

REDD+ prospects in LDCs

Charlie Parker, Matthew Cranford, Stephanie Roe and Ugan Manandhar

UPDATED JANUARY 2014

KEY POINTS

- The **Warsaw Framework for REDD+**, a comprehensive package of seven technical and finance decisions that provide the fundamental architecture for REDD+ to be implemented, was adopted at the 2013 climate conference.
- Deforestation in LDCs represents nearly a third of tropical deforestation. **REDD+ should therefore be a key component of LDC mitigation actions.**
- Most LDCs lack **technical and institutional capacity** to implement REDD+, and will require additional support.
- LDCs receive a high proportion – 22 per cent – of total finance committed to REDD+ countries. The **continuing availability of finance for REDD+ readiness**, including for demonstration and capacity building activities, will be a key consideration for the Group.
- Sources of finance that are contingent on the delivery of Measured, Reported and Verified (MRV) emissions reductions **may be difficult for LDCs to access**, given their relatively low capacity to implement advanced MRV systems.
- Increased **donor coordination** and **improved fiduciary management capacity at the national level** can improve LDC access to international REDD+ finance.

Table of Contents

Importance of forests for LDCs	2
A brief history of REDD+	4
Status of implementation of REDD+ in LDCs	6
REDD+, LDCs and a future climate agreement	10

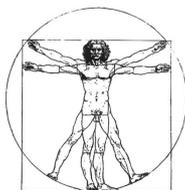
Charlie Parker, Mathew Cranford and Stephanie Roe work for Climate Focus.
Ugan Manandhar is with WWF Nepal, and works with the LDC Group on REDD+ issues.

The authors are grateful to Donna Lee for her contributions to the document,
and Keith Anderson and CDKN for their review comments.

Series Editor: Anju Sharma
Anju.Sharma@iied.org

FIRST VERSION NOVEMBER 2013

UPDATED JANUARY 2014



ecbi

The LDC Paper Series has been produced by the ecbi Publications and Policy Analysis Unit for the LDC Group. The views expressed in the papers in this Series are those of the authors and do not necessarily represent the views of the LDC Group or members of ecbi.

Importance of forests for LDCs

Forests are critical to the development and welfare of Least Developed Countries (LDCs), where they often provide a significant portion of household income.¹ Beyond timber and marketed non-timber forest products (NTFPs), forests sustain households with food, fuel, fibre and fodder. Hundred of millions, and perhaps more than a billion people worldwide depend on forests, particularly in developing countries.² This relationship can exist symbiotically, but with rising populations and resource constraints it can also lead to over exploitation of forest resources.

Deforestation in LDCs is primarily driven by small-scale subsistence agriculture, energy security and illegal logging.³ LDCs are also increasingly producing large-scale industrial commodities such as palm oil, timber and soy to support increasing global demand. Striking a balance between growth and sustainability will be an essential consideration for LDCs.

The relative importance of forests across LDCs is very diverse.

LDCs vary enormously in terms of their forest cover and deforestation rates. Some countries, such as Rwanda, have effectively no forest cover, whereas others, including the Solomon Islands and Guinea-Bissau have over 70 per cent of land covered by forests. Similarly in some LDCs, like Bhutan and the Democratic Republic of Congo (DRC), historical rates of deforestation are very low, whereas in others, such as Tanzania or Laos, deforestation is more than twice the global average.

Based on forest cover and deforestation rates, LDCs can broadly be grouped into six different groups (see Table 1 on the next page). LDCs across these groups will have very different opportunities and needs in terms of both climate change mitigation and adaptation.

Forests and mitigation in LDCs

While greenhouse gas (GHG) emissions from LDCs are small, a relatively high proportion of them are from land use change and forestry (LUCF).

In 2009, GHG emissions from LDCs were five per cent of global emissions.⁴ Emissions from LUCF, however, are a far greater proportion of emissions in LDCs than other countries. Net LUCF emissions in 2009 accounted for 25 per cent of LDC emissions, compared with 5 per cent in non-LDCs.⁵ As such, reducing emissions from deforestation and forest degradation represents a significant opportunity for LDCs to contribute to climate change mitigation.

Table 1: LDC categorisation based on forest cover and annual change in forest area

(Categories are based on a cluster analysis of deforestation rates and forest cover. Countries in bold are engaged in one or more REDD multilateral programme)

		Forest Loss (per cent change per year)	
		Low (<0.4)	High (>0.4)
Forest Cover (per cent land cover)	Low (<27.5)	Afghanistan Bangladesh Djibouti Eritrea Kiribati Lesotho Nepal Rwanda Yemen	Burkina Faso Burundi Chad Comoros Ethiopia Guinea Haiti Madagascar Mali Mauritania Niger Somalia Togo Uganda
	Middle (50 > x > 27.5)	Angola Central African Republic Gambia Sao Tome and Principe South Sudan Sudan Tuvalu Vanuatu	Benin Liberia Mozambique Myanmar Malawi Senegal Sierra Leone Timor-Leste United Republic of Tanzania
	High (>50)	Bhutan DRC Samoa Solomon Islands Zambia	Cambodia Equatorial Guinea Guinea-Bissau Laos PDR

As a group, LDCs represent a third of forest loss in developing countries.

All 154 non-Annex I countries are potentially eligible to receive support for REDD+ through a future UN mechanism. LDCs make up for 27 per cent of total forest cover in non-Annex I countries, and represent 29 per cent of gross forest loss in these countries from 2005-2010.⁶

Forests and adaptation in LDCs

Forests can support adaptation in LDCs, which are among the most vulnerable to the impacts of climate change. Seven of the ten most vulnerable countries are LDCs⁷ and ten LDCs are Small Island Developing States (SIDS). Rainfall in Africa has declined and drought events are more variable on an annual and seasonal basis.⁸ In Asia, climate change is

expected to increase water stress across arid and semi-arid regions, leading to increased rainfall intensity in monsoon-affected areas.⁹ Southeast Asia has already experienced a range of impacts from climate extremes, including increased frequency and intensity of heat waves, droughts, floods and cyclones.¹⁰

Diverse and intact forests are critical to improving resilience and adaptation to climate impacts. Mangroves and coastal forests provide a buffer for coastal flooding; forests can help retain soil under increased rainfall; and forests can provide alternative sources of food and fibre if crop yields are low.

