

Climate change and forestry legislation in support of REDD+

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ACRONYMS AND ABBREVIATIONS

ADP Ad Hoc Working Group on the Durban Platform for Enhanced Action

AWG-KP Ad Hoc Working Group on Further Commitments for Annex I Parties under

the Kyoto Protocol

AWG-LCA Ad Hoc Working Group on Long-term Cooperative Action under the

UNFCCC

BASIC Brazil, South Africa, India and China

BCCSAP Bangladesh Climate Change Strategy and Action Plan

CASS Chinese Academy of Social Sciences
CCC Climate Change Commission (Philippines)

CCP Chinese Communist Party
CERs Certified Emissions Reductions
CBD Convention on Biological Diversity
CDM Clean Development Mechanism
CONAFOR National Forest Commission (Mexico)

COP Conference of the Parties

CSA Carbon Sequestration Agreement (Australia)

DEWNR Department of Environment, Water and Natural Resources (Australia) **DENR** Department of Environment and Natural Resources (Philippines)

DSE Department of Sustainability and Environment

ETS Emission Trading Scheme

EU European Union

FAO Food and Agriculture Organization of the United Nations
FCMA Forest and Carbon Management Agreement (Australia)

FRA FAO's Global Forest Resource Assessment

GDP Gross Domestic Product
GHG Greenhouse gases

IDP Integrated Development Plans (South Africa)
 IPPC Intergovernmental Panel on Climate Change
 IRR Implementing Rules and Regulations (Philippines)

ITCCCM Inter-sectoral Technical Committee on Climate Change Mitigation of the

Environmental National Council (Colombia)

MARN Ministry of Environment and Natural Resources (Guatemala)
NAPA National Adaptation Programme of Action (Bangladesh)

NAPCC National Action Plan on Climate Change

NDSD National Director of Sustainable Development (Argentina)
NFSCC National Framework Strategy on Climate Change (Philippines)

NPCC National Policy on Climate Change (Brazil)

PK Protocol of Kyoto

PNRPS Philippines National REDD+ Strategy
PPP Permanent Preservation Areas (Brazil)

REDD+ Reducing emissions from Deforestation and forest Degradation, sustainable

management of forest, conservation and enhancement of forest carbon stocks

RMB Renminbi, Chinese currency

UNDRIP United Nations Declaration on the Rights of Indigenous Peoples UNFCCC United Nations Framework Convention on Climate Change

INTRODUCTION

As countries are generally becoming more experienced in the field of climate change, developing relevant adequate national legislation is becoming an increasingly important aspect of the international response to climate change. The progressive alignment of legal frameworks with the relevant international agreements such as the United Nations Framework Convention on Climate Change, is of paramount importance for countries. In this regard countries are in the process of adapting their laws as a response to climate change and REDD+ concerns, taking into account relevant UNFCCC decisions as described in the next section.

REDD+ is a climate change mitigation solution that the United Nations has developed. It is an effort to create a financial value for the carbon stored in forests, offering incentives for developing countries to reduce emissions from forested lands and invest in low-carbon paths to sustainable development. It goes beyond deforestation and forest degradation, and includes the role of conservation, sustainable management of forests and enhancement of forest carbon stocks.

This paper outlines the international response to climate change at the global level and provides examples of countries that have taken legislative action in line with the objectives of REDD+ to combat the effects of climate change. It highlights the ways legislation reflects countries commitments to REDD+ and examines the linkages between REDD+, forest, and climate change laws using examples from Asia-Pacific, Latin America and Africa. The aspects of the selected legislation that are analyzed in this paper include forest and wildlife resources management including planning, administration, decentralization processes, as well as use and conservation aspects that impact the implementation of REDD+. Other elements considered relate to crosssectoral coordination, the effective participation of relevant stakeholders in REDD+ decision-making processes, legal arrangements required for national forest monitoring systems (NFMS) or measurement, reporting and verification (MRV), the equitable distribution of benefits from REDD+ activities, definitions of REDD+ terms, and the formalization and protection of forest tenure rights. In relation to the general issue of climate change mitigation, several countries have enacted forest legislation that recognizes the use of forests as greenhouse gas sinks, or otherwise sets out a policy of forest-based mitigation.

The paper does not study an exhaustive list of countries but rather provides a snapshot of the ways in which different countries have started to align their national legislation with international agreements. While there are a plethora of positive examples, more coherence and consistency is required for REDD+ to be effectively incorporated into national legislation.

REDD+ A brief history

The United Nations Framework Convention on Climate Change (UNFCCC) was signed at the United Nations Conference on Environment and Development in 1992 and entered into force on 21 March 1994.

The objective of the UNFCCC is to stabilize greenhouse gas emissions "at a level that would prevent dangerous anthropogenic (human induced) interference with the climate system". It states that "such a level should be achieved within a time-frame sufficient to allow ecosystems to adapt naturally to climate change, to ensure that food production is not threatened, and to enable economic development to proceed in a sustainable manner". Conferences of the Parties (COP's) have taken place annually since 1994 and provide Member countries with the opportunity to update and coordinate the international response towards climate change.

Linked to the UNFCC is the Kyoto Protocol, an international agreement designed to enforce the UNFCCC, which commits its Parties by setting internationally binding emission reduction targets. The Kyoto Protocol was adopted in Kyoto, Japan, on 11 December 1997. Due to a complex ratification process, it entered into force on 16 February 2005. It commits industrialized countries to stabilize greenhouse gas emissions based on the principles of the Convention. It sets binding emission reduction targets for thirty-seven industrialized countries and the European Community in its first commitment period. It only binds developed countries because it recognizes that they are largely responsible for the current high levels of greenhouse gases emissions in the atmosphere, which are the result of more than 150 years of industrial activity. It places a heavier burden on developed nations under its central principle of "common but differentiated responsibility". 3 Its first commitment period started in 2008 and ended in 2012. In Doha, Qatar, on 8 December 2012, the 'Doha Amendment to the Kyoto Protocol' was adopted. The amendment includes new commitments for Annex I Parties to the Kyoto Protocol who agreed to take on commitments in a second commitment period from 1 January 2013 to 31 December 2020^4 .

Negotiations on REDD+ can be traced back to the 11th session of the UNFCCC COP, Montreal, in 2005, where it was raised by Papua New Guinea and Costa Rica as an agenda item. The proposal was supported by eight other parties and there was general agreement on the importance of the issue in relation to addressing climate change, particularly in light of the large impact that deforestation activities in developing countries have on global greenhouse gas emissions. A contact group was subsequently established and under the UNFCCC's Subsidiary Body for Scientific and Technological Advice (SBSTA); a two year process to address the issue of reducing emissions from deforestation was initiated. Between 2006 and 2008, several technical workshops on the issue were held and discussions under the UNFCCC process

¹ Text of the UNFCCC, article 2.

² Text of the UNFCCC, article 2.

³ Text of the UNFCCC, article 3.1.

⁴ Official webpage of the UNFCCC.

focused on the identification of drivers of deforestation, scientific, technical and methodological issues relating to estimating and monitoring emissions, and costs and technical barriers for the implementation of REDD activities.

In Bali, December 2007, The Bali Road Map was adopted at the 13th Conference of the Parties and the 3rd Meeting of the Parties. The Road Map is a set of forward-looking decisions which represent the work that needs to be done under various negotiating 'tracks' in order to achieve a stable climate for the future. The Bali Road map included the Bali Action Plan which provided some early methodological guidance on REDD+ under Decision 1/CP.13. The consideration of 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" was also part of Decision 1/CP.13. In this way, REDD+ was effectively incorporated into the Bali Action Plan. The discussions in Bali represented a shift in approach under the UNFCCC from just Annex I countries implementing mitigation actions to all Parties doing so, and hence laid the foundations to encourage non-Annex I Parties to implement Nationally Appropriate Mitigation Actions (NAMAs) that can be Measured, Reported and Verified (MRV).

Since COP13 in Bali, the UNFCCC has progressively adopted decisions related to REDD+. Subsequent decisions have provided guidance and clarified the rules and modalities surrounding the implementation of REDD+. During the COP 15 meeting of the UNFCCC in Copenhagen in 2009, several principles and methodological guidelines were defined through the adoption of decision 4/CP.15. At COP 15, the Ad Hoc Working group on Long-term Cooperative Action under the Convention (AWG-LCA) started drafting a decision for REDD+. The draft text under consideration of the AWG-LCA covers the core elements for implementing REDD+ activities, including: scope of activities that contribute to mitigation action in the forest sector in developing countries, guiding principles, safeguards, phases of implementation, means of implementation and measurement, reporting and verification of action and support.

