




BENEFIT SHARING IN REDD+

**Exploring the Implications for
Poor and Vulnerable People**

By Leo Peskett



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THE WORLD BANK

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1 Introduction

One of the key principles underlying debates about ‘reduced emissions from deforestation and degradation’ (REDD+)¹ is that of using international financial transfers between developed and tropical developing countries to incentivize the implementation of policies which reduce emissions from these activities. As a result, questions have arisen in relation to how these financial flows are managed at the international level between countries, and also within recipient countries.

Much of this debate fits under the commonly used term ‘benefit sharing’ (Costenbader, 2009; IUCN, 2009)—a ‘catch all’ phrase about which there is still a considerable lack of clarity—what the benefits are; how they can be shared; and how they balance with costs. At one extreme, benefit sharing is interpreted broadly to include many types of benefits (e.g., direct payments for carbon, employment, enhanced rights to natural resources, etc.) and sharing at different scales (e.g., locally through community funds within REDD+ projects; or nationally through the welfare effects or broad policy reforms in energy and agriculture linked to REDD). At the other extreme, it is a much narrower concept, for example, linked to revenue sharing arrangements within local payment for environmental (PES) systems. Benefit sharing also appears to be interpreted in different ways by different actors involved in REDD+. A particular concern from civil society is that benefits that do arise from REDD+ will be captured at higher levels, without reaching those most affected by policy reforms. Poor people, who have less power to influence

such processes, may be particularly at risk.

This paper focuses on looking more systematically at how benefit sharing can be understood in the context of national REDD+ systems and the possible implications of different benefit sharing arrangements. The paper addresses three main questions:

- What does benefit sharing mean in the context of REDD+?
- What are the options for establishing benefit sharing systems in different REDD+ approaches?
- What are the implications of different benefit sharing arrangements for poor people?

To explore these questions the paper suggests a simple conceptual framework to define benefit sharing systems more carefully, looks at how benefit sharing is currently being interpreted in the design of REDD+ systems and reviews relevant experience from existing benefit sharing systems in a range of sectors to identify possible implications for poor people. The aim of the paper is to bring greater clarity on what the main components of benefit sharing systems are, and how they may vary between approaches to REDD+.

REDD+ is at a critical stage of development at national and project levels, with project and program developers about to embark on the detailed appraisal and design of benefit sharing systems. This paper is aimed at such practitioners—whilst it does not give advice on establishing specific approaches, the generalizable framework can be applied to the wide range of systems and contexts where REDD+ is in development. It should provide a basis for planners to clarify some of the important aspects of benefit sharing systems, some of the risks and opportunities for poor and

¹ The + refers to conservation of forest carbon stocks; sustainable management of forest; and enhancement of forest carbon stocks.

vulnerable actors, and it could potentially be extended for more detailed design, monitoring and evaluation.

2 Benefit sharing in the current REDD+ debate

2010 saw a considerable expansion in the level of REDD+ activity at the national level. 17 countries have submitted Readiness Preparation Proposals (R-PPs) under the World Bank's Forest Carbon Partnership Facility and 5 countries have submitted National Program Documents (NPDs) under the UN-REDD program. Major financial commitments were made and bilateral deals were established, such as Norway's \$1 billion 'letter of intent' with Indonesia. Most of the nationally focused initiatives are still in the early 'pre-planning' phase—i.e., they are working on what needs to happen in order to build national REDD+ systems (e.g., conducting research to construct reference levels; analyzing legal frameworks for REDD+, etc.), rather than actually implementing REDD+ programs. There are also numerous REDD+ projects and pilot activities underway, but most of these are also at a very early stage with few activities being implemented in practice.²

Benefit sharing has been highlighted as a key aspect of all of these processes. For example, most of the R-PPs and NPDs make reference to the importance of developing benefit sharing systems and some also make commitments to transparent and equitable benefit sharing (Goers et al., 2010). They do not generally elaborate on how these could work, although some identify existing practices as potential mechanisms

through which REDD+ benefits could be channelled, and highlight existing challenges. The majority, however, suggest that further work is needed to define benefit sharing systems mainly by drawing on existing experience.

Benefit sharing is prominent in REDD+ because it is generally understood to result in potentially large financial benefits which will need to be distributed across the wide range of stakeholders linked to deforestation and degradation, and forest regeneration. Beyond this, there is clear rationale for benefit sharing in REDD+, including:

- *Sharing of benefits is likely to be positive from all stakeholder perspectives.* From the perspective of affected communities, it allows them to become partners in projects and potentially empowers them in decisions that affect them. From a government perspective benefit sharing is a practical policy tool to achieve greater social inclusiveness and balance social, economic and environmental factors in planning, design, implementation and operation of REDD+ projects. From an investor perspective, benefit sharing could help to reduce risks associated with the project (e.g., non-permanence) (IIED, 2009).
- *Sharing of benefits could help to enhance sustainability:* Benefit sharing in REDD+ could help to turn 'conflict into consensus', if agreements are reached in a collaborative way and are perceived as equitable. In many instances, careful attention to distributional impacts and the encouragement of local-level stewardship of natural resources has been essential to achieve sustainable development objectives (Wells and Brandon, 1992; Fisher et al., 2005). Moreover, lower levels of poverty in some contexts can

² Some of the more advanced projects include: Ulu Masen (Indonesia); Oddar Meanchey (Cambodia); Juma (Brazil).

actually lead to greater sustainability through decreased pressure on forest ecosystems (Soriaga and Walpole, 2007).

- *Clear benefit sharing arrangements in REDD+ could help to address past shortcomings in financial management linked to forests and increase trust.* For example, there are frequent cases surrounding the failure of investors and governments to honour financial commitments over the long term (IIED, 2009).

Despite the clear rationale for benefit sharing, there is still very little clarity on what benefit sharing actually means in the context of REDD+. Most of the processes outlined above have yet to detail how benefit sharing systems would work in practice and there are only a few studies that have looked at benefit sharing in detail (e.g., Costenbader, 2009; IUCN, 2009). There are also many areas of confusion in the current debate, including:

- *High expectations about benefits, with little understanding of how they relate to costs* (Streck, 2009). Figures for the potential financial flows associated with REDD+ often refer to international estimates based on opportunity costs or projections of the scale of finance that could be sourced from the carbon markets. These do not give any information on how finance for REDD+ may be divided along the value chain or what could be available at local levels. Even where costs are broken down more systematically at the project level, there is still very little data available, or assessments of how costs balance with income (REDD-net/DFID, 2010; Eliasch, 2008; Idesam, 2009).
- *Differences in interpretation of the types of benefits that could accrue through REDD+,*

such as financial (e.g., direct cash payments) versus non-financial (e.g., clarification of property rights) benefits. Within the financial category the distinction between direct ‘cash in hand’ payments for carbon and other more indirect financial benefits such as employment, is also often unclear. Some studies, for example, tend to conceive REDD+ to function in a similar way to traditionally conceived national Payment for Environmental Service (PES) operating in countries such as Costa Rica and Mexico (which involve participants being given direct cash payments linked to the volume of resource protected—Bond et al., 2009). This will be an approach in some REDD+ schemes, but the concept has broadened considerably, to include a wide range of forest management approaches (Angelsen et al., 2009).

- *The degree to which benefit sharing is linked to performance in emissions reductions or removals.* For example, benefit sharing systems could be based purely on emissions metrics, with those actors who have demonstrated reductions/removals being provided a level of benefits linked to the volume of reduced emissions/enhanced removals. This will not necessarily result in an equitable distribution of benefits, if it is difficult to identify which actors have been involved. Alternatively, broader eligibility criteria could be used to identify which actors receive benefits.
- *The scale of benefit sharing systems being discussed.* The main financial transfers in REDD+ are likely to be from international to national levels (e.g., between developed and developing country governments), between national and local levels (e.g., between

governments and communities), and at the local level (e.g., within communities). The options for how sharing occurs at these different levels are diverse and there is considerable overlap between levels, which can lead to confusion.

3 What is ‘benefit sharing’?

Benefit sharing systems have been developed across the natural resources (NR) sector, and are relatively common for resources such as oil, gas, water, and forests. Some useful principles can be drawn from existing debates, with which to build a conceptual framework applicable to REDD+. At a broad level, debates about definitions of benefit sharing of non-human genetic resources under the Convention on Biological Diversity (CBD) offer a useful distinction between more technical legal definitions which focus on who has rights of access to and use of such resources, and definitions which are more rooted in ethics, introducing questions of justice into decisions about who should benefit (Schroeder, 2007).³ In this paper, we take a more technical institutional approach as we are interested mainly in how benefit sharing systems function and their implications for a particular set of actors (poor and vulnerable people).

Most studies of benefit sharing systems also take a more technical approach, looking at the way in which the ‘profits’ or ‘rent’ from

natural resources can be allocated between different actors (e.g., IIED, 2009; Fischer, 2007; World Bank, 2009). Whilst few of these offer a conceptual framework which is directly applicable to REDD+, they outline some of the main aspects of benefit sharing systems. For example, in the community forestry and payment for environmental service (PES) literature, various studies have looked in detail at issues such as the types and appropriateness of benefits and costs that accrue to different actors; the actors who may or may not be entitled to benefits (e.g., community user groups; individuals; women) and their ‘legitimacy’ in receiving benefits; and the rules which govern benefit sharing (e.g., legal rules governing rights to land and other assets; rules within community groups, etc.) (e.g., Mahanty et al., 2009; Schreckenberg and Luttrell, 2009).

We base our conceptual framework on a similar set of attributes, defining three main elements of a REDD+ benefit sharing system:

- The types of benefits that arise through REDD+;
- The actors (including the beneficiaries) between whom benefits are shared; and
- The cross-cutting formal and informal rules that govern how benefits are shared.

Types of benefits

One of the key theoretical foundations of REDD+ has been the potential to put an economic value on reduced GHG emissions from deforestation and degradation. This could create incentives to reduce deforestation and degradation rates, if the economic benefits can be realized. This could occur, for example, through the transfer of funds to country governments or other actors that play a role in deforestation and degradation activities,

³ For example, Schroeder (2007) suggests the following definition for non-human genetic resources: “Benefit sharing is the action of giving a portion of advantages/profits derived from the use of non-human genetic resources or traditional knowledge to the resource providers, in order to achieve justice in exchange.” In other words, benefit sharing is not an act of charitable giving—if we use resources we do not own, justice demands some form of compensation in exchange.

or alternatively these actors could ‘sell’ certified emissions reduction credits within global carbon markets, if appropriate systems are developed. The sizable revenue flows that have been predicted by some studies (e.g., Stern, 2006; Eliasch, 2008) have driven an interest in REDD+ particularly among developed and developing country governments, conservation NGOs and venture capitalists involved in the carbon markets (Peskett and Yanda, 2009). It is these flows that are often associated with the ‘benefits’ of REDD+. However, this assumption needs to be unpacked in order to understand the types of benefits that could result from REDD+.

Firstly, the financial figures quoted for REDD+ at the international level often refer to the costs of implementing REDD+, which may not be representative of actual ‘benefits’. In most studies such costs are estimated by assessing the opportunity cost of land in different countries and working out the percentage reduction in deforestation or degradation that could be achieved by compensating these costs at a given carbon price⁴ (Greig-Gran, 2006). Much of the finance would be tied up in compensating different actors for the opportunity costs they face, and implementing new policies and measures, with few additional benefits beyond what they would have had through the implementation of any alternative land use strategies.

So what is the ‘benefit’ associated with REDD+ in financial terms? From an economic standpoint, the main categories of revenues that could be shared in REDD+ schemes, include (IUCN, 2009):

1. Compensation of opportunity costs:

Opportunity costs are equal to the value

of the next most profitable land use. For example, in cases where forests are protected from conversion to growing oil palm, the opportunity cost per hectare is equal to the value of the palm oil per hectare.

