

# The Evolving Role of Climate Policies in Development

An analysis of REDD+ Safeguards & Climate-Compatible Development

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## PREFACE

### ***Workshop in Applied Earth Systems Management, Spring 2011***

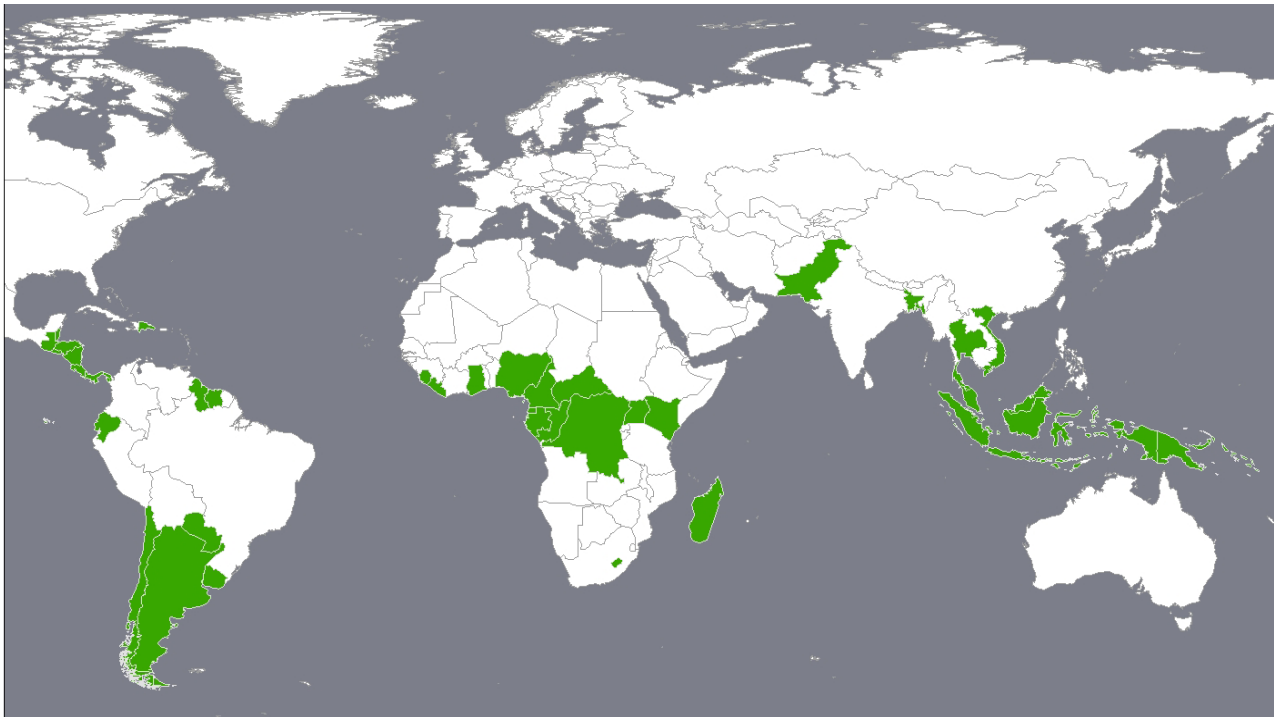
This report is a result of the capstone course, the Workshop in Applied Earth Systems Management, for the Master of Public Administration in Environmental Science and Policy at Columbia University's School of International and Public Affairs and the Earth Institute. In the spring semester, teams of students work with clients on an environmental policy or management issue and conduct research and analysis to provide recommendations. Our team worked with the Coalition for Rainforest Nations in the examination of the evolving role of a REDD+ mechanism in national development plans. This report details our semester-long work and recommendations to our client.

## CLIENT

### ***Coalition for Rainforest Nations***

The Coalition for Rainforest Nations (CfRN) is a non-profit intergovernmental organization that simultaneously promotes environmental sustainability and the creation of opportunities for economic advancement within tropical and forested developing nations. CfRN was influential in the establishment of the REDD+ (Reducing Emissions from Deforestation and forest Degradation) initiative and continues to partner with multiple stakeholders from developed and developing nations to promote national-level programs that include accounting and monitoring systems. CfRN seeks to encourage collaboration among member countries through educational workshops, programs, and the advancement of a unified negotiating position.

CfRN has asked our team to analyze and make recommendations for the implementation of the social and environmental safeguards introduced in the Cancun Agreement of 2010, as well as preliminary research into the potential adoption of Climate Compatible Development Plans (CCDP) by different countries. Our analysis of the safeguards, as well as our recommendations for their implementation and assessment, were presented during a meeting of Coalition countries in April 2011 in preparation for countries' participation in the meeting of the Subsidiary Board for Scientific and Technological Advice (SBSTA), the scientific body of the UN Framework Convention on Climate Change (UNFCCC), in June 2011<sup>1</sup>. Our analysis for both safeguards and CCDPs will inform the Coalition in preparation for the UNFCCC 17th Conference of Parties hosted by Durban, South Africa, in November 2011.



**Figure 1. Coalition for Rainforest Nations affiliate countries in green**

<sup>1</sup> A report on our analysis of the safeguards was provided to the Coalition countries at this meeting. The report can be viewed at: [http://www.columbia.edu/cu/mpaenvironment/Redd\\_Plus\\_Safeguard\\_Analysis\\_Report.html](http://www.columbia.edu/cu/mpaenvironment/Redd_Plus_Safeguard_Analysis_Report.html)

## ACRONYMS

|               |                                                                |
|---------------|----------------------------------------------------------------|
| <b>ADB</b>    | Asian Development Bank                                         |
| <b>CCBA</b>   | Climate, Community, and Biodiversity Alliance                  |
| <b>CCDP</b>   | Climate-Compatible Development Plan                            |
| <b>CDM</b>    | Clean Development Mechanism                                    |
| <b>CfRN</b>   | Coalition for Rainforest Nations                               |
| <b>C-MRV</b>  | Measuring, Reporting, and Verifying of Carbon Stocks           |
| <b>COP</b>    | Conference of Parties                                          |
| <b>FCPF</b>   | Forest Carbon Partnership Facility                             |
| <b>FPIC</b>   | Free, Prior, and Informed Consent                              |
| <b>FSC</b>    | Forest Stewardship Council                                     |
| <b>GEF</b>    | Global Environment Facility                                    |
| <b>GHG</b>    | Greenhouse gas                                                 |
| <b>IFM</b>    | Independent Forest Monitoring                                  |
| <b>IP</b>     | Indigenous peoples                                             |
| <b>LC</b>     | Local communities                                              |
| <b>MEA</b>    | Multilateral Environmental Agreements                          |
| <b>NAMA</b>   | Nationally Appropriate Mitigation Actions                      |
| <b>NAPA</b>   | National Adaptation Programme of Action                        |
| <b>NFP</b>    | National Forest Programs                                       |
| <b>ODA</b>    | Overseas Development Administration                            |
| <b>OECD</b>   | Organization for Economic Co-operation and Development         |
| <b>PS</b>     | Panda Standard                                                 |
| <b>REDD+</b>  | Reducing Emissions from Deforestation and Forest Degradation   |
| <b>R-PP</b>   | Readiness Preparation Proposals                                |
| <b>SBSTA</b>  | Subsidiary Board for Scientific and Technological Advice       |
| <b>SESA</b>   | Strategic Environmental and Social Assessment                  |
| <b>SREP</b>   | Scaling-Up Renewable Energy Program (in developing countries)  |
| <b>UNDRIP</b> | United Nations Declaration on the Rights of Indigenous Peoples |
| <b>UNFCCC</b> | United Nations Framework Convention on Climate Change          |



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## EXECUTIVE SUMMARY

The initiative to Reduce Emissions from Deforestation and Forest Degradation (REDD+) offers a powerful tool that serves multiple important purposes: to mitigate climate change, to preserve natural resources, and to provide a source of income for developing countries. Since its inception in 2004, REDD+ has gained significant momentum as one of the most viable methods of mitigating greenhouse gas emissions and valuing ecosystem services currently available. The Copenhagen Accord in 2009 and the Cancun Agreement in 2010 definitively placed REDD+ on the forefront of the climate change agenda. The Cancun Agreement also saw the establishment of the Green Climate Fund as a result of negotiations to support the forthcoming implementation of REDD+ programs as well as other mitigation and adaptation mechanisms.

As REDD+ continues to develop, however, new issues have emerged that countries must address in order to successfully implement REDD+ programs. These critical issues include the potential adverse impacts of REDD+ program implementation, such as the violation of indigenous peoples' and other forest-dependent communities' rights, threats to biodiversity, and the displacement of emissions. The Cancun Agreement addresses the potential adverse impacts of REDD+ implementation through the establishment of seven safeguards. These safeguards address concerns over governance, indigenous peoples' and local communities' rights, and environmental impacts. Governance concerns include corruption, lack of capacity, lack of transparency, and insufficient forestry and land tenure legislation. Concerns over the rights of indigenous peoples and local communities include violation of land tenure rights and lack of full inclusion in all levels of planning, decision-making and implementation. Negative environmental impacts include the loss of biodiversity, risk of project reversal, and displacement of emissions. These safeguards are not meant to create extra steps or burden for participating countries, but rather they should fall naturally into the process of planning and implementation to ensure that adverse effects are minimized and benefits of REDD+ are maximized and permanent.

**The first section** of this report presents an analysis of the seven safeguards, which builds upon currently available information produced by several organizations and pilot projects currently working on the safeguards. This analysis provides a set of criteria and methodology for each safeguard that will serve as a guide for how to effectively implement the safeguard. 'Criteria' are defined as the conditions that should be in place in order to meet a proposed safeguard. 'Methodology' refers to steps for implementing and assessing the safeguard. These criteria and methodologies are meant to serve as guidance for countries to develop nationally appropriate indicators that show whether safeguards are properly and effectively implemented. Countries should also establish a system of assessment of activities to gauge the success of implementation. Options for implementing this assessment include: an independent third-party auditor, a self-reporting body agreed upon by relevant stakeholders, or a reporting body from a nation that has previously completed a REDD+ self-assessment.

**The second section** of this report focuses on a different component of the Cancun Agreement, the request for low-carbon development plans. These plans are mandatory for developed countries and voluntary for developing countries. The Agreement also introduced the Cancun Adaptation Framework, which stipulates that adaptation must be given the same level of priority as mitigation. To satisfy both of these goals, countries should develop comprehensive Climate Compatible Development Plans (CCDPs), which are development strategies that aim to achieve economic growth while maintaining low emissions and reducing climate impacts. CCDPs, thus, integrate development, mitigation, and adaptation goals to make each complementary to the others.

For countries with large forestry and agriculture sectors, REDD+ should be a major mitigation component of their CCDPs. The establishment of CCDPs is increasingly relevant to the augmentation of the value of REDD+, as deforestation is driven not only by the forestry sector, but also by agriculture, manufacturing, mining and others. Hence, in order to fundamentally address the economic pressures that drive deforestation, countries should consider all sectors of their economy and implement strategies and incentives to redirect sources of revenue. By considering the linkages between all economic drivers and overall greenhouse gas emissions, CCDPs represent a broad tool by which REDD+ can be integrated into national development plans.

Many countries have taken considerable action or have expressed strong interest in achieving climate-compatible development. This report presents a preliminary evaluation of ten countries' political stability, institutional capacity and government commitment to climate-compatible development. These parameters were used to determine whether the countries have the political capacity to develop and implement CCDPs. From these ten countries, three were chosen from each of the main geographic regions, Asia Pacific, Africa, and the Americas, for further consideration: Fiji, the Democratic Republic of the Congo, and Guyana. These countries were evaluated for how they can benefit from developing a CCDP by examining their economic sectors and adaptation and mitigation potential.

Each of the three countries was chosen because of its high potential in one or more of the components of a CCDP. Fiji was highlighted for the importance of adaptation to the country, as rising sea levels and more severe weather patterns threaten this island nation's heavily populated and economically important coastal regions. The Democratic Republic of the Congo, emerging from years of internal conflict and having the second largest forest carbon stock, has high potential for developing on a sustainable and climate-compatible path and preventing the destruction of its natural forests. Guyana has high mitigation potential because it can lower its greenhouse gas emissions through the improvement of its large and inefficient energy sector, which can be achieved through further utilization of the country's renewable energy resources. One component was emphasized for each country, but as mentioned above, it is important that the country's CCDP integrate all three components in order to reach the goal of achieving climate-compatible growth.



A medicinal plant workshop at the village of Quiandeu along the Capim river in the Brazilian Amazon. Photo (c) Joel Satore/joelsatore.com



## INTRODUCTION

The 16th Conference of Parties (COP) of the United Nations Framework Convention on Climate Change (UNFCCC) in Cancun, Mexico, is widely viewed as a positive step in international climate change negotiations. The Cancun Agreement "encourages developing country Parties to contribute to mitigation actions in the forest sector by undertaking..." a set of activities targeting the reduction of emissions from deforestation and forest degradation, the conservation and enhancement of forest carbon stocks, and the promotion of sustainable forest management, known collectively as REDD+ (UNFCCC, 2010c, Para. 70). Reducing deforestation is a quick and cost-effective method of mitigating significant amounts of greenhouse gas (GHG) emissions (Stern, 2006). Since 2004 when REDD+ was first introduced at the 11th COP, REDD+ has developed into one of the most feasible mitigating agents of climate change and systems of valuing ecosystem services currently available.

As international climate change negotiations progress and with over USD 4.5 billion pledged by developed countries for REDD+ projects in developing countries, critical concerns over the social and environmental impacts of the implementation of a REDD+ mechanism have emerged. Creating a successful climate mitigation mechanism will also require countries to consider overall GHG emissions in addition to those from deforestation and forest degradation. Deforestation cannot be addressed in isolation, as other sectors such as agriculture, manufacturing and mining are also major drivers of deforestation. Alleviating the economic pressure to deforest will require developing countries to develop low-carbon plans for the primary sectors that drive deforestation. This report will address these concerns in two parts. The first will be an analysis of the newly introduced safeguards in the Cancun Agreement that address the governance, social, and environmental concerns that have arisen from initial REDD+ activities. The second part will consider the necessary parameters that enable countries to successfully pursue a climate-compatible development path. Using this information, ten countries have been reviewed for their political capacity to develop a Climate-Compatible Development Plan.

Figure 2: Objectives

| Implementation and assessment of safeguards                                                                                                                                                | Analysis of readiness of countries to develop Climate Compatible Development Plans (CCDPs)                                                                                                                                                               |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <ul style="list-style-type: none"> <li>• Criteria and methodology for how to effectively implement safeguards</li> <li>• Options for assessing the implementation of safeguards</li> </ul> | <ul style="list-style-type: none"> <li>• Presence of parameters, such as government willingness, that enable successful development of CCDPs</li> <li>• Country analysis of economic sectors with potential to maintain or achieve low-carbon</li> </ul> |

## Cancun Safeguards

REDD+ offers a powerful tool for mitigating climate change, preserving natural environments, and fostering prosperity in developing countries. If it is not implemented effectively, however, REDD+ activities also have the potential to adversely affect biodiversity and the rights of indigenous peoples and local communities. Administrative issues, perverse incentives, and inefficiencies at all levels of government can also reduce the efficacy of projects. To address these concerns, Annex I of the Cancun Agreement identifies seven safeguards and requests developing country Parties aiming to undertake REDD+ activities to develop, among other elements, "a system for providing information on how the Safeguards referred to in Annex I...are being addressed and respected throughout the implementation of (REDD+) activities" (UNFCCC, 2010c, Para. 71(d)).