COP15 advanced many key issues:

- It raised climate change policy to the highest political level;
- It advanced the negotiations on the infrastructure needed for well-functioning, global climate change cooperation;
- It produced the Copenhagen Accord. It was not adopted by all governments, but it advanced a number of key issues; and
- It committed developed countries to USD 30 billion in fast-start financing (in 2010-2012) for adaptation and mitigation in developing countries, with priority given to the least developed countries⁶.

⁵ Decision 1, COP 13

⁶ http://unfccc.int/key_steps/bali_road_map/items/6072.php

All of this momentum was built upon in Cancun in December 2010 at COP16. In Cancun, one of the most important decisions in relation to REDD+ was adopted. Decision 1/CP.16 (also known the "Cancun Agreements") sets out the scope of REDD+. Paragraph 70 of Decision 1/CP.16:

"Encourages developing country Parties to contribute to mitigation actions in the forest sector by undertaking the following activities, as deemed appropriate by each Party and in accordance with their respective capabilities and national circumstances:

- (a) Reducing emissions from deforestation;
- (b) Reducing emissions from forest degradation;
- (c) Conservation of forest carbon stocks;
- (d) Sustainable management of forests;
- (e) Enhancement of forest carbon stocks."

The Cancun Agreements include the most comprehensive package ever agreed by Governments to help developing nations with climate change and are often considered the largest collective effort the world has ever seen to reduce emissions in a mutually accountable way as in Cancun countries decided to make their emission reduction pledges official⁷.

Developing country Parties are also requested, when developing and implementing their national strategies or action plans, to address the drivers of deforestation and forest degradation, land tenure issues, forest governance issues, gender considerations and the safeguards identified in paragraph 2 of appendix I to this decision, ensuring the full and effective participation of relevant stakeholders, inter alia indigenous peoples and local communities.

In particular, the following safeguards should be promoted and supported when undertaking the activities referred to the above paragraph 70 of this decision (i.e. REDD+ activities):

- a) That actions complement or are consistent with the objectives of national forest programmes and relevant international conventions and agreements;
- b) Transparent and effective national forest governance structures, taking into account national legislation and sovereignty;
- c) Respect for the knowledge and rights of indigenous peoples and members of local communities, 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;
- d) The full and effective participation of relevant stakeholders, in particular indigenous peoples and local communities;

⁷ http://cancun.unfccc.int/cancun-agreements/significance-of-the-key-agreements-reached-at-cancun/#c45

- e) That actions are consistent with the conservation of natural forests and biological diversity, ensuring that actions 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;
- f) Actions to address the risks of reversals;
- g) Actions to reduce displacement of emissions.

Through decision 1/CP.16, the COP requested SBSTA to initiate a work programme on methodological issues, including modalities for forest reference levels and national forest monitoring systems (decision 1/CP.16, appendix II).

Further progress was made at COP17 in Durban in 2011. The governance structure of the Green Climate Fund was approved and a decision was passed to rapidly operationalize it. Progress was also made on an incentive framework for reduced emissions of deforestation and forest degradation (REDD+) with formal recognition that multiple sources and channels, including market-based approaches, may support REDD+. Further guidance was provided on safeguards and reference emission levels/reference levels.

At COP18 in Doha in 2012, among the issues discussed were the proposal to establish a REDD+ Committee to promote and coordinate REDD+ activities, and consideration of non-carbon benefits in REDD+ implementation and financing. Parties agreed to undertake a work programme over the coming year to scale up and improve financing of REDD+.

The same year, the XI/19 Decision adopted in 2012 by the Conference of the Parties to the Convention on Biological Diversity (CBD) focused on the application of relevant safeguards for biodiversity with regard to policy approaches and positive incentives on issues relating to REDD+, and acknowledged the large potential for synergies between REDD+ and the implementation of the Strategic Plan for Biodiversity 2011-2020 and its Aichi Biodiversity Targets. The Decision also urged to fully implement relevant provisions and decisions of the UNFCCC and CBD in a coherent and mutually supportive way (paragraph 6).

In 2013, at COP19, Warsaw, the seven REDD+ related decisions adopted at COP 19 referred to as the 'Warsaw Framework for REDD+', completed the REDD+ 'rulebook'. Decision 10/CP.19 concerns the coordination of support for the implementation of activities in relation to mitigation actions in the forest sector by developing countries, including institutional arrangements. The other decisions refer to modalities for national forest monitoring systems, for measuring, reporting and verifying, the presentation of a summary of information related to REDD+ safeguards and the work needed to continue addressing drivers of deforestation and degradation. A first REDD+ decision on aspects related to finance for results-based actions was also adopted. Taken with earlier COP decisions, the UNFCCC has now set out the process for developing countries to have the results of their REDD+ activities

recognised and available for results-based payments (RBPs) and results-based finance (RBF)⁸.

In 2014, outcomes from CP20 in Lima (Peru) related to REDD+ referred to forests and the Information Hub for REDD+. Countries meeting in Lima made also progress on providing support to avoid deforestation. Colombia, Guyana, Indonesia, Malaysia and Mexico formally submitted information and data on the status of their greenhouse gas emission reductions in the forest sector to the UNFCCC secretariat following a similar submission by Brazil earlier in the year. These baselines are likely to increase the possibility of obtaining international funding under REDD+.

Highlights

- During the last decade, climate change has reached the highest level of political attention in the international agenda, and Parties to the UNFCCC have recognized the large contribution of deforestation and degradation to global greenhouse gas emissions.
- Since 2005, the COP to the UNFCCC adopted a number of decisions on REDD+ most recently in 2010 by adopting the "Cancun Agreements" and in 2013 with the "Warsaw Framework for REDD+" (WFR).
- Within the framework of the Cancun Agreements of the UNFCCC (2010), developing country Parties were asked to address the drivers of deforestation and forest degradation, land tenure issues, forest governance issues, gender considerations and safeguards (par. 2 appendix I) when developing their national strategy or action plan, ensuring the full and effective participation of relevant stakeholders, inter alia indigenous peoples and local communities. More recently modalities for national forest monitoring systems and measuring, reporting and verifying have also been established as part of the Warsaw Framework for REDD+ (2013).
- In line with international commitments, countries with high forestry coverage are making progress in reforming existing legislation and adopting new legislation on climate change and REDD+.

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⁸ Official webpage of the UNFCCC.

CLIMATE CHANGE AND FORESTRY LEGISLATION IN SUPPORT OF REDD+

In light of the recent international developments mentioned above, some countries have recently made considerable progress in enacting climate change related legislation.

The section below presents some examples of climate change and forestry legislation that has been adopted by countries from Asia-Pacific, Latin-America and Africa, and represents or reflects commitments to REDD+.

The aim is to present current legislative trends towards the integration of REDD+ objectives into climate change and forest related national legislations, taking into account good practices from emerging economies and developing countries from the three regions. The countries that are showcased provide a sample of forestry countries and regions where global initiatives such as the UN-REDD Programme are implemented. The examples include developing countries that have adopted legislation related to climate change and REDD+9. They highlight the efforts of certain countries to reduce carbon emissions from deforestation, forest degradation, to conserve forests, manage forest sustainably and enhance carbon stocks (REDD+).

I.I Climate change laws and REDD+ in Asia-Pacific

I.I.I Australia

Australia has a federal system of government, and a federal parliament which enacts national laws. There are six States and two mainland territory parliaments which adopt the laws for their state or territory. Federal law always prevails over state or territory law. The State of Victoria and the State of South Australia both provide interesting legislative examples of climate change mitigation solutions, related to REDD+ issues.

The State of Victoria

The Climate Change Act of Victoria was passed by the Victorian Parliament in September 2010, and came into effect on 1st July 2011. It creates a legal framework for key actions and initiatives to respond to climate change in Victoria.

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⁹ The UN-REDD Programme is the United Nations collaborative initiative on Reducing Emissions from Deforestation and forest Degradation (REDD) in developing countries. The Programme was launched in 2008 and builds on the convening role and technical expertise of the Food and Agriculture Organization of the United Nations (FAO), the United Nations Development Programme (UNDP) and the United Nations Environment Programme (UNEP). The UN-REDD Programme supports nationally-led REDD+ processes and promotes the informed and meaningful involvement of all stakeholders, including Indigenous Peoples and other forest-dependent communities, in national and international REDD+ implementation.

