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9
REDD+ FINANCE

REDD+ ACADEMY
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ABOUT US

UN-REDD

The UN-REDD Programme is the United Nations collaborative initiative on Reducing Emissions from Deforestation and forest Degradation (REDD) in developing countries. The Programme was launched in 2008 and builds on the convening role and technical expertise of the Food and Agriculture Organization of the United Nations (FAO), the United Nations Development Programme (UNDP) and the United Nations Environment Programme (UNEP).

The UN-REDD Programme supports nationally-led REDD+ processes and promotes the informed and meaningful involvement of all stakeholders, including Indigenous Peoples and other forest-dependent communities, in national and international REDD+ implementation.

REDD+ACADEMY

The REDD+ Academy is a coordinated REDD+ capacity development initiative led by the UN-REDD Programme and the UNEP Environmental Education and Training Unit, which seeks to match the scale of the global climate change mitigation challenge and enable systematic, focused capacity development to deliver REDD+ on the ground.

The REDD+ Academy is a comprehensive response to capacity building needs identified by the countries receiving support from the UN-REDD Programme. The main aim of the REDD+ Academy is to empower potential "REDD+ champions" with the requisite knowledge and skills to promote the implementation of national REDD+ activities.

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METTE L. WILKIE

DIRECTOR,
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Dear Learner,

Welcome to the second edition of the REDD+ Academy Learning Journals. The journals provide you with state of the art knowledge on REDD+ planning and implementation, developed by some of the world's leading experts at the UN-REDD Programme.

The journals have been designed to accompany you in your learning journey and equip you with the necessary knowledge to understand the various components of REDD+, from the basics to the finer points of setting reference levels, monitoring, allocation of incentives and stakeholder engagement.

With deforestation and forest degradation being the third largest source of greenhouse gas emissions globally, action to reduce deforestation and to rebuild forests globally is vital. By realizing social and economic benefits, REDD+ is also fundamental to delivering on the Sustainable Development Agenda.

Following the adoption of the Paris Agreement, the focus of many developing countries is now firmly on REDD+ implementation. I encourage you to take the REDD+ Academy online course, and apply your knowledge to make REDD+ a national and a global success!

Mette L. Wilkie

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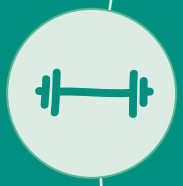

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CONTENTS

9

REDD+ Finance

This module considers finance as a multi-faceted means to achieve REDD+ objectives i.e. reducing emissions and increasing removals of greenhouse gases.

The module includes sections about:

- What is REDD+ finance?
- Financing REDD+ readiness
- REDD+ finance as part of policies and measures
- Designing and managing a REDD+ financial plan
- Financing the implementation of policies and measures
- Accessing results-based REDD+ finance

What do you already know about this topic?

9. REDD+ FINANCE

WHAT IS REDD+ FINANCE?

REDD+ finance in the context of UNFCCC

Under the United Nations Framework Convention on Climate Change (UNFCCC), REDD+ finance is mainly associated with results-based finance from international sources. This is the essence of the REDD+ mechanism. The aim is to financially reward developing countries for their verified reduction in emissions or increase in removals of greenhouse gases compared to a reference level.

Through decisions adopted by its Conference of Parties (COP), the UNFCCC has set out the process for developing countries to have the results of their REDD+ activities recognized for results-based payments and results-based finance.

For example, the Warsaw Framework[1] includes a decision on enhancing the coordination of support for the implementation of REDD+ activities, including institutional arrangements. A first decision on aspects related to finance for results-based actions was also adopted.

Key decisions relating to results-based actions include:

- Decision 1/CP.16, paragraph 73: results-based actions that should be fully measured, reported and verified;
- Decision 1/CP.16, paragraph 77: Ad Hoc Working Group on Long-term Cooperative Action under the Convention to explore financing options for the full implementation of the results-based actions [these actions require national monitoring strategies];
- Decision 2/CP.17, paragraph 64: for developing country Parties undertaking the results-based actions referred to in decision 1/CP.16, paragraphs 73 and 77, to obtain and receive results-based finance, these actions should be fully measured, reported and verified;
- Decision 9/CP.19: progression of developing country Parties towards results-based actions occurs in the context of the provision of adequate and predictable support for all phases of the actions and activities referred to in decision 1/CP.16, paragraphs 70 and 73;

There are also several references to results-based payments and finance, for example in Decision 9/CP.19:

- That results-based finance provided to developing country Parties for the full implementation of the activities referred to in decision 1/CP.16, paragraph 70, that is new, additional and predictable, may come from a variety of sources, public and private, bilateral and multilateral, including alternative sources;
- For Parties undertaking the results-based actions referred to in decision 1/ CP.16, paragraph 73, to obtain and receive results-based finance, those actions should be fully measured, reported and verified, in accordance with decisions 13/CP.19 and 14/ CP.19 … and developing country Parties should have all of the elements referred to in decision 1/CP.16, paragraph 71, in place, in accordance with decisions 12/CP.17 and 11/ CP.19.

A variety of perceptions

Under the UNFCCC, REDD+ results-based finance can be seen as the payments or finance that a country receives for the actual reductions of emissions or enhancement of removals of forest carbon that have been verified according to the UNFCCC process, and measured against an established FREL/FRL, and with the application of relevant safeguards. Under the UNFCCC, finance will generally be provided for results (ex post) and not for actions.

However, the scope of REDD+ finance can vary widely depending on the approach to REDD+ itself. For instance, by introducing the phased approach, the UNFCCC recognizes that REDD+ needs to go through readiness and demonstration or investment stages that require finance beyond a results-based approach. There is actually no single and comprehensive definition of REDD+ finance.

The sources of REDD+ finance also can be perceived differently. The 'spirit' of REDD+ under the UNFCCC includes the idea of international

1 The Warsaw Framework comprises seven decisions for REDD+ taken at the 19th Conference of Parties to the UNFCCC (COP 19) in 2013 in Poland. The text of all decisions relevant to REDD+ are gathered in the 'Decision booklet REDD+' (UNFCCC, 2014).

transfer. Decision 2/CP.17, paragraph 65, introduces various potential sources for REDD+ finance but implies an international origin, in that it:

"Agrees that results-based finance provided to developing country Parties that is new, additional and predictable may come from a wide variety of sources, public and private, bilateral and multilateral, including alternative sources".

Decision 9/CP.19, paragraph 5, provides further guidance when it:

"Encourages entities financing the activities referred to in decision 1/CP.16, paragraph 70, through the wide variety of sources referred to in decision 2/CP.17, paragraph 65, including the Green Climate Fund in a key role, to collectively channel adequate and predictable results-based finance in a fair and balanced manner, taking into account different policy approaches, while working with a view to increasing the number of countries that are in a position to obtain and receive payments for results-based actions".

The provision of international results-based finance is the key defining feature of REDD+, yet the UNFCCC provides little guidance on what this means in practice. Finance has been a thorny issue, lagging behind in the wider context of the climate change negotiations, and REDD+ is no exception.

Moreover, the UNFCCC also requests countries to formulate REDD+ national strategies or action plans that comprehensively address drivers, which has led some REDD+ countries to develop strategies and plans that mobilize and leverage co-finance from national sources. Pilot negotiations between donor institutions and REDD+ countries on results-based payments, for instance through the REDD+ Early Movers programme or as part of bilateral agreements, also demonstrate that a national direct or indirect contribution to REDD+ finance is sought from international partners, particularly in the context of limited and uncertain international development assistance.

Finally, some might also consider transitional REDD+ finance from sources outside the UNFCCC. Forest carbon-based payments from voluntary markets or institutions and programmes like the Carbon Fund of the Forest Carbon Partnership Facility (FCPF) are being labelled as REDD+ finance despite the fact that they do not fall under the strict UNFCCC definition and criteria, as they do not relate to results at the national level in a UNFCCC-compliant framework including safeguards and reference level instruments. Such projects are often considered as pilots towards the international REDD+ mechanism, and intend to bridge the gap with UNFCCC requirements through nesting and harmonization efforts.

REDD+ finance from the perspective of developing countries' needs

In this module, REDD+ finance is considered in the sense of the financial means and instruments required for developing countries to achieve REDD+ results, i.e. from readiness to demonstration, implementation and eventually results-based payments. This module examines finance in each of the three phases in detail, with some specific focus on formulating financial plans and exploring finance as a REDD+ policy and measure (PAM) when transitioning from readiness to implementation. When considering the different stages and what is required to achieve REDD+ results, Box 9.1 below can offer a general overview of the financial landscape for REDD+ countries.

Box 9.1 REDD+ finance – a fundamental shift since the origins of REDD+

When it first emerged under the UNFCCC, REDD+ was generally perceived as a stand-alone instrument, consisting of a transfer of international finance to incentivize and reward developing countries' activities and results in slowing down and halting emissions from deforestation. From 2005 and in the run-up to the Copenhagen Conference in December 2009, the context was favorable, marked by growing political momentum and supported by economic studies like the Stern Review in 2006 and a series of publications from McKinsey on forest emissions abatement cost-curves, notably in Brazil and Indonesia. First, fighting deforestation was expected to be less expensive than other options for reducing emissions (e.g. deforestation could be halved for less than $5 per ton of CO_2). Second, the carbon price in emissions trading was reasonably high and REDD+ was expected to mobilize massive international finance should it be fully implemented.

In 2016, the REDD+ context has changed: research looking beyond superficial opportunity cost figures has concluded that significant change in global deforestation will come at a price of approximately $25 per ton of CO_2 (Rakatama et al., 2016); carbon prices have fallen substantially; and international sources of REDD+ finance have remained scarce and uncertain, with REDD+ results-based agreements being negotiated at $5 or less per ton of CO_2. Under these conditions, REDD+ as a mechanism to finance the fight against deforestation "on its own" is unrealistic. Until the circumstances improve, REDD+ needs to be integrated into a broader approach to slow down and halt deforestation in developing countries.

Some positive developments can still be highlighted. For example, the air transport industry under the International Civil Aviation Organization (ICAO), is currently developing a mechanism to stabilize emissions from rising numbers of aircraft in the coming decades. If implemented, this mechanism could deliver considerable new demand for REDD+ credits to offset emissions that cannot be mitigated by other means. This would certainly increase REDD+ finance, though the overall impact on climate mitigation will remain debated. A further positive outcome is the prominent inclusion of REDD+ in the 2015 Paris Agreement, the only such mechanism to receive specific mention. This adds global significance to the REDD+ mechanism as a framework and financing mechanism to combat climate change under the UNFCCC.

FINANCING REDD+ READINESS

Readiness attracted major attention from international donors in the initial negotiations around REDD+. The UN-REDD Programme and the FCPF Readiness Fund were created in 2008, while REDD+ was still in the process of being framed and formally included in the UNFCCC negotiations and regime. Both programmes provided early support, technical assistance, platforms for dialogue and limited finance (typically $3-5 million per applicant) to a large number of developing countries. In 2016, FCPF counted 47 partner countries and UN-REDD Programme had 64. These programmes have become the major multilateral instruments to initiate readiness activities across REDD+ countries. Between 2008 and 2015, the FCPF Readiness Fund received $298 million and disbursed $88 million, while the UN-REDD Programme received $255 million and disbursed $240 million.

National readiness processes have also received significant support from bilateral donors. In many countries, bilateral donors have financed parts of national readiness plans. Box 9.2 below provides key figures of international REDD+ finance. The support from domestic budgets is difficult to assess, particularly because some readiness elements can be established before or in parallel to national REDD+ processes. Various countries, for instance, have already developed national forest inventories and some, like Brazil, already had advanced forest monitoring systems and capacities before engaging with REDD+.

