if the job requirements are met. Project proponents must explain how employees will be selected for positions and where relevant, must indicate how local community members, including women and other potentially underrepresented groups, will be given a fair chance to fill positions for which they can be trained.” (G4, Indicator 4)

“Demonstrate that the project proponents have clear, uncontested title to the carbon rights, **or provide legal documentation demonstrating that the project is undertaken on behalf of the carbon owners with**

³ Many aspects of the CCB standards relate to benefit-sharing in some way, e.g. monitoring of baselines and impacts, documentation of project processes. The text in Box 2 is that considered *most relevant* to benefit-sharing system, but is by no means the *only* relevant text. Additional and ongoing reference to the CCB standards will be required.

their full consent. Where local or national conditions preclude clear title to the carbon rights at the time of validation against the Standards, the project proponents must provide evidence that their ownership of carbon rights is likely to be established before they enter into any transactions concerning the project's carbon assets." (G5 – Legal status and Property Rights, Indicator 6)

"The project must generate **net positive impacts on the social and economic well-being of communities** and ensure that costs and benefits are equitably shared among community members and constituent groups during the project lifetime" (CM1 – Net positive community impacts, Concept, p.25. See detailed indicators for this section.)

"Demonstrate that any barriers or risks that might prevent benefits going to poorer households have been identified and addressed in order to increase the probable flow of benefits to poorer households." (GL2- Exceptional community benefits, Indicator 2) [Optional].

"Describe the measures that will be taken to maintain and enhance the climate, community and biodiversity **benefits beyond the project lifetime.**" (G3, Indicator 7).

To summarise, REDD benefit-sharing that meets CCB standards must fulfil the following criteria:

- Financial flows provide an adequate flow of funds to cover project costs *and* deliver necessary social and environmental co-benefits.
- Benefits are equitably distributed at the community level, and ideally include pro-poor targeting.
- Design of the benefit-sharing mechanism is transparent and participatory.
- Benefits should result in net-positive improvement of socio-economic conditions, are not susceptible to erosion due to human or environmental risk, and will endure beyond the project life.
- Benefit-sharing systems are transparent and flexible, allowing for adjustment and feedback.
- A grievance process, managed by a third-party, is incorporated into the benefit sharing mechanism.
- Legal carbon ownership is clarified or treated explicitly, and linked to benefits where appropriate.

2.2 Definition, objectives and scope of benefit-sharing in REDD

Definition

A simple and general definition of REDD benefit-sharing is:

"agreements between stakeholders about the distribution of monetary benefits from the commercialisation of forest carbon" (IUCN 2010: 2).

Early thinking on REDD, such as that outlined in the Bali Action Plan of 2007, suggests that REDD payments at the international level will consist of "compensation for opportunity costs incurred plus a so-called REDD

rent or surplus”, to be paid to countries and project actors in developing countries (cited in IUCN 2010). However, nearly five years on from the Bali Action Plan, uncertainties in the global climate regime and fluctuating carbon prices have meant that REDD payments between countries have remained incipient. Furthermore, REDD transaction costs and opportunity costs may well turn out to be higher than initially assumed (Hansen et al. 2009; Ghazoul et al. 2010), which means that there may be relatively little REDD surplus or ‘rent’ leftover for distribution among actors after these costs have been covered. Thus, benefit-sharing in REDD is best considered broadly to refer to *the allocation of REDD revenues*, which can be used to cover the costs of project implementation, the provision of incentives or compensation payments, and additional REDD rent if applicable (Peskett 2011). The allocation of revenues or benefits will also need to account for the distribution of REDD costs, particularly local or community-level opportunity costs.

Objectives and scope of benefit-sharing

Benefit-sharing arrangements will need to achieve multiple objectives. For example, the IUCN identifies two major objectives for REDD benefit-sharing systems: first they must create adequate *incentives for action* to reduce emissions, and second they must ensure *broad support for* and *legitimacy* of the REDD mechanism (IUCN 2010). In a similar vein, PROFOR states that REDD payments should achieve multiple goals. They must:

“...act as financial incentives that will engender changes in behaviour and policy frameworks, spur the development of appropriate institutional arrangements and needed technologies, and motivate both national and international coordination to achieve REDD objectives” (PROFOR 2011: p.1).

Thus, benefit-sharing mechanisms must be devised with a broad range of social, political and economic factors in mind. Importantly, there is now a move away from conventional economics-based framings of REDD costs and benefits, which consider only financial aspects, to a more inclusive view that accounts for non-financial benefits such as rights and empowerment as well (Peskett 2011).

Another critical factor in the design of a successful benefit-sharing mechanism will be the role of local or ‘forest-dependent’ communities: they will need to subscribe to the idea of REDD and actively participate in its implementation in order to ensure success (Angelsen 2009; PROFOR 2011). The benefit-sharing system must therefore create reasons and motivations for long-term community cooperation and participation in order to make REDD successful. This can only be achieved if project implementers and policy-makers engage with the complexities of property relations and resource distribution on the ground (PROFOR 2011). For example, social and political analysis of REDD and PES at the local level is now revealing that property rights are frequently contested, legitimate beneficiaries can be hard to identify, and required changes in land-use can difficult to achieve due to political and policy-related factors (Hansen et al. 2009; Poffenberger 2009; Milne and Adams 2012). A properly designed and implemented benefit-sharing mechanism should

therefore ensure that social conflicts are avoided, marginalised or poor resource users are included, and legitimate institutions are developed and engaged.

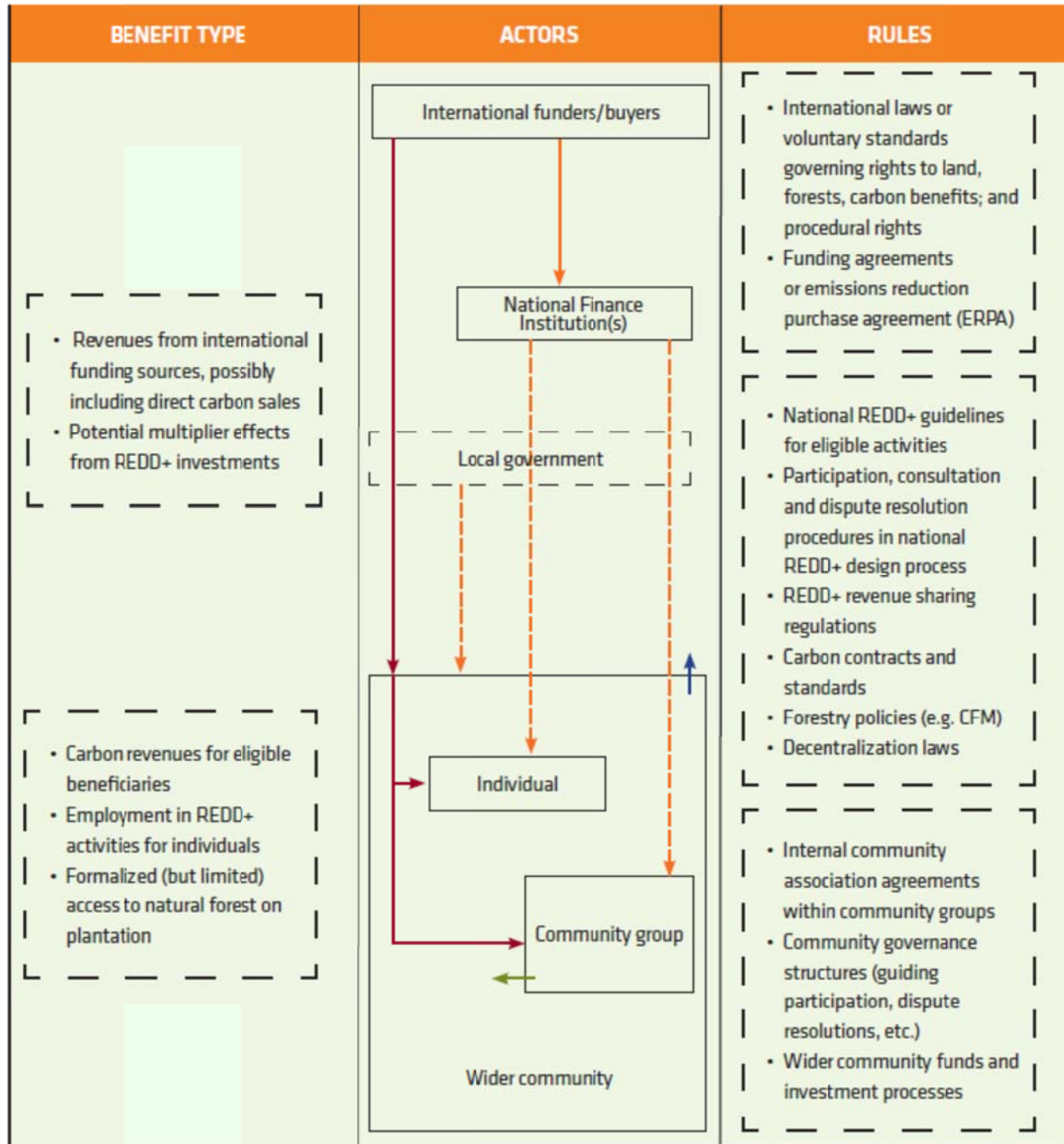
Key design considerations: actors, rules and benefit-types

A useful conceptual framework for the design of REDD benefit-sharing identifies three key 'variables' for consideration, which are (Peskett 2011):

- (i) *The actors* – those who receive benefits and manage the benefit-sharing system. The criteria for eligibility need to be defined. Actors involved in managing the benefit-sharing system may belong to a range of organisations at various scales.
- (ii) *The rules* – the institutions and regulations that govern *how benefits are shared*. This usually involves a contract of some kind, which should account for existing laws and rights around forest carbon. Benefit-sharing rules must determine whether payments are performance-based, market-driven, fund-based, or otherwise allocated. Issues relating to participation, transparency and monitoring are also considered here.
- (iii) *The type of benefit* - refers to *the form* in which benefits are delivered, whether cash or in-kind, communal or individual. The scheduling and timing of benefits is also considered here, along with issues of *scale*, i.e. whether benefits are rewarded on the basis of national, nested or project-based interventions (Parker, 2009).

Peskett's analysis of actors, rules and benefit types is comprehensive, and he summarises the possible relationships and flows between them in Figure 1 (presented below). In this figure, the arrows depict benefit flows (often financial). Orange arrows are 'national' REDD systems through governments, while red arrows are 'project' based systems through international actors direct to sub-national supplier. Green and blue arrows depict wider benefit-sharing (including distribution of costs and benefits) at the community level.

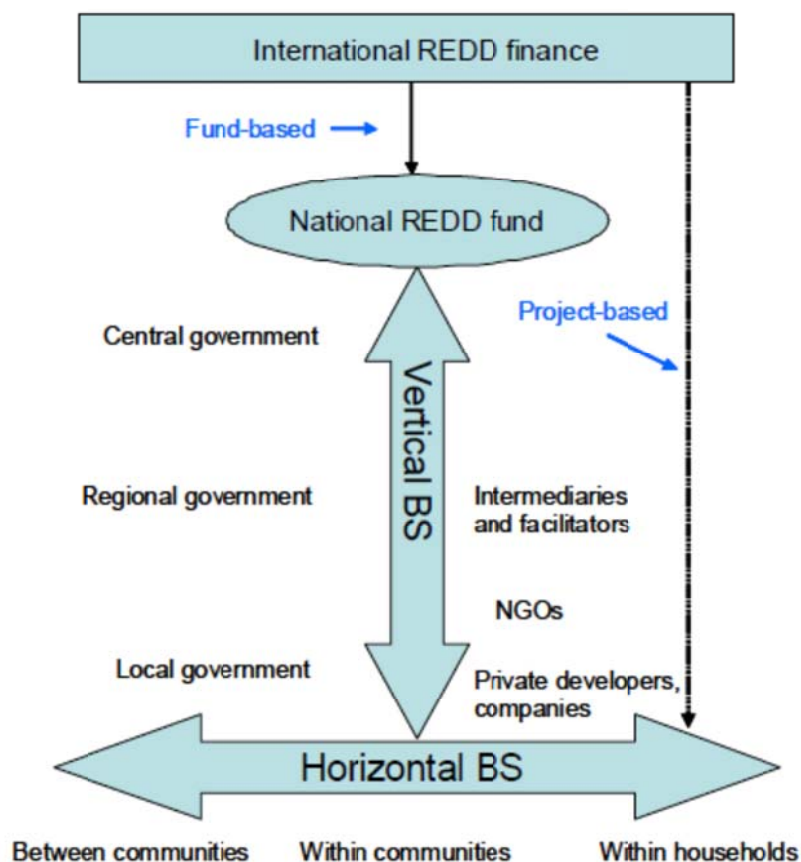
Fig 1: Actors, rules and benefit type (reproduced from Peskett 2011, p.13)



In considering the actors and rules involved in benefit sharing, there are two spatial dimensions to account for: (i) vertical benefit-sharing, which refers to how revenues are divided up between national and sub-national levels; and (ii) horizontal benefit-sharing, which refers to how benefits are shared among stakeholders at a given level, such as *within* and *between* communities (IUCN 2010). These dimensions are

illustrated below (Fig. 2). The focus in this report is on horizontal benefit-sharing mechanisms, but vertical benefit-sharing systems will need to be considered at a later date in a parallel study⁴.