The Cancun safeguards cover a range of issues related to governance, indigenous peoples' and local communities' rights, and environmental impacts. Governance concerns include corruption, lack of capacity, and specified forestry and land tenure legislation. Concerns over the rights of indigenous peoples and local communities include respecting land tenure claims and ensuring full inclusion in all levels of planning, decision-making and implementation. This concern also reflects the potential for indigenous groups or

local communities to be relocated or have their customary land-use practices altered in the development of REDD+ projects. Possible negative environmental impacts include the conversion of natural forests, loss of biodiversity, risk of project reversal, and displacement of emissions.

While the Cancun Agreement included provisions for these safeguards, it did not provide countries with guidance for how the safeguards can be implemented. This report presents an analysis of the seven Cancun safeguards and proposes elements that should be incorporated into the system referred to in paragraph 71(d) of the Cancun Agreement, as mentioned above. The analysis includes necessary or relevant stakeholders who should be involved, the criteria that must be met to ensure the safeguard is being promoted, and a basic methodology for implementation. 'Criteria' are defined as the conditions that should be in place in order to meet a safeguard. 'Methodology' refers to steps for implementing and assessing the safeguard. The authors have also prepared a draft decision that seeks to establish these criteria and methodologies as official guidelines for countries to implement and assess safeguards (See Appendix II for Draft Decision). If this draft decision is submitted and adopted by the country Parties, they will then be requested to utilize these criteria and methodologies in the development of country-specific 'indicators' that demonstrate if a criterion has been met.

The proposed criteria and methodology were informed by several organizations and pilot projects that are currently developing, implementing, assessing, validating, and sharing information regarding safeguards. Notable references include the standards outlined by CARE International and the Climate, Community and Biodiversity Alliance (2010), from which the principle-criteria-methodology structure of our proposal was adapted, and the "UN-REDD Programme Operational Guidance: Engagement of Indigenous Peoples & Other Forest Dependent Communities" (2009). The following is an effort to synthesize the various stakeholders, criteria, and assess-

ment methodology that were identified by these organizations and pilot projects, and expand on and modify them as necessary.

In order to develop comprehensive and practical guidelines for assessment of activities, existing practices for evaluating governance, indigenous peoples and local communities' rights, and environmental precautions from other organizations were examined. The language of "monitoring, reporting, and verifying" (MRV) was intentionally avoided because of the contentious issues surrounding the MRV of carbon stock assessments, developing countries' apprehension towards the cost of MRV, and the possibility of MRV requirements causing infringement of sovereignty. In the interest of achieving consensus, the assessment framework presented here aims to be adaptive to country-specific needs and feasible in the context of multilateral climate change negotiations.

### ***Lessons Learned from Safeguards in the Context of Carbon Assessments***

A major challenge to the widespread development of REDD+ projects has been the proper assessment of carbon stocks in forests. The technical expertise and expense required to establish baselines for carbon stocks has been a topic of all REDD+ negotiations (Baker et al., 2010), and many countries have not been able to complete their baseline assessments. As such, the Subsidiary Body for Scientific and Technical Advice was tasked in Annex II of the Cancun Agreement with developing the requirements for measuring, reporting, and verifying carbon stocks (C-MRV). The most contentious aspect of this assessment cycle is verification, as it requires a specialist to make site visits and review the methodology and results of local measurements. This process has received criticism from many developing countries as it can be prohibitively expensive as well as infringe upon national sovereignty. The process for assessing the activities of the Cancun safeguards must take these controversies into consideration in order to ensure widespread effective participation.

## Climate-Compatible Development Plans

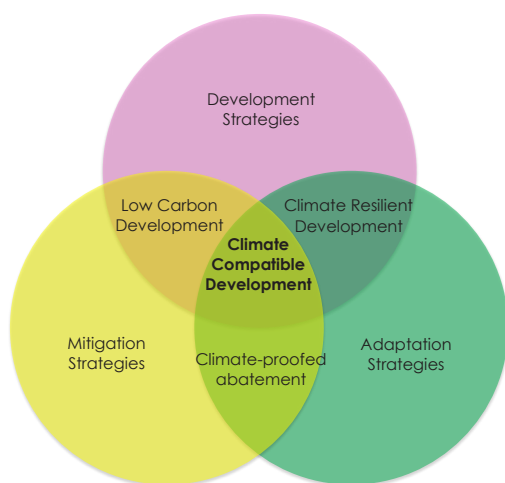
Climate-Compatible Development Plans (CCDPs) are defined as development strategies “that minimize the harm caused by climate impacts, while maximizing the many human development opportunities presented by a low emissions, more resilient, future” (Mitchell & Maxwell, 2010). The Coalition for Rainforest Nations has adopted this term to promote climate-compatible development in developing countries. Traditionally, development strategies do not account for GHG emissions or potential impacts of climate change. However, as global recognition of climate change has increased and its impacts continue to intensify, these components will become critical parts of national development plans. A CCDP is a development plan, but one that accounts for climate change consequences. Thus, a CCDP also includes two other major components: adaptation and mitigation strategies (Figure 1). Adaptation is the “adjustment in natural or human systems in response to actual or expected climatic stimuli or their effects, which moderates harm or exploits beneficial opportunities” (UNFCCC, n.d.). Mitigation, in the context of climate change, refers to “a human intervention to reduce the sources or enhance the sinks of greenhouse gases” (UNFCCC, n.d.). In the development context, it refers to cutting emissions or maintaining low emissions while countries develop. Without integrating the three components, progress in any one component

may address one issue but give rise to issues in the other two components (Mitchell & Maxwell, 2010).

Although the Cancun Agreement does not explicitly mention the concept of climate-compatible development plans, the rationale behind them is included in the text. Low-carbon development plans are mandatory for developed countries (UNFCCC, 2010c, para. 45) and voluntary for developing countries (UNFCCC, 2010c, para. 65). As indicated in Figure 1, low-carbon development plans consist of development and mitigation strategies, but not adaptation strategies. However, the Agreement also introduced the Cancun Adaptation Framework (UNFCCC, 2010c, para. 11-35), which states that adaptation should be addressed with the same level of priority as mitigation, and encourages the development of adaptation plans. A CCDP is the comprehensive and holistic approach that integrates all three components.

Due to its high potential to mitigate GHG emissions, as well as its support of other forest ecosystem services, REDD+ should play a primary role in the mitigation component of CCDPs for countries with large forestry and agriculture sectors. By considering the linkages between all economic drivers and overall greenhouse gas emissions, in addition to those from deforestation and degradation, CCDPs represent a broad tool by which REDD+ can be integrated into national development plans.

While REDD+ can serve an important role for eligible countries to meet their climate-compatible goals, CCDPs are not limited to REDD+ countries, but can be developed in any country ready to adopt a climate-compatible track. This report presents a set of steps that should be used to develop a climate-compatible strategy and the preliminary research on ten countries at different stages of development and with different dominant economic sectors. Identified pre-requisites, including political stability and government commitment to climate-compatible development, were examined for each country to determine whether it is ready to develop CCDPs.



**Figure 3. Climate-Compatible Development.**  
Source: Zadek, 2009

## CANCUN SAFEGUARDS

The Cancun safeguards are designed to enhance the success of REDD+ implementation. Including the safeguards in the process will ensure that the actions carried out in REDD+ projects will reflect good governance, involve and respect the rights of all stakeholders, including indigenous peoples (IP) and local communities (LC), prevent the conversion of natural forests, maintain biodiversity, and reduce the risk of reversal or displacement of emissions. These safeguards are essential for the long-term success of REDD+, and utilizing the framework provided by the safeguards will ensure that all circumstances, stakeholders, and natural assets affected by REDD+ are considered and protected according to both the Cancun Agreement and each country's best interests. The inclusion of these safeguards should not be perceived as an added burden to implementation, as they are inherent within the three phases of REDD+, as outlined in the Cancun Agreement (UNFCCC, 2010c, Para. 73): development of national strategies or action plans, implementation of plans and capacity-building activities, and the development of a system that ensures activities are fully measured, reported and verified. Thus, REDD+ safeguards should fall naturally into place if REDD+ projects are properly planned, implemented, and executed.

The first phase of REDD+ implementation involves the development of a national strategy or action plan. Commitment from the highest levels of government and compliance with pre-existing National Forest Programs and Multilateral Environmental Agreements are examples of fundamental elements within these plans. These elements can be found in our criteria for safeguard (a), which includes the need for national strategies or action

plans that promote effective and transparent forest governance. This includes resolving issues related to land tenure and ensuring that information is publicly available. Paragraph 72 requests that these specific issues be addressed when developing national strategies or action plans, and safeguard (b) provides a framework for accomplishing this.

The second phase involves the implementation of the national strategies or action plans. In order for implementation to be successful and sustainable, the full and effective participation of relevant stakeholders must be employed (UNFCCC, 2010c, Para. 72). Safeguard (c) details how the rights of indigenous peoples and local communities can be respected. Safeguard (d) ensures the full and effective participation of relevant stakeholders, including the equitable sharing of REDD+ benefits. By adhering to safeguards (c) and (d), decision-makers can ensure that this requirement is met.

By the final phase, REDD+ activities should evolve into results-based actions that are fully measured, reported, and verified. In order for this to be realized, countries will need to fulfill sections (b) and (c) of paragraph 71. Paragraph 71(b) requests that a national forest reference emission level and/or forest reference level be established, and 71(c) requests that a national forest monitoring system, including the monitoring and reporting of emissions displacement, be developed. By promoting the conservation of natural forests and biodiversity, as outlined in safeguard (e), integrating REDD+ activities into a national reporting system to avoid reversal of emissions and accounting, as outlined in safeguard (f), and reducing the displacement of emissions, as outlined in safeguard (g), countries will enjoy REDD+ activities that operate at their highest potential.

### ***Cancun Annex I Safeguards ensure that REDD+ actions...***

Safeguard a: Complement existing national programs and international agreements

Safeguard b: Promote transparency

Safeguard c: Respect Indigenous Peoples' rights

Safeguard d: Involve all stakeholders

Safeguard e: Conserve natural forests and promote biodiversity

Safeguard f: Address the risk of reversal

Safeguard g: Reduce the displacement of emissions

## Implementation of Safeguards

Prior to the initiation of REDD+ activities, information should be collected to create an initial baseline with regards to national circumstances. Additionally, a legal process and an accessible forum to voice concerns should be provided through an established system to address conflict resolution. Potential conflicts between involved parties may arise during the implementation, assessment, or information sharing of REDD+ safeguards. The establishment of minimum standards for representation and communication will reduce potential conflicts, increasing the effectiveness of REDD+ implementation. As such, this process should include consultation of all relevant stakeholders.

Engaging in a participatory process with relevant stakeholders can serve multiple purposes, such as: i) developing stakeholder capacity; ii) raising awareness; iii) sharing and disseminating information; iv) participating and engaging in design, implementation, monitoring and review of projects (UNREDD, 2009). Consultation should occur voluntarily as an on-going review of projects, without cost or external manipulation. Effective channels of communication and previously agreed-upon timelines should be developed for this process, which should recognize the rights of indigenous and local authorities, institutions, and processes. Independent validation should be an option. Ways of ensuring

## Identification of Relevant Stakeholder(s)

Stakeholder(s) can be defined as an actor or a group of actors that have a relationship with the land, resources, or communities where REDD+ actions are considered and who are affected, benefitted, or impacted by the actions of a REDD+ project.

- a. Indigenous Peoples (IP)
- b. Agri-Business
- c. Local Communities (LC)
- d. Forest Products-Related Small Businesses
- e. Local Governments
- f. Forest Products-Related Large Corporation
- g. National Governments
- h. Small Entrepreneurs
- i. International Organizations
- j. Landowners
- k. Non-Governmental Organizations
- l. Auditors
- m. Auditors
- n. Neighboring Communities

effective participation, as well as the mobilization of financial cooperation and assistance, are outlined in existing documents such as the United Nations Declaration on the Rights of Indigenous Peoples (UNDRIP), Article 41.

The criteria and methodologies presented in the next section for each safeguard are meant to guide countries in their development of nationally appropriate indicators that measure whether safeguards are being successfully implemented. Every country has differing national circumstances and one set of indicators cannot be uniformly applied to all countries without compromising the efficacy of the indicators. Thus, countries have the flexibility of establishing country-specific indicators to guarantee their relevance and applicability, while using the following criteria and methodologies as a framework for what indicators should achieve.



Scrap wood from a timber mill in Paragominas, Brazil, is burned to make cooking charcoal in beehive-shaped kilns.  
Photo (c) Joel Satore/joelsatore.com

**Options for selection of indigenous peoples' (IP) and other local communities' (LC) representative(s) to serve on National REDD+ Steering Committees (or the equivalent)**

1) Option i. Representative:

- a. Is selected through a participatory and consultative process;
- b. Has previous experience working with the government and UN system;
- c. Has demonstrated experience serving as a representative, receiving input from, consulting with, and providing feedback to a wide scope of civil society and/or Indigenous Peoples' organizations; **or**

2) Option ii. Representative:

- a. Has participated in a UN-REDD Programme scoping and/or formulation mission and sits on UN-REDD Programme consultative body established as a result of the mission; **or**

3) Option iii. Representative:

- a. Is an individual recognized as a legitimate representative of a national network of civil society and/or Indigenous Peoples' organizations (e.g. the GEF Small Grants National Steering Committee or National Forest Programme Steering Committee).

Provided by UN-REDD Programme Operational Guidance: Engagement of Indigenous Peoples & other Forest Dependent Communities



Community members discussing sustainable resource management in Ehrovipuka Conservancy, Namibia  
Photo (c) Aaron Price

***Safeguard (a)***

***Actions complement or are consistent with the objectives of national forest programs and relevant international conventions and agreements.***

**Overview:** Safeguard (a) ensures that the actions carried out for REDD+ projects respect and observe national regulations. REDD+ activities should also comply with international agreements to which the country is a signatory, including the Convention on Biological Diversity (CBD), the UN Declaration on the Rights of Indigenous Peoples (UNDRIP), the UN Declaration of Human Rights and others. To fulfill this safeguard, the criteria proposed below recommend that governments demonstrate commitment at the highest level, and that countries comply with and contribute to relevant National Forest Programs and Multilateral Environmental Agreements during the REDD+ process.

| Criteria                                                                                                                                                                                                                                      | Methodology                                                                                                                                                                                                                                                                                                                                        |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| (1) The highest levels of government are strongly committed to including REDD+ into their national strategies/action plans.                                                                                                                   | (1.1) Develop a domestic plan to assess whether REDD+ complements or conflicts with existing and future NFPs and MEAs through a participatory process involving local and national institutions and governments. Develop minimum standards with respect to national capabilities to avoid these conflicts and encourage positive incentives.       |
| (2) The policy approaches and the positive incentives adopted with respect to paragraph 70 of the Cancun Agreement comply with the objectives set in National Forest Programs (NFP) and relevant Multilateral Environmental Agreements (MEA). | (2.1) Ensure all relevant information is available for assessment of the planning, timing, implementation and governance of all forest activities. Recalling paragraph 71 of the Cancun Agreement, the assessment team has the 'right of free movement' <sup>1</sup> and access to information.                                                    |
|                                                                                                                                                                                                                                               | (2.2) Identify any possible areas where REDD+ policies and positive incentives do not, or may not, comply with NFPs and MEAs and take appropriate measures to resolve conflict and increase positive incentives, prior to REDD+ project implementation, in accordance with national strategies, recalling paragraph 71(a) of the Cancun Agreement. |
| (3) REDD+ policy approaches and positive incentives contribute to the objectives set in the NFPs and relevant MEAs.                                                                                                                           | (3.1) In the planning process, prioritize REDD+ policy approaches and positive incentives that contribute to the achievement of the objectives set in the NFPs and MEAs.                                                                                                                                                                           |
|                                                                                                                                                                                                                                               | (3.2) Recognize the right of assessors (as outlined in "Assessment of Activities" section below) to publish and biennially submit assessment activities to the COP.                                                                                                                                                                                |

<sup>1</sup>To freely move around the project area, political spheres, and other relevant places to access information.