2. Funding for productive activities:

These are the funds used to support the implementation of productive activities that store carbon. For example, they may include tree planting activities that aim to relieve pressure on natural forests.

3. REDD+ ‘rent’: This represents the difference between the cost of implementing REDD+ (opportunity cost plus the funding needed to implement policies) and the average global carbon price at which emissions reductions credits from REDD+ could be sold. I.e., the rent is the profit that could be made from REDD+.

Strictly speaking, the rent is the ‘benefit’ in REDD+ that needs to be shared, as it represents revenue which is not tied to compensation or any productive activities (Figure 1). However, given that there is still considerable debate about what types of opportunity costs should be covered in REDD+ and the types of activities that could be financed, we use a broader definition of benefit sharing to refer to the allocation of revenues used to finance REDD+.

A second implication of the common economic framing of REDD+ is that there is a strong emphasis on the financial benefits of REDD+ as opposed to any non-financial benefits. At one level, new financial flows are a key distinguishing feature of REDD+, so an understanding of how these flows are divided up is important. However, international revenue flows for REDD+ will incentivize the implementation of a wide variety of policies and measures that are likely to have benefits and

⁴ Additional costs, such as transaction costs and the costs of implementing policies, are often added to these estimates.

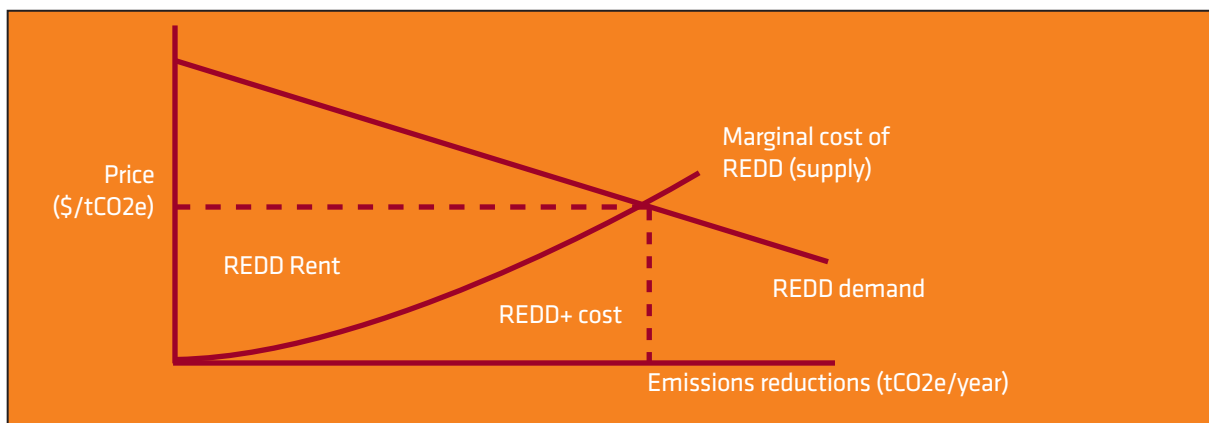


FIGURE 1: REDD supply and demand illustrating the differences between opportunity costs and the REDD ‘rent’. Theoretically developed countries could at a minimum pay the opportunity cost associated with reaching a certain level of emissions reductions or they could pay the same price for all reductions (i.e., paying ‘rent’). In addition to the opportunity costs, transaction and administrative costs also need to be considered in terms of determining the overall scale of financial benefits from REDD+. Source: Adapted from Eliasch (2008).

costs beyond purely financial ones. For example, certain procedural rights or cultural values may be enhanced or compromised in the design and implementation of REDD+; REDD+ may have an impact on local institutions through which people benefit in terms of empowerment in decision making, etc (Table 1). The appropriateness of different ‘types’ of benefits has been analyzed in some of the PES and social protection literature (e.g., Wunder et al., 2008; Farrington et al., 2005; Devereux et al., 2006).

There is often an implicit assumption that benefits will take the form of ‘cash in hand’ payments made to governments and/or communities/individuals involved in REDD+. This means that REDD+ would resemble some existing payment for ecosystem service (PES) schemes operating at local or national scales. Payments would be linked to the value of the service being provided, and their distribution based on different actors’ rights to sell these services. As a result, the discussion of benefit sharing is often linked to legal analyses of carbon rights (Streck, 2009; Peskett and Brodnig, 2011).

Finally, the focus on opportunity costs has tended to dominate financial assessments of REDD+. Transaction and administrative costs could be significant and also need to be carefully considered in understanding the extent of financial benefits that could be shared or how this might occur. These costs are not well known, and will probably vary considerably between different approaches to REDD+.

Bearing these nuances in mind, we focus mainly in this paper on revenue sharing in REDD+, rather than attempting an analysis of all of the other benefits that could result from REDD+ implementation.

Actors

In order to understand the implications of benefit sharing systems in REDD+ it is important to understand who the actors involved are—that means, who are the benefits shared among and who is eligible to receive benefits? It is also important to understand what role different actors play in benefit sharing systems, for example in terms of who is making decisions

TABLE 1: TYPES OF BENEFITS FROM REDD+ AT NATIONAL AND LOCAL LEVELS, BASED ON BROAD SUSTAINABLE DEVELOPMENT CRITERIA

Benefit type/level	Description/function
National	
Economic	<ul style="list-style-type: none"> • Contribution to REDD+ finance to national GDP and profits from sale of REDD+ credits • Multiplier effects of REDD+ investments, such as spending of income in local markets or creation of jobs elsewhere in the economy • Physical (e.g. roads; monitoring systems) and institutional (e.g. better resourced forest management institutions) infrastructure improvements • Reduced spending, for example on flood management due to improved forest environmental services
Social	<ul style="list-style-type: none"> • Accountable national institutions
Environmental	<ul style="list-style-type: none"> • Improved national environmental quality
Local	
Economic	<ul style="list-style-type: none"> • Employment in REDD+ schemes • Income from direct incentive payments • Income from sale of products linked to REDD+ • Increased net income due to local infrastructure improvements • Increased land and forest assets linked to REDD+
Social	<ul style="list-style-type: none"> • Local institutions more inclusive of poorer community members and better represent their interests in decision making processes • Reduced conflict and acknowledgement of cultural traditions • Improved health
Environmental	<ul style="list-style-type: none"> • Improved local environmental quality

about how sharing occurs. These will vary considerably between schemes, but some of the key categories and their characteristics are listed in Table 2.

At the national level, different actors will need to perform a range of functions linked to benefit sharing. Many of these functions will be carried out by existing government departments, or new institutions may be established by governments especially for delivering REDD+. Institutions such as national funding and monitoring agencies have been proposed in various studies (IWG-IFR, 2009; Meridian, 2009b) and are being established in some

countries (Angelsen et al., 2009). These will play a different role in approaches to REDD+ that involve financial transfers to national governments, as opposed to direct investment in projects (which in some cases may circumvent governments almost completely).

At the local level, the actors involved will also vary considerably depending on how REDD+ is implemented. Local governments may be involved in planning where and how REDD+ is implemented, in defining criteria for how benefits are shared between participating communities or individuals and in managing funds. Village governing bodies or existing/new

TABLE 2: TYPES OF ACTORS IN REDD+ AT NATIONAL AND LOCAL LEVELS

Actor type/level	Description/function
National	
National financial institutions (e.g. treasury)	Managing income associated with REDD+ and allocation sub-nationally
Legal frameworks	Establishing legal frameworks governing benefit sharing
National audit offices/REDD+ registries	Auditing financial flows from REDD+ and verifying financial performance
Government departments (e.g. Environment/forestry/agriculture/finance) departments; REDD+ trust fund working groups	Establishing allocation criteria and making decisions on allocation
Intermediaries	May act as aggregators for local level participants or brokers. They receive some part of the benefits from REDD+ (i.e., are part of the value chain).
Local	
Local government	May be involved in REDD+ implementation and receive financial benefits, and/or may be involved in defining activities and actors that are eligible.
Community groups	Community groups may be key structure through which REDD+ activities are managed, including the sharing of financial benefits. Poor and vulnerable groups may/may not be part of community groups.
Individuals	Individuals (usually owning or with access to land/forest) may directly manage REDD+ activities and receive benefits in some schemes.
Wider community	REDD+ projects and programmes will likely affect a wide constituency beyond those formally involved in activities or benefit sharing. They may benefit through multipliers or may face increased costs.
Project developers and implementers	Design, establish and often fund projects (they could be local NGOs, companies or government, or could include community groups/individuals themselves).

community groups may play a role in decision making about the allocation of activities and funds.

Depending on how REDD+ is designed, poorer or more vulnerable individuals and groups could participate in REDD+ and receive direct financial benefits. Typically these include landless individuals and households (often dependent on labour income); forest dependent individuals and households; women, the elderly and infirm;

and indigenous peoples and ethnic minorities.⁵ However, these actors may be less likely to be able to participate because they lack assets, have

⁵ While these classifications can be useful in terms of disaggregating between actors, they need to be used carefully as they can lead to static interpretations or poverty, a focus on the short term and a disregard for the multi-scalar drivers of poverty. Hobley (2007), for example, distinguishes between 'declining, coping and improving poor', whilst McKay and Lawson (2002) distinguish between the 'chronic poor' who are always poor and the 'transient poor' who are sometime poor.

fewer rights or are less able to influence how benefits from REDD+ are distributed.

Rules

The final aspect of benefit sharing systems that we define here is the rules that govern how benefits are shared between actors, and therefore cross-cut the two elements of benefit sharing that are already discussed. These can be diverse and are likely to vary significantly between different approaches to REDD+.

Rules can be formal (e.g., defined in laws, policies or contracts linked to revenue distribution or forest management) or informal (e.g., defined by customary systems or traditions). These frequently overlap in countries where REDD+ will be implemented, meaning that actors will have different interpretations of how benefits should be shared, which could lead to conflict (Cotula and Mayer, 2009). Where specific benefit sharing rules have not been defined in laws or policies, they will need to be constructed, for example through contracts—standard instruments have been developed for managing these in existing forest carbon market based systems (e.g., emissions reduction purchase agreements—ERPAs). It is possible that the stringency of rules could be greater in market based approaches compared to fund based approaches, because of the need to minimize investment risks and comply with broader international standards. Whether benefit sharing rules are established through contracts or other instruments, they will refer to existing laws which will need to be considered in interpreting who has the rights to benefits, what activities are permissible.

Different sets of rules governing benefit sharing may operate at national and local levels (Table 2). At the national level, existing

legislation, for example surrounding land tenure and forest revenue management, will probably be one of the most fundamental determinants of how benefits from REDD+ are distributed (Cotula and Mayers, 2009). New rules developed for REDD+ such as legislation on carbon rights, the types of policies and measures that are prioritized in REDD+ strategies and the criteria developed for national REDD+ funds will also govern how financial benefits from REDD+ at the national level are distributed. In federal states and in countries that are more advanced in decentralization processes, provincial/state level legislation on these issues will govern how benefits are shared.

At the local level, the sharing of benefits is likely to be guided partly by this national legislation and the institutions that surround its implementation, making it difficult in practice to distinguish ‘local’ and ‘national’ rules. However, certain rules are more specific to local benefit sharing, such as group constitutions that are often recorded by community groups involved in development projects (and define how decisions are made about activities carried out and spending); village level governance structures; and customary land management systems.