Box 9.2 Key figures in international REDD+ finance (data from Norman and Nakhooda (2014), Norman et al. (2015), and the Voluntary REDD+ Database).

- It is not possible to fully dissociate REDD+ finance from more traditional forest finance in developing countries, and there are no comprehensive reviews of forest and REDD+ finance covering the full scope of REDD+ finance as captured in this course, including domestic, private sector, parallel or enabling finance.
- Public finance accounts for about 90 per cent of total international finance to forests in developing countries. This support has increased steadily since the introduction of REDD+ under UNFCCC, from an annual average of $450 million between 2000 and 2005, to $600 million between 2006 and 2010, and $1.25 billion between 2011 and 2014.
- Between 2006 and 2014, a total of $9.8 billion was pledged for REDD+ by the international public and private sector.
- Bilateral institutions managed about 51 per cent of international REDD+ finance. 33 per cent was provided to recipient countries through multilateral institutions. NGO channeled 8 per cent of international REDD+ finance.
- Despite there being more than 20 REDD+ donors and 80 recipient countries, major flows are concentrated on a few players. In terms of pledges, five donors account for 77 per cent of the total (Norway, United States of America, Germany, Japan, United Kingdom), and two countries are the destination for 35 per cent of those funds (Brazil and Indonesia). A further four countries (Peru, Guyana, Democratic Republic of Congo (DRC) and Liberia) are the destination for a further 15 per cent.
- 58 per cent of international REDD+ finance has been pledged as upfront grants, and 42 per cent as ex post results-based payments.
- Based on figures gathered by the Overseas Development Institute and Heinrich Böll Stiftung, 52 per cent of total international REDD+ finance has been pledged for readiness activities (25 per cent deposited), 13 per cent for implementation activities (21 per cent deposited) and 35 per cent to results-based payments (54 per cent deposited).

With guidance from multilateral programmes, the formulation of a readiness plan has become the norm for a country to engage in REDD+ readiness. Such readiness plans have been extremely heterogeneous, as demonstrated by their total costs, ranging from a few million dollars to over $30 million. Such differences reflect the difficulty in understanding and clearly defining what constitutes readiness.

A narrow and technical approach to readiness focuses on establishing the minimum REDD+ instruments required by UNFCCC, i.e. the four pillars of the Warsaw Framework. Readiness plans will then differ depending on:

- What already exists in the country in terms of both structures such as forest monitoring systems and the capacity to engage and deliver
- The level of ambition, notably in terms of technical robustness, or participation and inclusion.

Most REDD+ countries have progressively explored broader dimensions as part of their readiness activities, including political, governance, regulatory or financial readiness. It has become more and more obvious to them that:

- The conditions required to effectively implement REDD+ PAMs go far beyond the four pillars of the Warsaw Framework
- Readiness is most a continuous and iterative process with a moving target, and instruments like safeguards information systems or national forest monitoring systems will keep evolving and improving over time, in line with the UNFCCC-supported step-wise approach to REDD+

Some instruments have been formulated to help assess the level of readiness of a country, like the FCPF readiness assessment framework. In practice, such instruments are used to assess progress, take stock of achievements and estimate the overall readiness of a country in terms of thresholds, rather than to determine once and for all if a REDD+ country is ready or not.

On this basis, a review of REDD+ finance targeted at readiness activities will vary widely depending on the scope. For instance, pilot activities in the field have sometimes started before or in parallel to core readiness activities, and are often directly contributing to the formulation of key readiness instruments.

However, they could also be considered as demonstration and REDD+ investment under phase 2.

In light of the above, countries willing to engage in REDD+ need to assess their national circumstances and determine what basic conditions need to be established to allow them to implement REDD+. Financial sources and volume will largely depend on such an assessment and target, but in a broad sense:

- A mix of domestic and international sources is most realistic. International donors are more and more turning their attention to REDD+ implementation and results-based payments, and windows for multilateral support like the UN-REDD Programme and the FCPF Readiness Fund are closing.
- The design of national REDD+ instruments like safeguards systems or national strategies can also receive support from traditional multilateral sources like the Global Environment Fund, from programmes focusing on REDD+ implementation like the Forest Investment Programme, or from non-REDD+ focused programmes with institutions like regional development banks, United Nations agencies or non-governmental organizations. New instruments like the GCF could increasingly play a role in financing readiness. Approaching bilateral donors with activities in country remains a case-by-case opportunity.
- There is little rationale to mobilize private finance for readiness activities. It may make sense in some very limited circumstances, for instance when formulating PAMs for commodity supply chains.
- In reference to figure 9.3, readiness finance is generally upfront, not connected with carbon finance or markets, direct and subsidy based.

REDD+ FINANCE AS PART OF POLICIES AND MEASURES (PAMS)

During the readiness phase, REDD+ countries build on studies, reviews and consultations to formulate their national strategy or action plan (see ***Module 4: National Strategies or Action Plans***). Such strategies encompass a set of PAMs to effectively reduce emissions and increase removals. By differentiating between 'direct' and 'enabling' finance, countries will address the finance issue at two different levels:

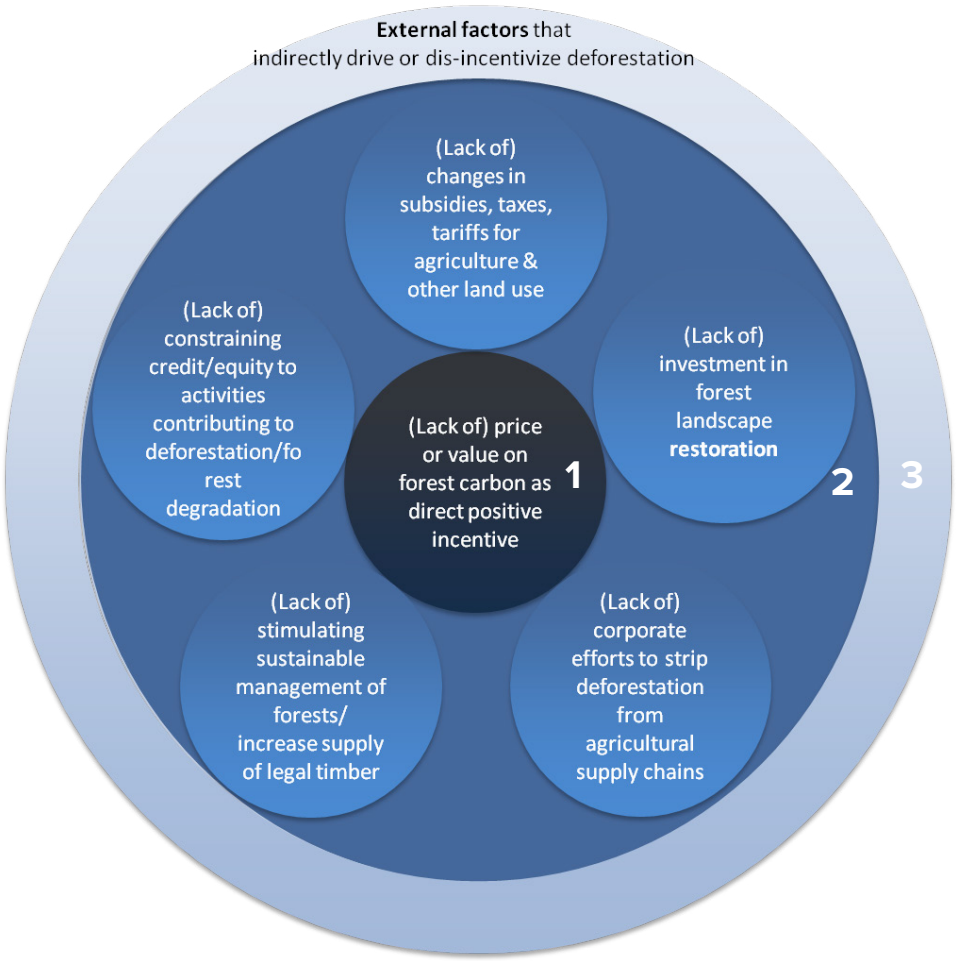
1. What financial instruments can be mobilized as part of the process of drawing up PAMs for REDD+ (enabling finance)?
2. What financial sources and means can be mobilized to support the implementation of PAMs (direct finance)?

For details on the first question, see ***Module 7: Policies and Measures for REDD+ Implementation***. In this module, we will review the different financial instruments that a country can explore when looking to finance the implementation of PAMs.

Module 4 already underscored the rationale for embedding REDD+ within a country's broader vision and plan to transition towards sustainable development and a low-carbon, resource-efficient and equitable economy. REDD+ can act as a catalyst for countries to make such a transition. However, in order for REDD+ to become an attractive proposition for developing countries, a balance will have to be sought between reducing emissions, support for forest-dependent communities, protection of biodiversity and other pressing social and economic needs, such as food security, continued availability of timber and non-timber forest products (e.g. rubber, fruits, nuts, etc.) and higher outputs from agriculture and mining.

A broader perspective on REDD+ finance includes building a 'government and business case' to transition to a green economy. This involves understanding and addressing the economic and financial drivers that contribute to deforestation or prevent effective improvement of forests as well as assessing the effect of reducing deforestation and enhancing forests on gross domestic product. Figure 9.1 below shows financial drivers and barriers that may need to be addressed through REDD+ PAMs.

Figure 9.1 Financial drivers and barriers for REDD+



Source: UN-REDD Programme

Level 1 - Pricing or valuing forest carbon	**Level 2** - Direct and indirect financial issues that can affect deforestation/forests	**Level 3** - External factors
Valuing forest carbon and other ecosystem services that forests provide (e.g. through a carbon tax) can incentivize landowners (public and private) to reduce deforestation and forest degradation	Different PAMs can tackle direct and indirect financial drivers of deforestation to generate REDD+ results-based payments/finance (for verified emission reductions/removals)	For example, macro-economic policies can influence agricultural commodity prices and exchange rates that can lead to deforestation

By exploring each level, REDD+ countries can identify financial instruments with the ability to change the conditions under which agents are incentivized to convert forests rather than protect them.

Level 1 refers to the opportunity to set a (high) price or value on healthy forests, for its carbon content as well as other ecosystem services such as water regulation. The more a healthy standing forest is valued, the less likely it is to be degraded or converted. There are usually two major instruments to directly set such a carbon price: through a tax, or through a market.

Various countries are currently exploring how to establish a carbon tax or carbon markets, which have the ability to directly increase the financial value of forest. Also, putting a price on carbon is not the only way to increase the financial value of forests. As discussed above, forests provide many more benefits that traditionally are poorly valued. A scheme of payment for environmental services, whether it values carbon or other services like water regulation, soil and infrastructure protection, recreation, ecotourism etc. will contribute to improving the enabling environment for REDD+.

Mexico has explored the use of both a carbon tax and a carbon market (ICAP, 2016). The General Climate Change Law has paved the way towards an emission trading scheme (ETS), and the country set up a National Emissions Register in 2014 that monitors all factories across the country emitting more than 25,000 tCO_2e in the energy, industrial, transport, waste, commercial, service and agriculture sectors. A pilot ETS began in August 2016 focused on energy, manufacturing and transport. Mexico also launched a carbon tax on fossil fuels in 2014, set at $3.5 per tCO_2e. Developed countries are more advanced in setting up such financial instruments, but REDD+ countries are catching up.