With proper design and policy planning, LDCs can design REDD+ interventions that support adaptation.¹¹ They could, for example, prioritise protecting forests (including mangroves) in key coastal zones, increase food security through ensuring forests provide key ecosystem services (such as soil, water, pollination), and broadly support resilience of households and economic sectors dependent on forests.

Forests can provide critical non-carbon benefits in LDCs.

Forests in LDCs will be first and foremost a development concern. Ensuring that forests contribute to the welfare of rural communities as well as national development goals will be an essential consideration for LDCs. Forests are also a habitat for biodiversity and a source of ecological function. Through these, forests provide multiple ecosystem services. Pollinators need intact habitat to survive and pollinate crops, trees increase soil retention in arid or sloped landscapes, and many people derive spiritual or cultural value from forests. Additionally, although the relationship between forests and water is complex, in many places forests help regulate water quantity and quality.¹²

A brief history of REDD+

Parties to the UN Framework Convention on Climate Change (UNFCCC) made a commitment to address both emissions and removals from forests under Article 4. This resulted in an accounting framework for developed countries under the Kyoto Protocol that includes forests, but developing countries were largely omitted from opportunities for forest-based mitigation and adaptation.

Under the Clean Development Mechanism (CDM), developing countries could generate emissions reductions through afforestation and reforestation projects. Deforestation, however, which represents the vast majority of developing country mitigation potential,

was not allowed, because it was considered too difficult to measure with sufficient accuracy, and Parties had concerns over the permanence of emissions reductions from deforestation and leakage in project-based approaches. Complex requirements under the CDM have been a barrier, in particular, to LDC participation.

REDD+ provides an opportunity for increased inclusion of forest activities in a global climate change agreement.

In 2005, at COP 11 in Montreal, several developing countries requested that a new, separate item on deforestation be added to the UNFCCC agenda. The scope was initially limited to “reducing emissions from deforestation in developing countries”, or REDD.¹³ Subsequently, the concept has expanded to include not only deforestation, but also forest degradation, the role of conservation, sustainable management of forests, and enhancement of forest carbon stocks – together known as REDD+.

REDD+ was included in the Bali Action Plan agreed at COP 13 in Bali, in 2007, further consolidating its place in a future international climate agreement. At COP 15 in 2009, in Copenhagen, forests were described as having a “crucial role” in global mitigation efforts.¹⁴ The following year, at COP 14 in Cancún, a more detailed REDD+ decision was agreed, which encouraged developing countries to contribute to mitigation through forest-related activities and provided guidance and a framework for undertaking such actions – including development of national strategies, reference levels, monitoring systems, and the application of social and environmental safeguards.¹⁵

Many countries expect discussions under the UNFCCC to result in a mechanism that will help to finance the collective and agreed goal to “slow, halt, and reverse forest cover and carbon loss”.¹⁶ There is agreement that REDD+ should occur in three phases (readiness, demonstration and performance-based payments),¹⁷ which will eventually culminate in results-based actions that should be fully Measured, Reported and Verified (MRV).

Where such payments will come from, however, remains a contentious issue with some supporting market-based mechanisms and others preferring non-market finance. Financing the integration of other issues into REDD+, such as adaptation and other non-carbon benefits (for example, biodiversity, livelihoods, ecosystem services protection) also remains an open question.

LDC submissions on REDD+

While the LDC Group has made few submissions on REDD+, many submissions have been made by LDCs individually or as part of other groups such as the Association of South East Asian Nations (ASEAN), the Like Minded Group,¹⁸ and the Coalition for Rainforest Nations

(CfRN).¹⁹ In February 2012, in a submission on behalf of the LDC Group, the Gambia made the following points on modalities and procedures for results-based finance:²⁰

- **The focus on results-based finance for REDD+ must not put LDCs at a disadvantage.** LDCs must be given priority support in areas including capacity building, technology development and transfer, demonstration activities and policy development and implementation.
- **LDCs have urgent funding needs to enable them to prepare for and implement REDD+,** and despite various international REDD+ initiatives, large gaps remain. Allocation of funding, including under the Green Climate Fund (GCF), should prioritise the needs of LDCs.
- **LDCs oppose the inclusion of REDD+ in carbon trading mechanisms** that will allow developed countries to offset emissions without providing adequate domestic emission reductions.
- **Funding for results-based actions should consider both carbon and non-carbon benefits from forest,** and REDD+ finance should directly support forest dependent people.

On addressing the drivers of deforestation and forest degradation, the LDC Group submission noted that **LDCs need guidance on how to integrate REDD+ across different related sectors,** such as agriculture, energy and mining. It called for **guidance and guidelines from the Intergovernmental Panel on Climate Change (IPCC)** to be used for REDD+.²¹

On national forest monitoring systems, the submission noted that **modalities for national forest monitoring systems should allow for flexibility,** so that countries with different capacities can be accommodated.²²

Status of implementation of REDD+ in LDCs

Despite slow progress under the UNFCCC, in particular the delay in negotiating a new climate agreement in which a REDD+ mechanism might be included, a number of countries are moving forward to create or pilot a range of financing mechanisms for forests.

In the 2010-2012 period, nearly US\$ 4 billion in international support had been pledged and allocated to REDD+,²³ mainly through bilateral channels. These include Norway's bilateral arrangements with Brazil, Indonesia and Guyana, and Germany's emerging REDD Early Movers programme. Many developing countries also receive finance through

multilateral REDD+ funds, and the voluntary carbon market provides a notable amount of finance each year, estimated at US\$ 237 million in 2011.²⁴ Little is known about the scale of private finance and domestic funding for REDD+ programmes, but the amount is likely to be significant.²⁵

LDCs receive a large share of international finance for REDD+, relative to their small share of developing country GDP.

On aggregate, relative to the size of their economies, LDCs receive a large share of REDD+ finance. For instance, LDCs accounted for just 2 per cent of the GDP of non-Annex I countries in 2012, but 22 per cent (US\$ 1 billion) of the total finance committed to REDD+ countries during the 2010-2015 period.

Of the US\$ 1 billion committed to LDCs, 70 per cent is allocated to 10 countries.