## *Safeguard (b)*

### *Actions promote transparent and effective national forest governance structures, taking into account national legislation and sovereignty.*

**Overview:** Effective governance is a characteristic that investors strongly consider when deciding which REDD+ projects to support, as it is an indication of how effectively REDD+ activities can be implemented. The existence of perverse incentives and/or misallocation of funds, especially within the forest sector, hinder countries looking to gain funding to carry out REDD+ actions. This safeguard addresses the need for good governance and transparency.

| Criteria                                                                                                                                                                 | Methodology                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| (1) REDD+ policy approaches and positive incentives lead to improvements in governance of the forest sector and other relevant sectors.                                  | (1.1) Create a participatory process to develop a domestic plan for assessing land and resource uses and tenure rights. Ensure this process involves relevant stakeholders, including IP and LC group representatives. Develop minimum standards with respect to national capabilities to avoid conflicts. Develop economic incentives with respect to land and resource uses. Respect legal and traditional rights to land and resource use.                             |
|                                                                                                                                                                          | (1.2) Ensure that policy approaches and available positive incentives identify and address broad institutional issues related to forest law enforcement and governance, in particular those related to equity, effectiveness and efficiency.                                                                                                                                                                                                                              |
| (2) REDD+ policy approaches and positive incentives identify and actively employ a process for effective resolution in the case of potential disputes over rights.       | (2.1) Identify any REDD+ conflicts regarding existing national sovereignty, legislation, and/or rights of local people. Establish a plan and a mechanism to identify conflicts related to governance as well as the processes to resolve them, further described in safeguard (c). Ensure conflict resolution mechanisms are transparent and accessible. Ensure that REDD+ activities are not carried out if they are predicted to exhibit adverse impacts on governance. |
| (3) All relevant stakeholders have the capacity to understand, implement, and monitor legal requirements related to the REDD+ policy approaches and positive incentives. | (3.1) Provide relevant stakeholders with the capacity to understand legal requirements, with respect to national circumstances, related to the REDD+ projects, as well as access to information for local activity assessment. This includes, but is not limited to, the expression of information in the languages and dialects of all stakeholders involved.                                                                                                            |
| (4) Adequate information is publicly available regarding REDD+ policy approaches and positive incentives.                                                                | (4.1) Ensure relevant stakeholders, especially IP and LC group representatives, are able to collect and disseminate all relevant information related to the policy approaches and positive incentives from and to the people they represent. Ensure that assessment reports are made publicly available and are biennially reported to the COP.                                                                                                                           |

### ***Safeguard (c)***

***Activities respect the knowledge and rights of Indigenous Peoples (IP) and Local Communities (LC), by taking into account relevant international obligations, national circumstances and laws, and noting that the United Nations General Assembly has adopted the United Nations Declaration on the Rights of Indigenous Peoples.***

**Overview:** The monetization of the carbon in forests carries the risk of instigating a rush to claim land by governments and private corporations. Heavily dependent on the forests they have traditionally owned or occupied, Indigenous Peoples and Local Communities have the potential to lose their livelihoods when land value increases on a larger scale. Safeguard (c) addresses rights to land ownership and resource use, rights to an equitable share of the benefits arising from REDD+ projects, and respect for IP and LC knowledge in the development and management of REDD+ activities.

| Criteria                                                                                                                                                                                                                            | Methodology                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| (1) Activities must promote and respect human rights, adhering to the UNDRIP and the UN Declaration of Human Rights, as well as promote and respect the knowledge of IP and LC.                                                     | (1.1) Activities of the REDD+ program recognize the rights of IP or LC to the lands, territories, and resources that they have traditionally owned, occupied, or otherwise used or acquired.                                                                                                                                                                                                                                                                                     |
|                                                                                                                                                                                                                                     | (1.2) Implement a process to identify traditional knowledge, skills, and management systems of IP, LC, and all relevant stakeholders to ensure that REDD+ activities respect and build upon them.                                                                                                                                                                                                                                                                                |
| (2) Rights to land ownership and possession, whether statutory or customary, are identified and respected, along with rights pertaining to the use and access of land, territories, and the natural resources associated with them. | (2.1) Establish, through a participatory process, an inventory and map of existing statutory and customary lands, territories, and resource tenure/use/access/management rights relevant to the project. Take special care to include those of marginalized and/or vulnerable groups, as well as any overlapping or conflicting areas of interest.                                                                                                                               |
| (3) IP and LC give Free, Prior and Informed Consent (FPIC) for all activities.                                                                                                                                                      | (3.1) IP and LC shall give FPIC, as recognized in UNDRIP, prior to commencement of any activities affecting their right to land, territories, or the resources on or within them.                                                                                                                                                                                                                                                                                                |
| (4) Rights include full and effective participation, as well as equitable benefit sharing as outlined in safeguard (d).                                                                                                             | (4.1) Establish a plan and a mechanism, both transparent and accessible, to identify and resolve conflicts related to land, territory, and access to associated resources. Ensure that activities are not carried out if resolutions and outcomes are observed to be negatively affected by REDD+ activities.                                                                                                                                                                    |
|                                                                                                                                                                                                                                     | (4.2) Develop a plan through a participatory process for selecting specific quantitative indicators, such as the number of jobs created or the number of trees planted that will guide the assessment of the advancement of the REDD+ project's goals. Establish a target regarding the frequency of reporting and assessment to ensure that variables are directly linked to the project's community development objectives and to anticipate positive and/or negative impacts. |

## Safeguard (d)

### *Activities ensure the full and effective participation of relevant stakeholders, in particular, Indigenous Peoples and Local Communities.*

**Overview:** Local stakeholder involvement and the incorporation of existing local knowledge should be respected as an integral element of REDD+ projects. The equitable distribution of benefits for and involvement of Indigenous Peoples and Local Communities are central to the long-term success of REDD+ projects, and resource management at the local stakeholder level can often result in more effective forest carbon storage and livelihood benefits (Phelps, Webb, & Agrawal, 2010). Safeguard (d) therefore seeks to prevent the exclusion of relevant stakeholders, particularly at the local level, from all stages of REDD+ projects. A useful parallel for this safeguard is the Forest Carbon Partnership Facility's Strategic Environmental and Social Assessment (SESA) Guidelines, which are included in participating countries' Readiness Preparation Proposals (R-PPs). The SESA guidelines stress stakeholder engagement and have been included in the R-PPs of 23 REDD countries.

| Criteria                                                                                                                                                                                                                                                                                                                                             | Methodology                                                                                                                                                                                                                                                                                      |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| (1) IP, LC, and relevant stakeholders, including women and youth, enjoy broad representation at all stages of REDD+ activities. Groups willing to participate in the design, implementation, and evaluation of REDD+ activities are fully involved, possessing a clear understanding of REDD+ key issues that enables their effective participation. | (1.1) Ensure IP and LC are represented on National REDD+ Steering Committees or equivalent bodies. The IP or other LC representative(s) should subscribe to one of the criteria established in Annex I of this document.                                                                         |
|                                                                                                                                                                                                                                                                                                                                                      | (1.2) Ensure that the above-mentioned representative(s) are present at a "validation meeting" <sup>1</sup> prior to REDD+ project development.                                                                                                                                                   |
|                                                                                                                                                                                                                                                                                                                                                      | (1.3) Establish effective and quality capacity building and technology transfer programs to ensure full involvement, participation, and engagement of IP and LC and all other relevant stakeholders at all stages of REDD+ activities.                                                           |
|                                                                                                                                                                                                                                                                                                                                                      | (1.4) Implement a process to identify traditional knowledge, skills, and management systems of IP, LC, and all relevant stakeholders to ensure that REDD+ activities respect and build upon them.                                                                                                |
| (2) Transparent, participatory, effective, and efficient mechanisms are established to ensure equitable sharing of REDD+ benefits among all relevant stakeholders, as well as recognition of risks and costs.                                                                                                                                        | (2.1) Ensure that National REDD+ Programs consider the rights of IP and LC prior to making decisions. Ensure that relevant communities properly communicate and analyze these impacts.                                                                                                           |
|                                                                                                                                                                                                                                                                                                                                                      | (2.2) Pursue initiatives and resources that support ongoing consultation, engagement, and partnership between project directors, IP, and LC to ensure that REDD+ activities take the current priorities and concerns of the IP and LC representatives into account.                              |
|                                                                                                                                                                                                                                                                                                                                                      | (2.3) Establish a complaint mechanism for addressing IP and LC concerns given Free, Prior, and Informed Consent.                                                                                                                                                                                 |
|                                                                                                                                                                                                                                                                                                                                                      | (2.4) Circulate outcome documents from consultations (e.g. meeting minutes and reports) to IP and LC through their representative to allow for an assessment of their accuracy. Ensure that these documents are made publicly available in the manner as outlined by safeguard (b) criteria (2). |
|                                                                                                                                                                                                                                                                                                                                                      | (2.5) Activities evaluate and mitigate any possible social and economic impacts that could result in the decreased social and economic well-being of main stakeholders living outside project boundaries.                                                                                        |

<sup>1</sup>A validation meeting is one component of a wider consultation and engagement strategy; its objective is to establish consensus on specific REDD+ projects prior to the program or project development (UN-REDD, 2009).

***Safeguard (e)***

***Activities are consistent with and promote the conservation of natural forests and biological diversity, ensuring that actions referred to in paragraph 70 of the Cancun Agreement are not used for the conversion of natural forests, but are instead used to incentivize the protection and conservation of natural forests and their ecosystem services, and to enhance other social and environmental benefits.***

**Overview:** In the process of carbon accounting, the replacement of a forest with another type of forest is not considered deforestation. This loophole has permitted the conversion of natural forests into monocultures, which support much less biodiversity. Additionally, many areas with high carbon value have low levels of biodiversity, which has the potential to be problematic if development activities are displaced to areas of high biodiversity. Thus, the purpose of Safeguard (e) is to prevent such conversions from occurring and, as a resulting co-benefit, protect the biodiversity and ecosystem services of the natural forest. REDD+ activities should also include measures to promote the conservation of natural forests and their ecosystems.

| Criteria                                                                                                                                                               | Methodology                                                                                                                                                                                                                                                                                                                                                                                |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| (1) National strategies or action plans prohibit REDD+ activities from being used for the conversion of natural forests to any other land type, including new forests. | (1.1) Provide positive incentives for the protection and conservation of biodiversity and ecosystem services within REDD+ actions. Seek out existing incentive initiatives, such as the Global Environment Facility (GEF) funding envelope for their Sustainable Forest Management/REDD+ Program, which aims to give monetary incentive to ensure multiple benefits exist within projects. |
|                                                                                                                                                                        | (1.2) Clearly define uses for existing forested land, including protected areas, community-conserved areas, forest reserves and production forests, as outlined in safeguard (g).                                                                                                                                                                                                          |
|                                                                                                                                                                        | (1.3) Develop an eligibility scenario for reforestation projects, taking into account a characterization of the baseline scenario and any historically significant disturbance.                                                                                                                                                                                                            |
| (2) Governments refer to biodiversity goals, as outlined in their current Convention on Biological Diversity (CBD) commitments, when considering REDD+ projects.       | (2.1) Assess the environmental impacts of REDD+ activities, both real and predicted, by identifying and recording initial levels and numbers of biodiversity and ecosystem services in project areas, using both scientific and IP and LC knowledge. Identify environmental impacts that may affect areas beyond project boundaries prior to the implementation of REDD+ activities.       |
|                                                                                                                                                                        | (2.2) Ensure carbon priorities do not conflict with biodiversity targets. Design REDD+ activities that meet both emission reduction and biodiversity targets.                                                                                                                                                                                                                              |
|                                                                                                                                                                        | (2.3) Perform or consult existing gap analysis <sup>1</sup> using geographic information systems (GIS)/remote sensing and species distribution data in order to identify the most ideal REDD+ sites for carbon and biodiversity conservation.                                                                                                                                              |
| (3) REDD+ projects are structured to incorporate biodiversity targets into project implementation.                                                                     | (3.1) Identify, prioritize, and assess biodiversity and ecosystem services that may be affected, either negatively or positively, by proposed REDD+ projects. Incorporate these findings into National REDD+ Programs in order to mitigate negative impacts, relevant on all scales.                                                                                                       |
|                                                                                                                                                                        | (3.2) Include the full participation of IP and LC within the environmental aspects of the assessment plans, particularly in regards to the ecosystem services that directly impact their livelihoods. Ensure the participation between different stakeholders in order to enhance communication.                                                                                           |

<sup>1</sup>The overlap of boundary (such as protected areas) data with species distribution data in map layers, in order to identify unprotected places rich in species targeted for protection. This can also be useful in identifying areas that have both high carbon and high biodiversity values.

## ***Safeguard (f)***

### ***Actions address the risk of reversals.***

**Overview:** Reversal is the intentional or unintentional release of carbon back into the atmosphere, such as human-induced deforestation or degradation, or through natural events such as fires and flooding. Intentional reversal would most likely be a result of the exhaustion of funding or the lack of a long-term source of funding to sustain projects. Safeguard (f) intends to promote measures to lower the risk of reversals and plan for the event of funding shortage. An example of a contingency plan for addressing the risk of reversals when funding becomes unavailable is a buffer pool. Buffer pools are used in the Voluntary Carbon Standard California Climate Action Reserve's Forest Project Protocol, section 1.2.1 and the Panda Buffer Pool in China's Panda Standard (See Appendix I). The buffer pool is an insurance mechanism that secures the permanence of accounting by setting aside a reserve of credits after the completion of a risk assessment, which will be retired if reversal does occur.

| Criteria                                                                                                                             | Methodology                                                                                                                                                                                                                                                     |
|--------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| (1) National strategies or action plans, as identified in paragraph 71(a) of the Cancun Agreement, should consider delayed funding.  | (1.1) Develop a plan that will assure funding for REDD+ activities. In the event that anticipated project funding is delayed, a contingency plan should be implemented in order to guarantee REDD+ strategies and action plans.                                 |
| (2) A system to report national land-use is in place, regardless of REDD+ stage or phase of implementation.                          | (2.1) Fully integrate a national reporting system for REDD+ activity areas into national greenhouse gas inventories to ensure reversals are reported both during commitment periods and/or after REDD+ activities are no longer in place.                       |
| (3) National strategies or action plans, as identified in paragraph 71(a) of the Cancun Agreement, generate alternative livelihoods. | (3.1) Ensure relevant stakeholders identify long-run economic opportunities by developing plans that guarantee alternative activities that can mitigate climate change. Provide positive incentives for the marketing of renewable, non-timber forest products. |
|                                                                                                                                      | (3.2) Develop alternatives for IP and LC and provide livelihood benefits as identified in safeguard (d) within national plans.                                                                                                                                  |

## ***Safeguard (g)***

### ***Actions reduce the displacement of emissions.***

**Overview:** Leakage occurs when the protection of one region under a REDD+ program causes another region to be targeted for deforestation, thus displacing emissions. This leakage can occur within a country or across national borders. To address this issue, Safeguard (g) calls for the inclusion of measures to detect and prevent the risk of leakage in REDD+ projects and the clear definition of land uses in national action plans.

| Criteria                                                                                                                                                                                                                                                              | Methodology                                                                                                                                                                                                                                                                                                                                                                                      |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| (1) Countries have clearly defined land uses including protected areas, community-conserved areas, and forest reserves, including some production forests, in their national strategies or action plans, recognizing paragraphs 71(a) and 72 of the Cancun Agreement. | (1.1) Determine areas with regards to and respect of areas of significance for threatened or endemic species, for significant concentrations or source populations of other species, for ecosystem services, and for cultural or religious importance to stakeholders, particularly IP and LC. Clearly identify these areas in national land use plans, considering their existence as an asset. |
|                                                                                                                                                                                                                                                                       | (1.2) Determine the value of existing or alternative land uses and land prices and consider the positive and negative impacts.                                                                                                                                                                                                                                                                   |
|                                                                                                                                                                                                                                                                       | (1.3) Ensure that the national reporting system covers all national boundaries in order for any displacement to be properly quantified and reported.                                                                                                                                                                                                                                             |
| (2) Countries take note of paragraph 71(c) of the Cancun Agreement in order to monitor and report activities related to land use change.                                                                                                                              | (2.1) Report current methodologies pertaining to the way displacement of emissions is being addressed, if appropriate.                                                                                                                                                                                                                                                                           |
|                                                                                                                                                                                                                                                                       | (2.2) Ensure that robust and transparent national forest monitoring systems take note of the guidance regarding consistent representation of land in the IPCC Good Practice Guidance for LULUCF. Make clear that information sharing can be carried out by anyone, including the general public.                                                                                                 |
|                                                                                                                                                                                                                                                                       | (2.3) Record the types of land use changes performed within national boundaries throughout the year (i.e. roads, plantations, etc.) and make information publically available in order to promote transparency. <sup>1</sup>                                                                                                                                                                     |
| (3) REDD+ project is adapted based on predictive and ongoing impact assessments to mitigate potential displacement of emissions through land use change.                                                                                                              | (3.1) Use feedback from forest cover monitoring to develop and implement measures to mitigate displacement of emissions through real or potential land use change.                                                                                                                                                                                                                               |

<sup>1</sup> The IPCC Good Practice Guidelines for LULUCF state that it is good practice to estimate and report separately the sum of all forest land conversions (deforestation) and grassland conversions to other final land uses (Section 3.1.2.2).