With regard to forest tenure rights, it repeals the Forestry Rights Act (1996) and creates new arrangements for the ownership, registration and transfer of forestry and carbon sequestration rights to facilitate the development of the emerging carbon sequestration industry, in line with national approaches, allowing Victorians to easily participate in State and national sequestration efforts. The key features of the new legal framework are:

- 1. Property rights of landowners, forest property owners and carbon investors are defined;
- 2. All parties must agree on management arrangements as part of the process of creating a Forest and Carbon Management Agreement (FCMA), which is then placed on land title;
- 3. Carbon rights are an interest that "run with the land" which means that carbon rights remain attached to the land even if there is a change in land ownership; and
- 4. The main benefit for private landowners, forest property owners and carbon investors is that landowners can directly sell carbon sequestered on their land.

The reforms make it easier for private landholders to separately buy and sell forestry and carbon sequestration rights, as they no longer require a new management agreement every time a right is sold. Interests are now recorded on the title to land and so all parties have greater legal certainty about management arrangements under the new FCMAs. These changes should minimize disputes about carbon claims under private agreements because the interests are now recorded on the title to land. It improves investor confidence by positioning Victoria to take full advantage of national carbon markets or government-funded programmes to establish carbon sinks.

Part 5 of the Climate Change Act (2010) recognizes the value of sequestered carbon on Victoria's public land and establishes clear rules under which Crown land can be managed and used for carbon sequestration purposes. The Government may manage its own land directly or through carbon sequestration agreements (CSAs) with third parties.

The Victorian Government will maintain its stewardship role on all public land and forests by sustainably managing forests to maximize value for the Victorian people. For carbon sequestration projects on Crown land, the Department of Sustainability and Environment (DSE) Secretary declares specified Crown land to be available for carbon sequestration; holds carbon rights over Crown land subject to existing licenses, leases and agreements, except in certain specified instances; can enter into CSAs with other parties for carbon reforestation on Crown Land and grant carbon sequestration rights and soil carbon rights to third parties. A CSA may authorize a person to access crown land, plant and maintain vegetation on crown land for the purposes of carbon

sequestration, control and exploit carbon sequestered within vegetation or soil and manage the land for the purpose of carbon sequestration.

In addition, the Climate Change Act enables the government to enter into climate covenants with communities, regions, industry and other stakeholders, empowering them to be innovative in responding to climate change. It also requires decision-makers to take climate change into account when making specified decisions under the Catchment and Land Protection Act (1994), Coastal Management Act (1995), Environment Protection Act (1970), Flora and Fauna Guarantee Act (1988), and Water Act (1989). It amends the Environment Protection Act (1970), enabling the Environment Protection Authority to regulate greenhouse gases, establishing new emissions reduction targets of 20 percent by 2020 (based on 2000 levels).

The State of South Australia

The Climate Change and Greenhouse Emissions Reduction Act (2007) has positioned South Australia as the first state in Australia to legislate targets to reduce greenhouse (gas) emissions, thus considering that forest are the major repository of carbon. In particular, the legislation sets out the target to reduce greenhouse gas emissions within the state by at least 60 percent to an amount that is equal to or less than 40 percent of 1990 levels by 31 December 2050, as part of a national and international response to climate change. The legislation also commits the state government to work with businesses and the community to develop and put in place strategies to reduce greenhouse (gas) emissions and adapt to climate change. Resulting initiatives include climate change sector agreements and the draft Climate Change Adaptation Framework for South Australia.

In 2011, the review of the Climate Change and Greenhouse Emissions Reduction Act (2007) was completed in accordance with section 21 of the Act. The review covered many issues including the development of an interim emissions reductions target as a way to support emissions reductions in the shorter term. The South Australian Government is also exploring opportunities to benefit from carbon markets and improve carbon sequestration. This includes protecting the state's forest assets from the threats of climate change. Section 8 of the report fulfilling the requirement of Section 7(2)(h) of the Act, provides an account of the inter-governmental agreements relevant to climate change entered into by the South Australian Government. It specifies that the South Australian Government has been a key contributor to a number of national developments associated with climate change, including the National Climate Change and Commercial Forestry Action Plan 2009-2012 and the National Agriculture and Climate Change Action Plan 2006-2009.

Scientific research relevant to South Australia is increasingly being carried out in specific sectors or in consideration of specific impacts. Much of this work has been used and referenced in the more general reports prepared to enforce Section 7(2)(h) of the Act. In relation to REDD+, the Department of Environment, Water and Natural Resources (DEWNR) is undertaking studies to evaluate and predict carbon sequestration rates from sustainable woody crops and environmental re-vegetation

plantings in the medium rainfall dry land agriculture zones of South Australia. This work advances South Australia's ability to identify and capture opportunities in carbon sequestration from re-vegetation 10.

I.I.II India

India has undertaken numerous response measures on climate change and REDD+ that contribute to the objectives of the UNFCCC. Driven by an increased awareness of the potential impacts of climate change for India, the country has pursued a number of climate-orientated policies and measures. Some of these efforts have been institutionalized under the ministries through policies and programmes. Relevant strategies and measures include, among others, an emphasis on energy conservation and promotion of renewable energy sources as well as afforestation.

There is no specific legislation at present dealing exclusively with regulating sources of GHG emissions in India, but several environmental regulations address climate cobenefits and much of the existing statutory framework in relation to the environment and energy can be read in line with the objectives of REDD+. Relevant legislation include the Environment (Protection) Act (1986); the Indian Forest Act (1927); the Forest Conservation Act (1980); and other legislation related to land, agriculture and energy.

In the recent initiatives for mitigating GHG emissions, the sectoral approach is being considered as an important tool to combat climate change by regulating sources of GHG emissions related to various sectors of the economy, including the forest sector.

The forestry sector in India began receiving due attention in 2001 when the Third Assessment Report of the IPCC released modelling studies which indicated that forest ecosystems in India were at serious risk because of climate change.

India has taken an active approach towards climate change. The Government's main initiative has been the National Action Plan on Climate Change (NAPOCC) which was adopted on the 30th of June 2008. The Plan sets out eight National Missions and the Mission that particularly pertains to REDD+ is 'The National Mission for a Green India'. Under the auspices of the NAPOCC India has committed to expanding the country's forest cover from 23% to 33% and set an afforestation target of 6 million hectares of degraded forest lands.

The following laws deal with the forest sector in India:

- The Indian Forest Act (1927)
- Guidelines for diversion of forest lands for non-forest purpose under the Forest (Conservation) Act (1980)
- Forest (Conservation) Act (1980) amended 1988
- Forest (Conservation) Rules (2003)

¹⁰ Reports can be accessed at http://www.environment.sa.gov.au

• Scheduled Tribes and other Traditional Forest Dwellers (Recognition of Forest Rights) Act (Act No. 2 of 2007).

A review of the present regulatory framework for limiting GHG emissions in India will indicate that there are some gaps that need to be addressed in the legal frameworks related to GHG regulations, such as the need for a comprehensive GHG law¹¹. The existing legal and institutional framework for regulating climate change is fragmented, and there are several incoherent laws and implementing agencies. Therefore, the forestry and climate change legislation might need to be updated to protect communities' forest and carbon rights and to include adequately the concepts, principles and mechanisms that refer to REDD+.

I.I. III People's Republic of China

During the last decade, the Chinese Government has included climate change into its mid and long-term planning for economic and social development, as a major issue concerning its overall economic and social development.

In 2007, China became the first developing country to formulate and implement a national program to address climate change. In 2009, China put forward the goal of action to reduce the per-unit GDP greenhouse gas emission in 2020 by 40-45 percent as compared to 2005. In November 2011, the information office of the State Council China's Cabinet published a White Paper on Policies and Actions for addressing Climate Change paving the way for further commitments to reduce greenhouse gas emissions in the atmosphere.

In relation to climate change mitigation measures and REDD+, the fifth paragraph focuses on the need to increase forest carbon sinks through different activities. In particular, it has developed ecological protection projects and projects to return farmland to forest as well as natural forest protection projects. It has also carried out pilot afforestation projects with an aim to expand carbon sinks, enhance sustainable forest management, and increase the forest stock volume. The central finance has raised the standard for afforestation investment subsidy from RMB 100 to 200 per mu12, and established the China Green carbon Fund. Currently, China's "man-made" forest reserve has reached 62 million hectares; its national forest coverage has reached 195 million hectares, and the forest coverage rate has increased from 18.21 per cent in 2005 to 20.36 percent in 2010, with a forest stock volume of 13.721 billion cubic meters. China's total carbon storage in forest vegetation has reached 7.811 million tons 13.