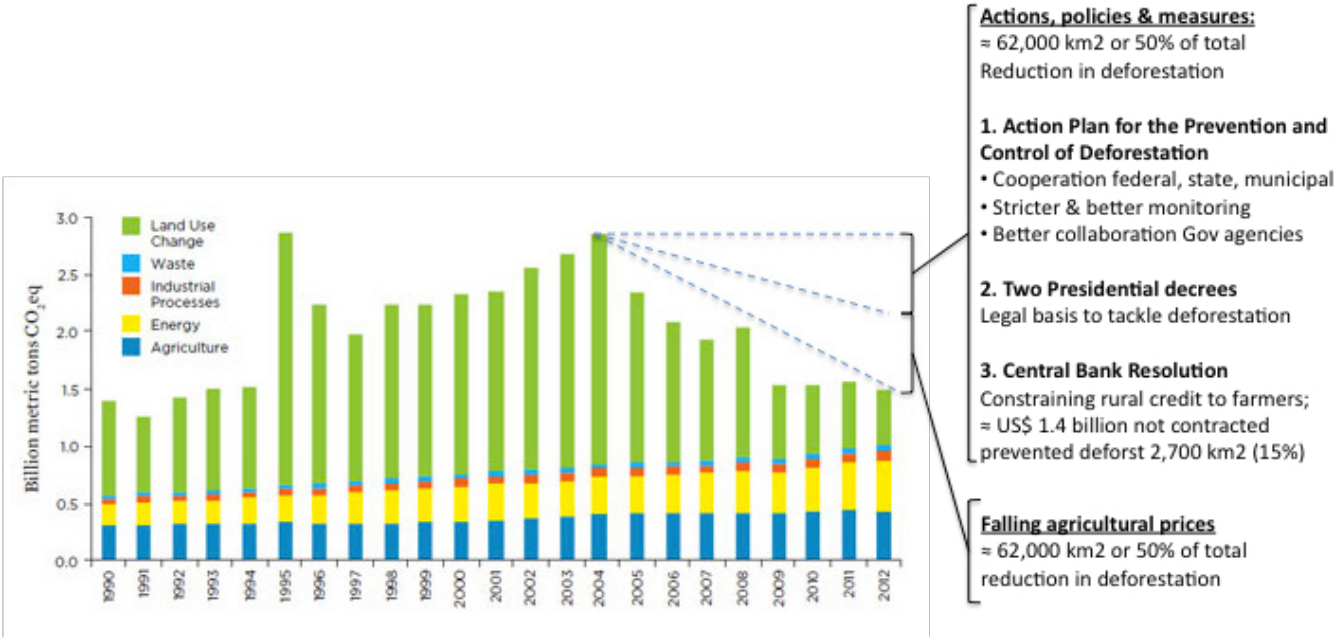
Both mechanisms can be directly or indirectly connected to REDD+. In the case of Mexico, for instance, the carbon tax is not targeting forest emissions specifically, and the carbon market is not setting a cap on forest emissions. But in both cases, REDD+ can benefit from the mechanisms if revenue from carbon taxes are directed towards REDD+ and forest protection activities, and when REDD+ emissions reductions units can be converted into credits to be sold on carbon markets.

Payments for environmental services offer a good illustration of how a carbon or non-carbon tax or fee can raise finance for forest-related activities. In 2013, a study from the European Commission identified 457 such payments worldwide, 85 per cent of them in developing countries (Schomers and Matzdorf, 2013). Most are project level schemes, but developing countries are increasingly establishing payments for environmental services at national or larger jurisdictional scale, following the lead of Costa Rica (1997) and Mexico (2003). In Viet Nam, a national system focused on payments for forest environmental services was created in 2010 and generates about $60 million per year, mainly from hydropower plants and water users, to be redirected to forest watersheds.

Level 2 refers to addressing direct and indirect financial drivers of deforestation. Incentives in favour of competing land use like industrial crops or mining are the best illustration of financial mechanisms that have a massive impact on deforestation and conversely offer opportunities for massive improvement. For instance, in Indonesia, subsidies for agriculture are estimated at $27 billion per year, dwarfing $660 million of forest aid (ODI, 2014). The picture is similar in many places across the world, revealing the potential of reforming fiscal policies to better incentivize forest protection. It also demonstrates that financial PAMs for REDD+ don't always come at a high financial cost, even though the impact of shifting subsidies from particular sectors needs to be assessed carefully. In this case, reducing incentives to agriculture, or redirecting incentives towards REDD+ compliant practices like agroforestry instead of industrial palm oil plantations, can be as effective as increasing direct incentives for forests, and actually offer sometimes more potential for impacts at scale.

Obviously, direct government subsidies are not the only financial driver. Taxes, import/export tariffs, and credit/equity constraints are indirect economic and financial tools that can either increase or reduce pressure to convert forests to other land uses. Figure 9.2 below shows how Brazil's policy of improving the link between rural credit and environmental law enforcement has helped massively reduce deforestation.

Figure 9.2 Major factors reducing deforestation in Brazil between 2005 and 2012



Source: UN-REDD Programme

Level 3 refers to external financial and economic factors, which have not usually been considered when formulating REDD+ PAMs. Reversing this situation would require a thorough understanding of the macro-economic factors at play and close dialogue with national financial institutions, which is challenging for forest-focused and REDD+ institutions. While there are few examples to report at this stage, the potential for such PAMs is massive and REDD+ countries with advanced cross-sectoral dialogue and close connections with national economic and financial institutions are encouraged to explore them.

External factors include exchange rates, sovereign credit ratings and debt, international market prices of (soft) commodities and fossil fuel prices. These factors need to be understood in the context of each country. Some external factors can be influenced by governments, such as exchange rates, which respond to monetary policy. For example, if the currency of a soft commodity producing country drops against the currency of an important consumer country, it becomes relatively cheaper to export, which in turn can add pressure to convert forests. Similarly, if the currency of a soft commodity producing country appreciates because of overall substantial economic growth, it can reduce the pressure on forests as the crops produced become relatively more expensive for consumer countries to buy.

The Brazilian success story illustrated in Figure 9.2 reflects falling international prices for agricultural commodities, which contributed about half of the total reduction in deforestation. Obviously, Brazil's ability to influence the price of beef and soy on international markets is limited. As a large producer, it has an interest in pushing for high prices. However, considering import and export tariffs or monetary policies during dialogues and international negotiations can still have major effects on the conditions that enable deforestation. Thus, while REDD+ considerations alone may lack the traction to influence policymaking at this level, they can still contribute to broader agendas. For instance, commodity price stability can be seen as a national priority for agricultural and rural development, as well as for poverty alleviation policies. Such broad approaches to rural development and land use can be strategic vehicles to promote a better economic and financial environment for REDD+, notably in countries with a large rural population.

In summary, a carbon tax, forest carbon markets, payments for environmental services, and fiscal, trade and monetary policies are all financial instruments or mechanisms that should be explored by REDD+ countries at the stage of formulating their PAMs (see box 9.3 below showing Costa Rica aligning its emissions reduction programme with payments for environmental services). Each has the ability to positively or negatively impact the enabling conditions for agents to protect forests, and can support the shift towards a green economy and sustainable development. While some of them can be costly, others can generate revenue and, on top of their enabling impact, help pay for the implementation of REDD+ PAMs.

DESIGNING AND MANAGING A REDD+ FINANCIAL PLAN

Once the country progresses through the readiness phase and defines REDD+ PAMs as part of its national strategy or action plan, it will naturally be confronted with the question of financing the implementation of the PAMs. This section explores how to design a financial plan, and the next section proposes a review of potential sources and modalities.

General considerations

During the readiness stage, REDD+ countries can usually rely on a handful of partners or national budget lines to cover the costs. But as countries move from readiness to investment and finally to results-based payments, financial sources, channels and forms become more diverse and fragmented. This raises two challenges: promoting diversity on the one hand, and ensuring coordination on the other. Designing and implementing REDD+ financial plans has become an important step for countries seeking to master these challenges as they transition from phase 1 to phase 2 and begin to implement their national strategies and related PAMs.

Designing such a REDD+ financial plan is closely related to the process of formulating PAMs. As REDD+ countries develop PAMs, they are encouraged to run a cost-benefit analysis of each policy or measure, explore the potential sources of finance, and prioritize or deprioritize options depending, among other criteria, on their economic feasibility and financial return. Two processes can be particularly useful at this stage:

- A bottom-up analysis, policy by policy, measure by measure of cost-benefit ratio and potential financial sources (see ***Module 7: Policies and Measures for REDD+ Implementation***)
- A top-down review of all potential financial sources to identify opportunities for REDD+

- Considering the results of both processes will help a country to finalize its selection of PAMs, and also to formulate a comprehensive financial plan for their implementation. Some countries, including Ecuador, DRC and Sri Lanka, are first presenting an overall approach to financing in their national REDD+ strategies while developing, in parallel or as a second step, a more detailed financing plan.
- Ideally, such plans should cover the full cost of implementing the PAMs, while allowing for the combination and leverage of various financial sources. Some interventions might rely fully on public sources, while others might combine several sources, such as public and private finance. The risk of formulating a plan for a tightly focused group of PAMs, or for a specific financial opportunity, would be to miss such potential for leverage. In practice, even when such plans have been formulated with a specific financial window in mind, they have proved to be comprehensive and propose an integrated picture of financial needs and solutions. This is the case of the investment plan of DRC with a particular contribution expected from the Central African Forest Initiative, or the action plan from Ecuador targeting significant support from the GCF.

Box 9.3 Looking for financial breakeven in Costa Rica

As part of its Emission Reduction Programme submitted to the FCPF Carbon Fund in May 2016, Costa Rica identified four financing levels:

Level 1: REDD+ Program Administration, including the operation of REDD+ instruments like safeguards, grievance redress mechanism, measurement, reporting and verification system.

Level 2: REDD+ National Policies, including transaction costs to establish new policies or improve existing policy and legal framework, communicate and implement then, carry out supporting studies etc.

Level 3: REDD+ Sub-programs, to carry out the scheme of programmatic actions for implementing policies

Level 4: REDD+ activities, including costs associated with activities to reduce emissions or enhance carbon stocks carried out by non-governmental organizations

The cost of the national REDD+ programme for the period 2016-2020 is estimated at $1.5 billion. Contributions from national instruments like the National System of Conservation Areas and the National Fund for Forestry Financing (mainly domestic sources) are expected to cover 92 per cent of the total. Costa Rica estimates that financing of $30 per ton of CO_2 saved or removed is necessary for the programme to break even, though emission reductions are only one of the expected benefits.

A country's vision for REDD+ shapes its national strategy and action plan, including the selection of PAMs. Financial planning can serve as a feasibility check once the vision and the resulting objectives are quantified. Where a strategy remains vague, financial planning can help to translate its ambitions into practical and quantified work plans. As already illustrated, not all PAMs come at an additional cost. Also, the type of funding targeted and the level of reliance on external sources are also likely to influence what information is required for the strategy or subsequent investment/financial plan. The level of detail and the technical and financial analysis required to back it up will vary depending on these factors, and should be thought through early on when preparing for financial planning.

Countries are encouraged to explore the various sources and types of REDD+ finance discussed at the beginning of this module in the light of existing data and the needs of the country. Countries should also be aware of and respond to specific windows of opportunity. For instance, following the 2015 Paris Agreement, there has been more discussion within REDD+ countries about carbon taxes, carbon markets, private sector engagement and transitioning to a green economy. National REDD+ process should align with and contribute to such developments.

Introduction to major sources

The next section of this module introduces eight dimensions to consider when preparing a REDD+ financial mix. While their scope is wide, a financial plan is likely to focus on a small number of primary sources.

International public finance is likely to be necessary for many countries to (i) complement and catalyze their own domestic efforts in implementing REDD+ PAMs and to generate results, as well as to (ii) raise and strengthen the profile of the REDD+ agenda in the country, and (iii) possibly support some of the costs of the full development and running of the REDD+ infrastructure (e.g. safeguards and forest monitoring systems), at least initially. Countries should build their likely requirement of the targeted financial sources into their readiness phase and strategy design process to ensure cost-efficiency.