Fig 2: Vertical and horizontal dimensions in benefit-sharing (reproduced from IUCN 2010, p.4)



Towards a broad consideration of benefit-sharing in REDD

Given the broad scope and diverse objectives of REDD benefit-sharing, it is now increasingly recognised that conventional or economics-based framings of REDD costs and benefits are too narrow (Peskett 2011). For example, until recently the ‘opportunity cost approach’ dominated thinking about the allocation of benefits from REDD (e.g. Grieg-Gran 2006; World Bank Institute 2011). This approach focuses on the idea of using REDD payments to compensate local actors for the opportunity costs (e.g. lost potential income) of foregoing forest clearing. However, this line of thinking raises a suite of questions about *who* should rightfully be compensated for reductions in forest clearing and by *how much*, especially in cases where deforestation is illegal or otherwise unsanctioned (Gregersen et al. 2010; Peskett 2011). The question of ‘how much’ is also complicated in areas where opportunity costs vary over landscapes and time, for example due to proximity of farmland to roads and fluctuating commodity prices respectively.

⁴ The parallel study will need to address how benefits are distributed at the national versus sub-national scale.

The idea of developing REDD on the basis of compensation for opportunity costs is also an issue where property rights are poorly defined, as it is necessary to distinguish or define legitimate 'rights-holders', whether they be legal or informal rights-holders. Unclear property rights can be managed in the short term through negotiation of local-level agreements and land use plans with local stakeholders (Milne and Niesten 2009), and in the long-term by facilitating formal land titling or other legal land-use instruments (see PROFOR 2011).

Another common economics-based approach is for REDD benefits to emulate Payments for Environmental Services (PES) schemes, where benefits are typically awarded as conditional payments that reflect the value of services provided (Wunder 2005), such as tonnes of carbon sequestered or emissions avoided. However, this approach is unlikely to work where revenue from the sale of carbon credits is low relative to other potential sources of income, and it suffers the same problems as the opportunity cost approach in cases where carbon rights are unclear, unjustly distributed, or contested.

Thus, in the emerging literature on REDD benefit-sharing, there is a move towards more 'hybrid' approaches that embrace broader goals and methods than those in purely economics-based models. For example, Costenbader (2011), in his review of policy options for national REDD benefit-sharing on behalf of UN-REDD and the Forest Carbon Partnership Facility argues that PES-based approaches to benefit-sharing represent just one of three main policy options, which may be combined or modified. The other two policy options for forest-related benefit sharing that Costenbader identifies are: (i) Participatory Forest Management, and (ii) Forest Concession Management (2011).

Overall, the trend is to consider how 'REDD revenue' is spent and allocated given both financial and non-financial concerns or priorities (IUCN 2010; Peskett 2011; PROFOR 2011). This view allows for a range of potential uses of REDD revenue, such as allocation of funds to cover project operating costs, which can include the costs of enforcement of rules and forest boundaries, provision of 'incentives to cooperate' for local actors, legal or policy reform, and the application of new technologies and effort for monitoring (PROFOR 2011). Similarly, REDD benefit-sharing can encompass investments in processes that aim to achieve *non-financial* benefits such as community empowerment, improved institutions, stronger resource rights, or livelihoods and development projects (Peskett 2011). On this basis, the brokering of REDD agreements with communities or individuals on the basis of their 'willingness to accept' incentives or benefits, given the legal context and the other realistic livelihood alternatives (e.g. see Ferraro 2001) is potentially a more valid conceptualisation of the contract or agreement involved, rather than negotiating payment amounts based upon opportunity costs or valuation of environmental services.

Finally, considering the above, it must be noted that any successful REDD benefit-sharing scheme will need to be accepted and recognised by all stakeholders. This will require processes of consultation and

participation to capture diverse stakeholder views and perspectives. Crucially, this process will need to recognise that ideas about what is 'fair' and acceptable will vary between stakeholders.

Summary of benefit-sharing definitions

- Benefit-sharing refers to the *allocation of REDD revenues*, which should in the first instance cover the costs of REDD, which generally include at a minimum project running costs, and transaction costs. The surplus can be distributed separately, if costs are covered.
- The three key 'design variables' for benefit-sharing that must be considered are *the actors, the rules and the type of benefit* involved.
- There are two key dimensions in benefit-sharing, *horizontal and vertical*. This report focuses on the horizontal benefit-sharing system for local project stakeholders. Building national support and legitimacy for the REDD mechanism will also require some degree of vertical benefit-sharing.
- Benefits should provide effective incentives for action at all scales. They can be *financial*, such as cash payments; or *non-financial*, including property rights and strengthened institutions, among other things.
- Benefits must ensure local actors' cooperation in REDD and deliver meaningful economic benefits. It is not strictly necessary to focus on compensation of opportunity costs in the broad sense, but in general local actors will need to perceive that REDD benefits exceed costs of participation (both financial and non-financial) and cover the opportunity costs of any foregone activities that they had a clear legal or customary right to conduct and for which no alternative has been provided.

2.3 Emerging design principles for REDD benefit-sharing

Research on PES, behavioural economics and related fields is beginning to reveal a relatively consistent set of design principles for REDD benefit-sharing. These principles are summarised in Table 1, below, which we use as a framework to structure the rest of this report. The categories in Table 1 are adapted from the design principles or key areas (KAs) for benefit-sharing identified by the IUCN (2010:7), and arranged around Peskett's framework for benefit-sharing design which considers actors, benefit types and rules (2011), with some key principles drawn from other recent reviews (Lindhjem et al. 2011; Mohammed 2011).

Table 1: Design framework: key areas for a well-functioning benefit-sharing system

BENEFIT-SHARING DESIGN FRAMEWORK		
	Key Area	Principle
ACTORS	1. Stakeholder engagement and institutions	<p>Stakeholders need to be carefully identified and engaged, and not just consulted. This will include deciding exactly who the beneficiaries are, as well as other stakeholders in government, NGOs, etc. We also include the identification and/or creation of the implementing institutions in this section.</p> <p>This implies a clearly defined process of engagement and participation. In relation to community-level stakeholders, Free Prior and Informed Consent (FPIC) may be required depending on the standards being followed.</p>
	2. Incentive design: Types and sizes of benefits	<p>The amount of incentive payments to these stakeholders, the timing and the form in which this payment takes place need to be decided.</p> <p>The scale, type and timing of benefits should be enough to motivate behaviour changes that reduce emissions. Benefits will ideally improve local livelihoods.</p>
RULES	3. Incentive design: Rules for benefit distribution	<p>Benefits should effectively motivate and incentivise local participation and there should be a clear link between the behaviour being incentivized and the main drivers of deforestation.</p> <p>Benefit distribution should ensure that ‘the poor’ or other groups are not harmed by the REDD scheme. This will require some consideration of the distribution of REDD costs as well. Special rules are needed where property rights are unclear or still under negotiation.</p>
	4. Transparency and accountability	<p>A mechanism which is trusted and has the necessary accountability provisions should be in place to disburse timely payments and safeguard against misappropriation of funds. Information about all transactions should be available in the public domain for scrutiny by civil society, government and private sector.</p>
	5. Dispute settlement	<p>Benefit sharing agreements should have clear dispute settlement mechanisms, should be flexible, and should allow for necessary changes based on experience.</p>

2.4 Lessons learned and key insights from the literature

There are few examples of REDD in practice that have been researched empirically, but relevant insights can be gained from research in: community forestry, community-based natural resource management, PES, integrated conservation and development projects, protected area management, the Clean Development Mechanism, and extractive industries such as mining and logging. For example, detailed studies have been conducted on how to share nature-based revenue among communities in protected areas (Emerton 2001; Adams and Infield 2003); how to deliver incentives or benefits to communities in the context of PES or direct

payments in developing countries (Milne and Niesten 2009; Clements et al. 2010; Sommerville et al. 2010); and how to address distributional and equity issues in relation to benefit sharing in community forestry and community-based natural resource management (Mahanty et al. 2006; McDermott and Schreckenber 2009).

Fortunately some preliminary attempts have already been made to gather ‘lessons learned’ for the purposes of designing REDD benefit-sharing (e.g. see IUCN 2010; Costenbader 2011; Lindhjem et al. 2011; Mohammed 2011; Peskett 2011; PwC 2012) so it is not necessary for us to conduct a comprehensive review of the vast primary literature. Instead, we start from a review of these earlier syntheses. The few early examples of actual benefit-sharing systems in REDD were also reviewed as part of this exercise, together with a selection of REDD-like schemes. These are summarised in Annex 1 and include: (i) REDD examples from Brazil, Vietnam and Nepal; and (ii) REDD-like examples from Eastern Africa, Brazil, Ecuador and Cambodia. The summary of cases in Annex 1 illustrates a variety of real-life design options for REDD benefit-sharing schemes. Selected findings with regard to good design are discussed below.

Key Area 1 – Stakeholder engagement, institutions and community participation

- *Building social acceptance for rules and an expectation that they will be enforced is fundamental to behaviour change.* The legitimacy of rules, and the social processes used to establish them, will be almost as important for achieving desired outcomes as the provision of incentives or benefits themselves (Vira 2001; Milne and Niesten 2009). Thus, community participation and stakeholder engagement will be fundamental components of the REDD scheme as a whole: that is, incentives alone will not be sufficient to avoid deforestation.
- *There is value in having people involved in setting their own rules.* Involvement of beneficiaries in rule-setting can increase local legitimacy and accountability and has been shown to be a key determinant in achieving sustainable management of resources (Ostrom 1990) and positive conservation outcomes (Persha et al. 2011). There is, however, a risk that such advantages may be lost through dominance of the process by elite groups and systems should be put in place to protect against this (Hickey and Mohan 2004).
- *A fund-based approach* (e.g. endowment or trust fund) with a central performance-based financing mechanism may provide more flexibility in delivering a range of benefit types in a range of locations, with relatively low transaction costs, compared to project-by-project or village-by-village performance-based benefit delivery systems (Cassola 2010; Caravani 2011; ICIMOD 2011).
- *A monitoring committee or multi-disciplinary expert team* may be needed to provide independent oversight of benefit distribution (e.g. monitoring, third-party conflict resolution, fund management). In Vietnam the body is government-housed but includes non-government actors, experts and community representatives (Pham Manh Cuong 2010).

- *A multi-stakeholder governance structure at the project (site) level* is likely to be needed to oversee benefit distribution to ensure transparency and fairness. In many cases, this occurs through a community-based organisation or representative body of some kind (ICIMOD 2011; Mwayafu and Kimbowa 2011).
- *A community level structure in each community* is likely to be needed to act as an intermediary, oversee the details of operation of the scheme and take operational decisions.

Key Area 2 – Benefit types

- *REDD benefits can take many forms.* For example, benefits can be distributed as communal ‘alternative livelihood’ projects implemented by development organisations; performance-based cash payments or rewards; revenues from direct sale of carbon credits at a project level; or as small grants or loans to community groups or individuals that are not necessarily performance-based but are administered through larger national funds, such as trust funds (e.g. Cassola 2010; Mwayafu and Kimbowa 2011).
- *REDD benefits can be delivered at many levels,* including household, sub-village (*krom* in Cambodia), village, commune, community and/or project levels. Benefit-sharing may involve a combination of benefit types shared at different levels.
- *Different benefit types will have different levels of effectiveness in terms of incentivising behaviour change.* Benefits that are only indirectly linked with performance provide little incentive for behaviour change (Engel et al. 2008) and may serve only to complement existing behaviour rather than providing substitutes (Ferraro 2001; Ferraro and Kiss 2002). Similarly, effectiveness has been shown to vary depending on how payments are structured, for example whether they are communally or individually provided (e.g. Travers et al. 2011). This in turn will have implications for other design considerations, such as increased transaction costs for individual contracts (Wunder 2007) or reduced potential for conditionality if benefits are provided in the form of social services that are difficult to withhold (Milne and Niesten 2009).
- *The frequency of benefit provision should align with opportunities to review performance and social impacts of the scheme, as well as people’s decisions to comply (e.g. agreement re-negotiation).* Where benefits are made conditional or performance-based, reward cycles should be timed to follow performance monitoring as it is considered unlikely to be appropriate to remove, due to poor performance, benefits that have already been provided. Likewise, scheduling of benefit provision should allow for opportunities for adaptive management through regular assessment of project performance against both biological and social objectives (Salafsky et al. 2001).