¹¹ Climate change laws of India. Columbia Law School University. Official webpage. Ministry of Environment and Forests of India. Official webpage.

^{12 1}m²= 0.0015 mu

¹³ Policies and Actions for addressing Climate Change. Information office of the State Council. The People's Republic of China. November, 2011.

China's commitment to tackle climate change is also reflected by China's intention to develop a climate change law. At this stage, it might be interesting to underline that China has been the main Clean Development Mechanism (CDM) host country so far and has to date supplied nearly 60 percent of all issued certified emission reductions (CERs), most of which go to the EU ETS. Despite the small number of forestry-based CDM projects, presumably the mechanism as a whole can inform REDD+negotiators as they examine options for financial, technical, and institutional arrangements. Is

Regarding forestry provisions which might be relevant for REDD+, the revised forest law (1998) focuses on increased public financing, enhanced authority of forest agencies, harmonized rehabilitation, development, protection and utilization of forests and wildlife, with the ultimate objective of achieving sustainable forestry development (Chen 2008). Legislation is still focused on state control but greater opportunity is provided for diverse stakeholders to participate in decision-making. Collective ownership is recognized; farmers can acquire forest land-use (management) rights and ownership for up to 70 years and have associated trading and inheritance rights. ¹⁶ In particular, in 2008 the Chinese Communist Party (CCP) Central Committee and State Council adopted a Decision endorsing the collective forest property reform in China. In 2009, the Central Forestry Working Conference acknowledged the need to re-orient forestry activities to pursue climate change targets and decided to fully implement collective forest property reform, establishing a support system for this reform. In spite of the inclusion of provisions aiming to strengthen farmers' forestland rights into the recent forestry and land laws, the proliferation of laws related to forestry¹⁷ makes the understanding of forest-related rights a complicated matter in rural China.

I.I.IV Philippines

The Philippines adopted a Climate Change Act (RA 9729) in 2009 which established a Climate Change Commission (CCC). The CCC is the policy-making body on climate change and was tasked with developing a National Framework Strategy on Climate Change (NFSCC) and coordinating, monitoring and evaluating government adaptation and mitigation plans. It is empowered to mainstream climate change adaptation and mitigation into national and local sectoral and development plans and related policy through recommendations, capacity building, and coordination with diverse stakeholders. The Act specified that the CCC shall have the power and function to recommend key development investments in climate-sensitive sectors such

¹⁴ See www.pointcarbon.com. China's draft climate change law backs continuation of CDM projects, May 2012.

¹⁵ Forests and climate change after Cancun. An Asia-Pacific perspective. 2011. FAO-RECOFTC-REDD-net.

¹⁶ Forest policies, legislation and institutions in Asia-Pacific. Trends and emerging needs for 2020. Asia-Pacific Forestry Sector Outlook II. 2010. FAO-USAID-RECOFTC- TNC- RAFT.

¹⁷ Transfer of Forest Resources Regulation (1997); (Amended) Forestry law (1998); Regulations on the Implementation of the Forestry law (2002); Regulations on Restoring Farmland to Forest (2002); Law on the Mediation and Arbitration of Rural land Contracts Disputes (2009); Regulation on basic surveying and mapping (2009); (Amended) Measures for Announcement of land Expropriation (2010); Regulation on land reclamation (2011); Urban and Rural Planning Law (2011).

as (...) agriculture, forestry to ensure the achievement of national sustainable development goals. The CCC shall also create an enabling environment to promote broader multi-stakeholder participation and integrate climate change mitigation and adaptation.

In 2010, Executive Order 881 authorized the Climate Change Commission to coordinate existing climate change initiatives, including REDD+ initiatives and other similar mechanisms. As such, the Commission is the primary body through which PNRPS policies are institutionalized. The Order further designates the Department of Environment and Natural Resources (DENR) as the operation arm for REDD+ activities, and as the manager of REDD+ resources acquired by the government. This provides initial structure for development of REDD+ decision-making and carbon and non-carbon accounting. Further, more specific legislation is however also necessary to strengthen the country's legal framework for the implementation of REDD+. The Implementing Rules and Regulations (2010) have also been signed to enforce the law.

I.I.V Republic of Korea

The Government first recognized the importance of sustainable development and climate change in the mid-1990s; the Framework Act on Sustainable Development followed in 2007. Subsequently, to implement the Copenhagen Accord, the government announced in July 2010 a plan to invest the equivalent of US\$ 1.9 billion by 2019 to build carbon capture technology and industrial infrastructure, and to reduce the country's greenhouse emission levels. In particular, the South Korea's target under the Copenhagen Accord was to implement a national mitigation strategy to reduce national greenhouse gas emissions by 30 per cent by 2020 on a "business as usual" basis. That target represents the highest target recommended by the intergovernmental Panel on Climate Change for developing countries¹⁸. In that year, the Korean National Assembly enacted the Framework Act on Low Carbon, Green Growth (2010)¹⁹ to provide the legal basis for implementing policy measures addressing climate change. Major provisions of the act cover the purpose, definitions and basic principles of low carbon green growth, as well as responsibilities of the State, local governments, the business sector, the general public and the relationship with other acts. It establishes low carbon green growth strategies and plans at the national and local government levels as well as guidelines on the composition, operation and functions of the Presidential Committee on Green Growth. It emphasizes the realization of a low-carbon society through basic principles and plans for coping with climate change and energy policies, reducing greenhouse gases, reporting on greenhouse gas emissions and energy consumption, establishing an integrated greenhouse gas information management system, introducing a cap-andtrade scheme, assessing the impacts of climate change and implementing adaptation measures. It promotes also the realization of green life and sustainable development through basic principles and plans for sustainable development, promoting green

¹⁸ Asia Pacific climate change policy series: Republic of Korea. Norton Rose. 2011.

¹⁹ Republic of Korea, Framework Act on Low Carbon, Green Growth (2010). Available at www.law.go.kr/engLsSc.do?menuId=0&subMenu=5

homeland, water management, green buildings, eco-tourisms and facilitating green life campaigns, education and public relations activities. Supplementary provisions include a request for data, improved international cooperation and the preparation of national reports.

There are also provisions related to REDD+ and forests. Particularly, as forests cover more than two-thirds of the Korean land surface, the potential for reducing emissions from the forest sector is expected to be enhanced from 1.452 billion CO₂ tons to 1.613 billion CO₂ tons in 2013. In this regard, article 3 states that the Government shall promote a comprehensive strategy for national development, including the resolution of climate change issues and the efficient utilization of national land while preserving the value of national resources and the environment. The Government shall establish and enforce a national strategy for green growth, which includes matters concerning policies for coping with climate change and policies on sustainable development (article 9). Articles 44 and 45 refer to the obligation of reporting on quantity of greenhouse gases emitted and the establishment of an integrated information management system for greenhouse gases. Specifically, the head of each central administrative agency shall provide to the Government information and statistics about matters under his jurisdiction such as agriculture and forestry. The Government shall, whenever it prepares and manages information and statistics through the integrated information management system, follow international standards for more transparent and reliable data or information. On the other hand, Article 48 underlines that the Government shall research and assess impacts of climate change on ecosystems, biodiversity, agricultural produce and forests and shall announce the results to the public.

Regarding contracts that might be established between the parties to implement REDD+ projects, it could be relevant to refer to article 49 as the State, local governments, enterprises, and citizens shall enter into agreement with foreign states on matters relating to sustainable development in good faith. They shall facilitate environmental conservation by developing and reorganizing systems for land use and production so as to protect the ecological base, which serves as the foundation for economic development. According to article 51, in order to create a green homeland, the Government shall prepare measures to expand forests and greenbelts and for the conservation of greater-regional ecological axes. In this respect, article 55 adds that the Government shall increase carbon sinks by preserving and developing farmland, and shall expand carbon sinks substantially through conservation and development of forests and facilitate the utilization of biomass in forests²⁰.

I.I.VI Other relevant initiatives

Bangladesh

The Environment Conservation Act (1995) is the main legal text which deals with environmental issues. Article 18, introduced in 2011, states that "the state shall endeavor to protect and improve the environment and preserve and safeguard natural resources, biodiversity, wetlands, forest and wildlife for the present and future citizens". According to the Rules for the Conservation of the Environment (1997), the Government may decide what activities are allowed in Ecologically Critical Areas. The areas may include mangroves, game reserves, marshes, and forest areas. These articles could therefore support mitigation activities under REDD+.