## Assessment of Activities

A process for assessing REDD+ activities is essential to ensure that REDD+ projects are implementing the governance, environmental and social safeguards outlined in Annex I of the Cancun Agreement. Beginning with REDD+ project commencement and at least every two years thereafter (consistent with the periods for reporting on Nationally Appropriate Mitigation Actions for developing country parties, as defined in paragraph 60(c) of the Cancun Agreement), Parties should provide a report consistent with their capabilities and level of support. This report should be submitted to the Conference of the Parties subject to expert review teams and should communicate an assessment of the implementation and advancement of goals of the safeguards. Paragraph 76 of the Cancun Agreement asks that developed countries support the development of national strategies or action plans that, after implementation, could involve further capacity building, which includes consideration of the safeguards. Quality assessment is therefore crucial for both the improvement and continued support of REDD+ projects and their associated safeguards. Assessment shall be based on available scientific, social, and environmental data. Persons conducting assessment activities should have access to planning, timing, implementation, governance, and other information related to REDD+ activities.

Assessment of implementation and advancement of REDD+ safeguards could be carried out by one of the following two options<sup>1</sup>:

a) A self-reporting body designated by the project's relevant stakeholders. Assessment is undertaken by a domestic entity selected through a participatory process by relevant stakeholders. A clear and well-defined methodology for collecting and providing access to information relevant to REDD+ activities should be established. A forum for reconciliation of conflicts that may arise from not using an independent third-party auditor should also be provided.

• **Precedent:** Article 7 of the Montreal Protocol; Articles 7 and 8 of the Kyoto Protocol.

b) A reporting body from a nation that has completed REDD+ self-assessment. Assessment activities should be carried out, with cooperation from the host country, by a nation that has completed its own REDD+ assessment. An agreement should be reached between the host country and the assessing country, with the inclusion of relevant stakeholders, on how assessment will be conducted and reported. A forum for reconciliation of conflicts that may arise from not using an independent third-party auditor should also be provided.

• **Precedent:** The Democratic Republic of Congo, having neared completion of the Forest Carbon Partnership Facility's REDD+ Readiness program, has begun assisting the Republic of Congo with its national Readiness Preparation Proposal (FCPF, 2010) (See Appendix I).

For the two options, the assessing body should:

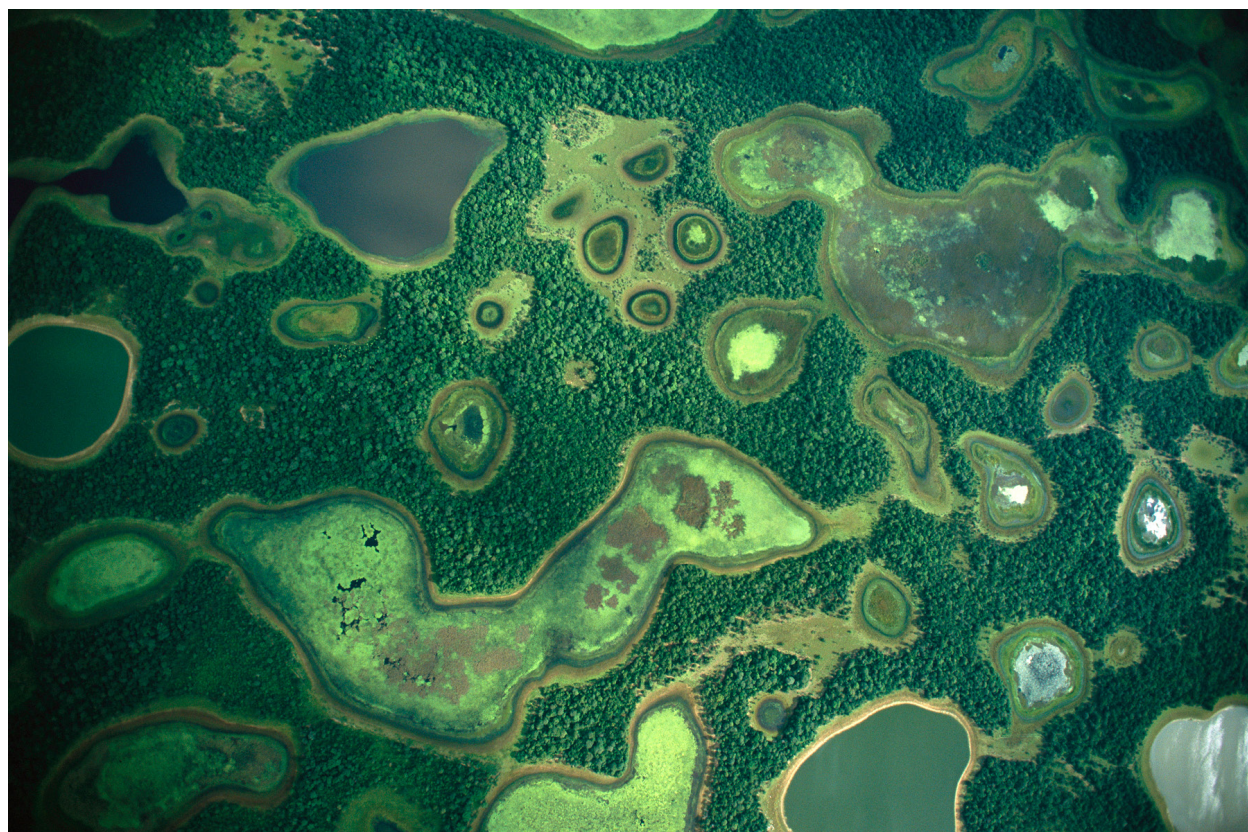
- Abide by international and national transparency laws
- Ensure actions respect national legislation, as well as other international and multilateral agreements to which countries are signatories,
- Respect decisions made by relevant stakeholders through a participatory process.
- Publish all findings in an accessible and public format and circulate reports to all Parties to the Convention.

Furthermore, all assessment plans should carry a participatory process that effectively involve and properly inform relevant stakeholders, listed below. This participatory process serves multiple purposes, including stakeholder capacity development, information sharing and dissemination, and the engagement of stakeholders in the design, implementation, monitoring and review of projects. Consultation can help the design and management of projects by drawing from stakeholder knowledge and expertise. Consultation should occur voluntarily, without cost or external manipulation, and as an on-going process. Effective channels of communication and agreed-upon timelines should be used for this process, which should recognize the rights of indigenous and local authorities, institutions and processes and allow for independent validation.

<sup>1</sup>Third-party assessment was originally considered as an assessment option. However, due to controversies surrounding issues of sovereignty, third-party assessment is not included in our final analysis and recommendations.

**Table 1. Benefits and disadvantages associated with each assessment option.**

| Options                              | Benefits                                                                                                                                                                                                                                                                                                                             | Disadvantages                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
|--------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Option a)<br/>Self-Assessment</b> | <ul style="list-style-type: none"> <li>Financial and resource investment and effective implementation will reflect national capabilities</li> <li>Timescale of assessment will reflect national circumstances</li> <li>Assessment will not infringe upon sovereignty</li> </ul>                                                      | <ul style="list-style-type: none"> <li>Lack of neutrality may result in decreased transparency and/or decreased donor and/or investor confidence, resulting in less consistent or secure funding</li> <li>Technological or personnel capacity may be limited, resulting in assessments that are narrow in scope</li> <li>Frequency and scope of self-assessment may be diminished due to national capabilities and circumstances if a multilateral fund is not established for this purpose</li> </ul> |
| <b>Option b)<br/>Peer-Assessment</b> | <ul style="list-style-type: none"> <li>Reporting body's previous experience with REDD+ assessments may result in increased efficiency</li> <li>Neutrality or a capacity for assessment greater than that of the host nation may increase donor and/or investor confidence and result in more consistent or secure funding</li> </ul> | <ul style="list-style-type: none"> <li>Cost of peer-assessment may be more expensive than Option a), making peer review less financially feasible if a multilateral fund is not established for this purpose</li> </ul>                                                                                                                                                                                                                                                                                |



The Brazilian Pantanal, an array of seasonally flooded lowlands which makes an ideal habitat for a rich array of biodiversity. Photo (c) Joel Satore/joelsatore.com

# CLIMATE-COMPATIBLE DEVELOPMENT PLANS

Climate-Compatible Development Plans integrate development, mitigation, and adaptation strategies, and have the potential to simultaneously achieve multiple goals set out in the Cancun Agreement. While all countries could benefit from the pursuit of this path of growth for a more sustainable future, many countries are not politically or institutionally prepared to apply climate-compatible development strategies and yield successful results. After review of existing work and national initiatives on climate-compatible and low-carbon development (ECA, 2009; PNG, 2010b; PNG, 2011; United Nations, 2011; WWF, 2010), the authors have determined that, in order for countries to develop and implement CCDPs, countries should exhibit certain characteristics that enable them to pursue a climate-compatible development path. A pre-requisite for a country to embark on the development of a CCDP is strong political support at the highest level, as CCDPs are national-level initiatives and commitment from high-level officials will ensure that the goals of CCDPs are aligned with national goals. Additionally, it is important for a country to have effective governing institutions in place to enforce contracts, oversee liability, and implement and manage actions consistent with the country's CCDP.

Countries can be evaluated for government commitment using the following indicators:

- a. Government commitment to international environmental treaties.
- b. Disclosure of GHG emissions to the United Nation Convention on Climate Change (UNFCCC) Development of National Appropriate
- c. Mitigation Actions (NAMA) and/or National Adaptation Program Actions (NAPA).
- d. Existence of low-carbon development plans or Clean Development Mechanism projects.

Ten countries were evaluated for government commitment, political stability, and institutional capacity; based on these metrics, the authors determined whether the Coalition should engage the countries for the possibility

## Recommended prior conditions for CCDPs

- Strong Political support at the highest level
- Adequate legal and institutional frameworks
- Full and effective participation of all relevant stakeholders

of collaboration on CCDP development. Within these ten countries, three were chosen for further analysis of major economic sectors that can potentially achieve climate-compatible objectives (see Appendix III for the overview of the literature research conducted on the countries not discussed here): Fiji, Democratic Republic of the Congo (DRC) and Guyana. These countries were selected from the three rainforest regions, the Americas, Africa, and Asia Pacific; one of the three components of a CCDP was highlighted for each country.

## Country Analysis

Once the political support and the institutional framework are both in place, three steps can be used to develop a CCDP:

Fiji, the Democratic Republic of the Congo (DRC) and Guyana, representing three main rainforest regions, were chosen for in-depth exploration of their potential benefits from the development of CCDPs. Fiji was explored for its adaptation needs, as it is an island nation with a heavily populated coastal region threatened by rising sea levels and intensifying weather patterns. The Democratic Republic of the Congo was chosen for its high potential to develop sustainably as it emerges from years of conflict and to conserve its vast forest cover. Guyana, with high GHG emissions from an inefficient energy sector, was selected to explore mitigation opportunities.

**Table 2. Metrics used to determine level of government willingness and commitment.**

| Country                | Signatory of Copenhagen Accord | Signatory of Selected MEAs <sup>1</sup> | Report GHG Emissions to UNFCCC <sup>2</sup> | Report NAMAs & NAPAs to UNFCCC <sup>3</sup> | # of CDM projects <sup>4</sup> | Existing Low Carbon Development Plan                     |
|------------------------|--------------------------------|-----------------------------------------|---------------------------------------------|---------------------------------------------|--------------------------------|----------------------------------------------------------|
| <b>Fiji</b>            | Yes                            | 5                                       | 2006                                        | No                                          | 1                              | Has consulted with UNDP, GEF & SREP but no official plan |
| <b>DRC<sup>5</sup></b> | Yes                            | 5                                       | 2000, 2009                                  | NAMA: no,<br>NAPA: yes                      | 1                              | No                                                       |
| <b>Guyana</b>          | Yes                            | 5                                       | 2002                                        | No                                          | 1                              | Yes                                                      |

1. Six relevant multilateral environmental agreements (MEA) were chosen. Countries denoted as "5" are party to the following MEA: Convention on Biological Diversity, Convention on International Trade in Endangered Species of Wild Fauna and Flora, the Kyoto Protocol, and UN Convention to Combat Desertification and the International Tropical Timber Agreement of 1983 and 1994. The sixth MEA considered was the Antarctic-Environmental Protocol.
2. Year(s) GHG emissions data was reported to the UNFCCC. For the years that the country has data for, see: [http://unfccc.int/national\\_reports/non-annex\\_i\\_natcom/items/2979.php](http://unfccc.int/national_reports/non-annex_i_natcom/items/2979.php)
3. All developing countries are requested to develop and report Nationally Appropriate Mitigation Actions (NAMA) and only Least Developed Countries are requested to develop and report National Adaptation Programme of Action (NAPA).
4. CDM projects have been registered.
5. Least Developed Country.

## Fiji

Consisting of over 300 islands, the Republic of the Fiji Islands is located in the southern Pacific Ocean, and about one-third of the islands are inhabited. Fiji covers an area of 18,247 sq km in a mountainous volcanic origin with 1,129 km of coastline located in a tropical marine climate. Overall, the growth rate of the population, currently at about 0.8%, has been stable (The CIA World Factbook, 2011). The GDP per capita was estimated to be USD 4,300 in 2009 and 2010 (The CIA World Factbook, 2011). Primary and planted forests occupy more than half of Fiji's land. About 13% of the arable land area is used for planting of sugar cane, rice, cocoa, ginger, and other crops, while over 80% of the land is covered by forests, tree crops and pastures (FAO, 1999). Fiji has one declared protected forest, Batiawi Forest, 17 forest reserves, and 7 nature reserves (FAO, 1999). Fiji's forestry sector is a "growth sector" in their economy, ranks fifth in terms of foreign exchange, and



employs 3000 people (FAO, 1999). Between 1990 and 2010, Fiji lost an average of 3,050 ha, or 0.32% per year. However, within that same time frame, about 6.4% of its forest cover was regained (FAO, 1999).