Key Area 3 – Rules of benefit distribution at the local level

- *The level of benefits should be sufficient to motivate changes in behaviour.* Failure to compensate beneficiaries adequately is likely to limit participation in the scheme to those individuals whose perceived costs of participation are low (Engel et al. 2008). In addition, a perverse result is that monetary benefits perceived to be insufficient can crowd out intrinsic motivation for cooperation due to non-financial incentives and so undermine existing levels of participation (Frey and Jegen 2001).
- *Benefit distribution among different stakeholders should be perceived as fair.* In behavioural economics, experimental participants have been repeatedly found to reject beneficial arrangements perceived as unfair (Fehr and Schmidt 2006). Similarly evidence from practice suggests that if benefit-sharing mechanisms are perceived as unfair they could lose legitimacy and therefore become ineffective (Sommerville et al. 2010). This becomes especially important in situations where opportunity costs are distributed unequally, introducing a trade-off between efficiency and fairness, or where free-riding (cheating) is too easy (Wunder 2007). *More positive outcomes may be achieved by paying people to do something, rather than paying them to not do something.* Rather than paying for avoided behaviours, benefits can be made contingent on services that are actively provided by beneficiaries, such as monitoring of forest cover (Skutsch et al. 2011) or the erection of boundary markers, which implicitly entail avoidance of the problematic behaviour. Such action-based approaches are potentially more cost-effective and offer greater certainty regarding the service received, but risk increasing uncertainty regarding the ultimate ecological outcomes (Sommerville et al. 2009). Thus monitoring of both behaviour change and environmental outcomes is necessary, and as a bonus this can help to test assumptions about the causal linkages between the two (Milne and Niesten 2009).
- *Benefits can be awarded according to a range of criteria,* depending upon performance, equity considerations, and in some cases a ‘pro-poor’ agenda (e.g. ICIMOD 2011). In practice, most schemes combine several criteria, tailored to the local context (see Annex 1). Most benefit-sharing systems are performance-based at some level (local, regional or national), and they often include special measures to *target benefits* for equitable and pro-poor outcomes. Targeting of benefits needs to be done transparently, and may be based on locally relevant criteria such as remoteness, percentage of indigenous people, local costs incurred as a result of REDD implementation and food security rates (ICIMOD 2011).

Key Area 4 – Transparency provisions

- *Transparent, participatory monitoring of impacts, performance and benefit distribution* is a vital component of adaptive management and is essential for improvement over time (Salafsky et al. 2001). Socio-economic monitoring should detect if any negative social impacts arise: for this reason

it is a necessary component of the CCB standards which require that no harm occurs to local communities and if possible pro-poor targeting of benefits occurs (CCBA 2008).

- *Flexibility is critical for evolution of the benefit-sharing mechanism.* The most effective benefit-sharing system will evolve over time - flexibility in institutions, processes and design of benefit types and distribution rules is critical to success (PROFOR 2011). Transparency promotes flexibility.
- *The CCBA standards describe one example of 'best practice' in terms of achieving transparent and adaptive project implementation (CCBA 2008).*
- *An independent body should be available to conduct regular monitoring, verification and auditing, to ensure transparency and accountability. To meet CCBA requirements this is mandatory, in the form of the formal, periodic 3rd-party verification audits. Other external audits (e.g. financial audits of fund dispersal) may also be useful to ensure good project management.*

Key Area 5 Dispute settlement

- *A grievance procedure of some kind is necessary, and communities should be aware that this process exists and how it can be accessed (CCBA 2008; Peskett 2011). To meet CCB requirements an independent third party should be available for mediation of any disputes that arise, for example a non-government organisation or local government body.*

3. REDD benefit-sharing in Cambodia

3.1 National context

Cambodia is working towards a 'nested approach' to REDD (Bradley 2011; Cambodia UN REDD National Programme 2011). This entails establishment of a national carbon accounting framework and monitoring system, under which emissions reductions at both the national and subnational level can generate tradable carbon credits (PwC 2012). In this approach the central government can receive (and disburse to other levels) REDD rewards paid through the international system for interventions such as policy reform and the increased effectiveness of state institutions; while in parallel local governments, communities, NGOs and/or private developers can earn direct revenues for their implementation of REDD activities at the sub-national level, through either the international, bilateral or voluntary markets. A national registry system ensures that emission reductions are not double-counted.

Implementation in Cambodia is now being led by a National REDD Task Force with the FA as Chair, the General Department for Administration of Nature Conservation and Protection (GDANCP) as Deputy Chair, and representation from many other government agencies. Of these, FA is the most directly relevant to benefit-share discussions for SPF, as it also holds the legal mandate to manage the site. However, key structural decisions relating to the benefit-sharing at SPF and in the national system will be taken at a higher level than the Task Force, within the Council of Ministers and taking inputs from, among others, the Ministry

of Economy and Finance (Keo Omaliss pers. comm.). No decisions of national scope have yet been taken. Below we describe specific guidance on benefit-sharing and carbon ownership that has been provided for the Oddar Meanchey REDD Demonstration site, which may set precedents for SPF⁵.

3.2 Benefit-sharing plans at the Oddar Meanchey REDD demonstration site

The Oddar Meanchey REDD project was initiated in 2008, as Cambodia's first REDD pilot, and it remains the only REDD Demonstration Site in Cambodia that is more advanced than Seima. The project is comprised of thirteen separate Community Forests, across a total of 64,318 hectares of forest (MacLeod 2011). It is jointly implemented by the FA and Pact, an international NGO, following both VCS (Verified Carbon Standard) and CCBA methodologies and standards. Other key stakeholders in the project are: the carbon developer and broker, Terra Global Capital (TGC); a local development NGO; community representative bodies known as Community Forestry Management Committees (CFMCs); and a project-level Community Forestry Network. It is anticipated that the first four years of revenues (credits already verified for 2008-2012) should cover all the project costs from the start of sales. After years five or six there should be a net surplus from carbon sales after project costs are covered, most of which will be distributed to communities (at least 50%). However, there are currently delays associated with the sale of carbon credits and additional donor financing may be necessary in order for the project to endure in the short term (Bradley, pers. comm.).

The main existing policy guidance from the Cambodian government on benefit-sharing is in Government Decision No. 699 (Council of Ministers, 2008), which refers to the Oddar Meanchey Demonstration project and stipulates that: (i) The FA is the seller of forest carbon from the site; and (ii) the revenue should go through the Technical Working Group on Forestry and Environment (TWG F&E) for the first five years⁶. The Decision also states specific uses of REDD revenue, which include: "improve forest quality"⁷; maximise benefits to local communities participating in the project⁸; and study additional REDD sites.

No detailed mechanism has been agreed to put these principles into practice. Pact and its project partners have produced a draft concept note, but this has not yet been formally considered by the Royal Government of Cambodia. The proposal is outlined in the Box below. While it has no official standing, this proposal is a useful illustration of the topics that need to be addressed and one way they could be dealt with.

It is not clear to what extent the benefit-sharing mechanism in Seima should harmonise with or replicate the mechanism that is eventually chosen in Oddar Meanchey. It may be advantageous to implement uniquely

⁵ Recent guidance from the Ministry of Environment (MoE) in Letter #1547, December 2011, may also be relevant. Further discussion on this matter is required.

⁶ It is unclear whether this 'first five years' starts from the outset of the project, or from the point of sale of carbon credits. This needs to be checked.

⁷ Assumed to mean forest restoration and assisted natural regeneration activities.

⁸ Hence the formal agreement between the FA and TGC that a minimum of 50% of "net income" from REDD will go to "local communities".

designed and separate mechanisms for each site, in order to test different models, enhance opportunities to learn from comparative insights and take account of site differences. On the other hand, some coordination and harmonisation will be required for dealing with REDD revenues at the national level, e.g. through the FA and TWG F&E. Further discussion is required with the FA, donors, verifiers, and project implementers.

Box: Elements of an unofficial proposed benefit-sharing system for the Oddar Meanchey REDD site

- Benefit-sharing is considered to encompass not only financial benefits, but also social and environmental benefits, e.g. employment, community empowerment, and forest protection.
- Communities could be given the option to have their REDD funds distributed through the Commune Council, but the main institutions involved are proposed to be the **Community Forestry Management Committees**, which report to the FA.
- REDD funds (from the buyer) will be handled by the **TWG F&E Secretariat** and then transferred to project implementing partners and the FA Cantonment (i.e. provincial) office in Oddar Meanchey. To fulfil this function, which includes monitoring and reporting, it has been proposed that 5% of the REDD revenue will be kept by the TWG F&E and FA to cover administration costs.
- The TWG F&E will transfer REDD implementation funds to provincial level, to two separate parties, which will fulfil discrete functions. These are: (i) the **FA Cantonment**, which will use funds to implement forest management and protection; and (ii) the **Implementing Partner** (ie Pact), to fulfil its provincial-level project management functions such as capacity-building. Reporting and accountability will be required on a quarterly basis from both of these parties to the TWG F&E. In addition, the TWG F&E will issue sub-grants direct to local partners, mainly local NGOs, for activities such as forest patrolling and tree planting. This may require a new staff member or 'contact point' within the FA to ensure that capacity and systems are in place for management of small grants.
- After the above project costs are covered, then **net income** can be distributed. As per Government Decision No. 699, at least half of this will go to local communities for community development, and remaining portions will go to the FA for new project development and 'forest improvement'.
- Community development benefits will be delivered through a proposed **small grants mechanism**, using criteria as yet undecided. The CFMCs will be eligible to apply for funds. A **provincial-level committee** will evaluate proposals and oversee benefit distribution. Funds must be distributed equitably between the 13 communities, based on criteria that will be developed by the committee in consultation with communities (e.g. population size, area protected, performance).
- A range of benefit types and distribution mechanisms could be tested in parallel across the 13 sites to identify the best. For example, at one site there is an established and effective micro-finance institution which could be used to REDD channel benefits.
- Benefit-sharing will be reviewed annually through a **Provincial Review Meeting**; and there will be a **Complaints and grievances** policy put in place.

- The TWG F&E may consider establishing an **endowment fund** to finance protection measures after the project is completed and so provide buyers with an assurance that emissions reductions can be classed as permanent.

3.3 Relevant experience from other sectors and projects in Cambodia

Insights on benefit-sharing in Community Forestry, Community-based Natural Resource Management and PES-like schemes in the Cambodian context are increasingly available through recent research, e.g. from the Learning Institute, the Cambodian Development Resource Institute, and recent PhDs by individuals. Some key insights from this body of research are outlined below.

Insights from the Central Cardamoms Protected Forest

In the Cardamom Mountains, a REDD-like scheme was implemented in which communities received incentives and benefits in exchange for their efforts to stop forest clearing, with extra measures for biodiversity conservation focusing on protection of rare species like Siamese crocodile (*Crocodylus siamensis*) and Asian Arowana (*Scleropages formosus*). This scheme entailed a set of Conservation Agreements at the commune level, negotiated through the Commune Councils and Commune Natural Resource Management Committees (CNRMCs), with support from Conservation International and the Forestry Administration. Through these agreements, benefit packages were provided at the *commune level*. The monetary value of the benefit packages was equivalent to the opportunity costs of avoided deforestation and conservation, although opportunity costs were only roughly estimated. The benefit packages were not provided in cash form. Rather, the CNRMCs, in consultation with local villagers, chose to spend the sum money on *in kind communal benefits*, for example assistance with ploughing old paddy fields, purchase of mechanical mules and buffalo. Other components of the benefit packages were spent on wages for community patrolling.

Research about the socio-economic impacts of the conservation agreements, including the distribution of benefits, has produced a number of lessons learned (Milne 2007; Milne 2009; Milne and Ouk 2012). In particular that:

- (i) *Benefit distribution and equity depend to some extent on the benefit type.* This means that some benefit types are harder to share than others. For example, it is difficult to share equitably twelve head of water buffalo between sixty families. In the Cardamom Mountains, this benefit type ended up privileging families with more land and labour availability, and was susceptible to elite capture. On the other hand, it is easy to share cash payments or wages for patrolling more equitably between households, e.g. every household receives the same amount through a rotations system. The use of

cash bonus payments can be helpful in communes that are socially diverse and less communally inclined, but it is hard to target these payments for ‘the poor’ without creating conflict.