Given the high percentage of LDCs in Africa – with the exception of Lao PDR and Nepal – the majority of REDD+ finance has been committed to African countries (see Table 2 on the next page). The divide between bilateral and multilateral REDD+ finance to LDCs is roughly equal, at 57 per cent and 43 per cent respectively. The majority of multilateral finance is being channelled through the Forest Investment Programme (FIP), which has pledged around US\$150 million to the DRC, Lao PDR, and Burkina Faso. Bilateral finance is from a range of donors including Germany, Japan, Norway, USA and the UK.

Half of LDCs are participating in multilateral REDD+ initiatives.

Many of the LDCs that are highly forested in absolute terms are receiving, or have access to, international support for REDD+ readiness activities (see Table 2 on the next page). Of the 49 countries categorised as LDCs, 24 participate in the UN-REDD Programme, Forest Carbon Partnership Facility (FCPF), and/or FIP. Among these, a few participate in more than one programme. Of the 25 countries that have not yet engaged in multilateral REDD+ programmes, at least two countries, Angola and Mali, have globally significant forest area.

Bilateral and multilateral REDD+ finance covers a range of activities including capacity building, demonstration and pilot activities, design and implementation of monitoring systems and reference levels, governance reforms, and strategy development. As expected, given the shortfall in capacity in developing countries, a large part of finance is going

Table 2: Top 10 recipients of REDD+ finance commitments to LDCs as reported by funders (US\$ million)

Country	Region	Bilateral	Multilateral	Total
DRC	Africa	38.9	142.8	181.7
Lao PDR	Asia	86.4	42.0	128.4
Tanzania	Africa	75.7	18.4	94.0
Nepal	Asia	73.5	3.9	77.4
Burkina Faso	Africa	35.8	39.3	75.0
Mozambique	Africa	38.6	3.7	42.3
Ethiopia	Africa	18.1	19.9	38.0
Central African Republic	Africa	16.7	16.3	33.0
Mali	Africa	13.1	19.0	32.1
Total	-	396.7	305.2	701.9

Source: REDD+ Partnership Voluntary REDD+ Database, <http://reddplusdatabase.org/>

towards capacity building. For example, the DRC reported that six out of seven activities receiving international funding for REDD+ were to build capacity and local awareness.²⁶

Challenges

More than half of the LDCs participating in multilateral REDD+ programmes have developed national readiness plans, which yield a number of important lessons:

LDCs often lack the institutional and human capacity to absorb international finance for REDD+. This includes the capacity to manage funds and set up appropriate financial architecture; access finance from multiple, fragmented sources; and/or ensure compliance with donor safeguards and other implementation standards.²⁷

LDCs lack the technical capacity to implement forest monitoring systems and accurately MRV emissions reductions. Specific issues raised in LDC case studies include a shortage of information about forest and carbon resources, and a lack of capacity to design and implement protocols for data collection and analysis, to provide sufficient evidence to an independent verification process.²⁸

Tropical forest countries that experience high levels of deforestation and forest degradation are often characterised by poor law enforcement.²⁹ This is especially true in LDCs that have weaker institutions and levels of governance generally. The ability to enforce laws will be a key barrier in the implementation of REDD+ activities in LDCs.³⁰

LDCs need to secure and clarify resource tenure. Areas of high forest carbon density often overlap with areas of low security in land tenure.³¹ This is a particular issue for many LDCs, where land ownership is often insecure and there is a lack of recognition of land rights, or laws contradict each other about such recognition.³² In some cases, customary rights may be recognised to a degree, but the legal structure is still restrictive and marginalises vulnerable groups.³³ Further, many resource rights overlap with statutory forest rights often predominantly owned by government, particularly in Africa.³⁴

The risk of corruption in the forest sector is common in LDCs. For example illegal and artisanal logging can be connected to public leadership or the military. Managing the risk of corruption in REDD+ will require parallel efforts to increase transparency; educate citizens about REDD+ and their related rights and responsibilities; educate public authorities on the benefits of REDD+ to their country's development; and improve capacity to manage REDD+ activities and finance.³⁵

More work is needed to address the drivers of deforestation. Addressing the direct and indirect causes of deforestation and forest degradation requires not only finance and technical capacity, but also cross-sectoral cooperation, as most of the drivers are outside of the forest sector (such as agriculture, energy needs and mining). A thorough assessment of the drivers of deforestation in LDCs is still lacking. Preliminary analyses, however, highlight energy use (fuel wood and charcoal production), subsistence and small-scale farming, and illegal logging as primary drivers of deforestation in LDCs.³⁶

Improvement of policy coherence must take place at the legal and institutional levels. Experiences across Asia and Africa indicate that in many LDCs, government ministries often have conflicting or overlapping mandates, and that cooperative planning is rare. It is essential that conflicting laws be clarified to improve the effectiveness of REDD+ activities, by removing direct legal conflicts and clarifying overlaps and ambiguities.

LDCs will find it difficult to attract private sector investment in REDD+, due to the challenges of doing business in these countries. Certain financing solutions can help overcome this challenge.³⁷ For example, the use of tools such as political risk insurance has been successful in Cambodia and Nicaragua.³⁸ The use of such tools will have limitations, however, as they may become prohibitively expensive in countries with extremely difficult investment climates.

REDD+, LDCs and a future climate agreement

Negotiations under the UNFCCC have focussed on a range of financial, technical and institutional issues beginning at COP 13 in Bali and codified more formally in a programme of work outlined at COP 16 in Cancún, in 2010. With the closure of the Ad Hoc Working Group on Long-term Cooperative Action (AWG-LCA) at COP 18 in Doha, REDD+ is now being negotiated under the UNFCCC's Subsidiary Body for Scientific and Technological Advice (SBSTA), Subsidiary Body for Implementation (SBI) and directly under the COP.

At COP 19 in Warsaw in 2013, Parties adopted the Warsaw Framework for REDD+, a comprehensive package of seven technical and finance decisions that provide the fundamental architecture for REDD+ to be implemented – including results-based finance, MRV and technical assessment of reference levels. The negotiations on REDD+ also continue to follow a broader discussion on mitigation and adaptation in developing countries. The following sections outlines the key negotiations on REDD+ from Bali to Warsaw, and their implications for LDCs. It concludes with an analysis of the relationship between REDD+ and the broader agenda for developing countries, and implications for the negotiations.