With regard to forests and REDD+, the major piece of legislation is the Forest Act (1927). This is the key law regulating forest resources in Bangladesh. The Act encompasses provisions for conservation and protection of government owned forests, and also private forests. According to the law, the Provincial Government may declare any forest land which is property of the Government to be reserved forest land (sect. 3) and shall issue a notice to that effect in the Official Gazette (sect. 4). No rights shall be acquired in reserved forest land other than those acquired by succession or by government grant or contract and no clearing of cultivation shall be carried out other than in accordance with rules made by the Government for the reserved area (sect. 5). The Government may assign community reserved forests to any village and such forest land shall be called Village Forest (sect. 28).

Laws on local governments also contain provisions on afforestation, or street planting in urban areas, such as the City Corporation Act (2009), the Paurashava (Amendment) Act (1992) and the Local Government (Union Parishad) Ordinance (1983).

Highlights

- Australian' states (State of Victoria and South Australia) are pioneers in legislating targets to reduce greenhouse emissions, and defining ownership rights on carbon while exploring opportunities to benefit from carbon markets and improve carbon sequestration from re-vegetation. This includes protecting the state's forest assets from the threats of climate change.
- In India, the sectoral approach is being considered crucial for addressing climate change by regulating sources of GHG emissions related to different sectors of the economy, but the legal framework is often incoherent and fragmented. There is no specific legislation but several environmental and forests provisions address climate co-benefits. Recently, the national Parliament has initiated a bill on climate change to formulate a unique and comprehensive law.
- China's commitment to tackle climate change is reflected by the intention to

develop a climate change law to be passed in 2015. Presumably it will set up the national frameworks to measure, manage, report and verify GHG emissions, and include possible provisions for a national emissions trading scheme (ETS) and for the introduction of a carbon tax. The proliferation of laws related to forestry makes the understanding of forest-related rights a complicated matter in rural China.

- In the **Philippines**, the adoption of the Climate Change Act (2009) establishing the Climate Change Commission (CCC) and Executive Order 881 on REDD+ (2010), created significant opportunities to review existing legislation and draft a national legal framework on REDD+. The Implementing Rules and Regulations (IRR) have also been adopted to enforce the law. Executive Order 881 authorized the CCC to coordinate CC initiatives, including REDD+, providing the initial structure for REDD+ decision-making, carbon and non-carbon accounting.
- The National Assembly of **Korea** enacted a framework act on low carbon and green growth in January 2010, providing the legal basis for implementing policy measures addressing climate change. It also contains provisions related to REDD+ and forests, as article 3 states that the Government shall promote a comprehensive strategy for national development, including the resolution of climate change issues and the efficient utilization of national land (...) while preserving natural resources and environment.
- Among other initiatives, **Bangladesh**'s Environment Conservation Act (1995), the Forest Act (1927) and the Rule for the Conservation of the Environment (1997) are the main pieces of legislation which could support mitigation activities under REDD+. Laws enacted by local governments also contain provisions on afforestation.

I.II Climate change laws and REDD+ in Latin-America

I.II.I Brazil

In 2007, Decree n. 6263 approved by the Inter-ministerial Committee on Climate Change established the National Plan on Climate Change. The plan defines actions and measures aimed at strengthening climate change mitigation and adaptation which are also related to REDD+. The main objectives are to significantly reduce emissions from land use change as well as increase the efficiency of the use of the country's natural resources. The 4th objective under the decree is sustained reduction of deforestation rates in all Brazilian biomasses, in order to reach zero illegal deforestation. In particular, it aims to reduce deforestation by 40 percent between 2006 and 2009 in relation to the ten year reference period of the Amazon Fund (1996).

– 2005), and by a further 30 percent in each of the following periods of four years in relation to the previous four year period. In this regard, the Federal Government is making great efforts in the Amazon Region. These efforts include the implementation of the Brazilian biomass satellite monitoring programs which is aimed at quantifying deforestation and providing the basis to combat illegal deforestation. The Brazilian Forestry Service has also been charged with creating a national public forests register to identify public forests to be protected, reserved and sustainably managed, to improve territorial and land organization, monitoring and control and to generate incentives for sustainable productive activities involving partnerships from federal bodies, state governments, city governments, civil society organizations and the private sector.

In addition, the Amazon Fund was created in 2008 under the terms of Decree n. 6.527 to raise financial resources to reduce deforestation, sustainable use and conservation, especially in the Amazon forest. The 5th objective of the Decree n.6.527 is aimed at eliminating the net loss of forest coverage in Brazil by 2015, to preserve forests at the levels stipulated in the fourth objective and to double the area of forest plantation from 5.5 million hectares to 11 million hectares in 2020, (2 million ha of which is native species) The main actions already taken by Brazil have exposed the need to revise the current banking requirements to make forestation and reforestation activities more attractive; to stimulate the recovery of degraded areas that belong to legal reserves or areas of permanent preservation in accordance with law n. 11.775/2008 by using resources from the National Rural Credit System, to develop a national forest inventory and to stipulate forestry grants for the management and exploitation of forestry products and services in a sustainable form. Measures to prevent the use of illegal timer were also introduced in 2009 including the requirement for the real estate sector to attain proof of the legal nature of any timber used.

On the eve of the COP 15 in Copenhagen in December 2009, the law establishing the National Policy on Climate Change (NPCC) was approved. The law requires that Brazil cuts greenhouse gas emissions by between 36.1 and 38.9 percent by 2020 compared to the levels they were at in 2005. The law is subject to several decrees setting out responsibilities and regulations for the farming, industrial, energy and environmental sectors.

The National Fund on Climate Change created by law n. 12.114 (2009), is another key instrument for reducing emissions from all sectors21. During COP16 in Cancun, that Policy was turned into a Federal Decree (n. 7.390/2010) regulating the NPCC, and giving details on the path Brazil intends to follow in order to reach its targets by 2020.

More recently, the New Forest Code regulating land use in forests and other protected areas was sanctioned in October 2012, after a long and controversial process it finally, replaced the 1965 Forest Law. Among its key provisions, the new Forest Code grants small farmers exoneration from illegal deforestation practiced before July 2008. Other farmers are only exempt from fines if they adopt measures to compensate their

²¹ Law 12.114/2009.

activities in order to meet the terms of legislation. A registry and full compliance with the new code are compulsory within 5 years and infringements are subjected to fines and credit access denial. Regarding Permanent Preservation Areas (PPAs), there was a change on the legal requirement of river basins to be protected, which now ranges from 5–100 meters according to the size of the properties. The new code amended by the Executive decree determines that landowners in the Amazon maintain 80 percent of the native forest as a legal reserve. That percentage drops to 35 percent for properties located in the "cerrado" (Tropical savannah), and 20 percent in all other areas²².

Directly related to REDD+ is bill 195/2011 which aims to "establish the national system of Reducing Emissions from Deforestation and Forest Degradation, Conservation, Sustainable Forest Management, Maintenance and Higher levels of carbon (REDD +), and other measures". The objective of the bill is to regulate REDD+ actions in Brazil, as well as create a national REDD+ system allowing the development of sub-national projects and their integration into a national strategy.

A relevant initiative is the Legal Land Program established by Federal Law 11.952/2009. Through this law, the federal government aims to expedite land regularization of up to 300,000 informal occupations in public land on the Legal Amazon. The application of that law is carried out through the Terra Legal Program which has as its main objective, the efficient management of private properties more quickly.

I.II.II Chile

Chile's Law 20.417/2010, established for the first time the government's responsibility for climate change. According to article 70 of the Law 20.417/2010, the Ministry of the Environment is in charge of proposing and developing a national climate change policy. The relevant section states that "the Ministry shall be responsible for proposing policies and formulating plans, programs and plans of action in the area of climate change" (Art.70, letter h).

The office of climate change was created under the sub-secretary of the Ministry of Environment and is responsible for attending international negotiations related to the implementation of the UNFCCC and acting as coordinator of the Committee for the Designated National Authority for the Clean Development Mechanism. It is also the focal point for the Intergovernmental Panel on Climate Change (IPCC) and the technical secretariat for Inter-ministerial committees on climate change.