- (ii) *Distribution of costs and benefits within communes can be uneven.* That is, when benefits are delivered for the purposes of compensation of opportunity costs *at the commune level* there can be ‘mismatches’ in space and time, which either reproduce local social inequalities or exacerbate them. For example, benefit packages spent on agricultural intensification were captured by those who were already better off and less reliant on shifting agriculture; while poorer families were left with less compensation for the costs that they bore associated with reduced deforestation (Milne and Ouk 2012). In such circumstances, special measures may be required to target the ‘very poor’ families, who often live far from the village centre and find it hard to attend project meetings and make the most of benefits provided.

Insights from the Northern Plains

In the Northern Plains of Preah Vihear province, WCS, in collaboration with GDANCP and FA, have been implementing three PES schemes since 2002: an eco-tourism initiative that rewards participating villages for birds seen by visiting tourists; an agri-environmental scheme that links farmers, who have signed no-hunting agreements, to a local organisation that markets their rice as a wildlife-friendly product; and a scheme where individuals are contracted directly to protect birds’ nests and are rewarded for successful fledging (Clements et al. 2010). These schemes vary in institutional complexity, conditionality and efficiency (measured as the percentage of benefits received locally), and illustrate different options for how benefits could be delivered as part of the REDD project in Seima (see table on p.1289 in Clements et al. 2010). Below, in Table 2, we evaluate these PES schemes within the framework of the five ‘Key Areas’ for benefit-sharing design identified above (see table 1, p.11).

Table 2: Three PES schemes evaluated within the framework of the six key areas for benefit-sharing

Key Area	Community-based eco-tourism	Agri-environment payments	Bird nest protection
KA1: Stakeholder engagement	<ul style="list-style-type: none"> • scheme developed through extensive participation of local communities • creation of elected committees to manage benefits • locally developed rule-setting • income managed and disbursed by elected village level committees • committees assess compliance, with checks by WCS 	<ul style="list-style-type: none"> • scheme developed through extensive participation of local communities • local association created to link village organisation to national market centres • participation in scheme voluntary • locally developed rule-setting • income managed and disbursed by village land-use management committees • committees assess compliance, with checks by WCS 	<ul style="list-style-type: none"> • payment rate set after consultation at the village level • participation in scheme voluntary, individual • direct contracts with individuals • WCS staff assess compliance and make payments

	<ul style="list-style-type: none"> • some payments made direct to individuals (e.g. for services in village, shop traders) 	<ul style="list-style-type: none"> • profits disbursed to farmers once committee costs have been covered 	
KA2: Incentive design – benefit type	<ul style="list-style-type: none"> • part-time/temporary job opportunities • payments also made into communal fund and used for village development projects decided by committee in consultation with village • provision of training for wildlife guides 	<ul style="list-style-type: none"> • premium payments for wildlife friendly rice to producer families • premiums set on market value, not opportunity costs of forgone illegal encroachment • provision of start-up capital and training in agricultural techniques 	<ul style="list-style-type: none"> • individuals paid \$5 for reporting nests, \$1/day to guard nests and a further \$1/day for time spent guarding nest if chicks successfully fledge • if chicks can be proved to have died through natural causes, the full rate of \$2/day is paid
KA3: Incentive design - rules	<ul style="list-style-type: none"> • rules enforced and monitored at multiple levels by different stakeholders • payments contingent on a full or sub-set of rare birds being seen • village participation in scheme conditional on cessation of hunting of key species & abiding with land-use plan 	<ul style="list-style-type: none"> • rules enforced and monitored at multiple levels by different stakeholders • payments to individual farmers contingent on compliance with village land-use plans and no-hunting agreements 	<ul style="list-style-type: none"> • individual compliance with agreement monitored regularly by WCS and village rangers
KA4: Transparency provisions	<ul style="list-style-type: none"> • all financial transactions recorded and checked by committee, commune chief and NGO when necessary. • regular financial reporting to commune council and park management (FA) • annual presentation to village on revenue, expenses and payment distribution • public identification of beneficiaries by committee for agreement from village members 		<ul style="list-style-type: none"> • no specific transparency provisions
KA5: Dispute settlement	<ul style="list-style-type: none"> • dispute settlement managed at multiple levels, first locally and then by external organisations if still required 		<ul style="list-style-type: none"> • dispute settlement between WCS and individuals

The bird nest protection scheme has the simplest institutional arrangement of the three, using direct contracts between the individuals participating in the scheme and WCS. This scheme has been very successful, protecting over 1000 individual nests during the period 2002-2008, and makes efficient use of funds, with 71-78% of project costs ending up in the hands of local beneficiaries. In addition, the set up costs for the project were low. The project is not without issues, however. Villages where the scheme has been implemented regularly accept in-migrant families, who have been observed clearing key nesting sites (Clements et al. 2010). Payments are also widely perceived to be unfair as only a few individuals are able to benefit from the scheme.

Both the community-based eco-tourism and agri-environment payment schemes have significantly more complex institutional arrangements, and hence require greater investment to set up and are less efficient in the disbursement of benefits. They do, however, provide a wider array of benefits to participating villages, and the institutional arrangements allow for redundancy and reinforcement of the different stakeholders

(e.g. enforcement of rule compliance is handled at multiple levels). The rules for these two schemes were developed locally, ensuring wider support and acceptance by participating villages. As with the bird nest protection, the eco-tourism scheme only directly benefits a small proportion of households within a village because the number of tourists is small and so the total quantity of direct services is also small, but payments to the communally managed fund mean that many more people benefit from investment in village development projects. Of the three schemes, the agri-environment payments have the potential to directly benefit the most people, since total demand is higher and almost all families produce marketable rice. Since its inception the rate of participation has increased significantly and is projected to rise further (A. John, pers. comm.).

4. Design options for the Seima Protection Forest REDD demonstration site

Throughout this section we provide a series of highlighted recommendations for design of the SPF system. These can also be found collected in the Executive Summary.

4.1 Project area description and overview of drivers of deforestation

The Seima Protection Forest is a 2927 kms² reserve in eastern Cambodia, managed by the FA. The Core Protection Area ('Core Area') of this reserve covers 1880 km² in Mondulkiri province, and this area forms the REDD crediting area. REDD project implementation activities will focus on this area, and will broadly consist of: (i) protected forest management, including law enforcement; (ii) community engagement, especially for land-use planning, registration of indigenous communal land titles and alternative livelihoods support, to ensure that local resource-use is sustainable and secures social benefits; and (iii) systematic monitoring of activities, forest and biodiversity status, and socio-economic impacts (FA & WCS 2011; FA & WCS 2011a).

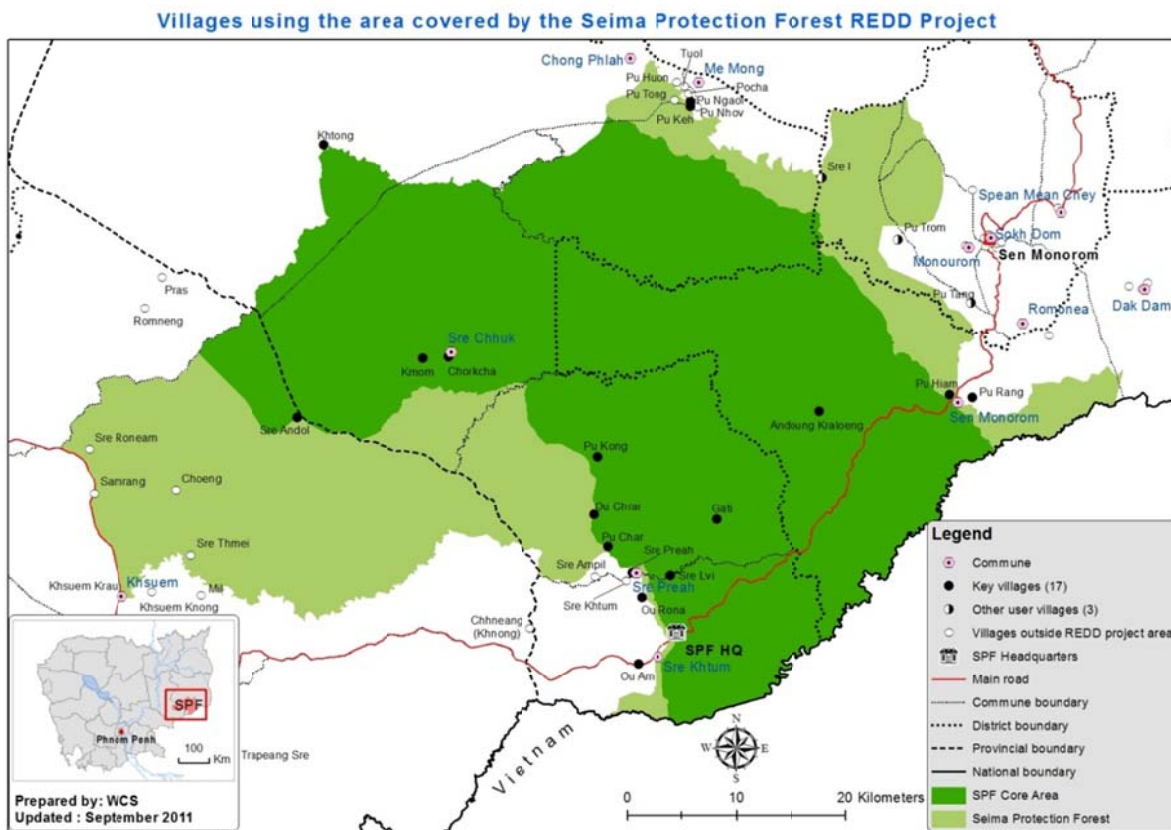
Illegal deforestation by smallholder farmers is the dominant cause of historical and projected forest loss in the SPF Core Area⁹, and this is caused by a variety of direct and indirect drivers. In remote areas of the reserve with limited road access, villages are more ethnically homogenous, most identifying as Bunong. Here, livelihood activities are dominated by mixed agriculture of rice and other crops and collection of non-timber forest products, mainly resin, and deforestation has been relatively low until now. Where road access is better, villages are increasingly of mixed ethnic composition, due to in-migration by Khmer farmers from other provinces of Cambodia. In these areas, agriculture is increasingly focused on the production of commodities for market, such as cassava, rubber and cashew nuts (although the latter is losing popularity given higher profitability of the former two). In these more accessible areas, deforestation rates have increased and 'business as usual' entails relatively little compliance with rules and laws, on the basis that they are only weakly enforced.

⁹ Clearance for large-scale agro-industrial concessions is also a potential threat that is being addressed during project design but for technical reasons no creditable emissions reductions can be demonstrated for controlling the threat.

Due to limited past investments and rapid rates of change, land ownership and forest boundaries are poorly delineated in many parts of the SPF. To remedy this, there are ongoing efforts to establish indigenous communal land titles, land-use maps and plans, and systems of regulations for legal access to forest resources. These efforts form part of the SPF REDD project activities, under the rationale that clarification of resource rights will help to stabilise the forest frontier and therefore reduce illegal or unplanned deforestation, while also securing benefits for local communities.

An analysis of legitimate and customary resource-use in the REDD area, including farming activities and collection of timber and non-timber forest products, has been conducted in order to identify local community stakeholders and REDD beneficiaries. 20 target villages were identified (see Fig. 1 below). The ‘village types’ presented in Fig. 3 are discussed further below.

Fig. 3 – Map of Seima Protection Forest, REDD project area



4.2 Key Area 1: Key actors and stakeholder engagement

Existing stakeholders for the Seima REDD project are described in Table 3.