Box 9.4 The Green Climate Fund's criteria to access public finance

The Green Climate Fund's investment framework identifies 6 criteria and 15 sub-criteria for appraising programme and project proposals. A REDD+ country aiming to access GCF finance for REDD+ implementation should consider these criteria when formulating their work plans and proposals.

III. Investment guidelines

4. The Fund's initial investment guidelines will represent the activity-based allocation mechanism and will be composed of the 6 criteria and 15 initial sub-criteria shown in table 2:

Table 2: Initial criteria for programme and project funding

Criterion	Definition	Sub-criteria
Impact/result potential	Potential of the programme/project to contribute to the achievement of the Fund's objectives and results areas	– Climate-related impact – Sustainable development impact
Paradigm shift potential	Degree to which the Fund can achieve sustainable development impact beyond a one-off project or programme investment through replicability and scalability Systemic change towards low-carbon and climate-resilient development pathways	– Potential for scaling-up and replication – Knowledge and learning potential – Contribution to the creation of an enabling environment (i.e. achieving systemic change) and to sustainable development, including social, economic and environmental co-benefits for a paradigm shift - Ability of a proposed activity to demonstrate its potential to adapt to the impacts of climate change and/or to limit and reduce greenhouse gas emissions in the context of promoting sustainable development and a paradigm shift
Needs of the beneficiary country/ alternative funding sources	Financing needs of the beneficiary country, or fewer available funding sources	– Absence of alternative sources of financing – Income levels of affected population
Country ownership and institutional capacity	Beneficiary country ownership of and capacity to implement a funded project or programme (policies, climate strategies and institutions)	– Existence of a national climate strategy – Coherence with existing policies – Capacity of implementing entities or executing entities to deliver
Economic efficiency	Benefit-cost ratio of activity: impact per US dollar[6] delivered by the Fund	– Cost-effectiveness – Amount of co-financing – Industry best practices
Financial viability (for revenue-generating activities)	Financial soundness of activity	– Project or programme financial return (net of subsidy element) and other financial indicators exceed predefined benchmarks

International finance for the implementation of PAMs may come from a number of private and/or public sources, such as:

- Bilateral agreements (for investment but also as results-based payments);
- Multilateral programmes such as the Central Africa Forest Initiative (investment), the Forest Investment Programme (investment), or the FCPF Carbon Fund (mainly results-based payments);
- GCF (both investments and results-based payments, see box 9.4 above); and
- Private sources

While UNFCCC decisions emphasize the international nature of results-based payments, it does not mean that investment will necessarily come from international sources or only from such sources. Countries are currently competing for limited international public REDD+ finance. Even with more substantial international support,

countries must line up resources from multiple sources, domestic and international, public and private, and not all specifically for REDD+.

Many REDD+ PAMs may not be new, since countries have been taking steps for decades to address deforestation or to promote the conservation and sustainable management of forests. As such, countries could start by identifying and quantifying relevant existing domestic financial efforts and showcase them (see box 9.5 below), as well as the most critical gaps to be filled.

Still, beyond injecting more resources into existing PAMs, these may need to be strengthened and complemented, often through a more cross-sectoral approach (see ***Module 7***). This is an opportunity to build a broader domestic financial base for REDD+. It also illustrates once again the importance of embedding REDD+ into the national development priorities of a country as well as of the sectors driving forest cover change (i.e. the many reasons to implement REDD+ beyond emissions reductions, including jobs and livelihood opportunities, increased resilience of communities and businesses to natural hazards, etc.).

Showcasing existing and new efforts in domestic financing for REDD+ in the national strategy and investment plan will in turn help strengthen and demonstrate national ownership as well as the longer-term sustainability of REDD+ implementation. These are important elements in making the case for international contributions to REDD+ implementation. International REDD+ finance may then be used to help integrate forest issues into existing policies, legal frameworks, programmes and projects (REDD+ alignment).

Box 9.5 Estimating public domestic REDD+ finance

Global estimates place domestic REDD+ financing in the region of $10 billion per annum (Streck and Parker, 2012) or twice the level of international REDD+ pledges (Tennigkeit *et al*, 2013). However, data at the national level (reported through Forest Trends' REDD*X*) suggests that governments are responsible for up to 50 per cent of REDD+ finance. For example, the Mexican government reports domestic contributions of $333 million or 43per cent of Mexico's total REDD+ finance, while the government of Ghana reports that it has provided over $39 million or 37 per cent of total REDD+ finance tracked in-country.

As of January 2015, the REDD+ Partnership reports $1.6 billion in domestic investments across 40 countries. But this figure is likely significantly higher, requiring more complete understandings of what 'counts' as REDD+ finance within countries, and more systematic frameworks for reporting which ensures that international finance is not re-packaged or double counted as new and additional finance. Many countries are now investing in systems to identify and monitor domestic spending on climate finance, including through the use of climate public expenditure reviews. For example, UNDP recently supported Indonesia to complete an analysis of expenditure related to mitigation, which sought to quantify domestic spending on REDD+ activities.

Source: Norman and Nakhooda (2014)

Institutional arrangements

As discussed above, following the detailed formulation of its PAMs and the general review of financial opportunities, countries will be in a position to consolidate their REDD+ financial plan, by matching their objectives, their needs and their means. At this stage, institutional arrangements to coordinate the funding of REDD+ implementation might need to be upgraded from provisions of the national strategy or action plan. Whatever financial means are available to support REDD+ implementation need to be coordinated, aligned, and monitored.

Countries face various options when deciding how to target, generate and manage REDD+ funds. Box 9.6 below provides a few illustrations. The arrangements include terms of reference and mandates for institutions and teams to access data from various sources, run assessments and studies, and produce analyses and reports. It can also include dedicated financial instruments like a national REDD+ fund, tailored windows in climate or green growth funds etc. In short, countries need to consider:

- Human resources: Coordinating and monitoring the implementation of REDD+ PAMs, including their financial dimension, is crucial. A centralized and well-staffed team is highly recommended. Countries also have the option of building on staff scattered among the various ministries and institutions involved.
- Processes and procedures: To access data from multiple sources, carry out effective analytical work guide constant improvement in financial management during implementation, and possibly carry out monitoring, roles and responsibilities need to be clearly assigned, particularly if the human capacities are decentralized.
- Financial instruments: Traditional instruments can be used, from specific national funds (e.g. for forests, conservation, biodiversity) or schemes (e.g. payments for environmental services) to national budget allocations using ministries' programming and incentive channels. Financial instruments also refer to mobilizing investments from development banks or financial institutions. The option of pooling some or all REDD+ resources into a dedicated financial facility or window can also be considered. Many countries are setting up REDD+ national funds, or creating REDD+ windows in broader sustainable development funds. This can attract international donors, as governance and operations can be adapted to meet their expectations or conditions. Such funds can also be connected to other funding instruments, serving as sources (e.g. for domestic or international carbon markets) or as channels for disbursement (e.g. for payments for environmental services).
- Engagement of stakeholders: To help promote the take-up of REDD+ financing sources and approaches and fund disbursement arrangements, effectively and actively engaging and consulting with stakeholders, who are involved in REDD+ policy design and implementation, should also be undertaken throughout decision-making processes on REDD+ fund design and management. In addition to promoting ownership, this is can help ensure funds are set up and managed in a fair, transparent and equitable manner. These stakeholders can include relevant government agencies, private sector entities, civil society, and women, men and youth from forest-dependent communities, indigenous groups and smallholders, etc.

Box 9.6 Comparing different financial arrangements for REDD+

Brazil launched the Amazon Fund in 2008 to finance the sustainable use of forests, recovery of deforested areas, conservation and sustainable use of biodiversity, plus environmental control, monitoring and enforcement. The fund is administered by the national development bank BNDES. It pools REDD+ results-based finance received from Norway as part of a bilateral agreement, as well as domestic public and private financial resources.

In Costa Rica, REDD+ support from the FCPF Carbon Fund will be managed by FONAFIFO, the National Fund for Forestry Financing, which also manages the national Payment for Environmental Services scheme. No new institution has been created. Further REDD+ finance to be managed by FONAFIFO is expected to be leveraged from other sources, including from the domestic carbon market, and channeled through various windows, including the Sustainable Biodiversity Fund.

In DRC, a REDD+ national fund was created in 2013, with initial funding from the Central African Forest Initiative. The fund was created to meet international partners' requirements and attract international public support. The facility is expected to evolve and open up to other financial sources, and also propose various financing modalities. A first window supports capacity building, policy reform and integrated investments. A second window will receive results-based payments when the source requires specific arrangements including incentive allocation plans. The fund is expected to serve as a critical financial and coordination platform to support the implementation of the national REDD+ framework strategy and, more specifically, its associated investment plan.

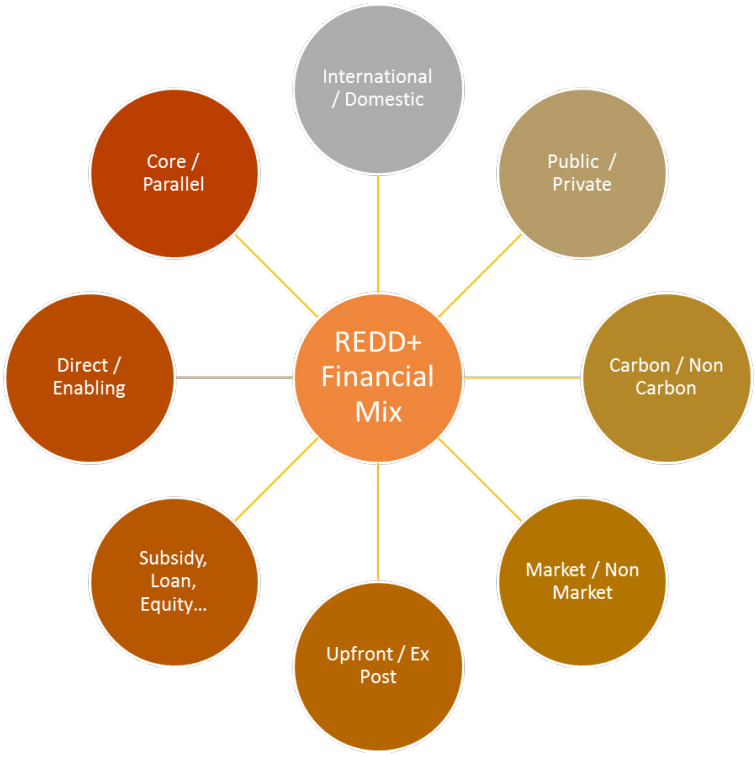
Below are a set of questions to help REDD+ countries scope their REDD+ financial architecture:

- **Step 1** – What are the needs of the country?
  - What sources of funding are expected to be mobilized?
  - What kind of disbursements are being considered (grants, loans or equity, size of disbursements)?
  - Who will be the beneficiaries (households, communities, companies, government, NGOs, aid agencies)?
  - Is there need for intermediaries?
  - What type of projects will be supported (capacity building, policy reform, investments in productive activities, carbon)?
- **Step 2** – Assessment of existing institutional arrangements
  - How do existing arrangements ensure coordination with national policies?
  - Are the arrangements transparent?
  - Where do the funds come from?
  - What are the disbursement capacities (to whom, what size, what sort of payment)?
  - How efficient are the procedures (complexity, speed, cost)?
  - How effective are the arrangements (earmarking, carry-overs, multiyear budgets, ring-fencing, leakage, additionality, permanence)?
  - What are the co-benefits?
- **Step 3** – Assessment of the arrangements that can be created
  - What are the specific shortcomings in the existing arrangements?
  - Can they be adapted?
  - Or should a completely new structure be created?
  - What are the cost/time implications of this decision?