## Importance of Adaptation

As an island nation, Fiji faces imminent challenges due to climate change. Therefore, it is critical that the adaptation component of Fiji's CCDP is given priority. Adaptation practices will be critical for both the tourism and agricultural sectors in Fiji. Rising sea levels threaten to erode beaches and hurt a critical tourism service industry that drives Fiji's economy. In addition to 90% of the population (both rural and urban), the majority of the services, infrastructure, agricultural production, and social centers are also located near coastal areas (PICCAP, 2005). That the population distribution is reinforced by the tourism-driven economy complicates inland migration plans, which might otherwise be the natural adaptation strategy. Coastal erosion in Fiji may also be accelerated by

increasing rainfall and sea surface temperatures, which can weaken the ability to maintain stable coasts (WWF, n.d.). Increasing sea surface temperatures could also lead to stronger tropical storms and, in confluence with rising sea levels, higher risks of storm surges, which will push threats farther inland (Nurse et al., 2001). Furthermore, increased sea surface temperatures will cause coral bleaching, which will have the dual negative effects of reducing coral reefs' buffering capacity that reinforces shoreline stability and suppressing the tourism industry's contribution to GDP. Finally, with increasing sea levels, there is a greater chance for saltwater to infiltrate freshwater aquifer water sources (Nurse et al., 2001).

One adaptation measure in which Fiji can invest is its mangrove forests. Mangrove ecosystems can also filter pollution, house many forms of wildlife and fish, and act as critical buffers for shorelines during storms (Boyd, 2010). In addition, mangroves are able to store up to five times as much carbon as a tropical rainforest



(Boyd, 2010). There is currently extensive destruction of mangroves due to the expansion of tourism, farming, and urban development, and remaining mangroves suffer from solid waste pollution and industrial dumping. By restoring and creating incentives to maintain mangroves, it can help reduce erosion and store large amounts of carbon now dubbed 'blue carbon'. Restoring Fiji's mangroves offers an investment of high-returns that would help the Fijian tourism industry remain viable, protect the coastal population, and possibly create profitable 'blue carbon' markets.

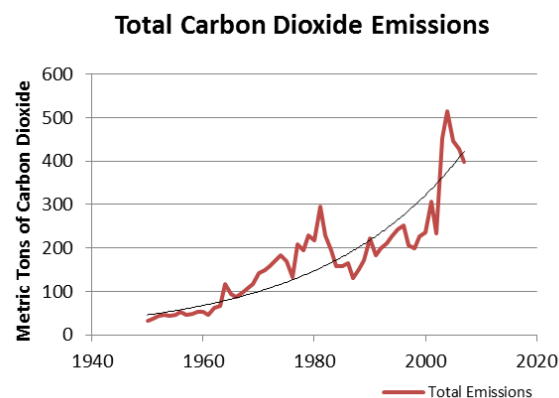
## Economic Sectors

Fiji is one of the more economically developed Pacific Island economies with the major sources of foreign exchange coming from sugar exports, remittances, and the tourism industry. According to the Fiji Islands Bureau of Statistics (2010) the main economic sectors in Fiji include: agriculture and forestry, fishing, mining and quarrying, manufacturing, electricity and water, construction, wholesale and retail, hotels and restaurants, and transport. Agriculture employs the majority the population at 70% and industry and services employ the remaining population (CIA World Factbook, 2010). However, the share of the GDP composed of sectors that depend on the use of natural resources has been declining since 1986 from 25% to 18% (Fiji Government Online Portal, 2009b). The tourism industry, including wholesale and retail trade, restaurants, and hotels, accounts for 19% of the GDP and is projected to continue growing (Fiji Government Online Portal, 2009b).

## GHG Emissions

By far the largest driver of emissions in Fiji is from the burning of liquid fossil fuels. After the transition in the 1960s from solid fuels, liquid fuels have consistently constituted 90% of the nation's GHG emissions (DOE, 2010). Liquid fuels also play a large role in the country's maintenance of trade deficits; Fiji does not have any proven oil or natural gas reserves, and thus imports about 20,340 barrels per day (2007 est.) (The CIA World Factbook, 2010).

Figure 4.



Source: DOE, 2010.

One possible opportunity for reduced dependence on liquid fuels is the development of a biofuels industry based on ethanol production from sugarcane. In 2005, the cabinet approved a proposal to receive funding assistance from UNDP for the transition of the government-owned sugar milling company to incorporate biofuel production (Fiji Department of Energy, 2008). This could both reduce the economy's exposure to petroleum price volatility and decrease trade deficits, making the country a more attractive candidate for foreign investment. Exploring and utilizing renewable energy sources, such as hydropower, geothermal, wind, solar, and biomass, could also create employment and investment opportunities (UNESA, 2009).

## Political Stability

Stalling Fiji's ability to explore a climate-compatible development agenda is its political instability. Fiji has undergone numerous military coups, the last as recent as 2006. Since taking power, Prime Minister Bainimarama has weakened Fiji's democratic institutions and refuses to hold elections, causing Fiji in 2009 to become the first country to be suspended from the 16-member Pacific Island Forum due to election scheduling issues (EIU, 2011a). Political instability has resulted in decreases in revenue and jobs from the tourism sector, causing a decrease in GDP (CIA World Factbook, 2011). Uncertainty in investments and government responsibility has also been slowing down investment.

There is strong political pressure on the Prime Minister to hold elections before 2014. The European Union has suspended development assistance worth EU 20 million and subsidies to cane farmers worth EU 115 million until the government takes steps toward new elections. Fiji has also been criticized for lacking effective political institutions and the future political situation remains uncertain (EIU, 2011a). Other long-term problems include low investment, uncertain land ownership rights, and the government's inability to manage its budget.

## Institutional Capacity

Key ministries are the Ministry of Lands and Min

eral Resources and the Ministry of Land and Survey, which handle the majority of environment and land development matters, and the Ministry of Environment, which houses Fiji's Climate Change Country Team (CCCT). Fiji has had extensive consultation with GEF, UNDP, and SPREP, but no official low-carbon development plan has been developed. Furthermore, despite being a signatory of the Copenhagen Accord, Fiji has not submitted a NAMA. Still, Fiji has plans to improve its climate change agenda, which includes reviving the defunct CCCT, beginning domestic and international climate change activities and negotiations, and initiating discussions of possible membership and terms of reference for the CCCT (Fiji Government Online Portal, 2009a).

## Government Commitment to Climate-Compatible Development

As mentioned above, Fiji has taken steps to address climate change in national policies and development plans. The Fijian government has created a Strategic Plan for 2008-2012, entitled the National Trust of Fiji Islands, with a primary focus on protecting natural, cultural and national heritage sites and strives to protect biodiversity in the process (National Trust of Fiji, 2008). Fiji also has a Strategic Development Plan (SDP), which is updated every three years to adapt to emerging needs and the priorities of the government. The current SDP has a number of programs related to sustainable development and economic growth, including Rural and Outer Island Development, Resources Development and Management, and Disaster Mitigation and Management. In an effort to increase transparency, the Fijian government implemented the Financial Management Reform Programme to give Chief Executive Officers more authority over budgets and is working to improve the existing financial management practices (Fiji Government Online Portal, 2009b). Fiji and its climate change issues have gained international attention, and the country has high potential for building institutional capacity to attract funding. Key adaptation strategies already taken by the government include (Climate Lab, 2010):

- A national vulnerability assessment.
- A watershed management project aimed at assessing the vulnerability of drought prone sugarcane production areas.
- An integrated coastal zone management project to increase the resilience of coastal areas through infrastructure investments and ecosystem reinforcement.
- Locally managed marine areas, which are community-based development projects, aimed at incorporating traditional practices in developing climate resilience. Some activities of interest include the creation of seasonal closures of fisheries to replenish fish stocks and the replanting of mangrove forests.
- A tourism industry-based adaptation plan in partnership with UNEP and the UN world tourism organization to reduce vulnerability of that sector to climate change.

## Democratic Republic of the Congo

The DRC, located in Central Africa, is the third largest country by area in Africa. With a population of over 70 million, the DRC is the fourth most populous country in Africa (CIA, 2011).



The DRC is a least developed country (LDC), with the second lowest GDP per capita in the world. Still, the country maintains an enormous wealth of natural resources, much of which remains unharnessed. The DRC has the world's second largest tropical rainforest, accounting for 8% of the world's forest carbon stocks. Of the total land area, 59% is forested, 9% of which is designated as protected. The DRC has relatively low rates of deforestation (below the global average), and maintains a very high forest cover. As a result, it is a carbon sink and has a negative net GHG emission exempting it from needing to submit NAMA.

## Importance of Low-Carbon Development

The DRC receives much international attention because of its wealth in resources and substantial forest cover. The government of the DRC has received funding from the World Bank's FCFP and UN REDD for capacity building, and is now the only country to have a completed REDD Readiness Plan. However, its institutions remain very weak, which presents a challenge to a robust and functioning low-carbon development plan. A protracted and lingering internal conflict and economic mismanagement pose significant challenges to the implementation of low-carbon development. The conflict has led to the destruction of much of the country's infrastructure and there is currently a lack of roads and electricity. The reasons for the conflict are complex and varied, but much of them are centered around competition over access to mineral resources. The main minerals are copper, cobalt, zinc, diamonds, and coltan (all for export).

After years of conflict and destruction, the DRC's economy has begun recovering (Figure 4). According to the World Bank and the IMF, its economy is expected to grow 5 to 6% over the next 20 years, with a moderate growth of 4% in the primary sectors: mining, petroleum, and intensive agriculture (MENCT, 2009). Construction of infrastructure and industries involved in the transformation of agriculture and mining products are expected to grow 10% annually, and tourism and the financial sector are expected to grow by 8% (MENCT, 2009). In addition, population growth is expected to double within the next 20 years, which may lead to increased pressures on forests for agricultural land, fuelwood and other economic opportunities (MENCT, 2009). Given the promise of rapid growth in both economic output as well as population, it is critical that the DRC develop a low-carbon growth strategy that minimizes the negative environmental consequences of development while maximizing the potential for poverty alleviation and social stability.

## Economic Sectors

According to the African Economic Outlook (2011), the largest economic sectors are agri-

culture and fisheries (38.2%), energy and water (22.4%), and mining (12.2%); the latter represents 80% of the country's exports. As much as 70% of the DRC's domestic economic activity takes place in the informal sector and is therefore not factored into GDP data (Ministère de l'Environnement, 2009).

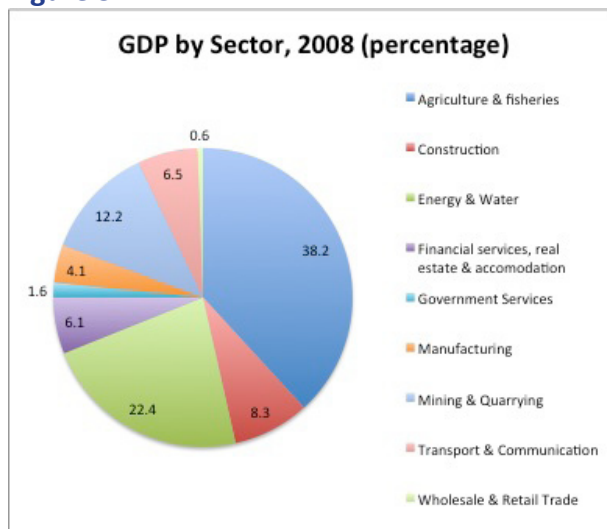
## GHG Emissions

According to the DRC reports to the UNFCCC, 75% of GHG emissions come from the agricultural sector, 85% of which is a result of slash-and-burn agriculture. Of the remaining emissions, 16% are from waste, 8% are from energy, and 2% are from commercial, illegal, and small scale logging, as well as mining operations (UNFCCC, 2003). The DRC has a net GHG emission of .04 tons per capita per year, the lowest in the world (Carbon Planet, 2007).

The current rate of deforestation in the DRC (0.25%) is lower than the global average. This is, in large part, a result of the years of political instability and as such there is a very real possibility that deforestation may increase at a rapid rate in the post-conflict period. The main drivers of deforestation and forest degradation include commercial and illegal logging, charcoal production, natural fires and human disturbances due to political instability. 14 million hectares are projected to be logged over the next 20 years, equivalent to the release of over 500 Mt CO<sub>2</sub>. Of the projected 14 million hectares, the expansion of commercial farming plantations for export is projected to account for between 3.5 and 9 million. Additionally, itinerant slash and burn techniques are projected to deforest 2.5 million hectares, or 20% of the total deforestation over the next 20 years (Greenpeace, 2011).

The DRC is the steward of an immense forest biomass, with an estimated carbon stock between 20 and 37 billion tons of carbon dioxide. The forestry sector is therefore of paramount importance to climate change mitigation efforts, not only to the country, but also to the international community. As a country emerging from a long period of internal conflict and with an important forest-based carbon stock, the country has the potential to have high

**Figure 5.**



*African Economic Outlook, 2011*

emissions due to potential deforestation, high population growth and economic development. Because of this, here is also great potential for sustainable forest management as well as mitigation in the agricultural and energy sectors. REDD+ can provide the financial incentives needed to keep the DRC's abundant forests standing. This would impact the sustainability of future policy decisions as well, such as directing agricultural expansion towards already deforested areas, reducing the need for additional deforestation. The financial gains provided by a functioning REDD+ would contribute to the DRC's promotion of a robust and comprehensive low carbon development.

There are immediate and targeted remedies to deforestation with enormous mitigation potential that remain only partially explored. For example, the use of fuel-efficient stoves would reduce fuelwood demand significantly. Furthermore, low cost and technologically viable possibilities to create charcoal briquettes out of non-timber biomass have the potential to phase out the need for timber-derived charcoal and fuelwood altogether. These initiatives would need to be facilitated through organized government and external intervention and policy.

## Political Stability

A protracted and lingering internal conflict and economic mismanagement pose significant challenges to the implementation of climate-compatible development. The conflict has led to the destruction of much of the country's infrastructure, resulting in a lack of roads and electricity. The reasons for the conflict are complex and varied, but many of them are centered on competition over access to mineral resources for export, such as copper, cobalt, zinc, diamonds, and coltan. Illicit trade in these minerals is widely considered to be responsible for fueling rebel groups.

Although fighting continues in the eastern part of the country, a peace treaty was signed in 2003 and a new government was established in 2006. The new National Assembly, led by Joseph Kabila, is in the process of establishing itself, rebuilding administrative systems, regaining control of areas governed by rebels and warlords, and has demonstrated a commitment to improved governance (Norway Ministry of the Environment, 2010). Corruption, government inefficiency and lack of transparency remain significant obstacles, but there have been modest improvements in these problems since conflict began to settle.



## Institutional Capacity

The new government has demonstrated a stated commitment to the environment and climate change, but its institutions remain very weak and lack coordination, presenting a challenge to the enforcement of laws and regulations and to the implementation of a robust and functioning low-carbon development plan. The DRC has established a Parliamentary Commission for the Environment, but it lacks expertise and inter-sectoral coordination. A National Environmental Action Plan was developed in 1992, but as of 2008 actions have been limited due to a lack of funding.

Lack of institutional capacity notwithstanding, the DRC has received a substantial amount of international attention because of its wealth in resources and substantial forest cover. The government of the DRC has received funding from the World Bank's Forest Carbon Partnership Facility (FCPF) and UN-REDD for capacity building, and is one of two countries to have signed a Readiness-Preparation Proposal grant with the FCPF. This grant was signed in March 2011 and will give the DRC USD 3.4 million to aid in its REDD+ readiness (FCPF Readiness Progress Dashboard, 2011). This grant could potentially give the DRC the capacity to strengthen its institutions. In addition, the DRC established the Ministry of Environment, Nature Conservation, and Tourism (MENCT), responsible for the institutional coordination of environment-related actions and the completion of environmental impact assessments. Using bilateral funds from Norway, this ministry created the Directorate of Sustainable Development in 2001 for the implementation of MEAs and the Climate Change Secretariat in 2010 (Walmsley & Tshipala, 2007).