Table 3- Description of stakeholders and implementing agencies for the Seima REDD project

Actor or agency	Name and role
Key implementing agencies	<p>Forestry Administration - the official site manager for SPF, chair of the National REDD Taskforce, owner of forest carbon in the Permanent Forest Estate. Project implementation will go through the Department of Wildlife and Biodiversity (DWB) with cooperation of FA Cantonments.</p> <p>Wildlife Conservation Society - technical and financial support to the Seima project.</p> <p>Local NGOs: Cambodian Rural Development Team, implementing livelihoods support; and others for support on the Indigenous Communal Land Title process, e.g. Community Legal Education Centre.</p> <p>Technical Working Group on Forestry and Environment – potential involvement in administration of carbon credit sales and funds / financial flows.</p>
Key local stakeholders	<p>Villagers and households within participating communities (20 villages)</p> <p>Other resource users, not directly participating in REDD or residing in the project area, but potentially affected by restrictions/benefits.</p> <p>Local authorities: provincial government, district governments, commune councils</p> <p>Line agencies: all line agencies, especially Ministry of Land Management Urban Planning and Construction at national and district levels in relation to land titling and mapping work; also Royal Cambodian Armed Forces, as they work in collaboration with the Forestry Administration on law enforcement activities.</p>
Carbon market actors	<p>Private sector, as potential buyers of carbon credits.</p> <p>Verifiers and auditors – necessary to meet CCB standards.</p> <p>Carbon brokers to arrange sale of credits at international level.</p>
Donors	<p>Bilateral and multilateral agencies, e.g. UN-REDD and JICA that have supported or may support the project in its start-up phase.</p> <p>Private foundations, other philanthropic sources.</p>

While the implementation of REDD benefit-sharing at the site level should be led by FA there are other stakeholders who need to be involved to ensure smooth, transparent and effective implementation. Therefore we believe a new institution will probably be required in addition to those listed in the table.

Recommendation - A site-level, multi-stakeholder benefit-sharing board should be created for oversight of benefit-sharing activities, with clear links to existing institutions.

We suggest that this board is housed within the SPF management structure and chaired by a senior member of FA. It should include adequate community and civil society representation, alongside SPF staff; and it should have clear and transparent governance procedures. This board will also require a connection to

relevant structures at the national level (e.g. the TWG F&E). It may also be appropriate to appoint an independent monitor and auditor, perhaps also connected to the TWG F&E¹⁰.

We believe that existing local government structures, in particular the commune councils, may lack the capacity and transparency required to handle large and complex REDD fund transfers from central government to villages and households. This issue is compounded by the fact that the SPF spans a number of districts and communes, which would make benefit-sharing through these structures administratively messy. Other reasons not to channel REDD benefits through the commune councils are that: (i) commune councils can be easily influenced by party political dynamics, which REDD benefit flows should ideally avoid; and (ii) by separating REDD benefits from normal Commune Development Funds, it will be easier to make explicit links between the benefits and conservation performance, so conditionalities and performance-based rewards may be implemented.

Recommendation - At least during the early years of the project, REDD revenue should not be channelled through the commune councils, or mainstreamed into the Commune Development Funds. This is because of the challenges associated with achieving equitable distribution, transparency and conditionality and also the problem of overlap with other mandates of the Commune Councils.

Local community stakeholders, participants and organisational structures

It is essential to define who the 'legitimate beneficiaries' are and the processes and criteria by which they have been identified (Peskett 2011). This is particularly important if some deforestation is illegal. A further complication in the context of Seima is that of migrant families moving into the area, often in association with forest clearing, logging and land grabbing. Managing and eventually preventing the influx of people is a key goal of the project. Migrant families (current and future) are project stakeholders in a broad sense, but arguably they do not have any legitimate claim to be project beneficiaries.

There are 17 villages that have legitimate farmland and residential land within the Core Protection Area and these have been defined as 'key villages' for the REDD project. In addition, there are three 'other user villages' that have no land inside but do have significant traditional use of forest resources in the Core Area. Thus, there are 20 'participating villages' in total that should be extensively and collectively involved in project activities. The village unit is the most appropriate level of social organisation for this purpose, because it is already the primary traditional and administrative structure.

A small number of families from each of 15-20 other villages in north-east Cambodia also regularly use the core area for legitimate reasons (mainly resin tapping), and their individual traditional rights will be protected in the same way as for members of the 20 participating villages, but the communities they come

¹⁰ For example, this function could be fulfilled by a national multi-stakeholder advisory committee, which may also oversee other REDD projects. This subject will be addressed in the subsequent study on vertical benefit-sharing.

from are not considered to have a legitimate collective claim to being traditional users of the SPF Core Area and hence they have a much lower level of involvement in decision-making or management.

Recommendation- members of the 20 participating villages should be considered as the main *legitimate beneficiaries* of REDD benefits from the project. If benefit-sharing is considered necessary beyond these 20 villages (e.g. to other villages in the same commune) it should be at a much lower level, to ensure that benefits are focused where they can have the greatest positive impacts on users of the target forest area and on forest management.

Many of the 20 villages have been engaged in conservation project activities for some years, mainly through the indigenous communal title and land-use planning processes (see Evans et al. 2012). These interventions have enabled the drafting of community-use zones for the SPF, codification of use-rights for forest resources, and creation of village-level representative bodies. Together, these activities lay the foundation for REDD implementation. Extensive community consultations have already been held in regard to the main REDD interventions, building on long-term prior community engagement. These activities have formed the relationships and laid the groundwork for obtaining Free Prior and Informed Consent (FPIC) for the project design in order to meet CCBA requirements (FA & WCS 2011). The community engagement provisions have been described in a 'Community Consultation Framework', which is currently being reviewed by the FA (ibid).

Once benefits are allocated to the village, an intra-village distribution and decision-making process will be required to ensure equitable and transparent delivery of benefits communally or among households. This process will most likely be managed or facilitated by a village representative group. It could occur through another process, such as through traditional village elders or through government and NGO structures, but these approaches may suffer from lack of community buy-in and transparency.

Recommendation – Village level representative bodies or community-based organisations should govern benefit distribution within the village, as far as possible given their capacity and the needs for good financial governance.

Annex 2 provides a list of the 20 participating villages, with some description of their population and ethnicity. The village-level structures in these communities form a basis for REDD project implementation, including decision-making about benefit-sharing arrangements. Where applicable, the ICCs can serve as the local representative bodies for REDD implementation. In villages where ICCs do not yet exist and are not expected to be formed, local representative structures will need to be created, ideally based on existing structures (e.g. village development committees). The formation of representative bodies at the village level usually requires a democratic election. Wide experience already exists with this in Cambodia, and committee election techniques are described for example in the Participatory Land Use Planning manual (Rock 2000). If not implemented carefully, local committees can become influenced in party politics, or they

can be subverted by elite interests (Milne and Adams 2012), so care must be taken to ensure equitable and transparent community participation, with strong prior awareness-raising efforts. This will be challenging in villages with mixed ethnicity, and where there are many recent migrants, but not impossible.

Community participation in the design of benefit-sharing system

Consultations will be required in relation to benefit-sharing arrangements and livelihoods support programs. These form part of the CCBA requirement for Free, Prior and Informed consent for the project. Community members and their representatives should be involved in deciding what is equitable, as perceived fairness is important (Sommerville et al. 2010), and they can also have a say in what balance of community-level versus household benefits they get, as well as the ratio of cash versus in-kind benefits.

Recommendation - Community consultation and consent, through village-level bodies and wider village discussions, will be required to decide upon appropriate benefit types and benefit distribution at the village level. As a result, some parts of the benefit-sharing arrangements may need to vary between villages, depending upon what is perceived to be fair, desirable and practicable.

Recommendation - Community consultation, involving representatives from all 20 participating villages, will also occur at the 'project level' through the multi-stakeholder board (see above) in order to decide upon benefit distribution arrangements between villages.

4.3 Key Area 2: Benefit types and sizes

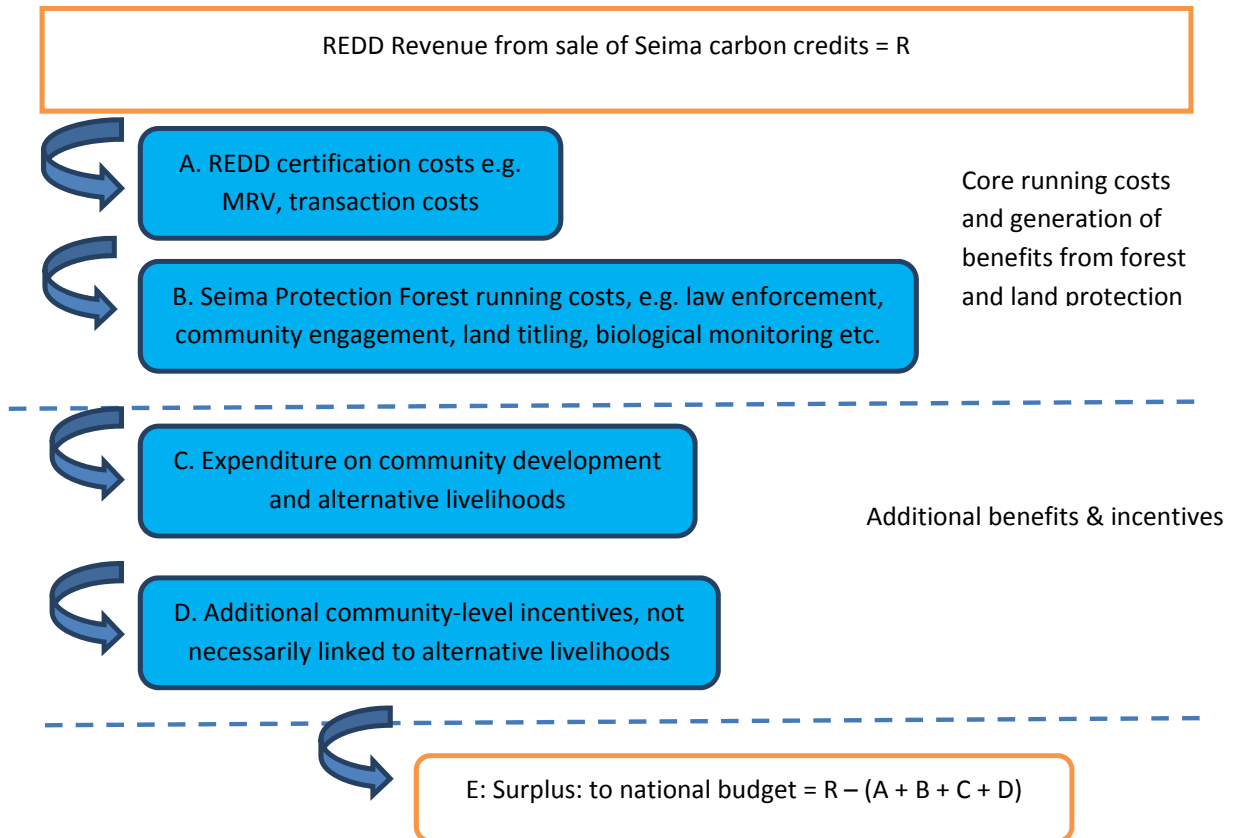
Distribution of REDD revenue between broad categories

REDD sales revenues will be received through a national or central bank account. The use of REDD revenue will then probably fall under five broad categories (Figure 4).

- A. Costs associated with REDD administration, validation and verification, at national and local level, such as forest monitoring and reporting (e.g. emissions reduction report, other 'Measurement Reporting and Verification' requirements). These can be considered as pure transaction costs.
- B. Core running costs of the Seima Protected Forest, including the securing of property rights and stabilisation of land-use. Other critical site management activities are law enforcement, biological monitoring, boundary demarcation, community engagement processes etc. These should not be seen as simple transaction costs, since they deliver several major benefits for communities, related especially to securing property rights and defending common pool resources at risk of destruction.

- C. Expenditure on community development and/or ‘alternative livelihoods’ support that helps to reduce pressure on forests (e.g. agricultural intensification). These benefits will be provided in parallel with efforts to stabilise land-use and property rights. The concept of compensation may be included here, where there is clearly a case of rightful benefits being forgone due to protected area management activities (most likely related to zoning).
- D. Additional or enhanced benefits not specifically linked to alternative livelihoods but also aimed at improving livelihoods, such as education support, contributions for local infrastructure, or household-level cash incentives¹¹.
- E. Any surplus not required for benefits at the local level. This surplus could be used for a range of other purposes e.g. investment in other REDD sites or national-level leakage reduction activities.

Fig 4. Illustration of REDD revenue distribution and spending



Recommendation - The highest priority for use of REDD revenue at the site level should be to cover categories A and B (REDD administration and SPF core protection/community management activities). The next priority should be categories C and D (alternative livelihoods and other benefits/incentives). Beyond a

¹¹ The benefits in categories C and D may be difficult to ‘separate out’ from each other in practice, and it is possible that some of the diffuse communal-level benefits in C will come after more targeted incentives or performance-based payments that would feature in category D. We have kept categories C and D separated for now to emphasize the importance of actively using these benefits to modify the drivers of deforestation wherever possible.

defined maximum level of local benefits any surplus funds should be used for REDD-related activities elsewhere.

Recommendation - Even at low revenue levels some proportion of funds should be spent on local benefits and incentives, both to show commitment to this goal and to allow for procedures to be tested.