FINANCING THE IMPLEMENTATION OF POLICIES AND MEASURES

A major financial challenge faced by most REDD+ countries is the implementation of REDD+ national strategies or action plans. Finance will be required to implement the various PAMs leading to REDD+ results, as well as for coordination and capacity building, and for the deployment (and continuous improvement) of REDD+ pillars like safeguards and forest monitoring systems. After a country has developed a comprehensive understanding of deforestation and degradation drivers and barriers to enhancement and removals, and while formulating relevant PAMs as part of its national strategy or action plan, the question of financial means and instruments to support implementation becomes central. In this context, REDD+ finance can be defined as a mix of financial sources, instruments and arrangements determined along eight key dimensions (see Figure 9.3).

Figure 9.3 Implementing REDD+: combining various sources and features into a comprehensive financial mix



Source: UN-REDD Programme

1. International and domestic sources

As discussed above, REDD+ countries are strongly encouraged to mobilize domestic finance to support the REDD+ process at every stage. REDD+ has significantly increased – about doubled - the international donor contributions for forests. By early 2015, nearly $9 billion had been pledged (although a much smaller amount disbursed) for REDD+ from international public sources (Lee and Pistorius, 2015). However, the international public finance raised so far or expected to be raised in the future falls short of supporting the major financial needs identified during the formulation of countries' national strategies and action plans (see Box 9.6).

The need for domestic finance is illustrated by experiences in Brazil and Chile.

Back in 2005, when REDD+ was just an emerging concept, the government of Brazil committed $661 million of its budget to implement its Action Plan for the Prevention and Control of Deforestation in the Legal Amazon. By 2012, Brazil had reduced its deforestation by 76 per cent compared to its 1996-2005 baseline, representing 2.2GtCO_2 in emission reductions (Boucher, 2013). Given the limited availability of international public funding, this figure demonstrates that domestic sources of finance are a must for REDD+.

In Chile, the implementation of the estimated $218 million National Strategy for Climate Change and Vegetal Resources 2017-2025 relies on $37 million in unconditional commitments from domestic public funding. The strategy stresses that the remaining $180 million of expected new and additional funding will be raised from both national and international sources.

2. Public and private sources

Depending on the nature of REDD+ interventions, public and private sector finance can be complementary. Most readiness activities or policy reforms usually rely on public finance. Public finance can also be used for pilot interventions and models on the ground, which can be scaled up later through private finance. The private sector encompasses very diverse players and interests. National forest administrations are usually quite familiar with the timber industry, but the private sector relevant for REDD+ usually also includes agricultural commodity supply chains, and non-timber forest-related sectors like tourism,

hydropower, water companies and mining. From grass roots organizations and small enterprises to medium and large-sized companies, a variety of private players can be approached. Last but not least, financial institutions including banks, investors and insurance companies and other service providers also offer high potential to scale up REDD+ finance and impact. See box 9.7 below on major approaches to leveraging private sector investment, and box 9.8 for a case in Viet Nam.

Box 9.7 Supporting private sector investment

Several elements are crucial to redirect private capital away from business-as-usual activities to those that are conducive to achieving REDD+ results. Most forest administrations have traditional relations with their domestic timber industry, but more rarely with sectors offering alternative opportunities for sustainable and profitable use of forests (like ecotourism, non-timber forest products supply chains), or those representing a major threat, like agricultural commodity producers. When preparing their REDD+ financial plan, countries should consider engaging closely with these sectors, and might need support from relevant external experts. Dialogue with the private sector can explore the following areas of potential cooperation:

- **Clear regulatory frameworks**: the regulatory framework of a country needs to make clear the roles and responsibilities of all key actors. It ranges from the overall business environment of a country (e.g. ease of setting up a business, governance) to targeted and sector-specific aspects. Policies that are consistent over a longer timeframe are needed to encourage private businesses to invest for change.
- **Economic incentives**: to redirect finance away from carbon intensive/high forest impact investments to alternative models that decouple productive activities from forest impacts, economic incentives such as tax breaks, subsidies, tariffs or carbon payments/payments for environmental services are likely needed.
- **Business models**: REDD+ can reveal ways to strengthen sustainable and profitable business models that are not achieving their full potential. The private sector, including the financial sector, usually needs robust data and a good understanding of the potential risks and opportunities, and REDD+ can support the emergence of high potential business models when working closely with pioneers from the private sector.
- **Access to finance**: Bridging the gap between potential investors and the financial institutions that could lend to them can also help unlock sustainable finance, and public policies and support can contribute significantly to improving capacities and reducing costs
- **Timeframe**: enabling conditions as described above need to be established and upgraded over the long term to secure and promote private investment.

Box 9.8 Viet Nam: Leveraging private finance on profitable models that enhance carbon and other ecosystem benefits

In Viet Nam, a major opportunity for REDD+ implementation consists of increasing forest carbon removals while enhancing multiple ecosystem services. Improving the quality and management of plantation forests through diversification with native tree species and extending the rotation periods of short-rotation plantation forests is beneficial for forest owners, the climate and biodiversity. Suitable models have been developed by UNIQUE forestry and land use GmbH, Climate Focus and IREN of Hue University, with financial support from the German International Climate Initiative. The models are being piloted in North Central Viet Nam. The feasibility study demonstrates that, over 20 years, switching from current practice to better and sustainable forest management practices can significantly increase CO2 removals from the atmosphere – depending on the model and local circumstances, by some 70 to 100 tons CO2 per hectare – while increasing the Internal Rate of Return for the forest owner by 50 to 100 per cent (UNIQUE 2015, unpublished). The models illustrate how REDD+ measures can tap significant synergies between different environmental and economic objectives, and leverage private finance as part of the overall REDD+ financial mix. This represents a major opportunity for REDD+ countries to trigger investments into implementation activities with a direct mitigation result.

3. Carbon and non-carbon oriented finance

REDD+ PAMs can be implemented by institutions and agents with diverging interests related to carbon as a commodity. This distinction is particularly important when it comes to building the appropriate narrative to engage with targeted partners. Some private companies but also NGOs, communities or public institutions might be looking at carbon as a commodity they are willing to manage, invest in and market, for instance. These players will seek carbon credits as a way to directly benefit from REDD+. However, most players have no interest in engaging with carbon as a commodity, and will be encouraged by other means. For instance, private timber company A might look at potential carbon credits as an integrated part of its business model, while timber company B has no experience or interest in diluting its core timber business. Engaging the first and second companies would require tailored messages, granting access to carbon credits for the first, supporting with adapted monetary or non-monetary incentives for the second. Overall, mobilizing partners to implement specific REDD+ measures in order to secure carbon credits might prove cost-effective and relevant only in limited cases.

- Cambodia, for example, has worked with the private sector through voluntary market projects since 2008. Based on their experience, the process from project scoping to the issuance of verified credits takes four to five years, and costs between $1 million and $1.2 million per project. This does not include legal service fees and other transaction costs. The Royal Government of Cambodia has had to rely on the assistance of NGOs -and development partners to navigate through the process. Only 1.5 % of available carbon credits yielded from the Oddar Meanchey project have been sold since market entry in 2010. Revenues from the sales currently remain in an escrow account [...] (quote from UN-REDD, 2016). It should be noted, that the poor sales of carbon credits are not due to an inherent fault in the REDD+ process, but are mostly due to a lack of demand in the compliance sector for carbon credits. Without this intervention by governments to create it, sales must rely on the voluntary market whose price remains relatively low and volumes small.

4. Market and non-market mechanisms

Market or non-market approaches cut across public and private, domestic and international finance. Market-based finance for REDD+ usually refers to the conversion of emissions reductions or removals, once achieved and certified, into REDD+ carbon credits, and the sale of such carbon credits. The sale occurs on voluntary or compliance markets. Voluntary markets, mainly leveraging philanthropy, corporate social responsibility or reputational and marketing concerns, have supported some pilot scale REDD+ initiatives on the ground, but are not expected to generate enough finance for scaled up interventions and impacts. Compliance markets offer more potential in the medium to long term. They can be international as well as domestic. In 2016, California and Australia were trading 99 per cent of forest carbon credits under a 'pre-compliant' format. California could accept REDD+ credits in fully compliant mode in the future, while Australia's market has become voluntary in connection with the set-up of the Emissions Reductions Fund in 2014. Several REDD+ countries are in the process of setting up domestic compliance markets that could be open to REDD+ credits. Examples include Mexico, South Africa and Viet Nam. Box 9.9 below provides key figures about carbon markets.

Carbon pricing is a critical incentive for climate and REDD+ action. Whether such pricing is determined by markets or not, public policies are instrumental. In the case of compliance markets, it is public policies that determine the conditions to access the market (and particularly to accept or not REDD+ credits and against which standards) and the ambitions that eventually translate into carbon demand and pricing.

Public policies referred to as 'market-linked' can also directly leverage finance from markets, like levies on plane tickets or financial transactions. This form of levy often covers payments for environmental services schemes, particularly at national level when the price-setting and the idea of a direct transaction between a service provider and the beneficiary of such a service becomes blurred.

Box 9.9 Accessing REDD+ payments from carbon markets – an uncertain journey

Voluntary and compliance markets are evolving differently.

The voluntary carbon market keeps shrinking. In volume, it dropped from an average 115 million tons of CO_2 equivalent traded per year between 2008 and 2012, to an average 76 million tons per year between 2013 and 2015. In value, it shrank to the all-time low average price of $3.3 per ton in 2015, resulting in a total market value of $278 million, the lowest since 2006. More specifically, the voluntary market for credits from REDD+ activities declined by 26 per cent in volume in 2015 (to 11.1MtCO_2eq), for a total annual value of $37.5 million (Hamrick and Goldstein, 2016).

Compliance markets offer better potential for REDD+ in the longer term, even though forest carbon trading on such markets remains at an early stage, Australia's market has reverted to a voluntary market, and new markets in developed and developing countries might not open up to REDD+ credits for several years. In volume, compliance markets traded 10.6MtCO_2eq in 2014, at an average price of $12.7, for a total value of $129 million (Goldstein and Neyland, 2015).

A significant new source of demand could come from the aviation industry. In 2013, the ICAO, the UN body responsible for setting standards for international flights, pledged to cap aviation greenhouse gas emissions at 2020 levels, delivering "carbon neutral growth from 2020". In October 2016, ICAO agreed the principal and initial framework of a Market Based Mechanism, which could create considerable demand for REDD+ credits if they are approved as offsets within the mechanism. This could prove transformative to REDD+ demand, even though the overall climate mitigation impact remains debated.

5. Upfront and ex post finance

REDD+ finance can include incentives, investments or compensation disbursed before the actions are implemented and the results are achieved. This is usually the case for readiness and demonstration activities in phases 1 and 2. However, the ultimate stage of REDD+ is phase 3, when results-based payments are made to REDD+ countries against demonstrated and recognized results. This is ex post finance. Some programmes like the FCPF Carbon Fund or REDD+ Early Movers focus almost exclusively on such ex post, results-based payments (even though some minimal ex ante support can usually be negotiated). In theory, carbon markets are also an ex post modality, as they involve trade in credits for already achieved emissions reductions. In practice, deals on the voluntary market are negotiated bilaterally and often imply some upfront support from the buyer. Ex post finance is the essence of REDD+, and is seen as key to its sustainability. Countries are expected to invest upfront to achieve results, with payments for such results sustaining the shift towards the end of deforestation. In practice, this vision needs to be adapted to challenging circumstances, notably that the price that buyers expect to pay for forest emissions reduction credits is usually much lower than the cost of delivering those credits, and that many developing countries lack the capacity to make upfront investments due to limited public resources and access to private sector financial networks.