Finance

There is broad agreement that multiple financing options will be required for REDD+.³⁹ At COP 18 in Doha, in 2012, a specific Work Programme on Results-Based Finance for REDD+ was created, to contribute to efforts to scale-up and improve the effectiveness of finance for REDD+ activities.⁴⁰ In the following year at COP 19 in Warsaw, Parties concluded this Work Programme and adopted two decisions which detail the practicalities of applying results-based finance for REDD+ and coordinating support.⁴¹ The decisions link results-based finance to the application of the methodological guidance adopted in Warsaw, as well as previous guidance, to the measurement of results.

Additionally, the decisions link eligibility to receive results-based payments to the provision of information of how safeguards have been respected. As one of the most substantive elements of the REDD+ finance decision, an 'information hub' was established to ensure transparency and coordination on results-based payments, as well as supporting information on applicable reference levels, monitoring systems, national strategies and how safeguards have been addressed.

Despite the ongoing focus on Phase III results-based finance, an important consideration for LDCs will be the continuing availability of finance for Phase I and II REDD+ readiness and implementation.

Some developing country Parties have raised concerns that readiness finance is inadequate and difficult to access. Further, the disbursement of current pledges is slow⁴² and the adequacy, predictability and sustainability of readiness finance in the future is unclear, particularly with the sunset clauses of major multilateral REDD+ financing entities such as the FCPF and UN-REDD. In earlier discussions, the LDC group has promoted public funding for readiness actions⁴³ and suggested prioritising readiness support for its member countries.⁴⁴ The former appears to be broadly agreed, and is the *de facto* state of readiness finance. Regarding the latter, many agree that finance should be distributed equitably across developing countries, based on abilities and needs.

Safeguards

Seven broad safeguard principles were established at COP 16 in 2010, with the aim of mitigating potential social and environmental risks and addressing multiple benefits in the implementation of REDD+.⁴⁵ In the following year at COP 17 in Durban, it was decided that Parties undertaking REDD+ activities “should provide a summary of information on how the safeguards are being addressed and respected,” using safeguard information systems (SIS). Information provided through SIS should be transparent and consistent; updated on a regular basis; complete (across all safeguards); country-driven and implemented at the national level; and build upon existing systems.⁴⁶

At COP 19 in Warsaw, a decision was adopted on the timing and frequency of the summary of information for safeguards, and the sharing of lessons on safeguard processes and SIS through submissions and the UNFCCC Web Platform.⁴⁷ The provision of the safeguard summary information will be consistent with submissions of national communications, and therefore will vary by country (for instance, with less frequent submissions for least developed countries). SBSTA also agreed to compile submissions on the type of information that could be provided by countries, and to consider the need for further guidance relating to safeguards at COP 20 in 2014.⁴⁸

LDCs will need additional support and guidance in the implementation of safeguard information systems.

The UNFCCC guidelines have given considerable flexibility over how the safeguards may be applied and the kind of information to be monitored. The language on “transparency” and “flexibility to allow for improvements” is particularly important for implementing safeguards in LDC countries. Transparent systems can foster good governance and investor confidence, while allowing for gradual improvements can incentivise readiness finance and participation of LDCs.

Non-carbon benefits

At COP 18 in Doha, Parties began work on non-carbon (social and environmental) benefits (NCBs) resulting from REDD+ activities. At SBSTA 38, Parties agreed that “it is important to take into account non-carbon benefits” when implementing REDD+ activities. The question remains, however, whether REDD+ finance should go beyond minimum requirements to recognise NCBs more explicitly.

While LDCs have called for the incorporation of NCBs in results-based finance, doing so would require additional capacity that is mostly lacking in these countries.

It is difficult to attribute NCBs to specific REDD+ interventions, and any attempt to do so would require additional monitoring capacities and MRV modalities and metrics, which might be difficult to define due to the varying nature, level, and priority of NCBs in different countries. Further, there is a lack of experience of measuring such benefits at the national level in most LDCs.

Integrating NCBs into REDD+ can take a variety of pathways, including linking NCBs to carbon payments (for instance, as developed by the Climate, Community and Biodiversity Alliance), creating a separate payment stream for NCBs, or strengthening and standardising safeguards (i.e. essentially becoming eligibility requirements for payments). SBSTA requested Parties to submit their views on NCBs to the UNFCCC secretariat by 26 March 2014, for consideration at COP 20 in Peru in 2014.

National Forest Monitoring Systems

National forest monitoring systems (NFMS) are primarily a tool to allow countries to collect a broad range of forest information for REDD+ as a “basis for estimating anthropogenic forest-related greenhouse gas emissions by sources, and removals by sinks, forest carbon stocks, and forest carbon stock and forest-area changes”.⁴⁹ Parties at COP 15, in Copenhagen, requested developing countries to “establish, according to national circumstances and capabilities, robust and transparent national forest monitoring systems”.

These NFMS should be guided by the most recent IPCC guidelines, use a combination of remote sensing and ground-based forest carbon inventory approaches, and provide estimates that are transparent, consistent over time, and suitable for measuring reporting and verifying forest-related emissions.⁵⁰ Decisions in the Warsaw Framework stipulate that data from NFMS will be used to justify performance-based payments through a verification process.

LDCs have relatively low capacity to implement NFMS due to the complex technical and methodological requirements these systems entail.

A recent assessment of capacities of non-Annex I countries for NFMS found very large capacity gaps in forty-nine countries, mostly in Africa. LDCs with significant emissions through forest degradation will face additional challenges due to the complexities in monitoring degradation through remote sensing. South-south capacity exchanges and access to support from developing countries will be essential in addressing these gaps. The decision under the UNFCCC to improve NFMS over time is an important provision for LDCs, but will have very little ability at the outset to generate robust forest monitoring data.

MRV

MRV systems build upon forest monitoring data to estimate and report GHG emissions by sources and removals by sinks, and forest carbon stocks. The decision on modalities for MRV adopted at COP 19 in Warsaw concluded difficult negotiations on verification and provides comprehensive guidance on implementation. The text highlights the linkages between MRV systems and reference levels. Both should be: measured in tonnes of carbon dioxide equivalent per year; constructed in a way that is consistent over time and with each other; and can be improved over time as information and capacity increases.

The conclusions also reaffirm decisions related to additional financial, technical and capacity support countries need to implement MRV systems.

LDCs have limited commitments for MRV under REDD+.