Because of the difficulty in distinguishing between these national and local rules, we instead look at their main functions, distinguishing between scales where necessary. This is also a useful approach in terms of understanding the implications of benefit sharing rules for the poor. The main functions identified include:

- **Eligibility criteria (i.e., *who* benefits):** One of the main factors governing benefit flows surrounds which actors are eligible for, and able to access, REDD+ benefits. These may include factors such as:

- formal and informal land tenure rules;
 - rules governing the interpretation of rights to benefit from carbon finance and the sale of carbon credits;
 - revenue sharing rules defined in statutory and customary laws;
 - additional targeting criteria such as socio-economic profile of beneficiaries;
 - emissions reduction/removal criteria which impose limitations on the types of activities that are eligible under REDD+; and
 - the form of allocation mechanisms, such as how beneficiaries physically receive benefits.
- **Scale and scheduling of financial benefits (i.e., *what the benefits are*):** Within our focus on financial benefits, there are likely to be rules governing how actual costs are established, the scale of benefits distributed and the variation in scale between actors or geographic areas. There are also likely to be rules affecting when the first benefits are received, how long they are received for and how they vary through time.
 - **Governance of benefit sharing systems (i.e., *how benefit sharing is managed*):** All of the rules listed above play a role in governing benefit sharing mechanisms. In addition to these, more general sets of rules can be applied to govern the accountability of benefit sharing, including participation, transparency, dispute resolution, and monitoring and assessment.

Table 3 gives some examples of the rules that are likely to govern how benefit sharing systems work and what their implications are.

Combining benefit types, actors and rules

What do REDD+ benefit sharing systems look like at the country level?

The way in which financial benefits associated with REDD+ are to be shared at the country level is still unclear in most countries. The standard process for developing REDD+ has been to start with a ‘pre-plan’ which details all of the steps necessary to build a national REDD+ system. These plans identify a wide range of possible policies for reducing deforestation and degradation rates, but also a series of further research and policy requirements in order to build national benefit sharing systems—a process that is likely to take at least a few years in most cases. However, reviewing examples of early REDD+ plans and projects, it is possible to get a sense of some of the different approaches to benefit sharing that are being considered and the interplay between benefit types, actors and rules in these systems. These include:

- **Brazil (Amazon Fund):** In its early years the Amazon Fund has developed a system of sharing financial benefits from REDD+ between different types of activities based on a competitive application process. This is moderated by a set of criteria developed by the national government.
- **Indonesia (draft revenue sharing rules):** In 2009 Indonesia released a set of draft legislation proposing ‘nested’ revenue sharing arrangements linked to REDD+ projects. This governs how benefits are shared between the government, the private sector and communities. The rules vary between different land tenure arrangements.
- **Tanzania:** Tanzania’s 2009 draft REDD+ framework indicated that benefit sharing is likely to occur through the channelling of

TABLE 3: TYPES OF RULES OPERATING IN REDD+ BENEFIT SHARING SYSTEMS AT NATIONAL AND LOCAL LEVELS

Rule type/level	Description/function
National	
Legislation	<ul style="list-style-type: none"> • Legislation and policies that govern land tenure, usufruct rights, etc. • Revenue sharing legislation linked to natural resources from different resource types/land categories • Forest management guidelines and policies also determine benefit sharing arrangements (e.g. through extraction licenses, collaborative forest management guidelines, etc.) • National policies may define how decision making occurs, for example decentralization laws may govern the role of local governments in structuring and enforcing REDD+. • International policies translated into national legislation, for example on the rights of indigenous peoples • Customary laws, which may or may not be recognized in formal national legislation
Standards	<ul style="list-style-type: none"> • Specify the processes that project developers need to go through in order to establish carbon forestry projects, such as project pre-assessment procedures (e.g. community consultation), design and ongoing monitoring, including government role • May specify sharing of carbon revenues, such as timing of payments and their duration
REDD+ funding criteria	<ul style="list-style-type: none"> • Funding criteria within specific national REDD+ funds, for example relating to eligible activity types, land size, etc. • Revenue sharing rules specific to REDD+ income, for example, governing how income from sale of REDD+ credits is allocated, taxed, etc.
Local	
Community group constitutions	<ul style="list-style-type: none"> • May define how decision making occurs within formal community groups • May define rules of entry into groups (e.g. membership fees), revenue sharing between members, scheduling, etc.
Customary laws	<ul style="list-style-type: none"> • These may define decision making processes within and between communities
Contracts (e.g. Emissions Reduction Purchase Agreements ERPA)	<ul style="list-style-type: none"> • Comprise the main formal set of rules used to structure carbon finance agreements. Specify expected carbon credit volumes, carbon credit prices, duration and scheduling of payments, risk reduction mechanisms and forest management systems. • May also define compensation entitlements, inheritance, etc. • Contracts may be put in place where legislation exists but are particularly important for defining benefit sharing arrangements where specific legislation does not exist.

finance from a new national REDD+ fund into specific policy priorities. Community forestry is prominent, implying that the sharing of REDD+ benefits is likely to be governed by existing community forestry regulations.

- **Costa Rica:** Costa Rica's national REDD+ plan emphasizes an expansion of the existing national PES program. This is managed by a national government agency which makes PES payments to registered individual private landowners and indigenous groups. Specific eligibility criteria have been developed, such as limits on the size of land owners that can participate.
- **Uganda:** The Nile Basin Reforestation project is a useful example of how the sharing of carbon finance can be managed between governments and communities, and also within communities. National rules surrounding collaborative forest management as well as specific carbon finance agreements and an internal community group constitution govern how such finance is distributed between actors.

These different approaches are discussed in more detail in separate case studies.⁶ Figure 2 gives a more stylized summary of the different approaches.

A key issue highlighted by Figure 2 is the relationships between different approaches to REDD+ and benefit sharing at the local level. REDD+ has commonly been conceived as falling into three different approaches based on scale, including national, nested and project-based approaches (Parker, 2009). Distinctions are also

⁶ Available at www.redd-net.org and www.worldbank.org/sdcc.

often drawn between market-based and fund-based financing mechanisms (Parker, 2009). While there are certainly differences in how benefit sharing functions in these different approaches,⁷ we do not consider them to be very useful categories for understanding benefit sharing at the local level, and in practice evolving REDD+ schemes contain overlaps between these different categorizations. For example, privately or NGO run REDD+ projects are usually governed by standards which refer to adherence to national and local laws, and are carried out within the constraints of existing forest and land-use policies. In a country such as Uganda, the sharing of carbon finance is then mainly governed by policies such as collaborative forest management guidelines, the carbon standards and specific company/NGO decisions.

4 Actors, benefit types and rules: implications for the poor

This section considers how some of the different options for actors' eligibility to receive benefits, benefit types and the rules governing benefit sharing affect poor people. Given the variability and complexity of different benefit sharing systems we simplify the analysis by focusing mainly on financial benefits (and costs) and three main sets of actors: indigenous peoples, women and the forest dependent poor.⁸

Poverty is primarily considered here from an economic perspective—i.e., in terms of how

⁷ For example, in market based approaches, specific types of contracts need to be negotiated, prices have to be agreed upon (which may fluctuate with international prices) and risk reduction is paramount.

⁸ As noted in section 3, we recognize the limitations of this approach—particularly that these actor sets may not necessarily be 'poor' and that they overlap.

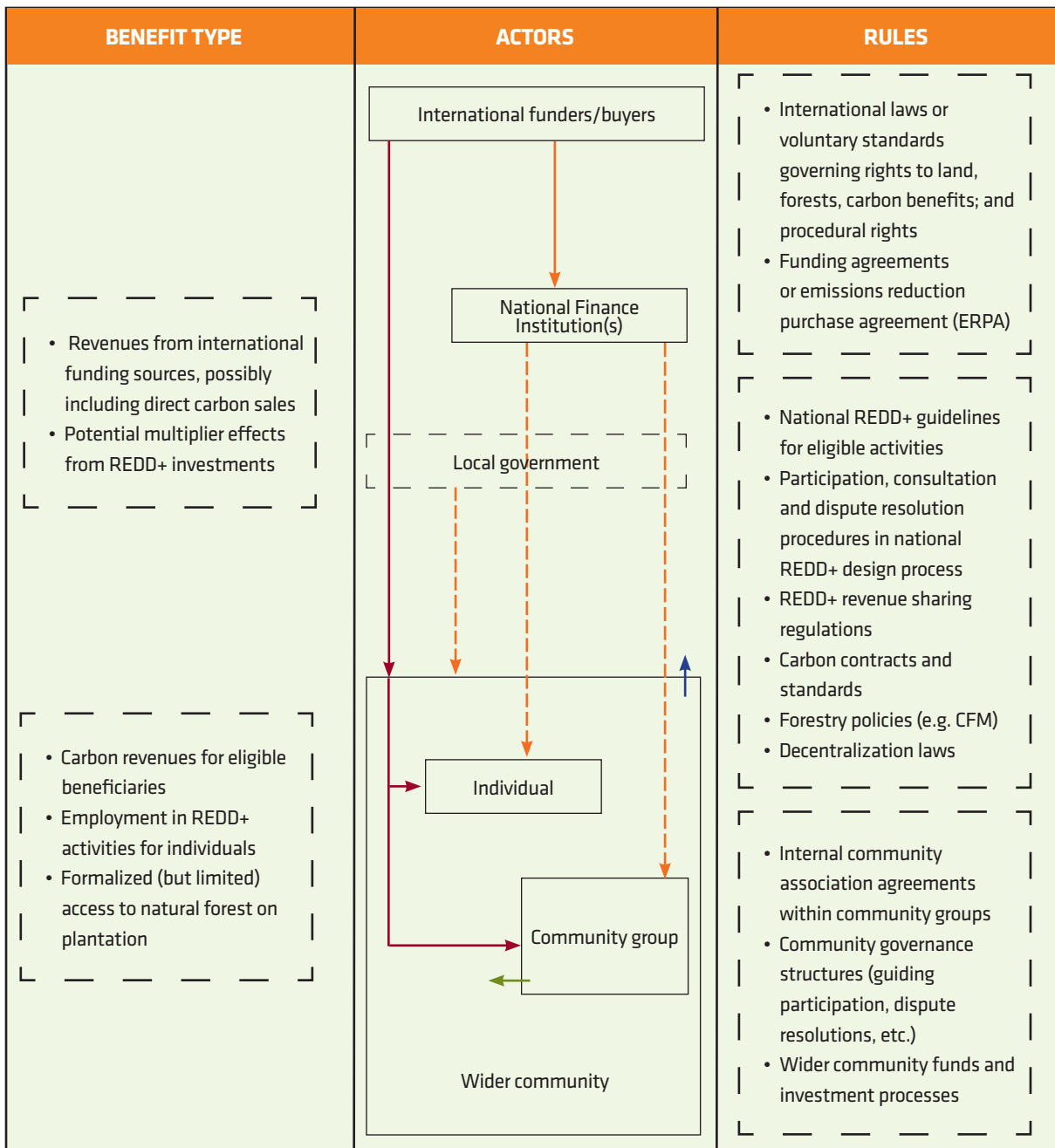


FIGURE 2: Stylized schematic diagram of benefit sharing in REDD+ systems and the relationships between types of benefits, actors and rules, based on examples of existing or evolving national and project approaches (annex 1). Arrows depict (financial) benefit flows in these systems. Orange arrows represent a 'national' REDD+ system, with benefits devolved by national governments either to communities as a whole (often through infrastructure investments), community groups (e.g. in Nepal) or individuals (e.g. in Costa Rica). Red arrows represent 'project' investments by international actors, which can also be made to communities, community groups or individuals. The green arrow illustrates cases where some sharing of financial benefits is made between community groups and the wider community and the blue arrow highlights the reality of the wider distribution of benefits and costs beyond communities (e.g. through multiplier effects, investments in other sectors or taxes that are redistributed to other activities/areas).

the components of benefit sharing systems affect income opportunities (e.g., carbon finance payments; employment; or access to other economic assets such as land). However, following the World Bank (2001) poverty framework, the impacts of the design of benefit sharing systems on empowerment (i.e., ability of people to shape decisions that affect their lives) and security (i.e., impacts on exposure to risks of economic shocks, reduced social cohesion and undermining cultural traditions), are also considered where appropriate.