6. Grants, loans, equity

REDD+ finance can take several forms. Public finance has been mainly delivered as grants and subsidies, particularly for readiness activities. As countries move towards the investment and full implementation stages, financial needs increase along with the opportunities for diversified forms of finance. REDD+ countries look more and more at leveraging the financial and private sectors, and formulate PAMs that include opportunities to invest in profitable alternatives to deforestation, opening the door for loans, concessional loans and equity investments (see box 9.10 below). Loans make sense when the implementing entity is a for-profit organization expecting a return on investment, but can also be appropriate when the end user is a public non-profit organization that only expects a limited financial return, but many more indirect socioeconomic, environmental and even political benefits. For example, several countries are considering issuing REDD+ bonds, which would involve borrowing on capital markets to support the implementation of PAMs. This approach is based on the premise that multiple non-financial benefits will make otherwise unprofitable REDD+ interventions worthwhile. It could also promote the use of loans from domestic public finance. Loans are the instrument of choice when the activity's cash flows are more certain and the general risk profile is low, which results in lower cost of borrowing and the confidence that the activity is not going to lead to the borrower defaulting on its obligations.

Box 9.10 Cote d'Ivoire investment plan to the Forest Investment Programme

The Forest Investment Programme, a $785 million funding window under the World Bank Climate Investment Fund, is an example of a facility meant to financially support countries aiming to ultimately access results-based payments. The finance comes upfront, usually through a mix of grants and loans. In June 2016, the Forest Investment Programme endorsed and agreed to support the investment plan of Cote d'Ivoire. This REDD+ funding of $24 million comprises a concessional loan of $15.8 million, and a grant of $8.2 million. The primary focus of the plan is restoring the country's forest cover by working with small-scale farmers to introduce agroforestry techniques and improve agricultural productivity. Beyond environmental benefits, it offers various socioeconomic benefits including job creation, diversification and increase of incomes notably for vulnerable groups, improvement of livelihoods and increased sustainability of production systems. The investment is expected to trigger a 550MtCO_2eq emissions reduction over the next 20 years, demonstrating a strong leveraging effect and the potential for eventually accessing significant results-based payments. It thus offers a robust rationale for accessing concessional loans in combination with grants.

REDD+ finance can also encompass private sector investments. Leveraging private sector finance can be enabled with subsidies or improved access to credit. In some cases, major REDD+ actions can be implemented by companies investing their own resources, without any external transfer of funds. As in other cases, this type of REDD+ finance does not necessarily fit the UNFCCC definition, but can result from the implementation of the UNFCCC guidelines.

7. Direct finance and enabling instruments

One of the primary drivers of deforestation is that individual agents often have an economic or financial interest in cutting trees and turning forests into other land uses, even if it makes sense to protect forests from a collective and long-term perspective. This driver is strongest where the costs of deforestation are borne by the wider community. The fundamental idea behind REDD+ is to increase the value of healthy forests by valuing their carbon component, at least partially (as a flow against a baseline, not as a stock). As reflected in many REDD+ national plans and strategies, REDD+ has a transformational dimension, meaning that it helps to change the very structure of economic incentives and disincentives to deforestation and forest protection. It is not only about triggering or preventing directly a specific action through a financial transfer. It is also about creating the enabling conditions for individual agents to change their decision patterns in favour of healthy forests.

As a consequence, REDD+ finance should be seen not only as a set of additional financial transfers, but also more generally in the frame of fiscal and broader policy instruments that indirectly trigger the implementation of REDD+ PAMs. Fiscal systems are actually a critical starting point to move towards REDD+, as they often allow for impactful change in the enabling environment, including at low direct cost. This kind of 'enabling' finance can be seen as part of PAMs, as discussed earlier in this module and as illustrated in box 9.11 below, while 'direct finance' refers to the financial means that are necessary to support the implementation of PAMs.

Box 9.11 Illustration from Brazil of the potential of credit reforms for REDD+

Rural credit, which the Brazilian government subsidizes via low interest rates, is an important source of financing for rural agricultural producers in Brazil. Introduced in mid-2008, Resolution 3545 placed a condition on rural credit for producers in the Brazilian Amazon Biome. To obtain credit, borrowers had to present proof of compliance with environmental regulations, the legitimacy of their land claims, and that their operations are otherwise in compliance with the law. The resolution has restricted credit and helped to contain deforestation in the Amazon Biome, while still allowing production of soy and beef to increase. Over 2,700 square kilometers of forest would have been cleared between 2009 and 2011 without the resolution.

Source: UN-REDD Programme (2016)

8. Core and parallel REDD+ finance

Under the UNFCCC, REDD+ results-based finance must comply with UNFCCC decisions and guidelines. For example, it must relate to actions that are measured, reported and verified and comply with REDD+ safeguards. On the other hand, the UNFCCC also recognizes the need to align REDD+ with broader national development agendas. That raises two major issues in practice. First, it is very difficult or impossible to associate a specific emission reduction with one single REDD+ action, as it is usually a combination of direct and indirect factors, policies and interventions, which will generate REDD+ results. In that situation, how can factors that are labelled REDD+ be separated from those that are not? This issue is exacerbated by the need to mainstream REDD+ into larger agendas, like climate change, green growth, and the sustainable development goals.

- For instance, a comprehensive REDD+ national strategy or action plan could aim to direct agriculture finance towards REDD+ friendly practices. Where a REDD+ country decides to allocate some of its agriculture budget to promoting agroforestry in critical buffer zones around protected areas, it does not seem realistic to require the application of REDD+ safeguards to the project, or to omit the related emissions reductions from national REDD+ results under UNFCCC because safeguards were not addressed.

Despite this ambiguity, REDD+ countries are strongly encouraged to look at options beyond strictly labelled core REDD+ finance when designing the financial plan to support the implementation of PAMs. Parallel funding in related sectors, including from public international and national programmes as well as the private sector, represent a major opportunity for REDD+ if connections can be made and these programmes can be leveraged to contribute to REDD+ objectives and results (see box 9.12 below for examples).

Put another way, "REDD+ finance has the largest potential when integrated into development planning and aligned with relevant private sector actors – a lack of engagement by those who profit from depleting or converting forest resources is a key weakness of many REDD+ programs" (Lee and Pistorius, 2015).

Box 9.12 Examples of private sector actors with the potential to complement or catalyze core REDD+ finance

Motivated by a desire to combine strong financial returns for their clients and shareholders with a clear engagement in long-term sustainable investments, a number of private financial companies were set up to explore opportunities in sectors with high environmental, social and governance (ESG) standards, such as renewable energy, sustainable forestry and low carbon intensity agriculture.

These specialized financial actors form a heterogeneous group, from private equity firms specializing in agribusinesses (such as Black River Asset Management, Phatisa or Acorn Private Equity) to impact asset managers (Mirova, a subsidiary of Natixis) to boutique funds (e.g. Moringa Fund, focusing on profitable large scale agroforestry projects with high environmental and social benefits). While these companies rely on different approaches and methods to screen and select their investments, they share an investment model that seeks to combine attractive returns with positive environmental impacts. The value they create for their clients comes from their capacity to identify and engage in projects with strong environmental integrity and economic potential, two dimensions that are also central to many REDD+ activities. This makes them possible funding partners for the implementation of certain REDD+ activities, as long as these can generate positive economic returns.

For instance, Mirova launched the Land Degradation Neutrality Fund in partnership with the United Nations Convention to Combat Desertification with a commitment to restore 12 million hectares of land per year. This is to be achieved by directly or indirectly financing projects and entities that promote land rehabilitation and sustainable land management globally. Initially, the fund aims to focus on existing initiatives involving like-minded players in order to significantly increase the scale and impact of the efforts deployed globally towards the achievement of SDGs, with agriculture, forestry, conservation and land reclamation as key targeted sectors.

In a different context, Althelia Ecosphere, a boutique fund specializing in investments in natural capital preservation and restoration with the aim of addressing the drivers of deforestation and unsustainable land-use, is setting up a fund to mobilizing private finance for ecosystem conservation, agroforestry and access to energy in Madagascar. The Madagascar Climate and Conservation Fund addresses a critical gap between grant financing (difficult to replicate and to scale) and the more traditional banking system that remains out of reach for small community-based organizations.

Other projects have managed to combine REDD+ objectives with financial and operational contributions and expertise from private sector actors. A recent REDD+ Forest Bond issued by the IFC is innovating by giving investors the option to receive coupon in the form of carbon credits generated from avoided deforestation instead of cash coupon. The bond supports the Kasigau Corridor REDD project in Kenya implemented by Wildlife Works Carbon LLC. BHP Billiton provides a price support for the carbon credits in order to secure a predefined minimum quantity of carbon credits every year. This price support provides the certainty needed to attract institutional investors while still generating verified reductions in deforestation, in the form of REDD credits.

Key message:

There is no single definition of REDD+ finance. For instance, approaches to REDD+ finance can be determined by a strict reference to UNFCCC decisions, or by pilot experiences outside the UNFCCC framework. Taking a REDD+ country's perspective, REDD+ finance in this module is defined as all relevant financial means and instruments to support REDD+ readiness, the implementation of REDD+ national strategies or action plans, and eventually achieve REDD+ results and access payments. Eight dimensions have been identified to support countries in determining their financial mix to support REDD+ from readiness to full implementation. Together, they set out the theoretical scope of REDD+ finance, which can then be translated and adapted to the circumstances in each REDD+ country.

ACCESSING RESULTS-BASED REDD+ FINANCE

Countries can receive REDD+ results-based payments once they demonstrate results in terms of emissions reductions or removals against their reference level. Under the UNFCCC, this reflects a situation where a country has reached REDD+ phase 3, even though phase 2 and phase 3 are expected to be concurrent more than sequential. It is unlikely that the volume of payments eventually received for emission reductions or removals matches that needed to sustain REDD+ investments, for instance due to limited cost-effectiveness of some PAMs, limited demand for emissions reduction units including carbon credits and/or their low price. In practice, countries currently receiving results-based payments like Brazil or Guyana are also fully engaged in implementing further REDD+ policies and measures. This reflects, in effect, a double conditionality for results-based payments: demonstrate results, but also demonstrate how payments will be used to sustain REDD+ interventions and enable future results.

By definition, results-based finance is ex-post, collected after investments are made and results are demonstrated. However, results-based finance can be considered at an early stage of designing a national strategy and financial plan. A results-based carbon payment agreement with an international partner, whether bilateral (e.g. with Norway or Germany), multilateral (e.g. Carbon Fund) or even indirect (access to the carbon market in California), can send a positive signal to local, national and international partners in terms of commitments and opportunities. As REDD+ is still at an early stage, many results-based mechanisms include arrangements to provide some payments up front. Finally, some financial mechanisms and intermediaries, like banks and investment funds, can also turn an agreement for ex post payment into ex ante investments, at a cost depending on the perceived risk and timeframe.

Box 9.13 Piloting results-based payments

A REDD+ results-based payment approach can be considered part of a broader trend in international relations that seeks to improve the delivery of official development assistance. This is based on the premise that it can improve official development assistance's efficiency and performance, notably by increasing ambition, strengthening national ownership, reducing transaction costs, improving monitoring, transferring risks and possibly scaling up finance (Climate Focus, 2015). However, several risks have been identified, including the channeling of direct finance toward 'low-hanging fruit' opportunities and away from costlier and uncertain transformational changes.

Institutions working on REDD+ results-based payment systems, like the GCF, must answer critical questions including the level of incentive and payments to be made in order to be both effective and attractive, in a context where capital availability, the cost-effectiveness of REDD+ PAMs, or the stakeholders critical to improved forest governance can vary widely from one country to another. Researchers point to four key issues to assess and measure performance for REDD+ results-based finance: incentivizing reforms, identifying indicators, managing the politics of numbers (in setting reference levels for instance), and securing funding (Wong et al., 2016).