The Warsaw decision requires that data and information on forest-related emissions should be provided through Parties' biennial update reports, and that Parties seeking to obtain and receive results-based payments will also need to provide a technical annex.⁵¹ Under this decision, special consideration and additional flexibility is given to LDCs and SIDS to submit BURs at their discretion.⁵²

For REDD+ verification, the technical annex will be assessed by a technical team of experts where two LULUCF experts (one from a developed and another from a developing country) will be included. The assessment will mainly evaluate the consistency in methodologies between the assessed reference level and the results of the REDD+ activities, and the accuracy, transparency and completeness of data, information and results provided. Guidelines for elements to be included in the technical annex are also outlined in the decision.

Reference levels

At COP 17 in Durban, in 2011, Parties decided that reference levels are the benchmarks for assessing national performance in implementing REDD+, and invited countries to submit their proposed reference levels, accompanying information and rationale on a voluntary basis.⁵³ Detailed guidance was provided in an Annex for how countries should develop their reference levels, which states that reference levels should:

- be expressed in tonnes of carbon dioxide equivalent per year. Other metrics, such as forest cover, are not acceptable under the UNFCCC;
- maintain consistency with national GHG inventories, including existing definitions of forests, and the most recent IPCC guidelines;⁵⁴
- have a strong rationale if adjusting from historical levels. If adjustments are made, countries are required to submit details of the national circumstances that were taken into account, and how;
- allow for a step-wise approach. The decision enables reference levels to be improved over time by incorporating better data, improved methodologies and, where appropriate, additional pools; and
- allow for the use of sub-national reference levels as an interim measure. Countries are expected, however, over time to transition to a national reference level.

At COP 19 in Warsaw, Parties adopted detailed guidance and procedures for the technical assessment of reference levels.⁵⁵ All country submissions will be subject to a technical assessment and proposed reference levels may be technically assessed in the context of results-based payments. The technical assessment will evaluate: consistency to national GHG inventories; how historical data has been taken into account; the extent to which the information provided was transparent complete, consistent and accurate; whether a description of relevant policies and assumptions of future policies that lead to adjustments of historic reference levels have been provided; pools and gases included and omitted; and the definition of forest and its consistency to other national reports.

Given their relatively low capacity to implement advanced MRV systems and reference levels, LDCs may be unable to access certain sources of finance that are contingent on the delivery of fully MRV-ed emissions reductions.

Given the close link between finance, MRV and reference levels it is likely that the type of finance that supports results-based actions will define the level of precision in the MRV and reference level system. The Warsaw decision stipulates that Parties have to submit a technical annex as part of their biennial update reports, and undergo the verification

process to receive results-based payments. If a carbon market is negotiated under the future climate agreement, which accepts emissions reductions from REDD+, it is almost certain that such a mechanism would preclude actions that are not MRV-ed to a robust level. Other sources of finance may also be contingent on the ability to fully MRV emissions reductions, and would not be available to LDCs if they lack robust MRV systems.

Drivers of deforestation and forest degradation

Discussions on drivers of deforestation and forest degradation remain relatively general, and this is reflected in the decision adopted in the COP 19 Warsaw Framework.⁵⁶ The decision affirms the importance of addressing drivers and encourages Parties and other entities to take action to address them and to share information on these actions through the UNFCCC, but stops short of setting out measures to systematically address drivers. This is largely a reflection of the diversity of drivers and their close links to national economic and social circumstances, as well as their link with livelihoods, a fact recognised by the decision itself. As a result, it may be that this decision represents the apex of action that Parties will be willing to take on drivers through the UNFCCC for the foreseeable future.

Institutions

The fragmented landscape of REDD+ finance is a major obstacle in accessing REDD+ finance. There are multiple entities providing finance, with few common standards to guide eligibility and little clarity on how finance should be distributed. Further, each entity has different fiduciary, reporting, and safeguard procedures, making the process of accessing REDD+ finance costly and technically challenging for recipient countries.

REDD+ currently lacks an agreed institutional arrangement to guide its implementation. At COP 16 in Cancún in 2010, Parties agreed to look further into results-based finance for REDD+ with the aim of scaling up and increasing the effectiveness of finance for REDD+ activities.⁵⁷ An informal workshop was held during an intersessional meeting of the AWG-LCA at Bangkok in 2012, and discussions covered a range of areas, including ways to improve the institutional arrangements for REDD+.⁵⁸ At COP 18 in Doha, Parties further submitted their views on this issue. A summary of the key elements that are being discussed in the context of REDD+ institutions follows.

Increased coordination between international sources and improved fiduciary management capacity at the national level would enable LDCs access to international REDD+ finance.

As part of the Warsaw Framework for REDD+, Parties decided that coordination between the national and international levels will be supported by Parties (voluntarily) designating

national focal points to liaise with the UNFCCC on REDD+.⁵⁹ In addition, annual meetings will take place between national focal points, together with multilateral and bilateral institutions financing REDD+, to coordinate support. This will include consolidating information sharing, identifying gaps in the coordination of support, improving the effectiveness of financing, and considering different approaches to REDD+. This stops short of creating a specific body under the UNFCCC to coordinate support for REDD+, which was advocated by some Parties. As a compromise, however, the decisions provide for these arrangements to be reviewed in 2017, when the SBSTA may recommend “potential governance alternatives” to the COP.

When the REDD+ information hub is developed, LDCs could engage with it according to their national circumstances and capacities.

Central to coordination, the information hub established by the results-based finance decision at COP 19 in Warsaw will aid in tracking financial support and the outcomes of REDD+ activities, providing transparency and information on safeguards, and avoiding double counting and reporting of REDD+ activities.⁶⁰ The information on the website will be based on national reports and other existing channels of information and inserted by the Secretariat. Provided reports are timely provided, this should ensure that the hub serves as a complete and up-to-date source of information, in contrast to other information hubs outside the UNFCCC that are largely incomplete. Some questions remain around the role of a REDD+ hub, including whether there should be a link between the existing NAMA registry⁶¹ and the REDD+ information hub. This could require the development of a national registry that coordinates with an international registry. Some LDCs would be more able than others to engage – for instance, the DRC has already implemented a registry at the national level.⁶²

Land use and REDD+ in a future agreement

The role of land use has historically held a unique place in international climate negotiations – no other sector with mitigation potential has such prominence, explicit mention, and even a separate track in the negotiations. This is partly because emissions from land use are more difficult to regulate compared with point sources (such as in the energy sector), and because of technical concerns over the non-permanence of carbon stocks and the effect of natural disturbances such as fires, droughts and insects.