Regarding the forestry sector and REDD+, law No. 20.283/2008 on the Chilean Native Forest establishes a regulatory framework to protect, recuperate and improve native forests and to ensure forest and environmental sustainability. The law defines the procedure for defining forest types and methods for regeneration, and includes provisions for establishing management plans for native forests. It also defines small

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²² Climate Legislation Study. Globe. 2013.

landowners as those with title to total property of no more than 200 hectares, except for landowners living in the far south of Chile. The law contains specific rules and definitions to promote the conservation, recovery and sustainable development of native tree species. It also defines a series of incentives, for preserving environmental services in native forests and xerophytes formations.

In 1998, law n. 19.561 modifying Law Decree 701/74 on forest promotion was enacted, extending several subsidies until 2010, to protect and recovery degraded soils and forestation activities carried out by small landowners. From the enactment of the 19.561/98 law up to 2008, the Government of Chile approved USD 284 million (nominal value) in subsidies for forestation and soil protection, financing the forestation of 475 000 hectares and soil recovery on another 175 000 hectares. This effort has generated positive effects such as erosion control, carbon sequestration and rural employment23.

I.II.III Guatemala

In 2013, Guatemala adopted a law on climate change to establish clear rules to prevent, and respond adequately to climate change impacts (Decree 7-2013). The objective of the law is to involve the central government, decentralized and autonomous entities, as well as the civil society in the adoption of practices aiming to reduce vulnerability, improve adaptation capacities, and develop mitigation proposals to tackle climate change. Chapter III of the law is dedicated to the development of national capacities, Chapter IV to the adaptation of climate change impacts, Chapter V to mitigation measures aimed at reducing greenhouse gas emissions, Chapter VI to public participation and Chapter VII to financial resources.

On the issue of REDD+, article 20 states that the national forest institute (INAB), the national council of protected areas (CONAP), the ministry of agriculture, livestock and food (MAGA) in coordination with the ministry of environment and natural resources (MARN) will adjust and design policies, strategies, programmes, plans and projects according to the principles and objectives of this law for the development and sustainable management of forest resources. This includes the environmental services aiming to reduce GHG emissions and conserve forest ecosystem services.

The ministry of environment and natural resources (MARN) will strengthen its interinstitutional capacities for the investigation, measurement, and monitoring of GHG emissions, and other aspects related to climate change. MARN is also responsible for the national inventory of GHG and other aspects associated with climate change under article 7.

The law creates also a national council on climate change chaired by the President of the Republic to regulate and implement actions, solve conflicts and monitor actions established under this law, including the national policy on climate change, the climate change fund, strategies, plans, climate change mitigation and adaption

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²³ Climate Legislation Study. Globe. 2013.

programs of action (article 8). The national information system on climate change is also assigned to MARN. Furthermore public and private entities have to provide relevant information associated to climate change, particularly with regards to GHG emissions reduction, vulnerability, and adaptation as requested by MARN in accordance to its obligations to provide national communications.

According to article 22, the activities and projects that generate certificates of GHG emissions reduction can access the voluntary and regulatory carbon markets, as well as other bilateral and multilateral compensatory or PES markets. Rights, tenure and carbon ER units negotiations, as well as certificates belong to the owners of the projects. Those projects should be registered with MARN. The individuals or juridical persons and the State who are owners or right holders of the land or goods are entitled to the projects.

MARN is also appointed the Ministry in charge of a National climate change fund (FONCC). The objective of the fund is to provide finance plans, programs, and projects for risk management, reduce vulnerability, mitigation and adaption and payment for environmental services (carbon storage, water production and protection etc.). MARN is also to adopt a manual establishing the procedures for guiding project proposals. The funds generated by compensatory systems, will be reinvested in mitigation actions (article 24) and finally MARN is charged with the responsibility of adopt the regulations, elaborate plans and programs and other provisions to implement this law (article 27).

I.II.IV Mexico

On 6 June 2012, the Mexican Congress enacted a climate change law. The law mandated several changes, including the requirement that future governments meet regular emissions reduction targets with the objective of cutting 30 percent of carbon emissions below business-as-usual levels by 2020, and by 50 percent below 2000 levels by 2050. It requires mandatory emissions reporting (articles 74 ss, article 102), the establishment of a voluntary carbon-trading market (article 94) and the creation of a climate change fund (article 80). The fund will also be used for REDD+ projects (article 82). Title II of the law clarifies the competences and responsibilities of the Federation, Federal Entities and Municipalities.

In relation to climate change adaptation and REDD+, the law specifies that those entities in charge of the elaboration and publication of programmes on sustainable land management should promote the adoption of sustainable management practices related to forests, agriculture and livestock (Title IV - Chapter II).

Regarding climate change mitigation and REDD+, article 31 states that the national climate change mitigation policy has to include measures in relation to the reporting, measurement, monitoring, verification and evaluation of national carbon emissions. The objectives are to promote the harmonization of programmes, budgets, policies and actions at the three governmental levels to reduce deforestation and degradation

of forest ecosystems (article 33). Accordingly, the public federal and state entities as well as the municipalities within their own responsibilities, should promote the elaboration of policies and mitigation actions, taking into account the need to reduce carbon emissions related to the agriculture and forest sectors as well as other land uses and to preserve the ecosystems and biodiversity through the following actions: a) maintain and increase carbon sinks, b) stop and revert deforestation and degradation of forest ecosystems, expand forest covers and increase carbon stocks in lands adopting sustainable agricultural practices; c) reconvert degraded agricultural lands; d) strengthen forest management and restoration schemes; e) improve ecosystem conservation practices, payment for environmental services schemes, sustainable forest management units and reduction of carbon emissions from deforestation and degradation; f) strengthen capacities to combat forest fires; g) harmonize environmental and agriculture programmes to combat forest fires and h) design and establish economic incentives to sequester and conserve carbon on natural protected areas and ecological conservation zones (article 34).

The National Forest Commission (CONAFOR) will have a key role in formulating strategies, policies, measures and actions related to climate change and forests, taking into account the sustainable development targets and community forestry practices (transitory article 2).

The law also establishes an inter-sectorial commission on climate change which will rely on the support of working groups on REDD+ activities (article 49). Sectoral programmes should include climate change mitigation and adaptation actions and long term planning (six years) in line with the national strategy on climate change and international commitments, taking into account the socio-economic conditions of the country. The six year planning target should prioritize national targets related to forest, agriculture and other land uses (article 67). Finally, an information system on climate change should be established, based on key indicators identified in article 77, including soil quality and carbon sequestration capacity and the protection, adaptation and management of biodiversity.

I.II.V Other relevant initiatives

Argentina

The institutional framework on climate change is regulated by resolution 58/2007 which established the Climate Change Office. The Climate Change Office will be under the direction of the Secretary of Environment and Sustainable Development. The Secretary's main task is to assist the National Director of Sustainable Development (NDSD) in implementing laws 24.295/93 and 25.438/2001 by fulfilling the commitments under the UNFCCC and the Kyoto Protocol, including the development of local awareness raising activities in relation to mitigating climate change. The Climate Change Office also provides assistance in the elaboration of climate change policy guidelines to be approved by the NDSD. The Decree 822/98 created the CDM Office which falls under the ambit of the Climate Change Office.

The CDM Office is composed of an Executive Committee, a Permanent Secretary and an Advisory Committee. In 2005, Decree 1.070/2005 created the Argentinean Carbon Fund to promote investments and facilitate the development of new projects aimed at reducing greenhouse gas emissions (CDM) while promoting communitarian development, through public and private partnerships and a strong participation in the carbon markets.

The Autonomous City of Buenos Aires has also adopted a law on climate change n. 3.871/2011 to establish appropriate actions, instruments and strategies on climate change adaptation and mitigation to reduce greenhouse gas emissions. An Interministerial team is in charge of the articulation of public policies related to the application of the provisions established by this law. It includes the revision of the normative framework related to territorial planning and land use as well as the evaluation of the emerging necessities to improve the biodiversity of green spaces in the city under different climate change scenarios (article 18). The Executive can (and should) establish adequate measures, economic and financial incentives to promote private investments in concrete climate change adaptation and mitigation actions, prioritizing small and medium enterprises (article 20).