Insights are drawn from evolving REDD+ schemes and a range of other case studies, including: national payment for environmental service schemes; social protection schemes; benefit sharing systems in the extractive industries; community forestry; local PES schemes (particularly carbon forestry projects).

Actors and their eligibility to access REDD+ benefits

One of the main factors governing benefit flows surrounds which actors are eligible for, and able to access, REDD+ benefits. There are many different factors which govern access to benefits. Whilst these are likely to vary with the approach to REDD+, some existing benefit sharing systems highlight some factors governing eligibility.

These include:

- Land tenure
- Interpretation of carbon rights
- Revenue sharing agreements and mechanisms
- Socio-economic criteria
- Emissions reductions/removals requirements

Land tenure

Land tenure is probably the main factor influencing how benefits are shared in forest and many other natural resource sectors, as it

influences which actors have the rights to carry out activities on specific areas of land and to claim benefits from these activities. Land tenure is normally established formally in national laws. There are significant differences between countries, but categories are often generalized into some form of private ownership, communal ownership, open access lands and state ownership (FAO, 2002). In many countries there are long standing disagreements between governments and civil society over rights to land and natural resources, for example between statutory and customary interpretation of rights. This means that what is enshrined in national legislation may not reflect realities on the ground in many instances.

In some national REDD+ systems the allocation of financial benefits will not necessarily be linked to land tenure. This is particularly the case where emissions reductions are claimed against a national reference level and result from broad policy reforms rather than geographically discrete interventions dealing with a limited set of actors. In these national systems, allocation linked to tenure may also be difficult and costly to implement given the wide variety of actors and difficulty of attributing emissions reductions. In this case, benefit sharing would need to be negotiated between governments and citizens.⁹

However, many early proposals for REDD+ systems and voluntary projects envisage implementation through various interventions

⁹ While land tenure may not be an important determinant in how benefits are shared, it would still likely emerge as a key factor in the debate about who has what sort of rights to the benefits associated with emissions reductions, and in terms of the of financial incentive of REDD+ influencing governments or project developers to secure stronger rights over contested lands in order to generate emissions reductions. This issue is discussed more in Peskett and Brodnig, 2011.

targeted on specific geographic areas at the local level, more akin to PES programs. In these cases, different land tenure systems will influence both the allocation of benefits between national and local levels, and also the allocation of benefits between different actors at the local level, depending on the rights associated with each tenure category. Private or state tenure is often associated with being easier for establishing benefit sharing systems in existing carbon forestry projects as the beneficiaries are often single entities (individuals, companies or government), investment risks are lower and management is easier. Emerging REDD+ projects and existing carbon projects often appear to be implemented on private or state land, highlighting a possible bias in benefit sharing towards these tenure categories (Myers-Madeira, 2009). Attempts to implement projects on private or communal land outside of reserves have failed in some cases because of the lack of clarity over tenure (Peskett et al., 2010).

In many instances, even if rights are clearly defined on paper, this does not necessarily align with different actors' interests in reality. For example, where benefit sharing systems are established with private or state actors who hold clear formal title, there may be competing claims by those without formal rights to benefits (Ellsworth and White, 2004; Fitzpatrick, 2006). Usufruct rights may exist, which enable limited benefits, although it is possible that policies such as PES will increase the incentives for landlords to restrict access (Pagiola et al., 2005; Brodnig, 2009). Complex tenurial systems (i.e., where there are competing claims to land and/or overlaps between statutory and customary tenure) may make it particularly difficult to identify beneficiaries and establish benefit sharing systems.

In approaches to REDD+ which distribute

finance based on land or forest tenure the clarification of tenure is likely to be important in terms of access to benefits from REDD+ and it could also increase livelihood security in the long term. However, the impacts on poor and vulnerable people will depend heavily on how these processes are managed. The drive to formalize land tenure in order to develop REDD+ projects and programs has led to concerns, especially where there are multiple perspectives on rights to forests and where there is a history of less powerful claimants losing out (Larson et al., 2008; Cronkleton et al., 2009). This has been raised, for example, as an issue for 'village lands' in Tanzania, which have uncertain tenurial status but are of increasing interest for use in REDD+ and biofuels development (REDD-net East Africa Bulletin 1, 2009). Often these processes are further complicated by a lack of records on local land tenure which can hinder the targeting of 'affected stakeholders' and inappropriate or unimplemented compensation schemes.

The implications of land tenure security may vary between different vulnerable actors within a given context. For example, considerable progress has been made on securing rights to land and forest resources for certain indigenous groups in Brazil which could increase the potential for direct benefits from REDD+. Statutory and customary tenure laws can generate gender inequalities—for example, in some African countries women are unable to own, inherit or prevent the sale of land (Wells, 2009).¹⁰ Progress has been made on these issues in some areas—for example, in Zambia, 30% of all urban land parcels are set aside for women. The landless poor would probably be

¹⁰ In Nepal, while 70% of women engage in agriculture, only 8.1% have land ownership.

most vulnerable, as in many of the proposed approaches to REDD+, they would only stand to benefit indirectly from REDD+ schemes.

Cotula (2010) suggests that this issue needs to be fully addressed in environmental and social impact assessments, compliance with local and international human rights laws and in private investment projects, using a process of negotiations with communities rather than compulsory takings. Technical and financial resources will also need to be provided for institutions involved in land titling processes in order to improve the processes through which the title is established and enhance land record and monitoring systems, especially in complex tenurial situations.

Carbon rights¹¹

The interpretation of carbon rights in REDD+ will influence which actors are eligible for financial benefits. Carbon rights can be defined in specific national legislation on REDD+ and/or can be interpreted through existing national and local laws. In many developing country situations carbon rights are likely to be linked to land or tree ownership which often lies with national governments. This means that benefit sharing agreements will need to be reached if communities are to benefit from REDD+. It is possible that in some countries rights to carbon could lie with government even if tree and land ownership lies with communities, meaning that communities will not benefit unless effective benefit sharing mechanisms are in place. This approach was used in New Zealand's emissions trading scheme, with negative impacts on both forest cover and industry trust

¹¹ For a fuller discussion of carbon rights in REDD+ and their implications for poor people, see the accompanying report (Peskest and Brodnig, 2011).

in government (Cox and Peskest, 2010).

Even where communities are eligible to sell REDD+ carbon credits, the linkage to land and tree ownership may make it difficult to access benefits. As noted in the previous section, this is because rights to land and trees are often unclear or overlapping which could make it hard to demonstrate ownership. It may also exacerbate conflicts over land as attempts are made to access the new benefits linked to REDD+, potentially increasing the vulnerability of poorer actors.

Different vulnerable groups will be affected in a similar way to those discussed for land tenure, given the links between carbon rights and forest/land ownership: women often have weaker rights; indigenous peoples may in some cases have stronger claims; and the landless would be unable to participate directly in the sale of carbon. The main additional concern is that new regulations and laws do not adequately address these groups in their definition of carbon ownership.

It is important that national REDD+ regulations include clear references to the rights of different types of land owners and managers in respect to carbon. The formulation of regulations also needs to carefully consider how different approaches to the definition of carbon ownership may affect the equity of benefit sharing.¹²

Revenue sharing rules and mechanisms

Different options for managing REDD+ financial benefits are beginning to emerge at the national level. Two of the main approaches include:

1. New revenue sharing rules for REDD+ projects, defined in either national

¹² See Osafo (2010) for a discussion of this issue in the Ghana context.

legislation or in contracts. These will determine which areas and actors are eligible for REDD+ investments.

2. National fiscal transfer systems that devolve financial benefits from national government funds to lower administrative levels, based on pre-defined eligibility criteria and a competitive bidding process.

These are not mutually exclusive approaches—both are being used or proposed simultaneously in Brazil and Indonesia.

Project revenue sharing rules govern how income from the sale of carbon credits is to be shared between government, project developers and communities. Land tenure is the main determinant of which actors are eligible to receive benefits, and the proportional division of carbon finance varies with different tenure categories. In Brazil, there are concerns about the current lack of detail in revenue sharing arrangements for REDD+ projects on private land (Chagas, 2010) and in Indonesia the rules are being revised because of overlapping regulations and questions over whether the Ministry of Forestry has the legal authority to define such rules. In Indonesia, the Ministry of Finance (2009) has also highlighted that “REDD revenue-sharing formulas would have important implications for the viability of different kinds of emission reduction activities, and for the overall effectiveness and efficiency of the scheme”, and go on to illustrate how this could affect the overall incentives either by producing windfall profits for developers or too few resources to implement appropriate activities. Both countries are also federal states, which introduces additional questions about the alignment of national and state/provincial level laws governing REDD+. This has been an issue for emerging REDD+ activities in the

Indonesian state of Aceh, where the provincial government argues that it controls the regulation of, and benefits arising from, REDD+ projects implemented in the province (Dunlop, 2009).

In the fiscal transfer approach, national REDD+ funding would be allocated to regions based on a set of pre-defined criteria such as the existing level of emissions or mitigation potential, as well potential additional development criteria. Initial funding would be provided to local governments to establish activities, but over time payments would be based on performance—initially using efforts to establish REDD+ programs as the main criterion for measuring performance, but graduating towards measures of actual emissions reductions as being the main criterion. Such an approach would overcome the problem of establishing fixed revenue sharing rules for project investments, would give more authority to local governments and would introduce flexibility for them to implement broader REDD+ interventions. However, lessons from Indonesia’s Reforestation Fund established in the Suharto era (and from other natural resource sectors—Box 1) indicate that significant effort would be needed to build resources in local governments to apply for funds, identify appropriate activities, monitor financial flows and establish compliance (Barr et al., 2009). This indicates that where REDD+ devolves large scale resources to local governments, it needs to be accompanied by investments in human resources and infrastructure at these levels to ensure that resources are used effectively.

At the local level the question of who is eligible for carbon finance benefits is unclear in most existing carbon forestry projects (Bozmoski and Hultman, 2009; Boyd et al., 2007a). However, such projects often work with new or existing community groups in order to

Box 1

Transferring mining revenues between different levels of government: Lessons from *Canon Minero*, Peru (ICMM, 2007)

The *Canon Minero* is a mechanism for the direct distribution of mining revenue collected by central government to sub-national governments. It is not a special tax or special fund, but merely the earmarking of 50% of corporate income tax collected from mining companies. It existed before the recent political transition in 2002, but different sources in Lima indicate that from 1997 to 2001 it earmarked only 20% of the mining companies' corporate income tax payments. Transfers through the *Canon Minero* allow sub-national governments to take more independent expenditure decisions, whilst other intergovernmental transfers funded by general tax collection, including from mining companies, are earmarked for targeted expenditure programs.

The fiscal system of direct intergovernmental transfers of revenue from mining remains under revision and is subject to contentious political negotiations between central government, the Congress and sub-national government entities. Underlying the decentralization process, which drives this, is a dynamic process of socio-political change whose outcome is by no means certain, and could have positive or negative implications for political stability.