## Government Commitment to Climate-Compatible Development

The DRC is a Least Developed Country and as such has incorporated NAPAs in its development plans. The climate change adaptation strategies are focused on agriculture, public health, forestry, and water resources management. Priority adaptation projects include managing and rehabilitating water reservoirs; settling rural communities, especially in areas affected by conflict; improving communica-

tion networks through radio, TV, and other means; managing forest resources; fighting erosion and land degradation; protecting coastal zones; and malaria prevention (Wingqvist, 2008).

Despite having weak institutional capacity, the DRC has been an active REDD participant, and the government has demonstrated a willingness to develop climate-compatible growth strategies. In 2009, the Prime Minister issued a decree for the establishment of an institutional organization that can facilitate a national REDD+ strategy (REDD+ Survey, n.d.). The government recognizes that its economic development is linked with its environmental management strategy. The DRC would benefit from producing a CCDP as it emerges from years of social conflict, and the government's willingness to pursue climate-compatible development will enable the country to achieve sustainable growth.

## Guyana

Located in Northern South America, Guyana is a tropical country that mainly consists of rolling highlands, low coastal plains, and a savannah in the south. It has a population of about 745,000 people, about 29% of which live in urban areas. Although population growth has been negative over the past three years, GDP growth has positively increased over the past two decades. Guyana's forest cover is an immense 76.7% of the total land area, and much of it is pristine (FAO 2010). It is likely that the poor soil quality of its forests has actually served to protect the forests, as there is little incentive for land use change to expand agricultural production. Guyana therefore enjoys low deforestation rates. Also significant is a high political commitment to low carbon development, with strong low carbon emission plans already in place. Mitigation strategies, particularly in the energy sector, should be explored in order to reduce the country's overall GHG emissions.



## Importance of Mitigation

Guyana's main source of GHG emission is from the energy sector, which is responsible for more than half of the country's annual emissions. Most of its electricity comes from thermoelectric plants that are very inefficient. These plants present losses of 40% and are characterized by frequent power outages. However, Guyana has a vast potential for hydropower generation that could supply 30 times the installed capacity (World Bank, 2007).

Guyana has begun exploring the opportunity to expand its sugarcane industry for the production of ethanol (Horna & Coviello, 2007), and requested the UN's Economic Commission for Latin America and the Caribbean (ECLA) for a study of its biofuel production potential. ECLA's report concluded that Guyana's present conditions on both energy and its agro-industry sector showed high potential for the production and use of ethanol as a source of fuel for the country (Horna & Coviello, 2007). This raises some concerns as the expansion of the sugarcane industry could potentially require conversion of forest into agricultural land, placing a heavier weight on the need to apply efficient mitigation strategies. Moreover, Guyana's rice industry production, second only to sugar, has increased dramatically over the 1990's, resulting in increases in the area cultivated. This expansion has gone from 127,000 acres in 1990 to 286,000 acres in 2000 (GRDB, 2007).

Guyana could reduce its GHG emissions by focusing on mitigation options. Increasing its energy efficiency and renewable energy capacity, exploring innovative mitigation options in its agro-industrial sector, and maintaining low rates of deforestation are three options Guyana should consider when developing a climate-compatible development strategy.

## Economic Sectors

The three largest GDP sectors are services (51%), industry (24.7%), and agriculture (24.3%) (Index Mundi, 2011). Guyana has experienced positive growth consistently for the past two decades; rates in 2006, 2007, 2008 and 2009 were 5.1%, 7.0%, 2.0% and 3.3% respectively (IMF, 2010). Although more than 75% of Guyana's area is forest cover, forestry only contributes 4.17% of GDP, earning USD 32 million (FAO, 2011), and deforestation has been relatively low. Anthropogenic drivers of deforestation are mining and industrial development, while natural drivers include flooding and drought (Guyana Forestry Commission, 2009). Wood-derived industries are the most important forest-based production in Guyana, producing sawn timber and plywood, with the latter mostly going towards exports. More than 40% of Guyana's log harvest is carried out by Barama Company Limited, which has a history of receiving concessions as big as 16000km<sup>2</sup> in areas previously not intended towards commercial use (FAO, 2011).

## Political Stability

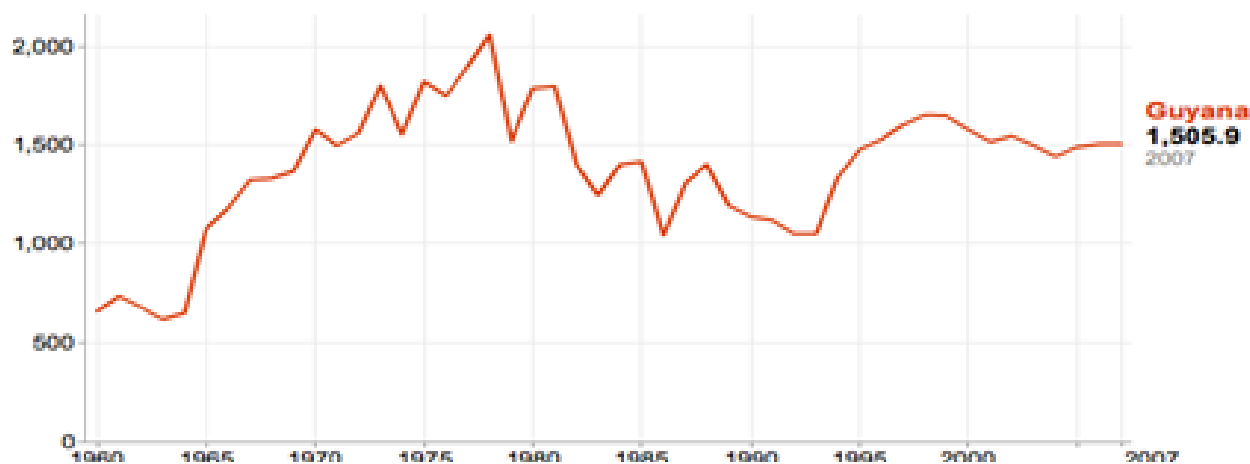
Guyana is a democracy with a multiparty system and a President chosen by majority. In 1992, Guyana experienced its first "free and fair" elections and since then, the People's Progressive Party has governed the country. However, the Worldwide Governance Indicators show that Guyana's government perfor-

mance and effectiveness has declined over time, specifically in areas such as rule of law, regulatory quality, political stability, and accountability (World Bank, 2010). According to Transparency International (2010), the country is considered highly corrupt with a Corruption Perception Index of 2.7 out of 10. The country is affected by corruption in its financial management, public procurement, judiciary system and informal economy. Moreover, corruption affects natural resource management such as mining industry and logging (Chêne, 2010).

## Institutional Capacity

Despite problems with corruption, Guyana's institutional framework has the capacity to develop and implement CCDPs. Guyana's Office of the President has an Office of Climate Change, which is responsible for developing low-carbon development strategies and has Geographic Information Systems and Information Technology units. Guyana also has a Forestry Commission tasked with providing forestry management services and communicating with stakeholders to contribute to the country's development goals (Guyana Forestry Commission, 2008). Importantly, Guyana recognizes forests as the country's most valuable asset and has consequently included REDD+ at the center of its development plan. That said, Guyana would have to have improvements in governance and public sector institutional capacity for REDD+ to be equitable and transparent (Republic of Guyana, 2010).

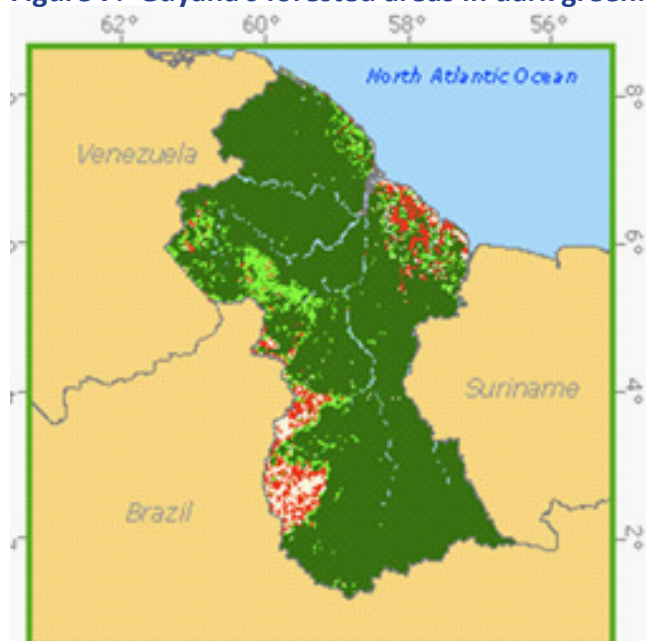
**Figure 6. Guyana's carbon dioxide emissions (tons) per year from 1960-2007.**



Source: World Bank, 2010; Chart Source: Google Public Data Explorer

Guyana has a National Low Carbon Development Strategy that promotes mitigation and adaptation policies that will lead the country towards a low carbon economy. From 2010 to 2015, it expects to reorient its economy toward low-carbon growth and create new economic sectors: hydropower, high-end fruits and vegetables, and aquaculture (Guyana Office of the President, 2010). Additionally, Guyana has a Climate Change Action Plan, which carries out the commitments of Guyana to the UNFCCC. The goals of the plan include developing the capacity to undertake GHG inventories, to conduct vulnerability assessment of economic sectors, and to facilitate adequate adaptation and mitigation to climate change.

**Figure 7. Guyana's forested areas in dark green.**



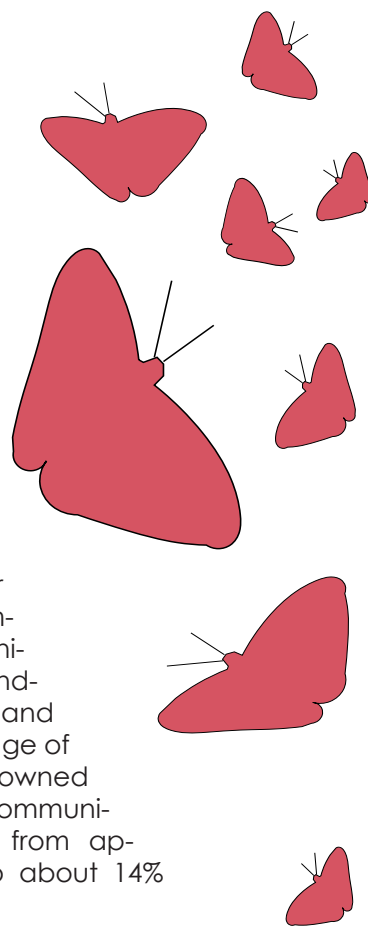
Source: FAO, 2010

## Government Commitment to Climate-Compatible Development

Significantly, Guyana's government is highly committed to involving indigenous People in its policies. The Amerindian population comprises approximately 9% of total population, and

occupies approximately 14% of land area. Amerindians play an important role in REDD+ projects and in Guyana's Low Carbon Development Strategy, and are considered to be the guardians of the forests. Guyana's Amerindian Lands Commission, which is responsible for granting land to Amerindian Communities, has been amended numerous times, and today, the percentage of Guyana's territory owned by Amerindian communities has increased from approximately 6.5% to about 14% (MOAA, 2009).

Despite government inefficiencies, Guyana has shown commitment to addressing climate risks and climate-compatible growth. The country has been actively participating in the United Nations Framework Convention on Climate Change (UNFCCC) for several years, most notably in the negotiations leading up to the Conference of the Parties in Copenhagen in 2009 (UNFCCC, 2011). It also supports international proposals to cut GHG emissions from deforestation and forest degradation in half by 2020. Its institutional framework is strong, and the country already has many components of CCDPs in place. Additionally, there is demonstrated commitment from the government to protect its extensive forests, and as such it seems likely that Guyana is not in danger of accelerated deforestation.



## Development of a Climate-Compatible Development Plan

Countries who wish to develop a CCDP and have the political capacity to do so should follow three steps: assessment of emission levels, identification of economic sectors, and selection of actions and initiatives. The CfRN (n.d.) has provided a basic framework for the development of a CCDP. The explanation of the steps here is an expansion of this framework, drawn from existing guidance for low-carbon development and actions that countries have already taken in pursuit of climate-compatible growth (CfRN, 2010; CDKN, 2010; ECA, 2009; Worldwatch Institute, 2011). Papua New Guinea is the first country to have developed a CCDP as defined by and with the aid of the Coalition. Its recent activities in preparation for implementing its CCDP, in accordance with the three steps, are briefly outlined below.

### 1. Assessment of Emission Levels

- **Baseline Emissions:** All developing countries willing to develop a CCDP should establish a baseline level of greenhouse gas emissions if they have not already done so, or update their reporting if needed. Under the UNFCCC, Non-Annex I parties are required to periodically report their national GHG emissions.
- **Business as Usual (BAU) scenario:** All developing countries willing to develop a CCDP should determine what their levels of emissions would be if a low-carbon development plan is not adopted. Normally, these scenarios are based on past trends. If and when the international community begins to broadly encourage the development of CCDPs, a common framework should be established for how BAU scenarios should be calculated.
- **Cost and Benefits of Mitigation and Adaptation:** All developing countries willing to develop a CCDP should determine what the cost and benefits associated with the implementation of a CCDP would be, in terms of job and revenue losses and gains.

### 2. Identification of Economic Sectors

- **High-carbon sectors:** Countries should identify and categorize the main economic sectors responsible for GHG emissions as well as those with potentially high GHG emissions.
- **Low-carbon sectors:** Countries should identify and categorize the main low-carbon economic sectors that are growing or already developed, and then determine whether and how these sectors can yield high levels of economic development without producing significant levels of GHG emissions.

### 3. Selection of Actions and Initiatives

- **Based on assessment of emissions levels and the identification of economic sectors,** countries should develop a Climate-Compatible Development Plan that incorporates the following measures:
  - **Development measures:** Countries should identify and promote economic development measures that are supportive of and complementary to adaptation and mitigation measures and the countries' development goals.
  - **Adaptation measures:** Countries should identify the most appropriate adaptation measures they can implement to address the consequences of climate change. This entails the identification of the main hazards, understanding the potential impacts, and prioritizing them for action. For the many developing country parties that have already conducted this process and have submitted their National Adaptation Programs of Action (NAPA) to the Secretariat of the UNFCCC, the NAPA should be reviewed and updated<sup>1</sup>.
  - **Mitigation measures:** Under the UNFCCC, developing countries are not required to develop mitigation actions. However, paragraph 65 of the Cancun Agreement encourages those willing developing country parties to develop low-carbon development strategies. Furthermore, the Copenhagen Accord established that developing countries should develop and submit Nationally Appropriate Mitigation Actions (NAMA). Therefore, developing countries willing

<sup>1</sup> The submission of NAPA is only required for Least Developed Countries. Published NAPA can be found at: [http://unfccc.int/cooperation\\_support/least\\_developed\\_countries\\_portal/submitted\\_napas/items/4585.php](http://unfccc.int/cooperation_support/least_developed_countries_portal/submitted_napas/items/4585.php)

and submit Nationally Appropriate Mitigation Actions (NAMA). Therefore, developing countries willing to engage in the development of CCDPs should already have mitigation measures ready for inclusion in their CCDPs.

- Countries should identify regulatory and institutional frameworks that should be in place for a transition towards an economy driven by low-carbon sectors. These frameworks could come in a variety of forms and would be necessarily country-specific. Examples for such frameworks include the creation of a robust environmental ministry with regulatory authority or a market for ecosystem services.
- While development strategies and plans are under the prerogative of national governments, the CCDP should be developed and implemented with the full and effective participation of all relevant stakeholders.