Colombia

Colombia has ratified the UNFCCC and the Protocol of Kyoto by laws n. 164/94 and 629/00. In 2003, Colombia adopted a National Strategy for the Selling of Environmental Services to Mitigate Climate Change. In 2004, the Ministry of Environment and Sustainable Development approved the Resolutions N. 0453 and N.0454. The objective of the first one is to establish principles, requirements and criteria related to procedural aspects for the approval of national projects to reduce carbon emissions (CDM). The second Resolution aims to regulate the Inter-sectoral Technical Committee on Climate Change Mitigation of the Environmental National Council (ITCCCM). According to article 4, the ITCCCM elaborates proposals related to climate change mitigation policy and recommendations for the approval of CDM projects. Resolution 0454/2004 states that the Environmental National Council is to designate Technical Inter-sectoral Committees to promote the coordination and follow-up of such projects.

Ecuador

The Constitution of Ecuador (2008) requires the national government to address climate change mitigation by adopting measures to limit greenhouse gas emissions and deforestation, and protect the population at risk (article 414). The Minister of Environment has enacted the agreement 033/2013 aiming to regulate the implementation of the REDD+ mechanism, according to the national strategy on climate change and the national forest strategy. The agreement recognizes the multiple benefits of forests, and their relation with other environmental services. Any decision related to REDD+ should take into consideration a multiple benefit approach.

Collective community and indigenous rights are recognized, in line with the Constitution adopted in 2008 and the international instruments ratified by the country. The AN-REDD+ is in charge to implement the REDD+ mechanism, to establish indicators and criteria for socio-environmental activities on safeguards, and national accounting carbon rules. A REDD+ registry is also created under the responsibility of AN-REDD+. Technical norms will be adopted to implement the REDD+ mechanism, taking into consideration the following elements: 1) free, prior and informed consent, 2) requirements, and procedures to register, approve and implement REDD+ activities, 3) processes needed to release administrative acts, 4) benefit distribution mechanism, 5) compulsory monitoring, 6) non-compliance, 7) conflict resolution.

Peru

Peru has taken concrete steps in adopting climate change measures, by passing a government resolution in April 2012 with the intention of lowering carbon emissions and addressing the negative effects of climate change. With regards to REDD+, a new law has been adopted in May 2014 aiming to regulate retribution mechanisms for ecosystem services. It is stated that the contributors who provide the ecosystem service, will be compensated for any action realized related to the conservation, recuperation and sustainable use of the natural resources (article 5). The following articles define the elements to establish a retribution mechanism, the functional modalities, the creation of a registry, and the role and responsibilities of the governmental entities.

Highlights

- In **Brazil**, Decree n. 6263/2007 established the National Plan on Climate Change. Objective 4 of the Plan requires a sustained reduction of deforestation rates in all Brazilian biomasses, in order to reach zero illegal deforestation. The Amazon Fund created in 2008 under the terms of Decree n. 6.527 aims to raise financial resources to reduce deforestation and encourage sustainable use and conservation, especially in the Amazon forest. In 2009, the law establishing the National Policy on Climate Change (NPCC) was approved and the national fund on climate change which was created by law n. 12.114. More recently, the New Forest Code regulating land use in forests and other protected areas was sanctioned in October 2012.
- In Chile, according to article 70 of the Law 20.417/2010, the new Ministry of the Environment is in charge of proposing and developing a national climate change policy. With respect to the forestry sector, in 1998, law n. 19.561 modifying Law Decree 701 on forest promotion was enacted. The law No. 20.283/2008 on the Chilean Native Forest establishes the regulatory framework to protect, recuperate and improve native forests and to ensure forest and

environmental sustainability.

- **Guatemala** has adopted a law on climate change aiming to establish clear rules to prevent and respond adequately to climate change impacts (Decree 7-2013). The objective is to involve the central government, decentralized and autonomous entities, as well as the civil society in the adoption of practices aimed at reducing vulnerability, improving adaptation capacities, and developing mitigation proposals to tackle climate change.
- **Mexico** passed a climate change law in June 2012. The National Forest Commission will have a key role in formulating strategies, policies, measures and actions related to climate change and forests, taking into account sustainable development targets and community forestry practices (transitory article 2). The law also establishes an inter-sectorial commission on climate change which will rely upon the support of working groups on REDD+ activities (article 49).
- Other relevant initiatives are in place in **Argentina**, **Colombia**, **Ecuador and Peru**. While Colombia has set up the institutional framework and defined procedural aspects for the adoption of CDM projects, Peru has drafted climate change laws and adopted recently a law aiming to regulate retribution mechanisms for ecosystem services, Argentina has taken steps to adopt climate change measures by passing government resolutions. In Argentina, the institutional framework on climate change is regulated by resolution 58/2007. Decree 1.070/2005 created the Argentinean Carbon Fund to facilitate the development of new projects aimed at reducing greenhouse gas emissions (CDM) while promoting communitarian development. The Constitution of Ecuador (2008) requires the national government to address climate change mitigation by adopting measures to limit greenhouse gas emissions and deforestation, and protect the population at risk (article 414).

I.III Climate change laws and REDD+ in Africa

I.III.I Cameroon

Decree N.410/2009 for the creation, organization and functionality of the national observatory on climate change was adopted by the President of the Republic of Cameroon approved on 10 December 2009 and it was adopted soon thereafter by the Ministry of Environment and Protection of Nature.

The purpose of the national observatory is to assess the socio-economic and environmental impacts as well as preventive and adaptation measures against negative effects of climate change. The Ministry of Environment and the Ministry of Finance

are responsible for the observatory. According to article 4 of the decree, the observatory is in charge of establishing appropriate climate indicators for the follow-up of the environmental policy, as well as promoting studies aimed at assessing climate change risks. Article 4 also states that the Ministries are responsible for raising awareness and facilitating the compensation for the services provided by climate change and forests through the management, conservation and the restoration of ecosystems. The observatory acts as an instrument of cooperation with other regional and international observatories which operate in the sector of climate change. The observatory also collaborates with public institutions, decentralized offices, research institutes and centers based in national territory.

The general policy of the observatory is guided by an orientation council which is in charge of validating the annual statement of account of carbon stocks at the national level and making recommendations regarding the preventive and adaptation measures to be taken against climate change risks.

I.III.II Kenya

Regarding forest related legislation in support of REDD+, discussions and perspectives related to the management of the forest sector in Kenya have taken place recently with the adoption of the Forests Act n.7 (2005) although the Act still needs to be amended in light of the new Constitution (2010). This framework is the result of almost two decades of planning and consultation and paves the way for new commitments to improve forest governance. The dominant features of the revised Act are provisions establishing the Kenya Forest Service to replace the Forest Department, enhanced civil society participation and partnerships in forest management, new benefit sharing arrangements, the promotion of private investments and the recognition of the important role of forests in livelihoods and sustainable development. The subsidiary legislation required to effectively implement the Forests Act are at various stages of development but generally progress is slow.

The development of effective approaches to the governance of REDD+ in Kenya to encourage foreign investments in REDD+ at country level will be realized by ensuring that the Kenya's REDD+ readiness process incorporates a strong legal framework that promotes investments while ensuring effective REDD+ benefit sharing arrangements.

Pending legislation on land reforms and the revision of the Forests Act in light of the new Constitution (2010) may impact on forest governance and REDD+ implementation. The new Constitution is likely to have important implications on the management of trust lands where significant forest resources are located. In addition, there is the need to generate responses to the current gaps in land ownership rights, and the lack of appropriate benefit-sharing arrangements to underpin REDD+ activities of public and private actors.

Understanding how to define forest carbon rights, including carbon rights generated by trees, and how the benefits related to forest carbon sequestration activities are equitably distributed to relevant stakeholders and communities depending on forests, are key aspects of REDD+ in Kenya. The Government of Kenya is interested in addressing these issues and support might be required to clarify those legal considerations in relation to REDD+.

Kenya is also aiming to establish an independent climate change authority through the enactment of a law on climate change, which is under discussion in the Parliament.

I.III.III Nigeria

In Nigeria, many factors need to be considered to ensure the implementation of REDD+ such as the weak or inadequate institutional and legal framework and uncertainty in land, forest and tree tenure systems, which is detrimental to forest communities. So far, the Nigeria REDD+ Readiness Programme envisions a two-track approach to achieve REDD+ readiness in the country, based on: (i) the development of institutional and technical capacities at Federal level, and (ii) carrying out intense institutional, strategy-building and demonstration activities in Cross River State.

In this country, forest regulation and management is decentralized. All States and the federal Capital Territory have sub-national laws on forests²⁴.