The *Canon Minero* system offers some insights into revenue transfer systems between different levels of government, that are useful for REDD+:

- One of the main problems faced by some areas receiving *Canon Minero* funds is their limited capacity to design projects that comply with the requirements of the National Public Investment System.
- So far there is no stability fund to address the issue of market volatilities.
- The fixed sum of royalties per unit of output could dissuade small companies from investing in Peru.
- The *Canon Minero* funds can only be spent on investment projects, this could lead to a recurrent expenditure issue.
- It has been suggested that substantial increases in revenue transfers to sub-national governments could potentially result in a "local resource curse". This is particularly the case when local public financial management capacity is weak and the delineation of administrative responsibilities and the strategic revisions of sector policies in a decentralized government system are unclear. There are no guarantees that higher amounts of public money automatically result in sustainable improvements in living conditions for local communities.

manage activities as this reduces the transaction costs for project developers (Brodnig, 2009). The involvement of community groups can also have benefits for communities, for example through increased collaboration and the generation of new activities.

The governance of community groups therefore offers some useful insights into how revenue sharing rules are constructed (Box 2). Requirements often include the payment of membership fees, purchasing shares, owning land or holding a bank account. As a result it is often the case that only wealthier community members can participate. Certain individuals and groups are often excluded because of cultural, gender or class differences. This is the case, for example, in Community Forestry User Groups (CFUGs) of Nepal's community forestry system in which dalits (lower caste members of communities) have been found to be excluded from participating (Mahanty et al., 2009). Women may also be excluded, despite their often prominent role in forest management activities (Agrawal, 2007).

Community members that are not included in formal groups may benefit through employment in project activities, potentially enhanced access rights to project areas or infrastructure investments linked to projects (Peskett et al., 2010). However, they often appear to face increased costs such as:

- increased local land and commodity prices (Wunder et al., 2008);
- decreased access to forest resources;
- potentially reduced employment if practices are less labour intensive; and
- potentially increased local land speculation by more wealthy community members (Peskett et al., 2010; Brodnig, 2009).

Some PES projects have established community funds aimed at spreading benefits more widely across communities or invest in local infrastructure (e.g., schools and roads) that brings benefits to a wider constituency.

In terms of how financial benefits are physically distributed at the local level, insights from PES and cash transfer schemes are useful. For example, in the Bolsa Floresta PES scheme, payments are made on ‘smart cards’, which participants use to collect payments in local urban centres. A similar approach has been used in Brazilian social protection programs (Fiszbein et al., 2009). These approaches can hinder access to benefits or increase costs for participants. For example, for some communities in Amazonia the cost of reaching urban areas can be between USD50-USD480 or several days’ walk, so it is important that programs be flexible and allow beneficiaries to collect a number of accumulated transfers so as to reduce their costs (Fiszbein et al., 2009). Schemes often require individuals or community groups to hold a bank account in order for funds to be transferred, which can entail payment of an initial fee or the demonstration of stable capital flows, which can also be exclusionary. For example, early in the Costa Rican PES scheme, national banks did not recognize PES, limiting access to upfront capital for small landholders (Miranda et al., 2003). The participation of women in particular may be affected, because it is often men who hold household bank accounts.

Socio-economic eligibility criteria

In response to some of the eligibility challenges that can arise for poor and vulnerable groups as a result of land tenure, and associated rights and revenue sharing rules, various approaches have been developed to use additional socio-economic indicators in order to increase

Box 2

The sharing of carbon finance within community groups—the Nile Basin Reforestation Project (Peskett et al., 2010)

The Nile Basin Reforestation Project in Uganda is being implemented by Uganda’s National Forestry Authority (NFA) in association with local community organizations. The growing trees absorb carbon dioxide from the atmosphere, and carbon credits are purchased by the World Bank BioCarbon Fund paid to NFA and the communities. In one of the project sites the NFA has an agreement with the community group (RECPA) to pay them for the carbon for trees grown on National Forest Reserve land that they manage through a Collaborative Forest Management agreement. This will amount to about 15% of the total carbon income, though this is dependent on the trees being maintained on the land. RECPA is also entitled to the income from the sale of timber on the land they manage.

Carbon shareholding arrangements have been developed by RECPA in order to manage income from carbon sales. Group members can buy up to six shares in cash or in kind, which allows them to receive a portion of future carbon revenues. This raises the issue of whether certain members are excluded from benefits because of the additional costs, which appears to be the case in this project and is an issue in other carbon forestry projects (Brodnig, 2009). It also means that members need to have a good knowledge of the future returns from carbon sales in order to make less risky investment decisions. In this case, members do not appear to be aware of the potential carbon income. The fact that the number of shares is not limited also means that for every new shareholder, there are diminishing returns from an unknown total income stream. This could have negative impacts on economic opportunities for participants who may face net costs in the early years of the project.

participation. These include, for example, means testing, self targeting, proxy testing and community targeting (Table 4).

National cash transfer programs¹³ are instructive in terms of how targeting approaches work and their implications. As highlighted

¹³ Cash transfers are direct payments, usually provided by the state and federal government to eligible poor people in order to reduce poverty and increase social welfare.

TABLE 4: PROS AND CONS OF DIFFERENT TARGETING APPROACHES USED IN SOCIAL PROTECTION PROGRAMS, FOCUSING ON FOUR DIFFERENT MECHANISMS THAT ARE USED TO HELP TARGET SPECIFIC TYPES OF ACTORS, SUCH AS POORER HOUSEHOLDS (BASED ON SLATER AND FARRINGTON, 2009)

Type	Description	Pros and cons of different approaches
Means testing	Assesses the eligibility of an individual or household to access the program by directly examining their income and is usually used in combination with targeting poverty approach (Farrington, Harvey, Slater, 2007).	<ul style="list-style-type: none"> • Costly • High data requirements • Highly bureaucratic for beneficiaries • Complex contracting processes can result in exclusion
Self targeting	Participants identify themselves, based on a number of pre-defined selection criteria.	<ul style="list-style-type: none"> • Cost effective • Often include onerous, disempowering and humiliating procedures that are designed to discourage the “non-deserving” poor. • If self targeting is done on a categorical basis (for example support for households affected by HIV of female headed household) it can increase vulnerability by stigmatizing certain households within the community. • might create negative incentives and ‘dependency’ as individuals might avoid activities that would improve their income, but that are not eligible for support.
Proxy	Generates a score for households based on a number of easily observable characteristics such as quality of housing, assets, education of household members or the composition of the household (Farrington, Harvey, Slater, 2007).	<ul style="list-style-type: none"> • Relies on good data • Proxies can often be ‘at odds’ with factors that schemes attempt to target
Community based	A state policy of contracting with community groups or intermediary agents to have them carry out one or more of the following activities: 1) identify recipients for cash or in-kind benefits, 2) monitor the delivery of those benefits, and/or 3) engage in some part of the delivery process (Conning and Kevane, 2000).	<ul style="list-style-type: none"> • High costs for community groups • Might provide better screening of information and strengthen social cohesion • Groups need to be trained • Prone to elite capture, rent seeking, gender bias

in Table 4, for the four main approaches used there are potential implications for poorer participants, even where schemes are designed to benefit these actors. In addition, targeting in social protection schemes illustrates a series of other risks, including¹⁴:

- Exclusion errors, particularly where poverty is widespread and when program design explicitly targets only the ‘ultra poor’, can result in households involved in the

which can prevent communities from participating (Dugan and Pulhin, 2007), and added layers of bureaucracy can also increase rent-seeking behavior in local governments and intermediaries (Mahanty et al., 2009).

¹⁴ Similar issues arise in the forest sector. E.g. new policy and legal frameworks have been found to increase costs,

program ‘leapfrogging’ the excluded, yet poor households.

- Targeting can also be ‘captured’ for political gains or subjected to political pressure. For example, it is argued in Africa, the design of social protection programs is influenced by the idea of the ‘deserving poor,’ which manifests itself through the use of targeting mechanisms that uses labor constraints as a proxy to identify the poorest in society and exclude households with working age members (Barrientos, 2006; Mkandwire, 2005).
- The political need to gain acceptability forces some programs to commit errors of ‘inclusion’ to achieve their targets. For example, in the PSNP program, households that were not in the poorest category were included to be able to achieve the program’s ‘graduation’ target and gain acceptability (Slater, 2009).

Additional socio-economic indicators are being applied in some REDD+ programs—for example in Tanzania, criteria such as level of poverty and community willingness to participate are used in the selection of pilot REDD+ sites (although indicators are not yet developed), and in Costa Rica larger land size allowances for indigenous peoples groups are aimed at enhancing their participation. These additional criteria may be important if the objective of REDD+ is to contribute to poverty reduction (Fischer, 2007; Ahmad and Mottu, 2002; CGD, 2009).

Development programs often target women in an attempt to address disparities between men and women within households and communities. The evidence from cash transfer programs that include such targeting highlights both positive and negative outcomes (Box 3). Positive outcomes include more

Box 3

Targeting women with cash transfers in the Mexican Oportunidades social protection programme

In the Oportunidades programme in Mexico, transfers made directly to women tend to be more equally redistributed within the household and tend to improve the woman’s standing within the household (Molyneux, 2006). However, it is also true that such programmes result in both risks and opportunities for women in particular as payments are usually too low to graduate out of poverty whilst they see their workload increase (due to the additional domestic duties) and are asked to perform additional roles within the household. There is also evidence of initial intra-household conflicts as men felt the transfer should be made to them (Latapí and Gozales De la Rocha, 2008). Furthermore, whilst women felt more autonomous as a result of the transfer made directly to them, this does not necessarily translate into empowerment as this notion entails the ability of women to shape decisions that affect their lives, something which has not yet been proven by the Oportunidades programme (Molyneux, 2006).

equal redistribution of income and increased autonomy; negative outcomes include increased workload as a result of obtaining payments, and increased household conflict. In the forest sector, cash income for men is often invested in activities from which women are unlikely to benefit (Agarwal, 2002). The way in which targeting is planned and monitored also needs to be carefully considered—for example, a requirement for community groups to include women in the Nile Basin forest carbon project simply led to male participants registering their wives while providing no additional access to decision making processes (Peskett et al., 2010).

Eligibility requirements linked to emissions reductions/removals

An important feature of REDD+ is that eligibility to participate is likely to be linked to existing emissions from deforestation/degradation

and the potential to successfully reduce these emissions (or enhance removals). The concepts of permanence, additionality and forest definitions are key in this respect.¹⁵ They could affect eligibility in the following ways:

1. **Permanence:** The requirement to ensure that emissions are reduced or sequestered carbon is stored for long periods of time. This could render certain land tenure situations ineligible for implementing REDD+ because of permanence risks. Existing evidence indicates that situations where land tenure is complex or where there is conflict will be less attractive (see land tenure section).
2. **Additionality:** The requirement that emissions reductions or removals are additional to those that would have happened in the absence of the project. This means that the only eligible land is likely to be that which is under threat of deforestation without the project or, in the case of tree planting projects, which would not have been reforested without the project. In practice this focuses REDD+ efforts on forest land that is under some form of pressure. Alternative income generating activities (AIGAs) and integrated conservation and development approaches (ICDPs) have become prominent in some REDD+ projects, despite significant evidence that they have been ineffective and inequitable (Angelsen et al., 2009). Additionality may also affect the sources of finance available for REDD+. For example, the accompanying note on REDD+ in Tanzania (Blomley et al., 2011) suggests

¹⁵ These have already been used in national REDD+ planning processes in various countries to identify which types of land might be suitable for REDD+ investment. See 'REDD Opportunity Scoping Exercises' (ROSE) for Tanzania, Uganda and Ghana. Available at: www.ecosystemmarketplace.com

that there may be issues surrounding the extent to which funding for REDD+ can be comingled with funds from other sources directed at natural resource management (to ensure that emissions reductions would not have occurred in the absence of REDD+ funds).