## Papua New Guinea's CCDP

The government of Papua New Guinea (PNG) has shown strong commitment to taking actions against climate change and has taken steps towards implementing a National Climate Change Strategy. As a signatory of the Copenhagen Accord, PNG has submitted its Nationally Appropriate Mitigation Actions. PNG has set the goal to reduce GHG emissions by 50% before 2030 and become carbon neutral before 2050 (Papua New Guinea, 2010a). PNG released an Interim Action Plan for Climate-Compatible Development for public consultation in August 2010 detailing all their actions thus far. It has completed an analysis of GHG emissions baselines and established the business-as-usual growth scenario for the next 20 years. From this analysis, they identified potential areas for abatement as well as climate change hazards and risks. Activities were carried out with consultation of all major stakeholders, including civil society, the private sector, the government and local communities.

After COP 15, PNG began developing a National Climate Change Strategy, which involved a review of the country's climate change policy and identification of priority adaptation measures and pilot projects. The government also created technical working groups to help with the strategy development process. Recognizing that their former Office of Climate Change and Environmental Sustainability had not been effective and efficient in carrying out its duties, PNG established the Office of Climate Change and Development under the National Cli-

mate Change Committee in replacement. This Office will oversee the implementation of the climate compatible development strategy, approve and implement projects including REDD+ pilot projects, act as liaison with development partners, and monitor and evaluate project performance (Papua New Guinea, 2010b).

The country's overall climate compatible development goals, as outlined in the Action Plan, are:

- 1. Economic Development:** reach GDP per capita of USD 3,000 by 2030 in accordance with the country's National Strategic Plan entitled 'Vision 2050'.
- 2. Mitigation:** a) reduce GHG emissions by 30% from 2010 levels or 50% from the business-as-usual projections by 2030, primarily through abatement measures in land use, land-use change, and forestry (LULUCF), and b) become carbon neutral by 2050 through investment in low-carbon infrastructure.
- 3. Adaptation:** Reduce vulnerability to climate change-associated risks, including gradual hazards (e.g. vector-borne diseases) and event-driven hazards (e.g. landslides, flooding) by implementing adaptation measures, such as setting up early warning systems, building levees, constructing drainage, distributing bednets to reduce risk of malaria, and others

Papua New Guinea plans to implement the strategy as part of their national development plan and is now in the process of implementing pilot projects and capacity-building programs, and expanding consultation to regional and local levels. The country's progress in these areas was recently presented at the first Global Climate Change Alliance's Pacific Technical Workshop (Papua New Guinea, 2011).

### *REDD+ in PNG's Interim CCDP*

Industries involved in LULUCF account for over 95% of PNG's emissions (Papua New Guinea, 2010). The country's analysis of abatement opportunities showed that the LULUCF sectors have the highest potential for emissions reduction. Thus, the country's commitment to Reducing Emissions from Deforestation and Forest Degradation (REDD+) and successful implementation of REDD+ projects will effectively reduce carbon emissions. PNG has taken initiative to revise national policies and enhance enforcement in order to improve the operation of REDD+ schemes. The Interim CCDP also outlines their REDD+ initiatives plans, including the development of a monitoring, reporting and verifying system.

## CONCLUSION

Reducing Emissions from Deforestation and Forest Degradation (REDD+) acknowledges the difficult dichotomy developing countries currently face; although many possess incredible environmental heritage and resources, such as tropical rainforests, preservation is oftentimes not possible on a development track. REDD+ aims to ease this conflict and realize the enormous opportunity to reduce carbon emissions from deforestation by maintaining the carbon stock in the world's forests. Recognizing their common but differentiated responsibilities within the issue of climate change, under REDD+, developed countries provide funding and capacity building to developing countries in order to keep forests standing in developing countries. The REDD+ initiative has the potential to be an effective tool to mitigate climate change and improve livelihoods in developing countries. However, if not planned and implemented with certain considerations, REDD+ could result in unintended consequences. Forests are more than just carbon, and REDD+ safeguards aim to ensure that forests continue to be recognized as a home for millions of people and a wealth of biodiversity, as well as an irreplaceable ecosystem that provides benefits far beyond its storage capacity.

Much in the same way that REDD+ safeguards acknowledge the complex and multi-dimensional role that forests play throughout the effort to curtail the forestry sector's contribution to climate change, developing countries' development plans must acknowledge the role of climate change within all aspects of their development paradigms. Climate-Compatible Development Plans (CCDPs) aim to focus on the interrelated nature of the sectors involved in development as well as the sectors that will be impacted by and contribute to climate change. CCDPs thus call for the inclusion of not only mitigation strategies, but also

adaptation strategies in development plans. An initial consideration of specific countries demonstrates the applicability and potential of CCDPs for countries of differing national circumstances.

Environmental and social problems cannot be solved in isolation. The research completed here on the Cancun safeguards provides direction for how countries can incorporate them into their REDD+ programs. The preliminary evaluation of countries' capacity to develop CCDPs aims to inform the Coalition on how they can encourage these countries to move forward and towards climate-compatible development. Although the analyses and recommendations presented here were intended to be useful in the negotiations at the June SBSTA meeting and at COP 17 in Durban, the relevance of the information extends beyond present international negotiations. This report can be used to inform national and local entities in their efforts to realize the urgent need to address and adapt to the complex and ever-evolving problem of climate change.

Old growth forest logs stacked and waiting for sale along the Capim River, a tributary of the Brazilian Amazon. Photo (c) Joel Satore/[joelsatore.com](http://joelsatore.com)



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## Appendix I: Existing Systems for Assessment of Activities

### **CCBA/CARE International REDD+ Social & Environmental Standards**

These standards were developed in collaboration with members of civil society, indigenous peoples organizations, research institutions and others. They include an argument for the inclusion of social and environmental safeguards in REDD+ programming, and a framework for developing safeguard indicators. The safeguards each have a number of broad criteria that must be met, with a framework for indicators to help national governments development appropriate indicators for their projects. Current pilot projects have seen these indicators established. These standards served as the basis for our recommendations.

### **Forest Carbon Partnership Facility Standards**

The Forest Carbon Partnership Facility (FCPF) assists developing countries in their efforts to engage in REDD+ activities by supporting REDD+ readiness. Throughout this process, the FCPF promotes Strategic Environmental and Social Assessment (SESA) guidelines to be included in participating countries' Readiness Preparation Proposals (R-PP). The guidelines are significant in that they stress the importance of strong stakeholder engagement to create regional ownership of the REDD+ project. A shortcoming of the Standards is that they do not specify standards or criteria by which country progress is measured as the REDD+ project matures.

### **Forest Stewardship Council**

The Forest Stewardship Council (FSC) certification process applies standards, certification, and verification of sustainable forest management practices. The FSC outlines ten principles and criteria that describe how forests should be managed to meet the social, economic, ecological, cultural, and spiritual needs of present and future generations (Forest Stewardship Council, 1996). Criteria are set at a global level certifying favorable forest management practices, and indicators are set at the national or regional level, allowing FSC to adapt to national and regional complexities. These broad criteria coupled with locally appropriate indicators, which specify verification actions, have made the FSC successful in protecting social and environmental values.

In the reporting process, FSC is respected for its delineation of high conservation value forest areas, employment of effective ground-based auditing of specific logging practices, stakeholder engagement, and independent third-party verification of compliance with social and ecological co-benefits, which are included in the ten principles. The costs of auditing are reasonable in group-certification contexts, as the costs can be spread over multiple stakeholders, thus providing more incentive to follow through on the reporting process.

## **Global Witness's Independent Forest Monitoring**

Independent Forest Monitoring (IFM) is a monitoring program designed to improve governance and encourage transparency in forestry projects. IFM is a system for assessing legal compliance using independent third party auditors with the assistance of state authorities. Global Witness monitors, which consist largely of civil society organizations, have been successful in tracking and reporting illegal and corrupt activities, shutting down illegal operations, increasing issuance of fines, motivating forest officials in law enforcement, increasing transparency through open access to reports, increasing skill levels, and increasing and improving enforcement. Challenges that still remain include communication issues between the monitoring body and the government, relocation of illegal activities into neighboring regions and countries, and minimal long-term stable funding sources (Global Witness, 2009).

## **The Voluntary Carbon Standard**

The Voluntary Carbon Standard (VCS) is a standard for approval of credible voluntary offsets and is an example of a third-party auditing system. The five main criteria for validation and verification are:

- Validation and verification must be performed by an outside verifier.
- Validation needs to be in accordance with ISO 14064-3:2006.
- The validation statement must be created and addressed to a central body VCS board.
- Greenhouse gas assertions must express if they're hypothetical, projected, or historical in nature.
- Verification requirements naturally differ depending on the size of the project

In order to mitigate the risk of reversal the standard specifies the development of a mechanism called the AFOLU (Agriculture Forestry and Other Land Use) carbon buffer fund whereby a specific number of credits are set aside at the outset of project implementation and these credits are subject to reduction if proper verification documents are not submitted on a quadrennial basis.

## **Panda Standard - China's Voluntary Carbon Standard**

The Panda Standard (PS) is a credit system designed to encourage the reduction of greenhouse gas emissions and increase capacity for a domestic voluntary carbon market. Initially, the program was started to focus on poverty alleviation in poor agriculture and forest areas in China. Currently, a registry is under development to manage the transfer and retirement of PS credits. PS also includes a mechanism to address the risk of reversal called the 'Panda Buffer Pool.' The Pool sets aside a reserve of credits after a risk assessment, which will be retired if reversal does occur, thus, guaranteeing the permanence of the credits.

## Appendix II:

### Draft Decision on the adoption of safeguards referred to in paragraph 71(d) of the Cancun Agreement

While safeguards were formally included in the Cancun Agreement, a system for assessing the implementation process has not been established and is the next step in the advancement of these safeguards. The following draft decision has been circulated to country representatives and UN delegates in hopes that it may be submitted at the next Conference of Parties (COP 17) in 2011 in Durban, South Africa.

#### *The Conference of the Parties,*

**Recalling** the relevant provisions of the “Cancun Agreement,” in particular its Section C, “Policy approaches and positive incentives on issues relating to reducing emissions from deforestation and forest degradation in developing countries; and the role of conservation, sustainable management of forests and enhancement of forest carbon stocks in developing countries,”

**Also Recalling** Annex I of the Cancun Agreement,

**Emphasizing** that the Safeguards referred to in paragraph 71(d) of the Cancun Agreement are an important tool for ensuring that activities undertaken by Parties on issues relating to reducing emissions from deforestation and forest degradation are fully inclusive of all relevant stakeholders, in particular Indigenous People and Local Communities, and are promoting good governance, conservation, and sustainable forest management,

- 1. Adopts** the “Guidelines for the Development and Assessment of Safeguards” annexed to the present Decision;
- 2. Encourages** developing country Parties aiming to develop a system for providing information on Safeguards referred to in paragraph 71(d) of the Cancun Agreement to use the guidelines as a basis;
- 3. Invites** developing country Parties, willing to do so, to submit to the COP, for consideration and approval, their system for providing information on Safeguards;
- 4. Requests** the Secretariat to provide, upon request, support to developing country Parties aiming to develop a system for providing information on Safeguards referred to in paragraph 71(d) of the “Cancun Agreement;”
- 5. Invites** developed country Parties, in a position to do so, to provide assistance, including financial, technical, and technological support, to developing country Parties aiming to develop a system for providing information on Safeguards referred to in paragraph 71(d) of the “Cancun Agreement.”

## Appendix III: CCDP - Additional country considerations

As discussed above, ten countries were evaluated for political stability and government commitment. Summaries of our preliminary research for the seven countries not chosen for in-depth exploration provided below. These countries were chosen from "Fast-Track Development of Transformative Climate-Compatible Development Plans and Building of Regional and Local Capacities", a Coalition for Rainforest Nations (2010) project document that outlines countries that have low-carbon development initiatives.

**Table 3. Metrics used to determine level of government willingness and commitment.**

| Country                     | Signatory of Copenhagen Accord | Signatory of Selected MEAs <sup>1</sup> | Report GHG Emissions to UNFCCC <sup>2</sup> | Report NAMAs & NAPAs to UNFCCC <sup>3</sup> | # of CDM projects <sup>4</sup> | Existing Low Carbon Development Plans                    |
|-----------------------------|--------------------------------|-----------------------------------------|---------------------------------------------|---------------------------------------------|--------------------------------|----------------------------------------------------------|
| <b>Colombia</b>             | Yes                            | 5                                       | 2001,2010                                   | Yes                                         | 27                             | Not explicitly, but do incorporate low carbon strategies |
| <b>Ecuador</b>              | No                             | 6                                       | 2000                                        | No                                          | 16                             | Not explicitly, but do incorporate low carbon strategies |
| <b>Ethiopia<sup>5</sup></b> | Yes                            | 4                                       | 2001                                        | Yes                                         | 1                              | No                                                       |
| <b>Ghana</b>                | Yes                            | 5                                       | 2001                                        | Yes                                         | 0                              | No                                                       |
| <b>India</b>                | Yes                            | 6                                       | 2004                                        | Yes                                         | 632                            | Yes                                                      |
| <b>Indonesia</b>            | Yes                            | 5                                       | 1999,2011                                   | Yes                                         | 62                             | Yes                                                      |
| <b>Liberia<sup>6</sup></b>  | Yes                            | 5                                       | None                                        | NAPA: Yes, NAMA: No                         | None                           | In development with assistance of Conservation Int'l     |

<sup>1</sup>Six relevant (MEAs) were chosen. Countries denoted as "4" are party to the following MEAs: Convention on Biological Diversity, Convention on International Trade in Endangered Species of Wild Fauna and Flora, the Kyoto Protocol, and UN Convention to Combat Desertification. Countries denoted as "5" are party to the International Tropical Timber Agreement of 1983 and 1994 in addition to the above listed MEAs. Countries denoted as "6" are party to all of the former as well as the Antarctic-Environmental Protocol.

<sup>2</sup>Year(s) GHG emissions data was reported to the UNFCCC. For the years that the country has data for, see: [http://unfccc.int/national\\_reports/non-annex\\_i\\_natcom/items/2979.php](http://unfccc.int/national_reports/non-annex_i_natcom/items/2979.php)

<sup>3</sup>All developing countries are requested to develop and report Nationally Appropriate Mitigation Actions (NAMA) and only Least Developed Countries are requested to develop and report National Adaptation Programmes of Action (NAPA).

<sup>4</sup>CDM projects that have been registered.

<sup>5</sup>Least Developed Country

<sup>6</sup>Least Developed Country

## Colombia

Colombia, with a population of 44.4 million and located in the northwestern tip of South America, generates 0.41% of the World's GHG emissions, or 1.43 tons of CO<sub>2</sub>/capita/year (World Bank, 2010). Although Colombia has a history of land struggle, peasant uprising, and armed civil conflict dating back to the 1940s, it is characterized as having high human development according to the Human Development Index, which rates parameters such as life expectancy at birth, literacy rate, and gross national income per capita (UNDP, 2010).

### Political Stability and Capacity

Current armed civil conflict includes several different guerrilla groups and private armed forces in addition to the Colombian Military. Colombia has signed UNDRIP, and many indigenous groups are represented through the ONIC (Colombian National Indigenous Organization). Where there is no armed conflict, the Colombian government has made effort to observe land tenure laws, but this is made difficult across the country due to the territorial control guerrilla groups hold over certain regions.

### Government Commitment to Climate-Compatible Development

The Colombian government has participated in the UNFCCC system for many years, and is a signatory to both the Copenhagen Accord and the Cancun Agreement. Colombia pushes further for a legally binding agreement that includes Bali Action Plan elements, the development of market mechanisms that support CDM, and a resolution to resolve REDD+ as a climate change mitigation mechanism (Colombia, 2010). Within its borders, Colombia has adopted ambitious environmental goals. They have Sustainable Sectoral Development Plans that include adaptation and mitigation actions, and have reported NAMA to the UNFCCC. Colombia is pursuing an aggressive renewable energy platform and has committed to using its own resources, both public and private, to ensure that at least 77% of the total energy capacity installed by 2020 will be generated from renewable sources (UNFCCC, 2010a). Furthermore, Colombia has committed to eliminating Amazonian deforestation by 2020. Other components of its NAMA include biofuel production, actions related to carbon markets, and the promotion of CDM opportunities. Although Colombia is not a REDD+ country, this is largely due to civil conflict rather than a disagreement with REDD+ as a mechanism for climate change mitigation. In fact, the government has publically recognized the importance of REDD+, and is encouraging reforestation through the use of Forest Incentive Certificates (Colombia Ministry of the Environment, 2010).