UNFCCC and expected sources

Article 5 of the Paris Agreement consolidates UNFCCC direction in terms of REDD+ results-based finance as follows:

"Recognizes the importance of adequate and predictable financial resources, including for results-based payments, as appropriate, for the implementation of policy approaches and positive incentives for reducing emissions from deforestation and forest degradation, and the role of conservation, sustainable management of forests and enhancement of forest carbon stocks; as well as alternative policy approaches, such as joint mitigation and adaptation approaches for the integral and sustainable management of forests; while reaffirming the importance of non-carbon benefits associated with such approaches; encouraging the coordination of support from, inter alia, public and private, bilateral and multilateral sources, such as the GCF, and alternative sources in accordance with relevant decisions by the Conference of the Parties."

In practice, REDD+ countries are expected to demonstrate their results under the UNFCCC by following the decisions and guidelines agreed, notably on reference levels, national forest monitoring systems, monitoring, reporting and verification systems, safeguards and national strategies or action plans. However, the modalities for accessing payments from demonstrated results are still unclear (see box 9.13 above). UNFCCC does not provide guidelines to operate REDD+ results-based payment systems. As a major financial arm under the UNFCCC, the GCF is expected to play a central role in providing REDD+ results-based finance, but the mechanism for this is still under construction (see Box 9.14 below). Regarding new market mechanisms and the 'internationally transferred mitigation outcomes' mechanism included in the Paris Agreement, discussions are still at an early stage and their relation to REDD+ results-based payments in the future remains largely to be negotiated and clarified.

Box 9.14: The Green Climate Fund

The GCF was created to receive and channel resources for climate change mitigation projects, policies and activities. So far it has managed to mobilize about $10 billion. Land use is one of the four windows that have been established as part of the mechanism to reduce greenhouse gas emissions.

The GCF offers an opportunity to support REDD+ during phase 2 demonstration and investments, as well as through a phase 3 results-based payment mechanism. This mechanism is yet to be formulated, but its logical framework is based on the UNFCCC Warsaw Framework or "REDD+ rule book". At the 12th meeting of the GCF Steering Committee in March 2016, it was agreed to operationalize the mechanism by the end of 2016.

The GCF is an operating entity of the UNFCCC's financial mechanism. Recipient countries can submit funding proposals through national designated authorities. Recipient countries will be allowed direct access through accredited sub-national, national and regional implementing entities they propose and set up as long as these implementing entities fulfill certain fiduciary standards. The modalities of access remain to be agreed. GCF funds can also be accessed through multilateral implementing entities, such as accredited multilateral development banks (e.g. African Development Bank and others) and UN agencies (e.g. UNDP).

A private sector facility will also be established that allows direct and indirect financing by the GCF, using loan, equity or guarantees, to leverage private sector investments and activities. National designated authorities are to ensure that private sector interests are aligned with national climate policies.

In October 2016, the GCF approved its first allocation to a REDD+ programme in Ecuador. The grant of $41.2 million will support the implementation of the national REDD+ action plan "Forests for Well-Being" in full compliance with the Warsaw Framework. The formulation took about a year with support from UNDP and the UN-REDD Programme, despite the fact that the country was already relatively advanced in terms of REDD+ readiness. It demonstrates the technical challenge to access GCF funding, but it also offers a concrete example and opens the way for the channeling of GCF funding towards REDD+ programmes in other countries.

GCF finance can also support REDD+ objectives indirectly. The $29.5 million project on "improving the resilience of vulnerable coastal communities to climate change related impacts in Viet Nam" was approved by the GCF in March 2016. Even though it is classified as an adaptation project, its ecosystem-based approach also encompasses an $11 million component for coastal reforestation, which is definitely aligned with national REDD+ objectives.

Transition period, pilot sources and methodologies

Donors have supported programmes to pilot REDD+ results-based finance, first in the absence of a mechanism under the UNFCCC, and then as a way to test operational modalities that could, eventually, help make the UNFCCC mechanism operational. These initiatives have been carried out outside the UNFCCC, but with the aim of eventually bridging gaps and securing consistency. Such initiatives include:

- Norway's International Climate and Forests Initiative, which has committed about $2.7 billion in results-based payments for REDD+ in Brazil, Indonesia, Guyana, Peru and Liberia.
- Germany's REDD Early Movers programme (see Box 9.15)
- The Forest Carbon Partnership Facility's Carbon Fund has a pipeline of 18 countries, and expects to sign 12 to 14 emissions reduction payment agreements in the future. It hasn't made a REDD+ results-based payments yet, though the funds committed and pledged total $750 million. The BioCarbon Fund, another instrument from the World Bank, is also expected to provide REDD+ results-based payments in the future, with agreements in Colombia, Ethiopia and Zambia.

Payments for results are expected to take various forms. Payments for emissions reductions units can be received as a 'reward' for good performance and contribution to climate change mitigation without generating offsets, like in the case of the agreement between Norway and Brazil and most other results-based payments agreements so far. Units can also be turned into titles/assets, usually referred to as REDD+ carbon credits, which are transferred to buyers against payment, as with the Carbon Fund. In this case, the transaction refers to the purchase of carbon titles or credits, which can then be used for public relations and to offset emissions, for instance by a company or industry. This approach can impact the capacity of a REDD+ country to account for its REDD+ results under its nationally-determined contribution under the Paris Agreement. In both cases, countries need to keep a transparent accounting system, database or registry, to ensure no double counting and double payment for emissions reductions units.

Other key features of results-based payments are currently being explored by pioneering initiatives. Climate Focus (2015) has proposed eight dimensions along which pilot initiatives are advancing the results-based finance framework:

- Defining results, including if the mechanism can pay retroactively for past performance
- Conditionalities, including safeguards and financial management
- Timing of payments, including negotiating advance payments
- Status of emissions reductions (see above)
- Managing risks, notably leakage and non-permanence
- Attribution, with some donors keen to see the relation between interventions and results clearly demonstrated
- Additionality, in financial and environmental terms
- Scale, using national or large jurisdictional approaches

Interestingly, project-level REDD+ as piloted in the earliest stages and oriented towards voluntary carbon markets, are not considered in REDD+ results-based payment initiatives explored by major national or multilateral institutions. Also, the nesting of REDD+ projects into national results-based architecture shows little priority to harmonization or the learning of lessons at the international level.

Also, when defining results, there is a clear interest in exploring results beyond carbon, notably as part of a cash-on-delivery model. Norway and Ethiopia are using this type of model, where "fixed payment is offered to recipient government for each additional unit of progress toward a commonly agreed goal" including policy reforms (Wong *et al.*, 2016). This could offer another step-wise type of approach to progressing towards full REDD+ results-based payments, while incentivizing transformative approaches and multiple benefits beyond carbon.

Box 9.15: REDD Early Movers

The REDD Early Movers programme was commissioned by the German Federal Ministry for Economic Cooperation and Development and implemented by the KfW Development Bank and the Gesellschaft für Internationale Zusammenarbeit. The programme promotes forest conservation and is designed to strengthen performance-based payments for demonstrated emission reductions and provides accessible bridging finance for countries that have already taken independent action towards mitigating climate change. It aims to assist in closing the funding gap by supporting REDD+ early actions – financing for 'early movers'. It supports emission reduction efforts achieved at a national, sub-national or biome level. One of the eligibility criteria is that a subnational or biome approach is integrated into national strategies and aligned with policies to reduce deforestation and associated emissions.

It includes payments for investment or capital requirements upfront (ex ante) as well as payments for results (ex post). Some of the countries and entities that have been supported include:

- **Acre State, Brazil - payment made for emissions reductions verified in 2012. Further payments were expected over the following four years for emissions reductions of 8 $MtCO_2$;**
- **Colombia and Ecuador - a letter of intent was signed at COP20 and is expected to lead to a more formal agreement.**

Challenges and arrangements to unlock REDD+ results-based finance

Results-based finance in general, and for REDD+ in particular, is still in an early phase, characterized by an agreed framework but a lack of commonly agreed operational guidelines, and being explored through a variety of pilot schemes. "To achieve scale and deliver finance that is both adequate and predictable, REDD+ [results-based finance] programs will require a greater degree of alignment than is currently the case. High-level cooperation between donors, and emerging norms established by the UNFCCC and Green Climate Fund does suggest movement in this direction" (Climate Focus, 2015).

For REDD+ countries, two challenges relate specifically to accessing REDD+ results-based payments, beyond the challenge of achieving and demonstrating REDD+ results themselves.

First, funding volumes, sources and modalities remain uncertain in the short and long run. This suggests that REDD+ countries should approach results-based finance as an experimental mechanism as part of a larger REDD+ financial mix, with major objectives still mainly related to gaining experience and improving cooperation with international partners rather than securing core financial resources for sustainable REDD+ implementation.

The second challenge relates to the lack of experience and institutional capacities in accessing and managing results-based finance. In a context where such finance remains attached to conditions, financial management capacity, the quality of the dialogue with the targeted partners, the coherence of policies to support relevant sectors, and the scale of PAMs are critical factors. This is particularly true in a landscape of scattered results-based payments initiatives with different modalities and conditions.

CASE STUDY

REFORMING INDIA'S FISCAL TRANSFER FORMULA TO INCLUDE FOREST COVER

Issue

India has 69.7 million hectares of forest. There are significant pressures on these forests, particularly from the demand for timber and fodder. While India is preparing for REDD+, and considering UN-REDD and FCPF participation to leverage resources for capacity building for implementation, the country is moving ahead to directly address the perverse incentives that impact forests by reconfiguring its intergovernmental transfer system.

Action

***Types of fiscal incentives and where in the supply chain*:**

India's intergovernmental fiscal transfer system is the mechanism by which the central government distributes the net proceeds of taxes back to states. As significant amounts of forestland are utilized and managed at local scales, for example, in Panchayats and Gram Sabhas, fiscal policies and decisions at these scales are important. The system previously did not include a way to recognize the fiscal implications of natural resource and forest management decisions.

Reason for intervention:

India's 14th Finance Commission recognized the perverse incentives that state and local governments had to undervalue and mismanage forests, and observed that declining revenue from forests was a concern to some states.

Evaluation of trade-offs:

Charged with considering the need to balance the management of ecosystems, the environment and climate change with sustainable economic development, the Commission concluded:

"Forests and the externalities arising from them impact both the revenue capacities and the expenditure needs of the States. We have noted that there is a need to address the concerns of people living in forest areas and ensure a desirable level of services for them. At the same time, it is necessary to compensate the decline in the revenues due to existing policy prescriptions. In our view, forests, a global public good, should not be seen as a handicap but as a national resource to be preserved and expanded to full potential, including afforestation in degraded forests or forests with low density cover. Maintaining a green cover, and adding to it, would also enable the nation to meet its international obligations on environment related measures. We recognise that the States have to be enabled to contribute to this national endeavour and, therefore, we are designing our approach to transfers accordingly."

Action taken to reverse or reform fiscal incentives:

India took action on two fronts:

1. Increasing the amount of revenue allocated to states by 10 per cent, and
2. Assigning a 7.5 per cent weight to forest cover in the formula for allocating revenue to states.

The criteria and weights in the new allocation formula are as follows:

	%
Population	17.5
Demographic Change	10
Income Distance	50
Area	15
Forest Cover	7.5

Impact

The weight allocated to forest cover is expected to deliver $6 billion a year to Indian states. Provinces with higher or growing forest cover will get a bigger or increasing share of budget. This works out at roughly $120 per hectare of forest per year and is competitive with agriculture production earnings, thus providing significant support to states that can grow their agricultural output without clearing forests.