The remainder of this report focuses on categories B, C and D.

Basis for setting the level of benefits

Setting benefit levels on the basis of a calculation of 'opportunity costs' is unlikely to be appropriate. Most of the deforestation in the Seima project area is illegal so strictly legally-defined opportunity cost payments are likely to be too low to dissuade people from clearing land due to currently very high profitability of crops like cassava and rubber. At the other extreme, calculating the opportunity cost of not conducting illegal agricultural expansion that is made possible by weak law enforcement would result in payment estimates that are too high to be covered by REDD revenues (or any other realistic direct payment system) and would also create serious ethical/philosophical difficulties by rewarding planned law-breaking at the full market value of the public property to be destroyed.

Recommendation- Benefit-sharing calculations in SPF should not be based on the opportunity cost of foregoing illegal deforestation or logging. However, there should be fair consideration of legitimate opportunity costs, which are expected to be quite low.

This approach is consistent with the CCBA standards (CCBA 2008, footnotes 31, 33 and 43).

Rather than a focus on calculated opportunity costs we suggest to adopt a 'willingness to accept' (WTA) approach to the benefit-sharing. Community acceptance of proposed payments will be based on a number of factors including their perceptions of the fairness and adequacy of the benefits, what they know of their legal obligations and rights, the expected levels (and fairness) of law enforcement, the proportion of the total revenues that is being shared and who will receive it, the degree to which they value the non-monetary benefits of the project and their expectations of any alternatives to accepting the proposed REDD benefits.

Recommendation- Benefit delivered to communities should be set at a level that people are collectively willing to accept. At a minimum, benefits will need to be valued enough by local communities to influence their behaviour and to be perceived as fair given the levels of funding available. Further analysis, consultation and negotiation will be required to assess what these levels are.

Benefit Types

Some illustrative examples of the potential benefit types are listed below in Table 4 organised according to the expenditure categories in Fig. 4.

Table 4 – Examples of likely benefit types to local community members from REDD in Seima

Category of REDD expenditure	Benefit type for communities
E. REDD implementation	N/A
F. Management of Seima Protection Forest	<ul style="list-style-type: none"> - Continued and secure access to natural resources, including non-timber forest resources such as resin, that may otherwise be destroyed - Secure and formal property rights to land and forest resources, such as indigenous communal land title - An equitable zoning and access system for communities with rights to use the SPF Core Zone - Improved forest quality in some areas - Employment in community-based patrolling and monitoring
G. Alternative livelihood projects	<ul style="list-style-type: none"> - Alternative livelihood benefits, e.g. livestock raising, vegetable gardens, savings groups and/or access to micro-finance for enterprise development - These benefits will most likely be administered through a 'community development fund' administered at the village or project level. Some benefits could be awarded at the household level though. - Increased community empowerment, capacity and organisation
H. Other benefits	<ul style="list-style-type: none"> - Additional incentives payments for 'conservation services' - This might be a bonus payment for exceptional performance, awarded to households or villages - Support for public services that are not 'alternative livelihoods' per se, for example road, health clinic, school, other infrastructure

Recommendation- Benefits should be delivered as a combination of different types, including strengthened resource rights, alternative livelihood projects, and additional bonus incentives. Input and ideas from villagers will be required, along with further analysis of livelihoods and local priorities, in order to make final decisions. Provisions for benefit types to be adjusted over time, if required, should also be made.

One consideration here is that some benefits are easier to share around than others (Milne 2007). If benefits are in units that are hard to share evenly between households, then it may be necessary to randomly select beneficiaries within a village, e.g. by pulling names out of a hat in a public meeting.

4.4 Key Area 3: Benefit distribution rules

System and criteria for allocation of benefits

Systems and criteria for benefit allocation and distribution will need to be developed for each of the relevant spending categories (B, C and D). With regard to benefits that are derived from better forest protection (category B), these will be delivered through SPF management and will derive from sound implementation of land-use planning, protected forest zoning, and registration of indigenous communal land title. We do not believe that these types of benefits can be made conditional upon performance. That said, the outcomes of activities such as land-use planning and zoning are not necessarily equitable, and special attention will need to be paid to (i) the needs of poorer villagers and (ii) the potential influence of local elites or powerful actors on project processes. Equity considerations should therefore be built into the implementation and delivery of these communal benefits regarding resource access.

Recommendation – Social benefits derived from the protection and management of SPF will be considered as communal, and derived automatically from land-use planning and titling processes. However, careful attention to social inequalities and power relations during the participatory process will be required to ensure equitable outcomes.

The other source of community benefits that derives from SPF management (category B) is the opportunity for local employment. Paid jobs may mainly go to individuals with special skills, such as map reading and GPS use, which are essential for patrolling purposes. While sensible, this must be carefully managed to avoid undue bias in favour of ‘able young men’ and those who are specially trained, which can lead to jealousy (Milne 2007). Thus, opportunities to earn wages from patrolling and other activities are best shared among households through a rotation system, with relevant training opportunities provided to those who wish to participate, and with extra opportunities provided to those who perform well.

Recommendation – Benefits derived from local employment opportunities in project activities should be distributed as widely and fairly as possible (e.g. through a rotation system that includes all households), depending upon the skill, willingness, and performance of participants.

Systems and criteria for the allocation of alternative livelihood support and other benefits (i.e. categories C and D in Fig. 4) will need to be carefully developed to ensure net positive outcomes for communities and biodiversity, as well as emissions reductions. Ultimately, each of the 20 villages will be entitled to receive a proportion of the available alternative livelihood support and other benefits, which will need to be scaled or calculated based upon a set of criteria. Criteria for the division of benefits *between* villages and *within* villages could be set in many ways – including on the basis of need (e.g. poverty), results or performance (e.g. actual emissions reductions), inputs (e.g. days of work by villagers) and legitimate opportunity costs (e.g. harvesting activities foregone). We discuss the various options below, focusing first on benefit distribution between villages.

Legitimate opportunity costs should be one criterion, although probably not the main one (see above). In Seima it is assumed that adequate areas for future land-use generally have been allocated or will soon be allocated, through various legal processes that incorporate participatory land-use planning (Evans et al. 2011). It is not envisaged that restrictions will be placed on legitimate clearance within these areas so no significant opportunity costs of this kind are anticipated. However, given that land-use planning and resource rights allocation processes are still underway, it is possible that REDD benefits could become available in some villages where these processes are incomplete. This could result in complex and ambiguous situations. To avoid this, agreement over forest boundaries in each village should ideally be achieved before significant REDD benefits flow.

Recommendation- Full-scale benefit-sharing should ideally not occur in any village before an agreed forest boundary has been established and mapped, as a benchmark against which to assess performance. In highly dynamic areas, physical demarcation of the forest boundary is also desirable before benefit-sharing begins.

There may also be some restrictions on use of harvested non-timber forest products in areas zoned for stricter protection and this would give rise to legitimate opportunity costs. These would probably be quite easy to quantify, as there are well-established methods in the literature.

A range of other criteria for benefit distribution and their pros and cons is presented in Table 5. Ultimately, criteria must be selected to achieve a system of benefit-sharing that is effective, efficient, simple, flexible, equitable and perceived as fair by villagers (Angelsen 2008). Thus, it may be desirable to use a combination of criteria to decide upon benefit allocation through a “compound coefficient” of some form, as developed in Vietnam’s REDD benefit-sharing policy (Pham Manh Cuong 2010), and in Nepal’s Forest Carbon Trust (ICIMOD 2011).

Table 5 – Potential criteria for distribution of community development and other benefits between villages

Factor in benefit distribution	Examples of criteria / indicators to guide calculation of benefit amount	Strengths and weaknesses
Community characteristics	<ul style="list-style-type: none"> - No. families in the village - Village size (e.g. small, medium, large) - % village land located inside the Core Protection Area 	<p>Benefit distribution based upon village size is transparent and easy communicate.</p> <p>Population or land area of the village should not be the only criterion that determines the amount of benefit allocation, as it does not necessarily correspond with performance or need.</p>

Impact / performance	<ul style="list-style-type: none"> - An adequate level of adherence to agreed boundaries is achieved, otherwise deductions occur - # hectares of land cleared outside agreed forest boundaries (penalties) - Bonus payments for particular achievements (e.g. exceptional wildlife populations) 	<p>Performance measures at the village level should not be linked directly to quantified emissions reductions, as this would be too expensive and cumbersome, and the models of baseline deforestation are probably too imprecise to give fair and accurate results for small areas.</p> <p>Proxy performance measures are likely to be better understood and perceived as fair but may not efficiently reward those who are most responsible for emission reductions.</p>
Inputs / effort	<ul style="list-style-type: none"> - Effort invested in forest conservation, e.g. patrolling hours 	<p>Rewarding effort through wages is a good way to pay for 'doing something' instead of paying for 'not doing something'</p> <p>Rewarding hours of effort is a transparent way to deliver incentives to individuals</p>
Opportunity costs	<ul style="list-style-type: none"> - Level of <i>legitimate</i> benefits forgone due to REDD implementation 	<p>The issues associated with the 'compensatory approach' have been addressed above: this will not be a primary focus in Seima.</p> <p>The benefit-sharing system will need to compensate for <i>benefits forgone by legitimate beneficiaries</i> in some way, especially if they are unevenly distributed between villages or among households.</p>
Poverty and social context	<ul style="list-style-type: none"> - Food security (e.g. no. months without rice) - Poverty level (e.g. illness, income levels, indebtedness) - Remoteness - Ethnicity 	<p>Additional benefits could be distributed to villages that are poorer and more remote: this would be recognised in the CCB standards as exceptional or 'gold standard'.</p> <p>Aggregate measures of village poverty may be hard to establish, and 'pro-poor' benefit allocation may be best achieved <i>within</i> villages.</p>
Other	<ul style="list-style-type: none"> - Bonus lottery payment or competition 	<p>As a minor component of the overall scheme, this approach could be good for awareness-raising.</p>

Recommendation- A set of benefit-sharing criteria will need to be developed in consultation with project stakeholders and local communities. A wide range of criteria should be considered including: village size and area; village performance in emissions reductions and conservation; village effort in project implementation; and village poverty levels.

Recommendation- Priority criteria which could form a starting point for the benefit allocation system could be: (i) Number of families in the village; and (ii) the degree to which villagers adhered to agreed forest boundaries. If forest clearing occurs that was beyond villagers' control (e.g. by outsiders) then special provisions may need to be made.

Village-level decision making processes and criteria (e.g. scoring systems) will need to be as easy and unambiguous as possible, so as to minimise unnecessary confusion/conflict and to allow for low levels of numeracy and literacy in many villages.

4.5 Key Area 4: Transparency and accountability

Well-defined and documented procedures will be required. First, clear protocols for reporting and monitoring of performance, financial and non-financial benefit flows, and socio-economic impacts will be required. This is essential for meeting CCB standards. Second, definition of a periodic agreement review process will be required to enable changes to be made, if necessary. This review process will need to account for changing social and environmental conditions, as well as project impacts, which should be detected through monitoring. The review process should also for feedback to be provided by village stakeholders and representatives. Thirdly, in terms of financial flows, rigorous records must be kept at all levels to show transactions. In addition, regular financial reporting will be required and data about revenues and expenditure associated with benefit-sharing between and within villages should be presented in village meetings.

Recommendation- Processes and decisions for benefit-sharing within villages should be transparent and monitored or at least witnessed by either an external third party or by a representative of SPF management team. The village structures or community-based organisations that are engaged in the benefit-sharing should be accountable for decision-making about village-level benefit-sharing.

Recommendation- Transparency provisions should be established that include clear monitoring protocols (social and environmental); regular public reporting procedures from the village level up to higher levels; and an annual review that involves the Seima multi-stakeholder management committee, which should allow for discussion and adaptive management.

Recommendation- At the village level, benefit-sharing decisions and allocations must be presented periodically for feedback at village meetings. The local community-based organisations responsible for benefit-sharing (e.g. the ICCs) must be responsible for recording all financial transactions, and reporting

these to the Seima multi-stakeholder management committee and villagers. These records should also be available to auditors, if necessary.

4.6 Key Area 5: Conflict resolution

An independent third party mediator or facilitator should be identified to receive complaints and resolve any disputes, in accordance with CCBA requirements. The commune councils may be suitable institutions to play this role, if they can be shown to have sufficient capacity, as it is in accordance with the established role of commune councils in Cambodia as mediators of dispute resolution in other sectors. Alternatively an NGO may be selected to play this role.