While REDD+ has tended to remain separate to date from the broader negotiations, it now needs to find a home within the overall international agreement on climate change.

REDD+ has similarly, largely progressed separately from the broader mitigation discussions under the UNFCCC. Many countries have worked continuously to keep

REDD+ separate for fear of being held back by the slow pace of the mitigation discussions, and for fear that the forest-related discussions will be driven solely by global mitigation objectives and ignore the other benefits forests provide to local communities. While some countries view REDD+ as a subset of land use NAMAs or other incentive program, others prefer it as a separate and distinct mechanism.

Under the Ad Hoc Working Group on the Durban Platform for Enhanced Action (ADP) which will establish the post-2020 global agreement at COP 21 in Paris, deliberations are ongoing as to how the land use sector will be treated and incorporated into the new framework. This includes how land use related mechanisms like REDD+, NAMAs, CDM and others will tie in with the broader discussions on mitigation and adaptation and link up with international climate finance, and how least developed, developing, and emerging economies can increase commitments as envisaged. A high level inter-ministerial meeting at COP 19 in Warsaw signaled political will for a more comprehensive and simple approach for land use in a post 2020 agreement. The African Group, representing many LDC countries, expressed particular interest in reviving the CDM and continuing to build its land use (forestry and agriculture) applications for the post 2020 agreement. These discussions provide an important milestone in the negotiations, and gives impetus to continue progress on a more holistic framework for the sector.

Table 3: Key differences in the treatment of land use under the UNFCCC, LULUCF and REDD+

	UNFCCC reporting	LULUCF under the second commitment period of the Kyoto Protocol	REDD+
Scope	Comprehensive coverage of all land use emissions and removals, including: <ul style="list-style-type: none"> ● Forest land ● Cropland ● Grassland ● Wetlands ● Settlements ● Other land 	Mandatory: <ul style="list-style-type: none"> ● Afforestation ● Reforestation ● Deforestation ● Forest management Voluntary: <ul style="list-style-type: none"> ● Cropland management ● Grazing land management ● Re-vegetation ● Wetland drainage and re-wetting 	Voluntary forest-related activities: ⁶³ <ul style="list-style-type: none"> ● Deforestation ● Degradation ● Conservation ● Sustainable management of forests ● Enhancement of forest carbon stocks
Scale	National	National	National, with sub-national as an interim step
Level of ambition	Reporting only. Under the Copenhagen Agreement, countries made economy-wide voluntary commitments to 2020	Countries take on legally-binding economy-wide targets, with liabilities if commitments are not met	Unclear to date whether “positive incentives” include responsibility for liabilities (e.g. requirements for insurance, buffers or other guarantee mechanisms related to the non-permanence of forests)

Parties have expressed a range of opinions on how best to accommodate REDD+ within the broader climate-change agreement. Table 3 on the previous page highlights key differences in the treatment of land use under the UNFCCC (and its requirement for all countries to report on GHG emissions using IPCC guidance), Land Use, Land Use Change and Forestry (LULUCF) under the second commitment period of the Kyoto Protocol, and negotiations to date on a future REDD+ mechanism.

There are currently too many uncertainties to speculate how REDD+ might ultimately appear in a new climate agreement.

Many countries, however, expect the REDD+ outcomes to be consistent with the other elements of the ADP that are currently being negotiated. These include:

- **Legal form:** The legal form of the outcome of the ADP is still not decided – for instance, whether it will be flexible (based on a pledge and review approach) or regulatory (legally binding with compliance implications); whether it will be in addition to, or subsume, the Kyoto Protocol; and what the level of post-2020 ambition will be. A more stringent outcome will increase the opportunity for REDD+ finance through market mechanisms.
- **Equity:** Also important is whether and how a new agreement might differentiate among countries (for instance, between developed, emerging, developing, and least developed countries) and how the principle of “common but differentiated responsibilities” is defined. In particular, there is as yet no agreement on how to manage emerging economies (such as Brazil and Mexico) that are likely to be required to make domestic emissions reduction commitments, but may also want to participate in market mechanisms for additional actions beyond such commitments.
- **LULUCF:** REDD+ will be affected by whether, and how, developed countries are willing to make commitments in the land use sector, including for accounting of agriculture, forests and other land use (AFOLU). It is unclear as yet whether the current LULUCF agreement under the Kyoto Protocol will continue or be renegotiated under the Durban Platform. This includes provisions for the development of forest management reference levels, which will set a precedent for REDD+ reference levels.
- **Finance:** It is also unclear how the GCF, whose operational modalities are currently being discussed by the GCF Board, will operate with respect to REDD+ and NAMAs. Many Parties have called for a REDD+ funding window under the GCF.⁶⁴ Developed countries have made clear that the pledge to “mobilise” US\$100 billion includes private sector finance – and only a portion will come from public sources or financial transfers. This will have implications for the scale of public sector finance available for LDCs. The GCF currently recommends REDD+ implementation and sustainable forest

management to support the dual goals of mitigation and adaptation.⁶⁵

- **New market mechanisms:** The new market mechanisms (NMM) discussion is developing modalities for sectoral market based approaches, one of which could be in the forest sector. REDD+ will need to be consistent with approaches and methodologies taken broadly for sectoral mechanisms, which closely resemble the direction of REDD+ (national or sub-national actions in the forest sector) versus a project-based approach.

How these pieces will fit together in a final agreement is not yet clear. To date, informal discussions among countries considering how land use and forests could fit into a new agreement appear to favour the construction of a consistent framework across the entire agreement related to land use.

LDCs will face fewer requirements than developing and emerging economies. It is still useful, however, for REDD+ negotiators from LDCs to engage in the broader context of the REDD+ negotiations as they relate to Annex I countries and emerging economies – not only to understand the dynamics of the negotiations, but also with the perspective of developing national REDD+ systems that are consistent with a smooth transition to meet international requirements, as in-country capacities improve in future.