3. **Forest definitions:** The definition of forest (based on national definitions of percentage tree crown cover and height) varies between countries, and depending on the scope of land use systems included in REDD+, it could influence which types of land are eligible for generating emissions reductions.

Types of benefits

The narrowing of the discussion in this paper towards the financial benefits associated with REDD+ precludes a detailed analysis of the types of benefits that may arise. However, within the financial area there are two issues that are important in terms of the implications for poor and vulnerable groups, including:

- The scale of benefits; and
- The scheduling of benefits.

Scale

The scale of benefits that are shared has obvious implications for the economic opportunities for participants in REDD+. REDD+ finance could potentially make a significant contribution to local incomes, depending on the scale of international funds mobilized or future carbon prices. If the overall scale of benefits is too small this could have implications in terms of the types of activities that participants choose to invest in. For poorer individuals, households and communities, this may affect graduation out of poverty and/or the wider transfer of

benefits linked to local spending. Research on cash transfer schemes indicates that small scale benefits may only be used for consumption, whereas larger benefits are likely to be used for productive activities with a higher likelihood of economic multiplier effects for the wider economy (Slater and Farrington, 2009). Slater (2009) finds that “in terms of growth, the main conclusion is that program scale is critical, as is the size of the transfer. Where coverage of cash transfers is low, the impact on demand will be limited, and while household consumption may increase, the total market share of beneficiaries remains small, and the potential growth impact is marginal.”

As discussed in section 3, theoretically the scale of REDD+ financial benefits will depend on opportunity costs and, in market based approaches, the price at which carbon is sold. However, this may be completely disconnected from the scale of benefits that are actually shared if benefits are being redistributed. For example, a government may sell REDD+ credits at the global carbon price, and their overall financial benefit will be equal to the difference between the total income and the implementation and opportunity costs of delivering these REDD+ credits. They could choose to share none or all of these benefits with different actors at national and sub-national levels. In order for REDD+ to be effective, the benefits being shared should at least compensate for the costs of each actor affected by REDD+ implementation. The main implications that arise in relation to the scale of benefits that we discuss below include:

- Opportunity costs may not represent the real costs for different actors;
- Participants may have little say when negotiating prices;
- Potential for conflict where scale of

payments varies between actors or geographic areas;

- Factoring in unforeseen costs and distributing liabilities.

Opportunity cost estimates have been the main approach used for establishing the global and local costs of REDD+. In practice such estimates may not represent the real costs for different actors, especially where REDD+ is not implemented in the context of a functioning market system (e.g., slash and burn) (Gregersen, 2010). These systems may be hard to value in economic terms and run the risk of extremely low opportunity cost estimates. Transfers to forest dependent and landless people in particular would need to significantly exceed opportunity costs for this reason. Administrative and transaction costs also need to be carefully considered.

Various approaches have been proposed and tested in order to help determine the appropriate level of benefits in benefit sharing schemes at the local level. For example, in PES schemes reverse auction processes and ‘willingness to accept’ methodologies are sometimes used to determine the value attributed by participants to changes in activities (Pagiola et al., 2004). These can be a useful basis for negotiation, but require participants to have good information about existing and future expenditures in relation to the benefits of joining a scheme. This includes information about administrative and transaction costs that they may have to bear—for example, up to 30% of carbon revenues may be allocated to an insurance fund in carbon projects, which may be deducted from the producers’ income—some standards (e.g., the Voluntary Carbon Standard) make this mandatory in order to reduce project risks. In many PES projects, however, it appears that participants have little

direct say in the prices which they are offered (Peskest et al., 2010; Brodnig, 2009). This could lead to dependence on intermediaries (Palmer, 2006). Given that there is likely to be a lack of intermediaries in this sector, participants may be susceptible to unscrupulous practices of intermediaries, which has led to calls for ‘honest brokers’ to stimulate and facilitate the process (Wertz-Kanounnikoff and Kongphan-Apirak, 2008), building trust and sharing knowledge between stakeholders (Pham et al., 2010).

The variation in the scale of benefits between different geographic areas or different actors can also lead to implications in terms of conflict between actors. For example, a differential taxation system has been developed in Nepal in which the traditional community forestry rules where community forest user groups get 100% of the income linked to forest product sales, have been adjusted for the Terai forest areas, where higher value timber species are subject to 15% taxes (Mahanty et al., 2009; Acharya and Yasmi, 2008). This has caused conflict between the user groups and the state.

Finally, the distribution of liability between actors is an important aspect of benefit sharing. This is particularly important in REDD+ where the linking of payments to performance is likely to increase the burden of responsibility placed on participants (Peskest and Harkin, 2007). Unforeseen costs often arise in projects (e.g., the loss of trees in tree planting projects) which can reduce the net benefits for participants if they are liable to cover these costs. In carbon forestry projects, they may be liable for additional costs such as covering lost revenues from carbon sales. In PES schemes the distribution of liability is often defined in contracts with communities or individuals. Ideally in REDD+ most of the burden of meeting unforeseen and accidental costs will lie with buyers or governments in

order to ensure more predictable net benefits. In nested approaches it may be possible to build in sanctions for investors, such as the termination of contracts that do not meet national guidelines (Cotula, 2010). The burden of liability can also be reduced using various insurance instruments. At local levels the burden of proof could also be reversed, meaning that in the event of problems in implementation, the burden of proof is with the investor, who has to provide evidence that they have not been negligent (Cotula, 2010).

In practice, many of the revenue sharing rules that currently exist in the forest sector appear to be highly variable between countries¹⁶ and not based on an accurate assessment of costs (Mahanty, 2009). A number of the World Bank R-PPs also note that revenue sharing systems exist that are not currently in operation but could be built upon for REDD+. Before implementation in REDD+, it will be important to better understand why they are not currently functioning and what is the basis upon which the revenue proportions have been determined.

Scheduling of benefit flows

The way that benefits are shared through time has important implications for poor people engaging in REDD+ and the sustainability of schemes (Fischer, 2007; Peskest et al., 2008). Experience from PES, community forestry and cash transfer schemes highlights a number of different approaches for distributing benefits over time and their implications, particularly at local levels. We divide these into the following issues:

- Scheduling: when the first benefits are

¹⁶ For example, Mahanty (2009) outlines revenue sharing rules linked to collaborative forest management in fourteen countries in Asia, where the proportional divisions vary from 100% available for local communities in some countries, to up to 65% going to the national treasury in others.

allocated and how frequently;

- Variability: variation in scale of benefits through time;
- Duration: length of time over which benefits are delivered.

In PES and carbon projects, the scheduling of benefit flows is often defined by the contract between buyers and sellers (the ERPA in the case of carbon projects). A key variable between different schemes is when the first and subsequent payments are made. Given the performance based nature of PES, payments are often made on verification that the service has been provided (i.e., ex-post)—in some projects this might be as much as 5 years after initial activities have commenced. This is likely to be a particular barrier for market-based REDD+, given that upfront finance may be scarcer. The issue that arises is that significant capital may be required in order to start activities such as tree planting, which could preclude poorer people from joining schemes. Nevertheless, these problems have been avoided in some tree planting projects by the provision of free seedlings at the outset of projects, by finding alternative funds (from donors or venture capital) or by forward selling carbon credits. None of these approaches is perfect: the provision of free seedlings has been associated with higher project failure because participants have less at stake if trees die prematurely; donor funds can be difficult to access; and forward selling creates higher risks for participants if projects fail (because they may have to reimburse buyers).

The variation in the level of benefit flows over time is also important. In market based REDD+ systems, such variation would be influenced by the degree to which REDD+ is linked to global carbon markets, in which prices have been

quite variable to date (Capoor and Ambrosi, 2009). If the scale of benefits is linked to market prices, producers will be more susceptible to price shocks in carbon markets, which, as with other commodities, could affect their vulnerability and reduce their ability to make long-term decisions (Slater, 2009). Solutions to these problems include the establishment of stabilization funds at the national level, agreements with communities or individual producers at the local level, and the inclusion of renegotiation clauses in contracts or enforceable investor commitments to buy at agreed prices (Cotula, 2010; Eaton and Shepherd, 2001). It is also possible to avoid this issue through fixing prices over the duration of the contact. However, participants could then be vulnerable to inflation if they are locked into long term projects that do not remain the best economically viable activity.

It may also be important to consider when benefits are distributed throughout the year in certain approaches to REDD+. For example, research from cash transfer schemes suggests that when transfers do not arrive when expected, households often have to take credit and lose a proportion of their transfer in debt payment when it eventually arrives (Slater, 2009). Payments made in hungry months may be more likely to be spent on food when it is most expensive, whilst payments that are made when food prices are low, can free up cash for expenditure in more productive activities (Slater, 2009).

The duration over which benefits are allocated is also important. REDD+ has the potential to deliver financial benefits over long timeframes, because of the requirement to maintain permanent emission reductions (in practice contracts will probably range from 25 years upwards). This is similar to the duration of community forest management agreements

in Asia which vary between 15 years and in perpetuity and similar timeframes are seen in African community forestry schemes (e.g., EMPAFORM, 2006). Shorter timescales may not be sufficient for providing communities with long term management incentives and raise questions about what happens when benefit flows come to an end, especially if behaviors have shifted over the period (Mahanty, 2009). There are some examples of PES projects in which the management requirements for projects exceed the duration over which benefits are delivered to communities. This is based on the assumption that after a certain timeframe, behavior may have changed permanently and there will be little incentive for participants to revert (Plan Vivo, 2008; Peskett and Harkin, 2007).

Rules affecting the governance of benefit sharing

Benefit sharing systems for REDD+ will be developed in the context of a wider set of cross-cutting rules that may influence their outcomes. These have been widely discussed under the broad heading of ‘governance’ in REDD+. We summarize the main issues below, defining governance in a functional sense to include four elements (One World, 2008):

- Participation in decision making and implementation processes;
- Transparency of decision making and implementation processes;
- Dispute resolution; and
- Assessment and evaluation

The importance of ensuring full and effective participation of those affected by REDD+ has been a prominent issue, particularly in terms of safeguarding the rights of indigenous peoples

and local communities (Meridian, 2009a). Effective participation is likely to require the recognition of principles relating to the acknowledgment of both substantive (e.g., rights to land and forests) and procedural rights (e.g., rights to consultation). Three broad sets of instruments can be applied at international and national levels to ensure participation, including:

1. Direct inclusion of text within a UNFCCC agreement referring to the rights of different actors or inclusion of safeguards in international financial mechanisms (e.g., guidelines and standards establishing in what cases).
2. Other international legal instruments could be used to protect rights if they are recognized by governments implementing REDD+. The International Labor Organization Constitution, for example, establishes a mechanism through which non-state actors can inform the ILO that a member state is not complying with an ILO convention (Meridian, 2009a).
3. National implementation of REDD+ could include a range of mechanisms to enhance participation, such strengthening rights through tenure reform, building consultation procedures into design processes, alignment or REDD+ with other development strategies and use of REDD+ funding to strengthen local government.

Some progress has been made on the incorporation of safeguards at the international level. A number of specific legal instruments exist in relation to the rights of indigenous peoples and discrimination against women, and are referenced in draft UNFCCC text on REDD+. The rights of particular groups, such

as indigenous peoples, may in some cases be relatively stronger than other vulnerable groups that are less well defined, such as landless migrants. The strong stance on issues of representation and voice, and insistence of rights of self determination have been central to the success of gaining recognition of indigenous rights in major conventions and in-country (Colchester, 2004, cited in Hopley, 2007).