As a consequence of decentralization, the management and control of forests is vested in state governments, although dual ownership of natural forests by local and state governments still exists in the northern states. Local governments are responsible for communal forest areas, in the northern states only, and state governments are in control of forest reserves, game reserves and sanctuaries. States like Cross River and Lagos have developed their own legislation enacting the Cross River State law on management and sustainable use of the forest resources in 2010 as and the forestry law of Lagos in 2003.

The Cross River State, which is the home of most of Nigeria's rainforest, is the only state that officially recognizes community rights to forests. The State forestry law allows the State's Forest Commission to create community forests and transfer some management rights to community-based forest management associations (Sections 24(c), 26, and 67-69). The law also enables the award of concessions for payments for environmental services. These include concessions for carbon, biodiversity offsets, eco-tourism and watershed protection.

It has been recommended that a National Forestry Act be enacted to promote community participation in forest and REDD+ projects, as well as the passage of the climate change commission bill into law and the promulgation of legislation dealing with the management of carbon by the government.²⁵

²⁴ FRA Country Report: Nigeria, 2010.

²⁵ Legal reforms underlined as Nigeria readies for REDD+. <u>www.Ecojournalism.com</u>. April 2012.

I. III.IV South Africa

South Africa is party to the UNFCCC, Kyoto Protocol and numerous other international environmental conventions. South Africa has played a leading role in the various Conferences of the Parties (COPs) in promoting the agenda of African countries, but it is also closely aligned to the other BASIC countries (Brazil, India and China) in climate change negotiations. The country hosted the COP 17 in Durban in December 2011.

The Bill of Rights chapter of the country's Constitution includes an environmental right in the following terms: "everyone has the right: (a) to an environment that is not harmful to their health or wellbeing; and (b) to have the environment protected, for the benefit of present and future generations, through reasonable legislative and other measures that: (i) prevent pollution and ecological degradation; (ii) promote conservation; and (iii) secure ecologically sustainable development and use of natural resources while promoting justiciable economic and social development. 7 Subsection (iii) refers to "sustainable development and use of natural resources while promoting justiciable economic and social development".²⁶

According to the National Forest Act n. 4 (1998), the Parliament recognizes that "everyone has the constitutional right to have the environment protected (...) and that natural forests and woodlands form an important part of that environment and need to be conserved and developed according to the principles of sustainable management".

Part 4 of chapter 3 of the National Forest Act gives the Minister powers to intervene urgently to prevent deforestation and to rehabilitate deforested areas and sets out the procedures for doing so as well as the effects of exercising these powers. It also provides for the Minister to enter into agreement with owners to remedy situations that might arise.

The environmental right has also been embraced by the judiciary in a number of cases. In *BP Southern Africa (Pty) Ltd v. MEC for Agriculture, Conservation and Land Affairs*²⁷ the Court stated that 'by elevating the environment to a fundamental justiciable human right, South Africa has irreversibly embarked on a road, which will lead to the goal of attaining a protected environment by an integrated approach, which takes into consideration, inter alia, socio-economic concerns and principles'.²⁸ Similarly, the Constitutional Court has affirmed that the concept of sustainable development is part of South African law.²⁹

²⁶ Section 24 of the Constitution.

^{27 2004 (5)} SA 124 (W).

²⁸ At 144D, as cited in J. Glazewski, Environmental Law in South Africa, 2nd edn (Durban: Lexis Nexis, 2005), p. 15.

²⁹ Africa and the Middle East. South Africa. J.Glazewski and D.Collier. Department of Environmental Affairs, National Climate Change Response Green Paper 2010, GN 1083 of 2010, Government Gazette No. 33801, 25 November 2010, p. 7.

The State, in its response to climate change, is therefore obliged to consider the environmental right, including the notion of sustainable development.

For a substantial perio, South Africa leaned towards the adoption of climate change policies and strategies and regulations rather than legislation. Legislation on this issue has emerged recently with a proposal on carbon tax introduced within the framework of the 2012-2013 budget. The Taxation Law Amendment Bill (2009) amended the Income Tax Act (1962) to include income tax incentives for participation in Clean Development Mechanism (CDM) projects as well as for energy efficiency savings.³¹

South Africa has also an extensive set of planning laws at national, provincial and local spheres of government that directly or indirectly have, or potentially have, an impact on climate change considerations. At national level these include the Municipal Systems Act n.32 (2000) which among other things provides for Integrated Development Plans (IDPs) that can potentially incorporate climate change considerations, and have direct impacts for REDD+ implementation.

Highlights

- The Ministry of Environment and Protection of Nature of **Cameroon** has adopted the Decree n. 410/2009 for the creation, organization and functionality of the national observatory on climate change. The objective is to assess the socio-economical and environmental impacts as well as preventive and adaptation measures against negative effects of climate change. The observatory will facilitate the compensation for the services provided by climate change and forests through the management, conservation and restoration of ecosystems.
- In **Kenya**, a comprehensive law on climate change is expected to be developed in order to mitigate emissions and improve energy efficiency. The law once adopted will guide the implementation of the climate change response strategy prepared by the Ministry of Environment. The climate change authority will also establish and manage a national carbon registry. Pending legislation on land reforms and the revision of the Forests Act in light of the new Constitution (2010) may impact on forest governance and REDD+ implementation.
- In Nigeria, the bill establishing the climate change commission has been passed by the National Assembly but not yet signed by the President. It is

³⁰ Climate Legislation Study. Globe. 2013. A number of institutional arrangements have been established to implement the policy: an Inter-governmental Committee on Climate Change; a National Committee on Climate Change; a Monitoring and Evaluation Task Team; a Technical Working Group on Adaptation and a Technical Working Group on Mitigation.

³¹ Climate Legislation Study. Globe. 2013.

- recommendable to call for the enactment of a National Forestry Act to promote community participation in forest and REDD+ projects, and the promulgation of a legislation dealing with the management of carbon by the government.
- The State of **South Africa** in its response to climate change has to consider the environmental rights established by the Constitution, including the notion of sustainable development. South Africa was positioned to adopt climate change policies and strategies and regulations rather than legislation. Legislation on this issue has emerged recently with a proposal on carbon tax, to include income tax incentives for participation in Clean Development Mechanism (CDM) projects. The country also has an extensive set of planning laws at national, provincial and local levels that directly or indirectly have an impact on climate change considerations.

CONCLUSION

This paper has presented current legislative trends towards incorporation of REDD+ objectives and general climate change mitigation action plans into national legislation in Latin America, Asia-Pacific and Africa.

As this study has shown, a growing number of countries have or are aiming to adopt a comprehensive climate change law clearly defining emissions reduction targets, incorporating policy measures or strategies and complementary norms to reach the expected climate change adaptation and mitigation objectives. Most of the countries cited in this study have also adopted specific secondary legislation establishing climate change institutional entities, such as the Climate Change Commission of Philippines, the Climate Change Office of Argentina or the National Observatory on Climate Change of Cameroon.

The legislation explored in this paper has shown that countries are adopting specific climate change and forestry laws in line with the objectives of REDD+ insofar as they typically provide for at least some of the following elements:

- arrangements for the ownership, registration and transfer of forest carbon sequestration rights;
- national frameworks to measure, manage, report and verify emissions reductions, including integrated information systems;
- measures and actions to evaluate vulnerability, impacts and adaptation of forests or to evaluate the effects of reforestation;
- climate change coordination mechanisms or entities, including REDD+ initiatives and their relation with existing institutions;
- policy measures or strategies addressing climate change and the efficient utilization of national lands and forests;
- regulatory aspects of contractual agreements to implement REDD+ projects;
- measures related to avoided deforestation and degradation, afforestation, revegetation or conservation of forests, adopting sustainable agricultural practices;
- decentralization processes aiming to improve forest management while promoting communitarian development;
- the introduction of a carbon tax;
- the identification of economical instruments to finance mitigation projects;
- the creation of carbon funds.

While it is heartening to see many countries legislating in line with REDD+ objectives, legislating is only the first step. Putting this legislation into action and enforcing it is the next step. Much remains to be done as well in terms of enhancing legal frameworks so that forestry, climate change and specific REDD+ legal

³² For e.g. Australia, Brazil, China, Guatemala, India, Kenya, Mexico, Nigeria and the Philippines.

frameworks complement each other in the most efficient and effective way possible. At best the current frameworks in some countries are fragmented. It is also hoped that the efforts of these countries towards concretizing their commitments under international instruments to mitigate against climate change can provide guidance for other countries to legislate similarly.

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Links

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