-
- 1 UNEP (2011). *Forests in a Green Economy: A Synthesis*. United Nations Environment Programme, Nairobi
 - 2 *ibid.*
 - 3 Hosonuma, N. *et al.* (2012). An assessment of deforestation and forest degradation drivers in developing countries. *Environmental Research Letters*, 7(4), 044009; Boucher, D. *et al.* (2012). *The Root of the Problem: What's Driving Tropical Deforestation Today?* Union of Concerned Scientists. Cambridge, Massachusetts. http://www.ucsusa.org/assets/documents/global_warming/UCS_RootoftheProblem_DriversofDeforestation_FullReport.pdf
 - 4 CAIT (2009). *Yearly Emissions*. World Resources Institute, Washington D.C. <http://cait2.wri.org>, 2009
 - 5 *ibid.* These emissions include net forest conversion (i.e. forest gain as well as forest loss). Gross emissions from forest loss will therefore be higher.
 - 6 All information on forest cover and forest cover change derived from FAO 2010.
 - 7 Maplecroft (2011). *Climate Change Vulnerability Index*. Bath, UK. <http://maplecroft.com/about/news/ccvi.html>
 - 8 Russell, A. *et al.* (2011). *Using Forests to Enhance Resilience to Climate Change*. Programme on Forests, Washington D.C. <http://www.profor.info/node/2032>
 - 9 IPCC (2007). *IPCC Fourth Assessment Report: Climate Change 2007*. Intergovernmental Panel on Climate Change, Geneva
 - 10 ADB (2009). *The Economics of Climate Change in Southeast Asia: A Regional Review*. Asian Development Bank, Manila
 - 11 See, for instance, Richard, K., Mwayafu, D.M. & Smith, H. (2011). *REDD+ and Adaptation to Climate Change in East Africa*. REDD-net; and Suzuki, R. (2012) (ed.). *Linking Adaptation and Mitigation through Community Forestry Case Studies from Asia*
 - 12 Hamilton, L. S. *et al.* (2008). *Forests and water: A thematic study prepared in the framework of the Global Forest*

- 13 UNFCCC (2006). *Report of the Conference of the Parties on its eleventh session, held at Montreal from 28 November to 10 December 2005*. FCCC/CP/2005/5
- 14 UNFCCC (2010). *Report of the Conference of the Parties on its fifteenth session, held in Copenhagen from 7 to 19 December 2009, Addendum*. FCCC/CP/2007/6/Add.1
- 15 UNFCCC (2011). *Report of the Conference of the Parties on its sixteenth session, held in Cancún from 29 November to 10 December 2010, Addendum*. FCCC/CP/2010/7/Add.1
- 16 *ibid.*
- 17 *ibid.*
- 18 These countries are Bolivia, China, Cuba, Dominica, Ecuador, Egypt, El Salvador, India, Iran, Iraq, Malaysia, Mali, Nicaragua, Philippines, Saudi Arabia, Sri Lanka, Sudan, Venezuela
- 19 See <http://www.rainforestcoalition.org> for more details of Coalition members
- 20 UNFCCC (2012). *Views on modalities and procedures for financing results-based actions and considering activities related to decision 1/CP.16, paragraphs 68–70 and 72*. FCCC/AWGLCA/2012/MISC.3
- 21 UNFCCC (2012). *Views on issues identified in decision 1/CP.16, paragraph 72 and appendix II*. FCCC/SBSTA/2012/MISC.1
- 22 *ibid.*
- 23 Prince's Rainforests Project (2013). *Interim REDD+ Finance: Current Status and Ways Forward for 2013–2020*. <http://www.pcfisu.org/wp-content/uploads/2012/11/Nov-2012-Interim-REDD+-Finance-Current-Status-and-Ways-Forward-2013-2020-Princes-Rainforests-Project.pdf>
- 24 Peters-Stanley, M., Hamilton, K. & Yin, D. (2012). *Leveraging the Landscape: State of the Forest Carbon Markets 2012*. http://www.forest-trends.org/documents/files/doc_3242.pdf
- 25 Prince's Rainforests Project (2013). *Interim REDD+ Finance: Current Status and Ways Forward for 2013–2020*. <http://www.pcfisu.org/wp-content/uploads/2012/11/Nov-2012-Interim-REDD+-Finance-Current-Status-and-Ways-Forward-2013-2020-Princes-Rainforests-Project.pdf>
- 26 Voluntary REDD+ Database (2013) Democratic Republic of the Congo. Accessible at http://www.reddplusdatabase.org/entities/40#graphs_and_stats
- 27 Nussbaum, R. *et al.* (2009). *Accelerating Transfers of Interim Finance for REDD+: Building Absorptive Capacity*. ProForest, Oxford
- 28 Edwards, K., Lukumbuzya, K. & Kajembe, G. (2012). REDD+ Capacity Needs Assessment in Tanzania: Policy brief.
- 29 Goers Williams, L. (2013). *Putting the Pieces Together for Good Governance of REDD+: An Analysis of 32 REDD+ Country Readiness Proposals*. World Resources Institute, Washington D.C.
- 30 Karsenty, A. & Ongolo, S. (2012). *Can “fragile states” decide to reduce their deforestation? The inappropriate use of the theory of incentives with respect to the REDD mechanism*. In *Forest Policy and Economics*
- 31 Naughton-Treves, L. & Day, C. (2012). *Lessons about Land Tenure, Forest Governance and REDD+: Case studies from Africa, Asia and Latin America*. <http://www.nelson.wisc.edu/lrc/docs/Lessons-about-Land-Tenure-Forest-Governance-and-REDD.pdf>
- 32 *ibid.*
- 33 Mason-Case, S.A. (2011). *Legal Preparedness for REDD+ in Zambia Country Study*. International Development Law Organization and Food and Agricultural Organization of the UN, Rome
- 34 Rights and Resources Initiative (2013). *Data on statutory forest tenure in forty countries*. http://www.rightsandresources.org/documents/country_data.php
- 35 PwC (2011). *Implementing REDD+ in the Democratic Republic of Congo How to manage the risk of corruption*. PricewaterhouseCoopers. <http://www.redd-monitor.org/wordpress/wp-content/uploads/2012/01/NORAD-PwC-Implementing-REDD-in-DRC-Corruption-risks-NORAD-Final-Version-E.pdf>
- 36 Boucher, D. *et al.* (2012). *The Root of the Problem: What's Driving Tropical Deforestation Today?* Union of Concerned Scientists, Cambridge, Massachusetts
- 37 Cranford, M. & Parker, C. (2012). *Advanced REDD+ Finance*. <http://www.forestcarbonportal.com/resource/advanced-redd-finance>