Source: Kissinger (2015)

EXERCISE 17

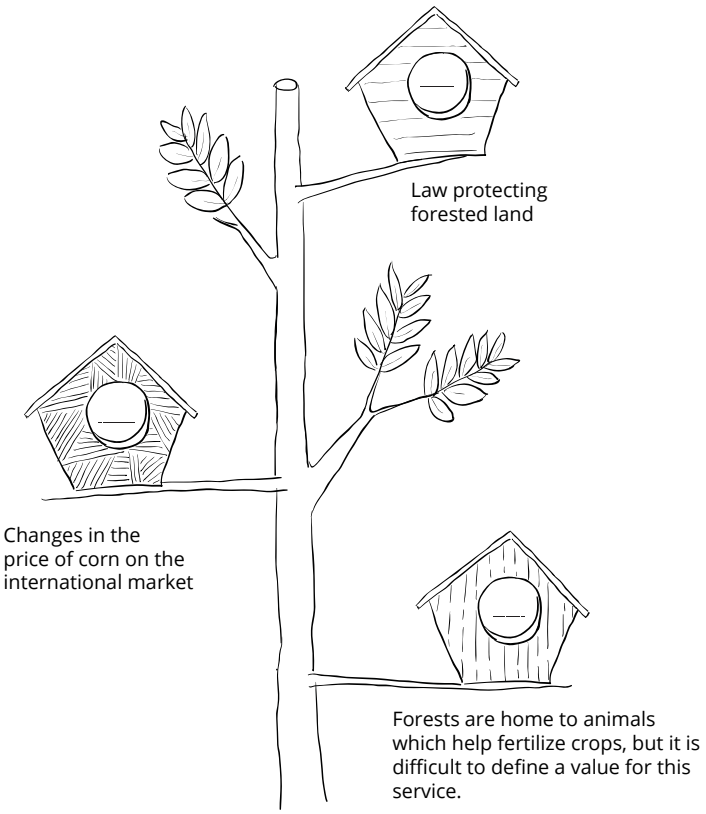
Using the eight dimensions of the REDD+ financial mix, how would you characterize the following typologies of REDD+ finance as accessed or leveraged by:

- Brazil, as payment for emissions reductions under the Norway-Brazil bilateral agreement
- Cote d'Ivoire, receiving support from the Forest Investment Programme
- India, when reforming budget devolution criteria to include forest cover
- Costa Rica, mobilizing its payment for environmental system to support implementation of its REDD+ strategy
- Nestle supporting capacity building of coffee farmers in Viet Nam to switch to deforestation-free practices
- Ecuador, accessing the GCF to implement its national action plan

EXERCISE 18

Decide if the following economic factors are related to (1) carbon price, (2) direct or indirect drivers, or (3) external factors:

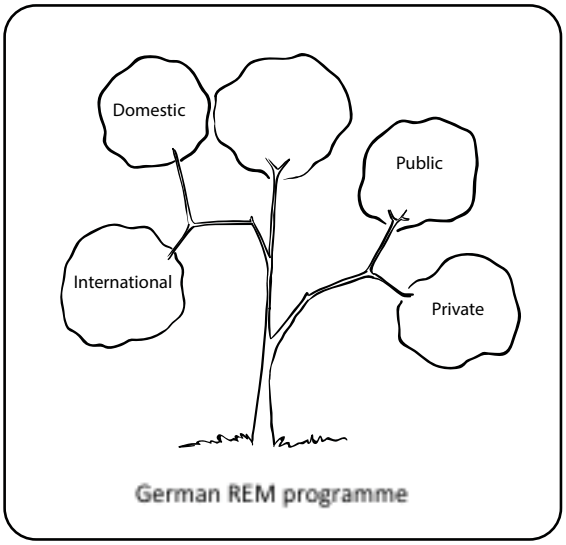
- Law protecting forested land
- Changes in the price of palm oil on the international market
- Forests are home to animals which help fertilize crops, but it is difficult to define a value for this service.

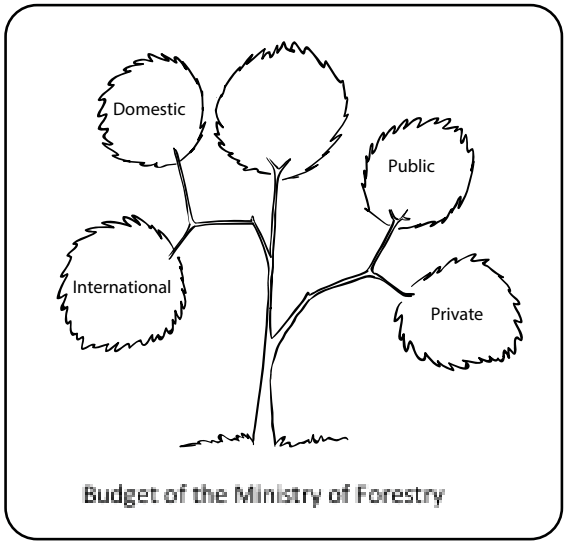


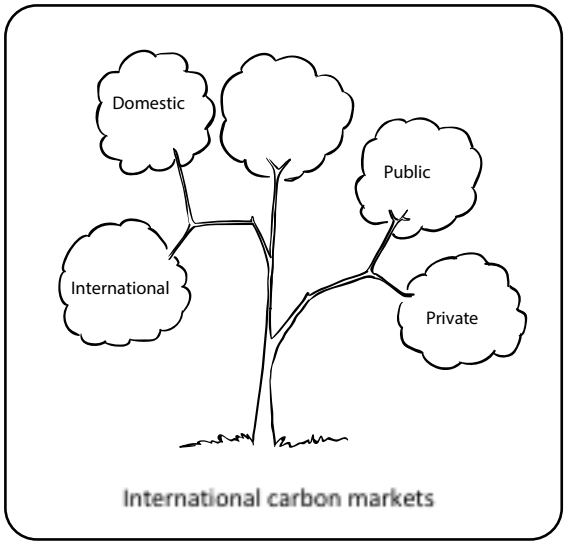
EXERCISE 19

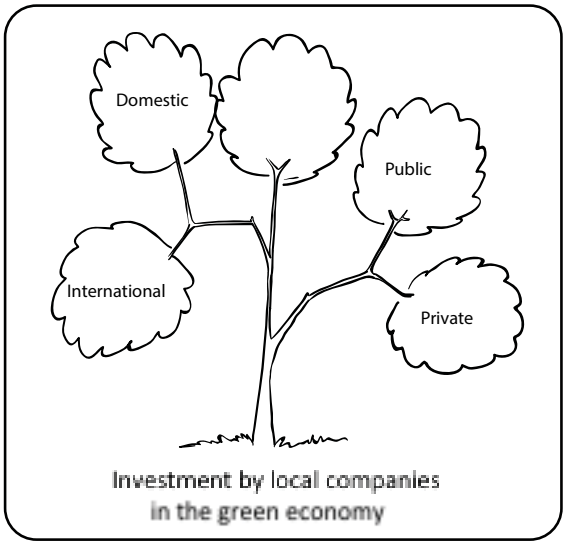
Which of the following sources of funds are private or public, and domestic or international?

- ☐ Germany's REDD Early Movers programme
- ☐ The budget of a national ministry of forestry
- ☐ International carbon markets
- ☐ Investment by local companies in the green economy









KEY MESSAGES OF THIS CHAPTER

- With REDD+, international finance for forests has increased, but not to the required scale
- REDD+ countries need to take a broad approach and think in terms of a financial mix
- Better directing existing finance can offer more potential than seeking additional funding
- Finance can be a means of implementation, and a REDD+ PAM in itself, sometimes a very cost-effective one
- Financial planning must be integrated with the design of other REDD+ components, particularly with PAMs and financial architecture

WHAT FURTHER QUESTIONS DO YOU HAVE ABOUT THIS TOPIC?

NOTES

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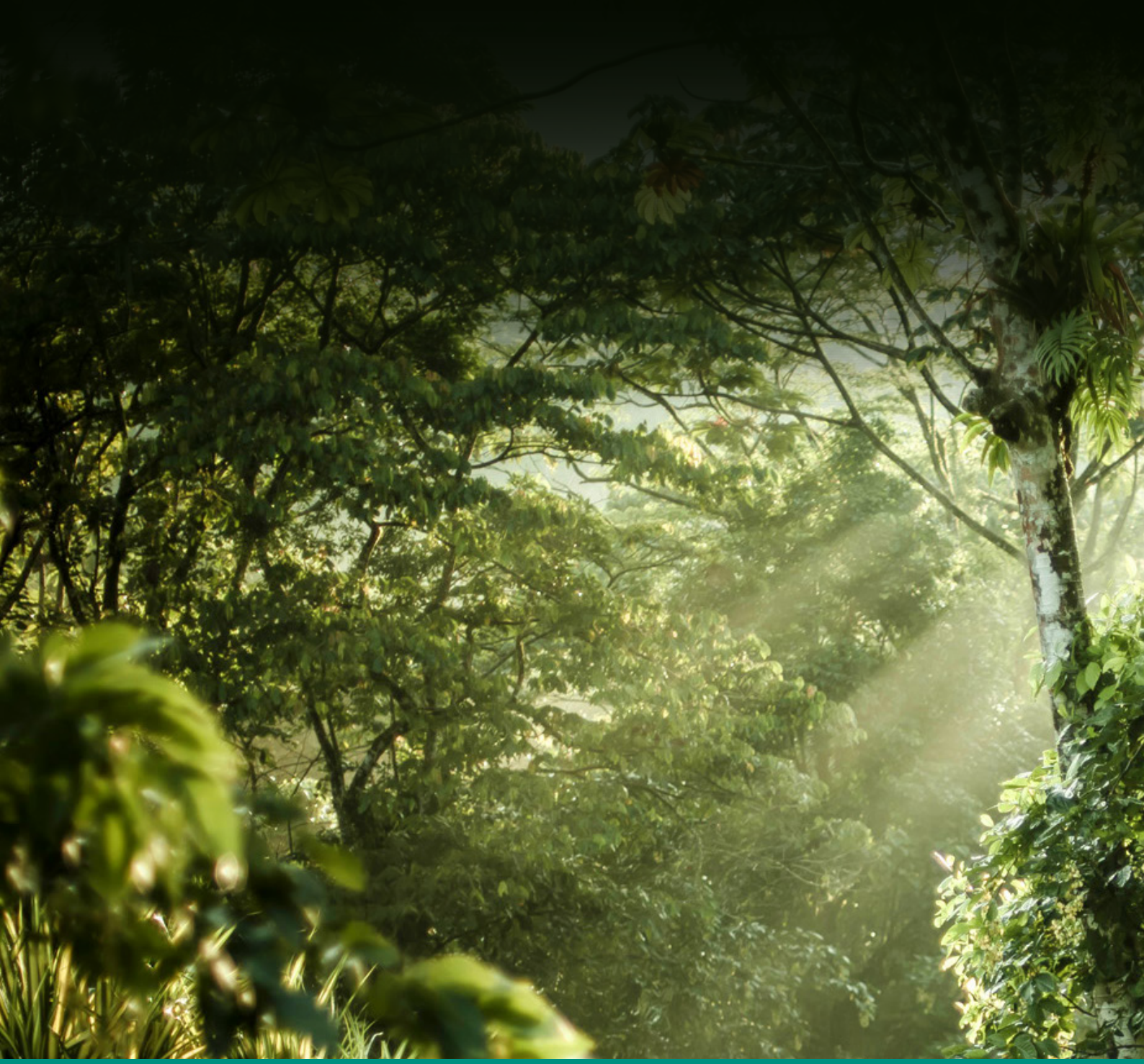

UN-REDD PROGRAMME | ACADEMY

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UNDP Empowered lives. Resilient nations.

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