At the national level, participation is generally being promoted through approaches such as the formation of national REDD+ working groups, majority rule decision making in national PES management institutions (Navarro, 2010), multi-stakeholder consultations and the implementation of ‘free, prior and informed consent’ in some countries (UN-REDD, 2010). Most of the R-PPs make references to ensuring the participation of particular vulnerable groups in REDD+. For example, a number of R-PPs highlight the importance of including women and mainstreaming gender issues, although the processes by which this might occur have not been elaborated at this stage in most cases. This is likely to be important, as research indicates that rule making in forest management can differ between men and women (Agrawal, 2010).

The effectiveness of these processes in practice in terms of how well they represent the interests of the poor has been little tested for REDD+ and in some cases appears relatively tokenistic (Peskett and Brockhaus, 2009). There are certainly many cases of benefit sharing systems failing because decision making and implementation is dominated by a few elites, is highly politicized or lacks accountability (e.g., World Bank, 2010; Barr et al., 2010) (Box 4).

Similar issues need to be considered in decision making at the local level, where processes can be equally as complex, consist of

Box 4

Decision making processes in the Lesotho Fund for Community Development

The Lesotho Fund for Community Development (LFCD) was established in 1991 using the revenues deposited from the Lesotho Highlands Water project. The project is designed to supply electricity to Lesotho and to transfer water from the highlands of Lesotho to the dry Gauteng region of South Africa through a series of dams, transfer tunnels and associated infrastructure (World Bank, 2007). The LFCD’s Board of Directors is elected from government civil servants and beneficiaries, and a management unit with the technical units and specialists needed (Palmieri, 2002). The Fund’s aim was to create community driven, pro-poor and transparent participatory processes for implementing small scale development projects (e.g. infrastructure). The Bureau of Statistics was in charge of monitoring poverty reduction outcomes. However, the LFCD’s Board became dominated by ministers rather than technocrats and stakeholders, thus introducing a strong political element (World Bank, 2010). Key operational divisions in the fund’s management unit were not established. Parliamentarians were given license to select projects to fit their own constituency interests and royalties were used to finance politically chosen and non-participatory investments. Thus, the original purpose of the project was lost. The internal World Bank Completion Report for the LFCD rated the project outcome as highly unsatisfactory. Among the reasons of this evaluation was a lack of beneficiary involvement in producing the operating manuals for the fund, and failure to monitor impacts on poverty levels.

many layers and be influenced by informal and concealed political dimensions (Baumann and Sinha, 2001). Rules can be introduced to help avoid some of these problems—for example, in Namibia and South Africa, minimum female representation is mandated on land management boards in areas of customary law.

In some projects, the representativeness of decision making over benefit sharing is questionable because of the heavy involvement of project developers within community groups established to distribute project benefits (Peskett et al., 2010). The literature on community

forestry (McDermott and Schreckenberg, 2009; McDougall et al., 2007) and forestry outgrower schemes (Race and Desmond, 2002) suggests the involvement of a third organization, often from civil society, in order to build technical and organizational capacity among producer groups and enable them to draw on a wider network of experience to improve their ability to negotiate an informed and fair deal.

Enhancing transparency will be an important aspect of ensuring that benefits from REDD+ reach poor people (Transparency International, 2010). At the national level, this will include processes such as enhanced citizen and parliamentary oversight, clear guidelines on expenditure and the public disclosure of external audits. At local levels, transparency can be enhanced through improving access to information about REDD+ before projects begin and throughout their lifetime. Cotula (2010) suggests a number of requirements for enhancing transparency in contractual processes around natural resource projects:

- Open public debate before REDD+ schemes commence and provision of accessible information at all levels;
- Public input into planning and contract negotiation;
- Applying procedural rights to investments, for example in terms of freedom of information;
- Alignment with voluntary initiatives such as the extractive industries transparency initiative; and
- Strengthened legal institutions and dedicated dispute resolution mechanisms.

Dispute resolution is an important requirement to enhance rights in REDD+. Mechanisms already exist which can be applied to REDD+,

such as the World Bank's Inspection Panel and Compliance Advisor Ombudsman (CAO) and the Forest Stewardship Council Dispute Resolution system. It is possible that an innovation in market based approaches to REDD+, structures providing opportunities for recourse, could be provided for non-state actors at the international level (Meridian, 2009a). These would be applicable to formal participants in REDD+ projects (who are in most cases not the landless), but would unlikely extend to the wider set of stakeholders that may be affected by projects.

Dispute resolution procedures can entail considerable additional costs in terms of time and finance (Hatcher, 2009), although the cost of taking no action might be higher in the long term (DFID, 2004). One of the key requirements for effective dispute resolution is ensuring awareness of and access to dispute resolution mechanisms, through investments in national or local legal institutions, or the provision of mechanisms through standards.

Alternative dispute resolution procedures have also been promoted in development policy, as a method of avoiding costly formal litigation and in some cases bridging gaps between statutory and customary law. Community based systems are one example, based on traditional models of popular justice that rely on elders, religious leaders, or other community figures to help resolve conflict. These could be applied in REDD+ and have been suggested in at least one recent R-PP (Vietnam). One problem that these face is that norms controlling dispute resolution can contradict national laws, which may be the dominant force in REDD+ implementation. Another problem is that those deciding the cases are often biased against women, poor people, and other underprivileged groups. Training, outreach, and legal awareness can solve some of these problems, as well as ensuring that there

are incentives for such systems to work (World Bank, 2005).

Finally, assessment and evaluation are considered important aspects of benefit sharing systems, in order to ensure appropriate and agreed levels of benefits are delivered, and to continually assess the effectiveness of systems. A number of the R-PPs make specific reference to institutions to monitor benefit sharing systems (e.g., Madagascar) at national level—details have not been worked out in most countries, but these would presumably entail processes such as regular reporting and independent auditing of financial flows. At the local level, participatory monitoring has become an important theme in the REDD+ debate—involving local communities in monitoring and verification processes can be both effective and efficient (Skutsch, 2009; Danielsen et al., 2007), although if not carefully managed it can be exclusionary to poorer or more vulnerable groups (Peskett et al., 2008).

Independent verifiers that already evaluate market based carbon projects could play a role in assessing whether benefits are reaching communities, at least in terms of some basic information on benefit flows (e.g., observable infrastructure investments or lump sum payments to community funds). However, verifiers are often working under strict time limitations, focusing on verifying emissions reductions/removals and may lack skills in social impact assessment, so are unlikely to pick up detailed information on the equity of benefit sharing. This could be partially addressed through provision of greater resources to train verifiers and increase assessment time.

Local governments and NGOs often play an important role in social and environmental impact assessment, and the implementation of approaches that aim to channel benefits to poorer actors. Guidelines often exist for implementing

these processes and increasing resourcing to ensure that these are adapted for REDD+ where necessary and properly implemented, is likely to be important to enhance the equity of benefit sharing in both market and fund based systems. The question of ensuring independence is harder to address—the use of external auditors at all levels could help in this respect but will further increase costs.

Table 5 summarizes the pathways through which benefit sharing may have implications for poor people that are discussed above and the potential opportunities, risks and policy solutions that need to be considered in the design of benefit sharing systems.

TABLE 5: SUMMARY OF DIFFERENT REDD+ RULES AND THEIR POTENTIAL IMPLICATIONS FOR POOR PEOPLE

ACTORS	Factors affecting implications	Potential implications arising for poor people		Potential pro-poor solutions
		Opportunities	Risks	
ACTORS	Tenure	<ul style="list-style-type: none"> Those with secure private or communal tenure likely to be eligible for benefits in some systems In some countries indigenous peoples may have better defined rights to land compared to other vulnerable groups and be eligible for REDD+ benefits 	<ul style="list-style-type: none"> Preclude of actors with less clear tenure in some systems, who are often the poorest Formal tenure systems often not aligned with actual interests in forest—could result in misalignment of incentives/compensation Drive to formalize tenure could result in anti-poor tenure reform Compensation systems often stated in law but may be weakly enforced and not meet actual costs 	<ul style="list-style-type: none"> Clarification of tenure (if this takes into account the interests of the poor) Simplification of titling procedures (e.g., registration) and reduction of costs Strengthening tenancy agreements and compensation schemes
	Carbon rights	<ul style="list-style-type: none"> New income potential if carbon recognized as an asset May be opportunities for direct financial benefits (e.g., some indigenous peoples reserves in Brazil) 	<ul style="list-style-type: none"> Often linked to land/forest ownership, so similar issues as above apply If national regulations separate rights to carbon from those to land/forests, this could result in few benefits at local levels 	<ul style="list-style-type: none"> Avoiding the de-linking of carbon ownership from land/forest ownership Care in definition of the legal nature of carbon Ensuring simple rules surrounding carbon trading
	Revenue sharing agreements	<ul style="list-style-type: none"> Can be tailored to help ensure revenues from REDD+ are devolved to local levels 	<ul style="list-style-type: none"> Revenue sharing processes often dominated by elites Off-take to cover risks and management costs (e.g., in carbon forestry projects) can reduce returns for producers Shareholding arrangements within communities (e.g., community groups), can put groups at risk (e.g., if they do not understand cost vs. benefits of schemes) and preclude poorer members from benefitting 	<ul style="list-style-type: none"> Ensuring local participation in the development of revenue sharing agreements Enhancing accountability of implementation, through increased transparency and dispute resolution (see below) Ensuring costs of implementation are borne by project developers/governments or factored into proportions agreed
	Socio-economic criteria	<ul style="list-style-type: none"> Can increase benefits for particular vulnerable groups, based on gender, ethnicity or wealth Can enhance the environmental effectiveness of programs 	<ul style="list-style-type: none"> Can increase costs, result in exclusion errors and suffer bias from political pressure (e.g., self-targeting methods) 	<ul style="list-style-type: none"> Provide additional resources to implement socio-economic targeting effectively Careful selection of approaches
	Emissions reduction/removal criteria	<ul style="list-style-type: none"> Opportunities for new and long term benefits to incentivize changes to emissions generating activities. 	<ul style="list-style-type: none"> Requirements for permanence and additionality are likely to preclude certain activities May put activities important to forest dependent people under increased scrutiny (e.g., shifting cultivation) 	<ul style="list-style-type: none"> Use of insurance measures (e.g., buffers) may reduce risks and increase access to wider variety of activities Need for detailed evaluation of alternative income generating activities proposed in REDD+