Recommendation- Clear procedures for receiving complaints and resolving disputes must be established from the outset. A third party facilitator should be available to all parties and awareness-raising about the complaint or dispute settlement process will be required as part of village consultations.

Complaints from villagers or other stake-holders could be made directly to the third party, or otherwise they could be made through the local village representative bodies, the SPF management, or a national body or advisory committee (e.g. TWG F&E). Whatever the process, it is necessary that all stakeholders are aware that they can make complaints or seek to resolve disputes without retribution. To this end, local level awareness-raising or extension will be required to ensure that villagers are able to express concerns or complaints if necessary. In practice this might be achieved through a telephone 'hotline', but further discussion is required.

4.7 Two illustrative benefit-sharing systems for Seima Protection Forest

In this section we compare two illustrative examples of systems for structuring benefits in SPF: the delivery of benefits through village-level services versus the provision of benefits through household-level performance payments. The purpose of this exercise is not to prejudge the outcome of stakeholder consultations, but rather to synthesise the options suggested above and to provide a basis for further discussion.

Table 6 summarises the key features of the two modalities or options that we discuss. It is clear that in the design of benefit-sharing for SPF, and Cambodia more generally, certain trade-offs must be made and the most important of these have been highlighted in the table. An additional key feature of any benefit-sharing mechanism to be applied in SPF is *flexibility*. There is a significant diversity of livelihood systems, resource use and institutional arrangements found between and within the 20 beneficiary villages. It will therefore be necessary for the distribution of benefits to be adaptable to the different conditions found in each village. As such, we have avoided being too prescriptive in these suggested options but have instead attempted to

offer a framework from which individual village or community organisations could tailor benefits to meet their own needs. In practice the two options presented here are not mutually exclusive and we would expect different villages to adopt elements of both in varying combinations.

Table 6 – Potential benefit-sharing options for SPF

	Option 1: Benefits focus on delivery of village services	Option 2: Benefits focus on household performance payments
Shared features	<ul style="list-style-type: none"> - Site management activities, including community engagement, securing property rights and law enforcement - Formation/support of village/community management committees - Wage opportunities for monitoring and patrolling - Support for alternative non-farm livelihoods and agricultural development 	
Key features	<ul style="list-style-type: none"> - Payments to be made to village development fund with a portion contingent on performance - Performance portion to be conditional on zero clearance outside agreed zones - Disbursement of funds to be decided by village management committees or ICCs on projects voted for by village 	<ul style="list-style-type: none"> - Incentive payments to be made to individual households - Payments to be contingent on households remaining within land restrictions - Land restrictions to be decided on a household by household basis by village management committees or ICCs
Advantages	<ul style="list-style-type: none"> - Perceived as fair - Provides key services for development tailored to village needs - Social peer-pressure provides additional incentive for behavioural change 	<ul style="list-style-type: none"> - Every household provided opportunity to benefit - Flexible to household needs - Reduced lag between cost and benefit - Strong conditionality on payments - Direct benefits to the household may provide highest impact on personal behaviour
Disadvantages	<ul style="list-style-type: none"> - Diffuse and potentially uneven benefits from village services may give lower impact on personal behaviour - Lag between cost and benefit - Infrastructure development may increase pressure on forest resources - Infrastructure already receiving limited support through commune development fund but with no opportunity costs - difficult to withhold all of development fund 	<ul style="list-style-type: none"> - High transaction costs for working at the household level - Additional monitoring required to identify households responsible for clearance - Per household payments likely to be quite small especially in the early years. - Risk of unequitable distribution of land by village management committee

	for poor performance	
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Key features of benefit-sharing options

Option 1 focuses on the delivery of village services through contribution to a development fund to be overseen by individual village management committees or ICCs. Spending would then be decided through voting, or some other mechanism, at collective village meetings. It is envisaged that the majority of spending would be used to develop village infrastructure, though there would also be opportunities to fund in-kind benefits such as alternative livelihood projects or savings groups. As benefits would be received collectively under this option, it is expected that this would give rise to social peer-pressure to comply with agreed land use plans. Investment in village infrastructure is also more likely to be perceived as fair, although it is not necessarily equitable in practice. Careful implementation will be required to ensure equitable or pro-poor distribution of benefits for communal projects.

Option 2 focuses on cash performance payments to individual households. Payments would be made to each household provided that they had kept within land endowments decided by the village management committee. In this way, greater allowance could be made for more vulnerable groups (e.g. landless households could be granted larger endowments than those households with greater access to land). This option offers greater flexibility on how benefits are received as individual households would be able to tailor them to meet their own needs. It would also ensure that every household would benefit rather than the potentially uneven benefits provided by some village services. In addition to this, structuring benefits so that they are received on an individual basis protects compliant households from losing out as the result of non-compliance on the behalf of others.

Common to both options presented is the continued implementation of site management activities. This includes the securing of property rights for land and forest resources as part of the indigenous land titling process already underway in many of the 20 villages. The expansion of this process to the remaining villages, and continued support where it is ongoing, is seen as a priority as agreed boundaries and zoning will form the basis for performance related benefits.

Similarly, law enforcement and forest demarcation will continue to be supported for both options. Once boundaries have been agreed with local communities, enforcement of these boundaries will be critical to reducing expansion of agriculture into non-permitted areas.

Conditionality of benefit-sharing options

In both the options presented at least some of the benefits received are to be made conditional on agricultural zoning being respected. In Option 1, we have suggested only a portion of payments to the

village fund be made conditional. This is driven largely by two factors: the time lag between the opportunity costs of forgoing agricultural expansion and receipt of benefits and the difficulty in withholding payments for some social services, such as teacher's salaries. The delay between the opportunity costs experienced by complying with agreed boundaries and the completion of village development projects is potentially problematic. Such delays can lead to a loss of faith in village management committees, although measures to ensure transparency can help to ameliorate this risk. The result is a weakening of payment conditionality and reduced effectiveness of these benefits to incentivise behaviour change. The conditionality is weakened further by the diffuse and potentially uneven nature of the benefits received.

For Option 2 the conditionality is stronger, with all payments to households contingent on compliance with land use plans agreed by the village management committee. Consequently, there is a stronger incentive for households to respect agreed zoning. There is, however, a risk that corrupt or weak management of village agricultural zones will lead to resentment and marginalisation of vulnerable groups. The greater level of conditionality offered by this option also comes at a cost of greater monitoring requirements and higher transaction costs, thereby reducing the revenue available to finance benefit provision.

In both cases, stipulation would be necessary to address clearance within a village's agreed area by people belonging to another village, in-migrants or land speculators. This is particularly likely in the low-land areas dominated by cash crop cultivation where immigration and land speculation are common and villages are located in close proximity to each other. In this instance, penalising villagers for clearance by other stakeholders would risk engendering resentment, although the opportunity for collusion between villages to avoid restrictions on land use should also be recognised. In villages in the Northern Plains in which the PES examples summarised in Section 3.3 were implemented, in-migrant families were frequently turned away as a result of participation in the schemes.

5. References

- Adams, W. and M. Infield (2003) 'Who is on the Gorilla's Payroll? Claims on tourist revenue from a Ugandan National Park', *World Development* 31(1): 177-190.
- Angelsen, A. (ed) (2008) *Moving ahead with REDD: Issues, options and implications*. Bogor: CIFOR.
- Angelsen, A. (ed) (2009) *Realising REDD: National strategy and policy options*. Bogor: Centre for International Forestry Research.
- Bradley, A. (2011) *Review of Cambodia's REDD Readiness: Progress and challenges. Forest Conservation Project. Occasional Paper No. 4*. Japan: Institute for Global Environmental Strategies (IGES).

- Cambodia UN REDD National Programme (2011) 'United National Collaborative Programme on Reducing Emissions from Deforestation and Forest Degradation in Developing Countries, National Programme Document, ' January 2011 (version 3.3).
- Caravani, A. (2011). 'REDD Benefit sharing in Brazil: A case study', REDD-Net and The World Bank.
- Cassola, R. (2010). 'TEEB case: Conserving forests through grants, Brazil', Available at TEEBweb.org.
- CCBA (2008). 'Climate, Community & Biodiversity Project Design Standards - Second Edition'. Arlington, VA, CCBA (Climate Community Biodiversity Alliance).
- Clements, T., A. John, K. Nielsen, D. Ana, S. Tana and E. Milner-Gulland (2010) 'Payments for biodiversity conservation in the context of weak institutions: Comparison of three programs from Cambodia ', *Ecological Economics* 69(6): 1283-1291.
- Costenbader, J. (2011). 'REDD benefit sharing: A comparative assessment of three national policy approaches', Forest Carbon Partnership Facility and UN-REDD Programme.
- Emerton, L. (2001) 'The nature of benefits and the benefits of nature: Why wildlife has not economically benefited communities in Africa' in Hulme and Murphree (eds) *African Wildlife and Livelihoods: The promise and performance of community conservation*, pp. 208-226. Oxford: James Currey Ltd.
- Engel, S., S. Pagiola and S. Wunder (2008) 'Designing payments for ecosystem services in theory and practice: an overview of the issues', *Ecological Economics* 65(4): 663-674.
- Evans, T., M. Arpels and T. Clements (2011). 'Pilot REDD activities in Cambodia are expected to improve access to forest resource use rights and land tenure for local communities'. Madison, Presentation for Land Tenure and Forest Carbon Management Workshop, University of Wisconsin.
- Evans, T., H. O'Kelly, S. Men, M. Nut, P. Pet, P. Sorn and E. Pollard (2012) 'Seima Protection Forest, Cambodia' *Evidence-based conservation: Lessons from the Lower Mekong*, pp. xx-yy. London: Earthscan.
- FA & WCS (2011) 'Community consultation framework for the Seima Protection Forest REDD Project, Phases 2 and 3 (DRAFT)'.
 FA & WCS (2011a). 'Overview of the Seima Protection Forest REDD Project: DRAFT FOR APPROVAL'. Phnom Penh, May 2011.
- Fehr, E. and K. Schmidt (2006) 'The economics of fairness, reprocicity and altruism: experimental evidence and new theories.' *Handbook of the economics of giving, altruism and reciprocity.*, pp. 615-691. Amsterdam: North-Holland.
- Ferraro, P. (2001) 'Global habitat protection: Limitations of development interventions and a role for conservation performance payments', *Conservation Biology* 15(4): 990-1000.

- Ferraro, P. and A. Kiss (2002) 'Direct payments to conserve biodiversity', *Science* 298: 1718-1719.
- Frey, B. and R. Jegen (2001) 'Motivation crowding theory', *Journal of Economic Surveys* 15(5): 589-611.
- Ghazoul, J., R. Butler, J. Mateo-Vega and L. Koh (2010) 'REDD: a reckoning of environment and development implications', *Trends in Ecology and Evolution* 25(7): 396-402.
- Gregersen, H., H. El Lakany, K. A and A. White (2010). 'Does the opportunity cost approach indicate the real cost of REDD? Rights and realities of paying for REDD'. Washington D.C., Rights and Resources Initiative.
- Grieg-Gran, M. (2006). 'The cost of avoiding deforestation: Report prepared for the Stern Review of the economics of climate change'. London, International Institute for Environment and Development.
- Hansen, C. P., J. F. Lund and T. Treue (2009) 'Neither fast, nor easy: the prospect of Reducing Emissions from Deforestation and Degradation (REDD) in Ghana', *International Forestry Review* 11(4): 439-454.
- Hickey, S. and G. Mohan (2004) *Participation: From tyranny to transformation?* New York: Zed Books.
- ICIMOD (2011). 'Pilot Forest Carbon Trust Fund: Rewarding local communities for forest conservation'. Kathmandu, International Centre for Integrated Mountain Development.
- IUCN (2010). 'REDD-plus and benefit sharing: Experiences in forest conservation and other resource management sectors'. Geneva, Switzerland, International Union for the Conservation of Nature.
- Lindhjem, H., I. Aronsen, K. Braten and Gleinsvik (2011). 'Experiences with benefit sharing: Issues and options for REDD-plus'. Oslo, Pöyry Management Consulting (Norway) AS, Econ Report no. R-2010-018. Commissioned by the IUCN.
- MacLeod, K. (2011). 'Experience and lessons learned from a REDD Pilot Project in Oddar Meanchey, Cambodia'. PowerPoint presentation: Hanoi, 17 November 2011.
- Mahanty, S., J. Fox, M. Nurse, P. Stephen and L. McLees (2006). 'Hanging in the Balance: Equity in Community-Based Natural Resource Management in Asia'. 'Eleventh Workshop on Community Management of Forest Lands: Equity in CBNRM' Bangkok, RECOFT and East-West Center: 19.
- McDermott, M. and K. Schreckenberg (2009) 'Equity in community forestry: insights from North and South', *International Forestry Review* 11(2): 157-170.
- Milne, S. (2007). 'Monitoring the socio-economic impacts of conservation incentives agreements in Cambodia'. Consultancy Report, Conservation International, Washington, D.C.
- Milne, S. (2009). 'Global ideas, local realities: The political ecology of payments for biodiversity conservation services in Cambodia', PhD dissertation, Department of Geography, University of Cambridge.