- 38 Although Nicaragua is not an LDC, it is a difficult climate for private sector investment and can provide lessons for REDD+ in LDCs
- 39 UNFCCC (2012). *Report of the Conference of the Parties on its seventeenth session, held in Durban from 28 November to 11 December 2011, Addendum*. FCCC/CP/2011/9/Add.1
- 40 UNFCCC (2013). *Report of the Conference of the Parties on its eighteenth session, held in Doha from 26 November to 8 December 2012, Addendum*. FCCC/CP/2012/8/Add.1
- 41 UNFCCC (2013). Decision -/CP.19 Work programme on results-based finance to progress the full implementation of the activities referred to in decision 1/CP.16, paragraph 70 http://unfccc.int/files/meetings/warsaw_nov_2013/decisions/application/pdf/cop19_redd_finance.pdf
- 42 Schalatek, L. et al. (2012). *Climate Finance Thematic Briefing: REDD+ Finance*. Heinrich Böll Stiftung, North America. http://www.boell.org/downloads/CFF5_REDD.pdf
- 43 UNFCCC (2012). *Report on the workshop on financing options for the full implementation of results-based actions relating to REDD- plus, including modalities and procedures for financing these results-based actions. Note by the chair of the workshop*. FCCC/AWGLCA/2012/INF.8
- 44 UNFCCC (2012). *Financing options for the full implementation of results- based actions relating to the activities referred to in decision 1/CP.16, paragraph 70, including related modalities and procedures*. Technical paper. FCCC/TP/2012/3
- 45 UNFCCC (2011). *Report of the Conference of the Parties on its sixteenth session, held in Cancún from 29 November to 10 December 2010, Addendum*. FCCC/CP/2010/7/Add.1
- 46 UNFCCC (2012). *Report of the Conference of the Parties on its seventeenth session, held in Durban from 28 November to 11 December 2011, Addendum*. FCCC/CP/2011/9/Add.1
- 47 UNFCCC (2013). Decision -/CP.19 The timing and the frequency of presentations of the summary of information on how all the safeguards referred to in decision 1/CP.16, appendix I, are being addressed and respected. http://unfccc.int/files/meetings/warsaw_nov_2013/decisions/application/pdf/cop19_safeguards_1cp16a1.pdf
- 48 UNFCCC (2013). *Methodological guidance for activities relating to reducing emissions from deforestation and forest degradation and the role of conservation, sustainable management of forests and enhancement of forest carbon stocks in developing countries*. UNFCCC/SBSTA/2013/L.12
- 49 UNFCCC (2013). *Methodological guidance for activities relating to reducing emissions from deforestation and forest degradation and the role of conservation, sustainable management of forests and enhancement of forest carbon stocks in developing countries*. UNFCCC/SBSTA/2013/L.12/Add.1
- 50 UNFCCC (2013). Decision -/CP.19 Modalities for national forest monitoring systems. http://unfccc.int/files/meetings/warsaw_nov_2013/decisions/application/pdf/cop19_fms.pdf
- 51 UNFCCC (2013). Decision -/CP.19 Modalities for measuring, reporting and verifying. http://unfccc.int/files/meetings/warsaw_nov_2013/decisions/application/pdf/cop19_mrv.pdf
- 52 UNFCCC (2012). *Report of the Conference of the Parties on its seventeenth session, held in Durban from 28 November to 11 December 2011, Addendum*. FCCC/CP/2011/9/Add.1
- 53 Although Decision 12/CP.17 refers to forest reference emission levels and/or forest reference levels we simplify the term here given that a) there are no definitions for these terms and b) they encompass the range of possibilities for a forest Reference Level.
- 54 Currently developed countries must use the 2006 IPCC Guidelines for National GHG Inventories and developing countries have the option to use the 1996 or 2006 Guidelines. Parties are also encouraged to use the 2003 IPCC Good Practice Guidance for LULUCF.
- 55 UNFCCC (2013). Decision -/CP.19 Guidelines and procedures for the technical assessment of submissions from Parties on proposed forest reference emission levels and/or forest reference levels. http://unfccc.int/files/meetings/warsaw_nov_2013/decisions/application/pdf/cop19_frl.pdf
- 56 UNFCCC (2013). Decision -/CP.19 Addressing the drivers of deforestation and forest degradation. https://unfccc.int/files/meetings/warsaw_nov_2013/decisions/application/pdf/cop19_drivers_deforestation.pdf
- 57 UNFCCC (2011). *Report of the Conference of the Parties on its sixteenth session, held in Cancún from 29 November to 10 December 2010, Addendum*. FCCC/CP/2010/7/Add.1
- 58 UNFCCC (2012). Informal Note. http://unfccc.int/files/adaptation/application/pdf/inredd_in_3b3_v2.pdf
- 59 UNFCCC (2013). Decision -/CP.19 Coordination of support for the implementation of activities in relation to mitigation

actions in the forest sector by developing countries, including institutional arrangements. http://unfccc.int/files/meetings/warsaw_nov_2013/decisions/application/pdf/cop19_mitigationactions_forest.pdf

- 60 UNFCCC (2013). Decision -/CP.19 Work programme on results-based finance to progress the full implementation of the activities referred to in decision 1/CP.16, paragraph 70. http://unfccc.int/files/meetings/warsaw_nov_2013/decisions/application/pdf/cop19_redd_finance.pdf
- 61 UNFCCC (2011). *Report of the Conference of the Parties on its sixteenth session, held in Cancún from 29 November to 10 December 2010, Addendum*. FCCC/CP/2010/7/Add.1
- 62 DRC (2013). *National Forest Monitoring System Democratic Republic of the Congo*. <http://www.rdc-snsf.org>
- 63 It remains unclear if additional LULUCF activities may be included, such as peat lands, croplands, etc.
- 64 UNFCCC (2012). *Financing options for the full implementation of results-based actions relating to the activities referred to in decision 1/CP.16, paragraph 70, including related modalities and procedures. Technical paper*. FCCC/TP/2012/3
- 65 GCF (2012). *Business Model Framework: Initial Result Areas and Performance Indicators*. Green Climate Fund Board, GCF/B.05/02