	Allocation mechanisms	<ul style="list-style-type: none"> • Can be designed to target vulnerable groups (e.g., payments to women's bank accounts) 	<ul style="list-style-type: none"> • Can decrease access (e.g., if bank account is required, or if financial benefits delivered through banks far from project area) 	<ul style="list-style-type: none"> • Evaluate how different mechanisms can be accessed by different potential beneficiaries • Combining both targeted mechanisms and broader distribution mechanisms (e.g., payments to both individual bank accounts and community funds)
BENEFIT TYPE	Scale	<ul style="list-style-type: none"> • New and additional sources of finance compared to existing livelihood options • Potentially large financial benefits if agreed funding/prices significantly outweigh costs 	<ul style="list-style-type: none"> • Opportunity costs may not be a good measure of actual costs for many activities which involve (especially forest dependent) people. • Estimates can be influenced by biased information and power differences between those negotiating • Benefits that are too small may only be used for consumption activities • Different scales of benefits between adjacent actors can result in conflict between actors 	<ul style="list-style-type: none"> • Basing revenue sharing proportions on accurate assessment of costs • Ensuring that poor people have accurate information on benefits and costs of REDD+
	Scheduling	<ul style="list-style-type: none"> • Benefit flows may exist over long timeframes and could be relatively stable 	<ul style="list-style-type: none"> • Lack of upfront capital can be a barrier to access for smaller producers • Variable flows can leave beneficiaries susceptible to 'shocks' • Fixed flows may not cover opportunity costs adequately through time • Benefits delivered in vulnerable months may only be used for consumption activities (rather than productive activities) • Benefits delivered over too short a timescale could result in few long term management incentives 	<ul style="list-style-type: none"> • Provision of upfront capital e.g., through donor funds • Building flexibility into contracts (e.g., renegotiation clauses) • Ensuring regular delivery of financial benefits and some minimum level (e.g., price floors)
RULES LINKED TO GOVERNANCE	Participation	<ul style="list-style-type: none"> • Can result in better forest management decisions • Can result in more equitable decisions (e.g., balancing interests of men and women) 	<ul style="list-style-type: none"> • Procedural rights can be weakly recognized in practice • Procedural rights may mask attention towards more important questions on substantive rights • Consultations can be rushed and unrepresentative 	<ul style="list-style-type: none"> • Supporting 'disinterested' third parties to represent interests of communities
	Transparency	<ul style="list-style-type: none"> • Increases ability to make informed decisions and contest decisions made by others 	<ul style="list-style-type: none"> • Information around REDD+ is often complex and not understood by communities 	<ul style="list-style-type: none"> • Increased local information provision • Public disclosure or financial information on REDD+ benefits
	Dispute resolution	<ul style="list-style-type: none"> • Increased ability to contest decisions or respond to unexpected outcomes of decisions 	<ul style="list-style-type: none"> • Formal systems can be costly to implement • Community-based systems can be inequitable • Access to dispute resolution may be limited (especially for non-beneficiaries or REDD+) 	<ul style="list-style-type: none"> • Supporting local courts • Establishing dedicated dispute resolution procedures within REDD+ schemes and standards • Providing resources to enhance access to these structures
	Monitoring and assessment	<ul style="list-style-type: none"> • Increases knowledge of the effectiveness of benefit sharing systems • Allows adaptation of benefit sharing over time in order to respond to needs 	<ul style="list-style-type: none"> • Monitoring benefit sharing at local levels (and at a level of detail to understand equity) is likely to be costly • 'Non-beneficiaries' may not be so closely monitored • Participatory monitoring can suffer from bias and discrimination 	<ul style="list-style-type: none"> • Inclusion of auditing procedures within benefit sharing systems • Ensuring allocation of resources for ongoing monitoring at local levels

5 Conclusions and recommendations

REDD+ benefit sharing can take a wide variety of forms depending on the policies used to achieve REDD+ objectives. Some policies may more directly resemble cash transfer or payment for environmental service schemes which transfer revenues between different actors and at different scales. However, benefit sharing systems could be much more complex, especially for national REDD+ schemes in which relatively broad brush policy reforms may be implemented which change the economics of multiple sectors.

This paper has focused more on the simpler cash transfer approaches. In order to understand the implications of benefit sharing systems in any approach, it is important to be very clear about the types of benefits that can accrue from REDD+, the actors that are both directly and indirectly involved in benefit sharing and particularly the rules that may affect benefit flows to these actors.

We know a lot about the options for designing benefit sharing systems at different levels and some of the ways in which these systems attempt to increase the equity of benefit sharing, particularly with poorer individuals and groups. By clearly analyzing the rules and the pathways through which they may impact on different actors, it is possible to identify some of the implications. It is also possible to understand some of the challenges in REDD+, such as the likely efficiency-equity trade-offs involved in approaches that aim to target poor people more directly, the need for accurate data about potential beneficiaries and their costs.

However, one of the key insights is that even when approaches take these issues into account and are well designed on paper, implementation is often problematic, often being undermined

by political objectives or rent seeking behavior. This can be overcome to some extent, for example by developing processes that enhance accountability and by building flexibility into any rules that are agreed.

There is still a tendency for debates about benefit sharing to stop at the level of communities. Whilst many of the general concerns about benefit sharing within communities are widely referenced (e.g., elite capture), relatively less is known about how benefits are actually shared within communities and the implications in terms of economic opportunities, empowerment and vulnerability. There is also surprisingly little empirical evidence on the implications of different benefit sharing approaches for the poor in the different examples reviewed; e.g., in terms of questions about whether benefits have actually compensated people adequately, helped lift people out of poverty or deal with temporary shocks. These issues need to be much better understood within emerging REDD+ projects and programs, if their objective is for REDD+ to benefit those affected.

Recommendations

Early analysis of rights to REDD+ benefits and their links to tenure. Projects and programs need to begin with a careful review of different rights and interests in the land involved. Improving data on land records and land demarcation processes is likely to be key in supporting these processes. A range of different tools have been developed to delineate and record complex and overlapping rights which could be useful in REDD+, including lower cost options for cadastral mapping, adjudication and participatory mapping processes (e.g., Knox et al., 2010).

Supporting institutions to administer benefit sharing systems: Financial and technical support will need to be provided to national, regional and local institutions involved in administering benefit sharing. These will include: private and public finance institutions such as banks, ministries and NGOs handling REDD+ finance; administrative bodies such as regulatory authorities governing land titling, land records and monitoring land use; legal institutions involved in negotiating contracts and adjudicating disputes. In addition to building the technical capacity of local legal institutions, it will be important to support independent organizations as honest brokers that can help represent the interests of communities. This will be particularly important in cases where intermediary organizations participate as aggregators for a number of individual land owners within REDD+ schemes. Support for community groups themselves (e.g., forest user groups; women's groups that are managing forests) will also be important.

Development of clear national REDD+ regulations and definitions: Seek clarity in national REDD+ regulations on revenue sharing between actors (different levels of government, private sector, NGOs and communities). These need to be informed by detailed and realistic cost-benefit analysis associated with programs and projects. Clarity will also be needed in definitions included in regulations, such as how 'affected stakeholders' or 'communities' are defined.

Use of mechanisms to isolate vulnerable beneficiaries from risks: Various mechanisms could be used to ensure that the design of benefit sharing systems does not create risks for more vulnerable participants. For example:

- Putting the burden of liability on buyers and governments in relation to accidental default (e.g., in the case of accidental loss of trees);
- Establishment of stabilization funds at the national level and in agreements with communities or individual producers at the local level;
- Inclusion of renegotiation clauses in contracts or enforceable investor commitments to buy at agreed prices;
- In nested approaches it may be possible to build in sanctions for investors, such as the termination of contracts that do not meet national guidelines (Cotula, 2010);
- Use of insurance instruments;
- Considered timing of benefit distribution in order to ensure productive use of funds;
- Information provision relating to likely scale of benefit flows, their duration and any associated management requirements. These could be supported by the application of methodologies to illicit likely opportunity costs for beneficiaries.

Introducing criteria to enhance the 'pro-poor' targeting of benefits: Inclusion of criteria for targeting particular individuals and groups (e.g., women) could help to improve the equity of benefit distribution. However, these will need to be applied carefully to avoid unforeseen implications such as increased transaction costs or political bias. Financial instruments such as community funds could also help to distribute benefits beyond those formally involved in REDD+ schemes.

Use of rigorous consultation and social impact assessment processes: Such activities will need to be supported by information provision in

appropriate formats and sustained over time.

Processes could include:

- Open public debate before REDD+ schemes commence and provision of accessible information at all levels. Communities need to clearly understand the potential costs of being involved in REDD+;
- Public input into planning and contract negotiation;
- Applying procedural rights to investments, for example in terms of freedom of information;
- Alignment with voluntary initiatives such as the extractive industries transparency initiative; and
- Strengthened legal institutions and dedicated dispute resolution mechanisms.

Development of monitoring systems for assessing the impacts of benefit sharing systems on communities.

These need to be rigorous enough to determine how and whether benefits are being distributed across different actors within the same project or program (e.g. women; indigenous peoples).

Development of social standards to help ensure that the recommendations suggested above are implemented. These could include safeguards and guidelines mandated within an international REDD+ agreement; voluntary international standards; standards defined by funders; and country defined social standards. These need to be well coordinated to ensure that they are efficiently implemented.

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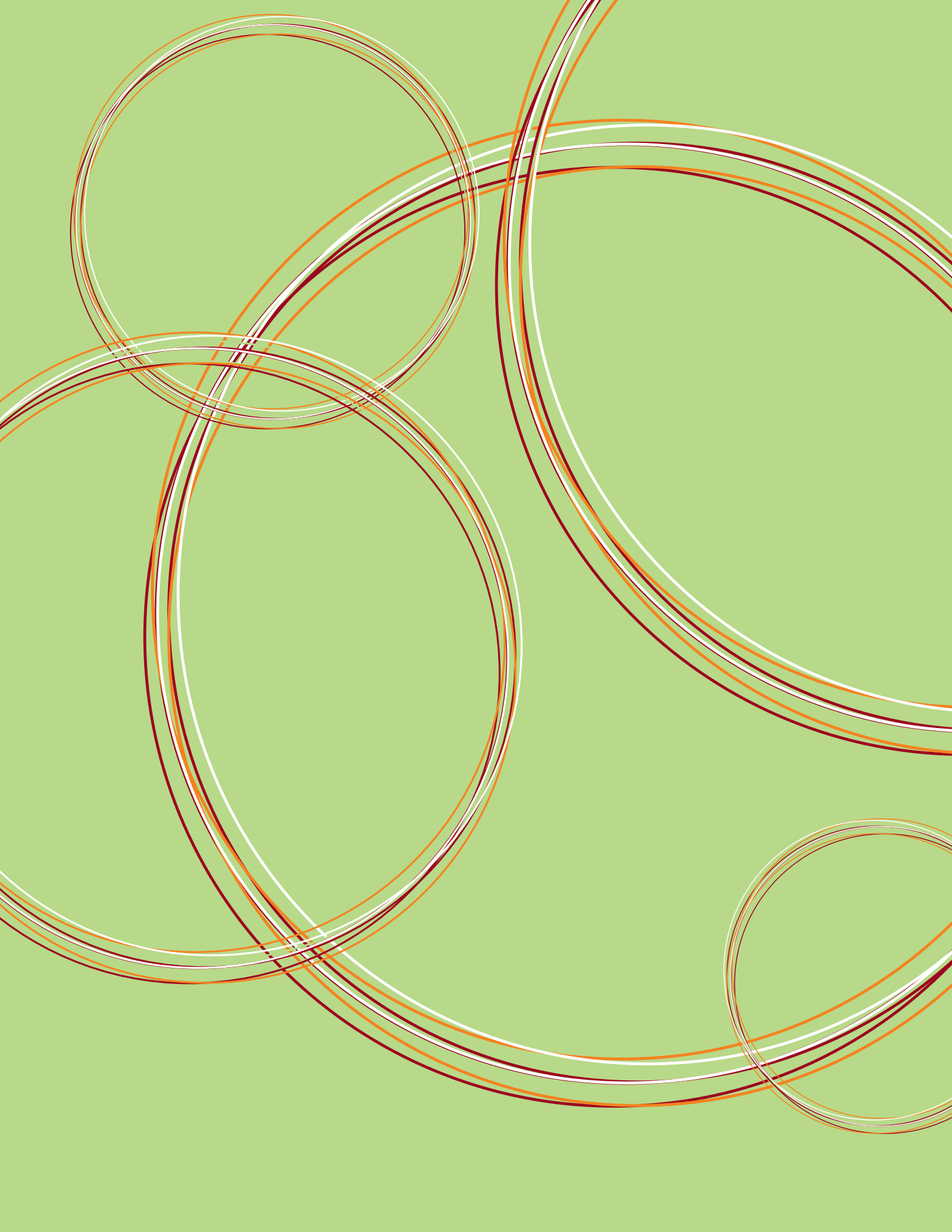
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