- Milne, S. and W. Adams (2012) 'Market masquerades: Uncovering the politics of community-level payments for environmental services in Cambodia', *Development and Change* 43(1): 133-158.
- Milne, S. and E. Niesten (2009) 'Direct payments for biodiversity conservation in developing countries: Practical insights for design and implementation', *Oryx* 43(4): 530-541.
- Milne, S. and L. Ouk (2012). 'A not-so-perfect match? Community experiences with the coupling of avoided deforestation and agricultural intensification in upland Cambodia'. Cairns, United Nations University-Traditional Knowledge Initiative. Workshop on Climate Change Mitigation and Indigenous People for Intergovernmental Panel on Climate Change (IPCC).
- Mohammed, E. Y. (2011). 'Pro-poor benefit distribution in REDD: Who gets what and why does it matter?'. London, International Institute for Environment and Development (IIED): REDD Working Paper.
- Mwayafu, D. and R. Kimbowa (2011). 'Issues and options for benefit sharing in REDD in East Africa: A case study of Mount Elgon Regional Conservation Programme', REDD-net case study, www.REDD-net.org.
- Ostrom, E. (1990) *Governing the commons: The evolution of institutions for collective action*. Cambridge: Cambridge University Press.
- Persha, L., A. Agrawal and A. Chhatre (2011) 'Social and ecological synergy: local rulemaking, forest livelihoods and biodiversity conservation', *Science* 331(6024): 1606-1608.
- Peskett, L. (2011). 'Benefit sharing in REDD: exploring the implications for poor and vulnerable people', World Bank and REDD-net.
- Pham Manh Cuong (2010). 'Designing REDD benefit sharing systems in Vietnam', Directorate of Forestry in Vietnam & Ministry of Agriculture and Rural Development (MARD).
- Poffenberger, M. (2009) 'Cambodia's forests and climate change: Mitigating drivers of deforestation', *Natural Resources Forum* 33(4): 285-296.
- PROFOR (2011). 'Making benefit sharing arrangements work for forest-dependent communities: Insights for REDD initiatives', Program on Forests (PROFOR) Briefing Note, November 2011.
- PwC (2012). 'Assessing options for effective mechanisms to share benefits: Insights for REDD initiatives'. Washington DC, Program on Forests (PROFOR).
- Rock, F. (2000). 'Participatory land use planning in Cambodia: Proceedings of the Third Workshop on PLUP, 29-30 June 2000, World Vision International Cambodia Conference Centre'. Phnom Penh, GTZ-MRC Sustainable Management of Resources Project (SMRP).
- Salafsky, N., R. Margoulis and K. Redford (2001). 'Adaptive management: a tool for conservationists'. Washington D.C., Biodiversity Support Program.

- Skutsch, M., B. Vickers, Y. Georgiadou and M. McCall (2011) 'Alternative models for carbon payments to communities under REDD: A comparison using the Polis model of actor inducements', *Environmental Science & Policy* 14(2): 140-151.
- Sommerville, M., J. Jones and E. J. Milner-Gulland (2009) 'A revised conceptual framework for payments for environmental services', *Ecology and Society* 14(2): 34.
- Sommerville, M., J. Jones, M. Rahajaharison and E. Milner-Gulland (2010) 'The role of fairness and benefit distribution in community-based Payment for Environmental Services interventions: A case study from Menabe, Madagascar', *Ecological Economics* 69: 1262-1271.
- Torres, A. and M. Skutsch (2012) 'Splitting the difference: A proposal for benefit sharing in Reduced Emissions from Deforestation and Forest Degradation (REDD)', *Forests* 3(137-154).
- Travers, H., T. Clements, A. Keane and E. J. Milner-Gulland (2011) 'Incentives for cooperation: the effects of institutional controls on common pool resource extraction in Cambodia', *Ecological Economics* 71: 151-161.
- Vira, B. (2001) 'Claiming legitimacy: Analysing conflict in the environmental policy process', *Government and Policy* 19: 637-650.
- World Bank Institute (2011). 'Estimating the opportunity costs of REDD: A training manual'. Washington DC, The World Bank.
- Wunder, S. (2005). 'Payments for environmental services: some nuts and bolts'. CIFOR Occasional Paper No.42: 32.
- Wunder, S. (2007) 'The efficiency of payments for environmental services in tropical conservation', *Conservation Biology* 21(1): 48-58.

Annex 1- Examples of REDD or REDD-like benefit-sharing elsewhere

Table A: Examples of benefit-sharing in existing REDD schemes (either verified or ‘under verification’)

Scheme	Key design features
<p>National REDD Benefit Distribution System, Vietnam</p> <p>(Pham Manh Cuong 2010)</p>	<ul style="list-style-type: none"> • A stand-alone national fund receives REDD revenues. • The fund is overseen by a multi-stakeholder governing body, but is still a centralised government structure. • The national fund subtracts transaction and implementation costs, and then distributes remaining revenue to provinces according to performance, following national criteria. • Provincial or district bodies determine the distribution of benefits to ultimate beneficiaries, balancing performance and equity considerations. • Participatory governance at the local level established, to guide selection of beneficiaries, decision-making and monitoring. • Complaints procedures for beneficiaries are established. • Independent monitoring and auditing conducted.
<p>Forest Carbon Trust Fund (FCTF), under Community Forestry REDD Project, Nepal (2011)¹².</p> <p>Initiated with NORAD SEED grant in 2010.</p> <p>(ICIMOD 2011)</p>	<ul style="list-style-type: none"> • REDD benefits go into a Trust Fund, which is multi-scalar and transfers benefits from national level to the ground. • The benefit-sharing system was designed by a multi-stakeholder taskforce through a participatory and consultative process. It is now in the pilot phase. • There are well-developed institutional arrangements for managing and disbursing REDD funds to Community Forestry User Groups (CFUGs) – these groups represent communities and are the main forest managers. • Other institutional elements include: the FCTC Advisory committee which supervises the fund at a national level; the Project Management Unit which conducts carbon accounting and payment transfers and general operations; Monitoring Committee which ensures eligibility and compliance related to performance and payments (see diagram on p.23 of Operating Guidelines) • There is a separate multi-disciplinary ‘expert’ team which acts as the Verification Agency. • Uses criteria for payments to target benefits to poorer communities, especially including women and indigenous people. Payments are a function of: (i) forest carbon enhancement (40%); (ii) ethnic diversity (25%); (iii) sex ratio (15%) and (iv) poverty (20%). Payments are therefore equitable and performance-based.

¹² See “Operating Guidelines of Forest Carbon Trust Fund 2011”.

<p>Cat Tien National Park, Vietnam.</p> <p>(Mohammed 2011)</p>	<ul style="list-style-type: none"> • Not yet implemented, but the IIED report (Mohammed 2011) provides a comprehensive set of recommendations for REDD benefit sharing at Cat Tien, including: • The benefit distribution system must “systematically favour the landless poor and smallholders”. e.g. calculate benefits according to landholding size, rather than emissions avoided per se. • The decision on whether to deliver household or community level benefits must be done through community consultation, and should be based on economic feasibility, institutional capacity and governance structures.
<p>Amazon Fund, Brazil.</p> <p>A national competitive grant scheme for distribution of REDD benefits.</p> <p>(Caravani 2011)</p>	<ul style="list-style-type: none"> • A centralised national fund, which receives performance-based payments from international contributors (e.g. Norway, with funds conditional upon reduced deforestation at the national level). • The fund operates like a traditional conservation trust fund at sub-national level: it does not use performance-based payments. It is project-based. • Local benefit-sharing depends upon the type of project. • Project proposals are assessed competitively, according to criteria. • Projects involve economic activities created with sustainable use of forests; Ecological and economic zoning, territorial arrangement and agricultural regulation; preservation and sustainable use of biodiversity.
<p>Brazil’s early REDD projects examined in CIFOR’s Global Comparative Study¹³</p>	<p>Benefits include:</p> <ul style="list-style-type: none"> • PES-like rewards or incentive-based mechanisms • Public services • Provision of “sustainable land use alternatives” • Cattle and milk production • Land tenure reform is considered to be a REDD-readiness activity, not a benefit

Table B: Examples of benefit-sharing in existing REDD-like schemes

Scheme	Key design features
<p>Mount Elgon Region Conservation Programme, Kenya and Uganda</p> <p>(Mwayafu and Kimbowa 2011)</p>	<ul style="list-style-type: none"> • Benefits awarded based on performance, which mainly includes forest enhancement and reforestation. • The mechanism for benefit distribution is a set of Community Revolving Funds, which are ‘reserves’ of money available for lending to one or more borrowers at the local level. • The benefits are not available as grants or donations, only small loans, as this was seen to be a better strategy for local empowerment and development.

¹³ See presentation by Duchelle (2011) at <http://www.rmportal.net/library/content/translinks/2011/land-tenure-center/ltfc-mgmt-workshop/index>

	<ul style="list-style-type: none"> • Many loans to households are spent on tree-planting activities through Participatory Benefit Sharing Agreements with the fund, which clearly outline roles and responsibilities of parties. • Operation of the fund is conducted with strong community participation and peer monitoring of performance. • Lack of local capacity makes fund management difficult and can restrict access for some community members • Benefit-sharing occurs through local Community Forestry Associations, or other Community-Based Organisations. • The mediator and administrator is the government National Park authority.
<p>Socio-Bosque Program, Ecuador¹⁴</p>	<ul style="list-style-type: none"> • Began in Sept 2008 as an government initiative led by the Ministry of the Environment of Ecuador (MAE) • Offers economic incentives to owners of land with native forests to guarantee protection over the medium to long-term • Main mechanism is conservation agreements between land owners and the state, now signed for 630,000 hectares • Priority given to areas with rapid land use change, critical ecosystem processes that benefit society, and high incidence of poverty • Socio-Bosque exists within the proposed framework for Ecuador’s national REDD strategy.
<p>Bolsa Florestal - The Forest Conservation Allowance Program, Amazonas, Brazil.</p> <p>Created in 2007 through State Law.</p> <p>(Cassola 2010)</p>	<ul style="list-style-type: none"> • A government established payment for ecosystem services scheme managed, Fundação Amazonas Sustentável (FAS, Sustainable Amazonas Foundation). • Focus is on ‘deep Amazon’ in historically low deforestation areas, and emphasis is on collaboration with indigenous people in reserves and protected areas • Guarantees basic needs of people, and compensates them for: (i) maintaining forest protection or conservation services; (ii) improved ecosystem management in human-use areas. • An endowment fund for ecosystem services is the central mechanism. The fund is held through a government-bank partnership (the FAS). Many government and private actors have now contributed to the fund. • Benefits involve: (i) household-level cash payments; and then three community-level benefits for: (i) community organisation; (ii) social benefits or public services; (iii) alternative livelihoods projects.

¹⁴ See http://www.theREDDdesk.org/countries/ecuador/info/activity/the_socio_bosque_program

Annex 2- List of ‘participating villages’ in the REDD project area

Village	Commune	Population (HH)	Ethnicity
KEY VILLAGES (17 IN TOTAL)			
Keo Seima district			
O Am	Sre Khtum	623 ¹⁵	Mostly Khmer
O Rona		160	Khmer, Bunong
Sre Lvi		28	Bunong
Sre Preah	Sre Preah	112	Bunong, Khmer
Gati		54	Bunong
Pu Char		66	Bunong
O Chrar		27	Bunong
Pu Kong		62	Bunong
Chakchar	Sre Chhuk	124	Bunong
Kmom		62	Bunong
Sre Andaol		50	Bunong
Sre Khtong		165	Bunong
Pu Keh	Memong	114	Bunong
Pou Ngaol		95	Bunong
O Rang District			
Andong Kraloeng	Sen Monorom	107	Bunong
Pu Haim / Rokathmei		303	Bunong
Pu Rang		91	Bunong
OTHER USER VILLAGES (3 IN TOTAL)			
Sen Monorom District			
Sre I	Romonea	29	
Pu Trom		128	
Pu Tang		154	
TOTAL no. families		2554	

¹⁵ Not all of these families in O Am will be relevant to the project area