### Recommendation for Further Analysis

Due to the government's commitment to climate-compatible development, its active participation in the UNFCCC system, and its support of REDD+, it is recommended that Colombia be further analyzed for potential collaboration in developing a CCDP. Although Colombia is not in the Coalition, the "Fast Track" document, produced by the Coalition in collaboration with McKinsey, states that climate-compatible development countries will be selected according to German ODA priorities; Colombia was highlighted as one of the potential countries.

## Ecuador

Located on the northwest coast of South America, Ecuador has a population of 15 million and generates 0.29% of the world's GHG emissions, or 9.8 tons of CO<sub>2</sub>/capita/year (USCAN, 2009). They have high human development according to the Human Development Index, and a 91% literacy rate (UNDP, 2010). Ecuador is a highly indigenous country with over 14 indigenous ethnicities. Indigenous peoples enjoy broad representation in the government through the National Ecuadorian Indigenous Peoples Confederation, and the indigenous movement is considered the most powerful in the Americas (Cott, 2010).

### Political Stability and Capacity

Like many countries in the region, Ecuador has a long history of coups and land tenure conflicts. No president elected by popular vote has finished his term since 1996, and the Political Instability Index places Ecuador as the 14th most unstable country in the world (EIU, 2011c). Transparency International's 2010 Corruption Perception Index also considers Ecuador a corrupt country. However, new efforts to improve transparency are being pursued, including making all processes and documents of public agencies available to the public through the use of the internet.

### Government Commitment to Climate-Compatible Development

Within international climate change negotiations and policies, Ecuador has often expressed reticence at participating: it did not sign the Copenhagen Accord giving the rationale that the agreement is not legally binding, does not report NAMA and has stated that the methods at Kyoto were inappropriate and unfair (Ecuador, 2010). However, this reticence is largely due to a view that international policies should be more aggressive at combating climate change and protecting the environment. Ecuador calls for an ambitious post-Kyoto commitment whereby countries reduce GHG emissions by 50% by 2020 and 90% by 2090. The government also supports Bolivia's Declaration of Nature's Rights and calls for the world to join it and increase its legitimacy (Ecuador, 2010). Although Ecuador supports the concept behind REDD+, they have put forth the idea that countries should be compensated for their Net Avoided Emissions (NAE), rather than just those from REDD+ or CDM.

Nationally, Ecuador has taken impressive strides to protect the environment, with a recently created Office of Climate Change located within the Ministry of Environment. The country adopted a new constitution in 2008 that explicitly states that development plans should follow *buen vivir* (good living) by respecting the integrity of natural resources and the environment (Ecuador, n.d.). They have a National Authority for Clean Development Mechanism that supports all CDM projects, and are currently developing a REDD+ National Action Plan. Other significant initiatives include the Yasuni ITT, which is a proposal to keep the largest oil reserves of the country underground in exchange for compensation from the international community, and the Programa Socio Bosque (Forest Partner Program), which is a voluntary program whereby families or communities that own forest land are compensated by the government to maintain the country's forests (Ecuador, n.d.).

### Recommendation for Further Analysis

Due to the government's commitment to climate-compatible government, its progressive environmental initiatives, its strong support of indigenous peoples, and its efforts to increase transparency, it is recommended that Ecuador be further analyzed for potential collaboration in developing a CCDP.

## Ethiopia

Situated in the horn of Africa, Ethiopia has a population of 85 million, and low human development (UNDP, 2010), with a literacy rate of only 42.7% (CIA, 2011) and a high population growth rate. When combining the population growth rate with the observation that the economy heavily depends on agriculture, the susceptibleness of the country to the adverse consequences of climate change is magnified. Once LULUCF is taken into account, 67% of the country's GHG emissions come from agriculture (Ellis et al., 2009), further highlighting the importance of an integrated plan that focuses on the mitigation, economic and adaptation potential of agriculture.

### Political Stability and Capacity

Transparency International (2010) characterizes Ethiopia as corrupt, placing it at 20th out of 47 African countries. Although 45 different ethnic groups (out of more than 80) are represented in the House of Representatives, the government holds 99% of the seats in Congress (Ethiopia, 2011). Furthermore, all land belongs to the state (Ethiopia Constitution, article 40), meaning that citizens may only lease or rent land. Only 0.8% of the total population receives tertiary education (WRI, 2003), and many of those who do finish their studies leave the country. The International Organization for Migration states that there are likely "more Ethiopian doctors in Chicago than in Ethiopia itself" (Winch, 2007).

### Government Commitment to Climate-Compatible Development

Being a Least Developed Country (LDC), Ethiopia has established NAPA as well as NAMA (UNFCCC, 2011). The NAPA deals mainly with water and agricultural issues (Tagege, 2007), while the NAMA are centered around the generation of electricity through hydropower (Ethiopia's Environmental Protection Agency, 2010). Although the government recognizes the risks of climate change in official documents, translating these policies into results-based actions is fragmented and inconsistent. There is no national climate change strategy, a lack of coordination between ministries, limited mitigation activities, and few opportunities identified beyond hydropower, bio-fuels, agriculture and forests (Ellis et al. 2009).

### Recommendation for Further Analysis

Ethiopia would certainly benefit from developing a CCDP due to its vulnerability to the impacts of climate change. However, due to its lack of coordination between government ministries, and low participation in existing climate change initiatives, it is not recommended that Ethiopia be further analyzed for potential collaboration in developing a CCDP. Furthermore, Ethiopia is not in the Coalition, although the "Fast Track" document, which states that CCD countries will be selected according to German ODA priorities, does highlight Ethiopia as one of the potential countries. If Ethiopia coordinates its policies and creates the necessary structure to implement policies, they could easily benefit from participating in existing programs such as the FCPF or UN-REDD.

## Ghana

Located in West Africa, Ghana has a population of 25 million inhabitants (CIA, 2011) and a literacy rate of 57.9%. Only 5% of the population receives post secondary education (Lankarani, 2011). The country enjoys relatively low GHG emissions as most power is generated by hydropower. Furthermore, due to its low rates of deforestation, Ghana's forests are actually a carbon sink (Ghana's Environmental Protection Agency, 2001).

### Political Stability and Capacity

Ghana has often been referred to as the "black star of Africa" for its early attainment of independence in 1957, and has successfully held democratic elections since 1992 (Gary, 2010). However, Transparency International (2010) places Ghana at 4.1 out of 10 on its corruption index, making it the highest-ranking country among West African states. Still, local communities have a strong ability to protect their rights to customarily held lands, due to the integration of customary and indigenous land laws into the common law administered by the state (Crook, 2007).

Although Ghana is widely seen as a model by donor countries because of its economic and political stability, thriving civil sector and independent media, the recent discovery of large oil and natural gas deposits off its coast will be a test to the government's transparency and willingness to participate in an economy-wide plan for climate-compatible development. This discovery will immediately vault the country into a 'medium developed country' (Gary, 2010), and vast amounts of wealth from oil extraction may place pressure on ministerial departments to become less transparent. Further, it will dramatically increase energy's contribution to the country's total GHG emissions.

### Government Commitment to Climate-Compatible Development

Ghana has developed a NAMA, which deals mainly with the generation of electricity through alternative sources (Ghana's Environmental Protection Agency, 2010). The country recognizes the need for mitigation and adaptation actions, and has also created a National Climate Change Adaptation Strategy with the support of UNEP and UNDP (UNEP & UNDP, 2011). However, climate change is given more importance in the country's medium-term plan rather than in its long-term plan (National Development Planning Commission, 2010).

### Recommendation for Further Analysis

Due to its economic and political stability and the existence of a National Climate Change Adaptation Strategy, it is recommended that Ghana be further analyzed for potential collaboration in developing a CCDP. Collaboration with Ghana for this purpose is especially timely as a CCDP could serve to prevent the negative environmental impacts that may result from the extraction of the recently discovered oil and natural gas deposits. Additionally, a CCDP may protect Ghana's largely in-tact forests from any future shifts in deforestation pressures.

## India

India has a relatively low per-capita carbon footprint, emitting 1.2 tons per-capita in 2007 compared to the global average of 4.4 tons. However, 400 million people still lack access to electricity (World Bank, 2009). As affluence and access to energy sources increases, greater demands will be placed on the forest, industry, and agricultural sectors, and per-capita GHG emissions will likely increase.

### Political Stability and Capacity

India faces both domestic and foreign terrorist threats, a strained political relationship with Pakistan, and territory disputes with China due to military build up in Tibet (EIU, 2011c). That India is a member of the ADB-OECD Anti-Corruption Action Plan for Asia-Pacific, the UN Convention against Corruption, and the UN Convention against Transnational Organized Crime (Transparency International, 2009) signals that India does recognize and take action with corruption locally and in the international arena. According to the Economist Intelligence Unit, India is a “moderate risk” for political stability, with an index of 4.5 out of 10. This index has remained unchanged since 2007 (EIU, 2011b).

Today, discrimination based on caste is illegal, but the law is still being violated in rural areas and certain states are revitalizing traditional village councils and democratic participation at village levels (U.S. Department of State, 2010). Land rights and tenure issues are still convoluted and rural development and carbon development will require inclusive participation of the hundreds of thousands in poverty. The customary land rights of tribal people have been undermined by laws and other reforms, leading to a steady loss of their land (USAID, n.d.). According to the same resource, many people living in poverty, minorities, and lower castes have inadequate access to natural resources and opportunities that would allow Indians to experience economic growth.

### Government Commitment to Climate-Compatible Development

In its letter to the UNFCCC indicating their association with the Copenhagen Accord, India committed to reduce 20 to 25% of its carbon intensity by 2020 (USCAN, n.d.) According to a World Bank study, these reductions can be met while expanding energy services and reducing poverty (World Bank, 2009). However, in 2009 India’s Minister of Environment unequivocally stated that India would not commit to legally binding emissions reductions (Kessler, 2009). India developed a National Action Plan on Climate Change (NAPCC) in 2008, highlighting existing and future policies that will address climate mitigation and adaptation (The Pew Institute, 2008). India has an Office of Climate Change housed in the Ministry of Environment and Forest (MoEF), which is responsible for the country’s climate change actions and negotiations (MoEF, n.d.).

### Recommendation for Further Analysis

Although the government has a National Action Plan on Climate Change as well as an Office of Climate change, it is not certain where the political commitment lies with respect to low-carbon development. In addition, India is so much more complex than the other countries surveyed that a recommendation for potential collaboration in developing a CCDP is outside the scope of this report. It should also be noted that India is not in the Coalition, although the “Fast Track” document, which states that CCD countries will be selected according to German ODA priorities, does highlight India as one of the potential countries.

## Indonesia

Indonesia is a nation of islands, and as such is susceptible to sea level rise and extreme weather events. Further, anticipated changes in temperatures will impact food production and the prevalence of vector born diseases. Indonesia produces 4.73% of the world's GHG emissions and 34% of the global LULUCF emissions, largely due to its high deforestation rate (Sari et al., 2007). The emissions from energy and transport sectors have also been increasing and are expected to triple over the next 25 years. This is due in part to barriers to clean and renewable energy sources as well as government policies that have promoted fossil fuel based development. (Sari et al., 2007).

### Political Stability and Capacity

According to the Economist Intelligence Unit's Political Stability Index, Indonesia has seen its political instability rise three points over the past four years, from 3.8 to 6.8 out of 10 (EIU 2011c). There is little government support for renewable energy adoption. Due to a lack of financial incentives, there are currently barriers to the adoption of low carbon energy sources. As a result, Indonesia's renewable energy use is vastly under-developed. Furthermore, Indonesia has enormous CDM potential that is considered under-utilized, including energy efficiency measures, and renewable adoption (Sari et al., 2007).

### Government Commitment to Climate-Compatible Development

President Soesilo Bambang Yudhoyono, at the G20 summit in Sept 2009 (before COP 15) pledged a reduction of 26% of GHG emissions by 2020, stating that with international support the country could see reductions up to 41% (WRI, 2010). The government has also shown its willingness to cooperate with other countries and foreign organizations and advocacy groups. Indonesia has completed a National Action Plan for GHG Emission Reduction 2010-2020. The Ministry of Environment along with National Development Plan Agency and National Council on Climate Change coordinated the Action Plan based on submission from all other sectors in national and local level. However, the government's action plan relies significantly on external support/funding, and does not address LULUCF and deforestation (the primary driver of GHG emissions).

Indonesia has a low carbon development plan called Indonesia Climate Change Sectoral Roadmap (ICCSR). It was launched in 2010 and is meant to guide the central and local governments toward low carbon development. ICCSR is comprised of strategies for nine sectors: forestry, energy, industry, transport, waste, agriculture, ocean & fisheries, water, and health. The priorities for mitigation include increasing renewable energy sources, reducing gas flaring, biofuels, the development of a mass transit system, energy efficiency and 'self sufficient energy villages' throughout the islands (Dalkmann & Binsted, 2010).

### Recommendation for Further Analysis

Due to the government's commitment to reduce GHG emissions (albeit largely dependent on international financial support), the existence of a low carbon development plan, and the huge potential for mitigation from mechanisms such as REDD+, it is recommended that Indonesia be further analyzed for potential collaboration in developing a CCDP.

## Liberia

Liberia is the only country on the UN list of LDC that has yet to report GHG emissions. It relies heavily on its forestry sector and on the export of abundant natural resources. Because of this and because the country is emerging from long periods of conflict with now an unemployment rate of 85%, Liberia can benefit considerably from developing and implementing a CCDP. Despite Liberia's difficulties, the country has demonstrated its willingness to receive assistance from international organizations and commitment to addressing climate change.

### Political Stability and Capacity

Liberia's institutions of accountability have been undermined by internal conflicts. Hence, meaningful progress in coordination of national efforts to address climate change is also limited. In 2010, a Transparency International poll cited Liberia as the country with the highest rate of bribery to attract government services. In recognition of this, Liberia has entered into a groundbreaking financial management assistance program with the World Bank called Governance and Economic Management Assistance Program (GEMAP), which shows its commitment to reform and willingness to take the great strides needed to put it on a path to sustainability. It also demonstrates Liberia's willingness to work successfully with international organizations.

Land tenure is noted as a root cause of conflict in Liberia, and land disputes make up the majority of cases in statutory courts. There is no land information system that tracks and communicates land ownership. Only recently in 2003 was a law passed which removes gender bias from land inheritance systems (USAID, 2011). The judicial system is weak and lacks capacity to adjudicate land disputes properly. However, USAID is working with Liberia develop its legal and technical land tenure capacities (USAID, 2011).

### Government Commitment to Climate-Compatible Development

Liberia is a signatory of the Copenhagen Accord and as such, has submitted NAMA. As an LDC, it has also developed a NAPA (UNFCCC, 2010a). The president, Johnson-Sirleaf, has taken great strides in promoting sustainable forest management and the government has formed a national carbon working group to document the potential of carbon financing and developed a national forest management strategy. They do not have an office of climate change but they do have an environmental protection agency that was set up with assistance from UNEP (Liberia Environmental Protection Agency, n.d.).

### Recommendation for Further Analysis

Although Liberia is politically unstable and lacks institutional capacity, it is clear that the government is taking steps to ameliorate that. Furthermore, they show a strong commitment to enhancing environmental protection, most notably in the forestry sector. For these reasons, it is recommended that Liberia be further analyzed for potential collaboration in developing a CCDP.